

CHAPTER III

RESEARCH METHODOLOGY

In this chapter, the writer aims to provide an explanation of the research methodology that was used in this research. The research methodology consisted of research design, the subject of the research, data collection technique and instrument, and data analysis.

A. Research Design

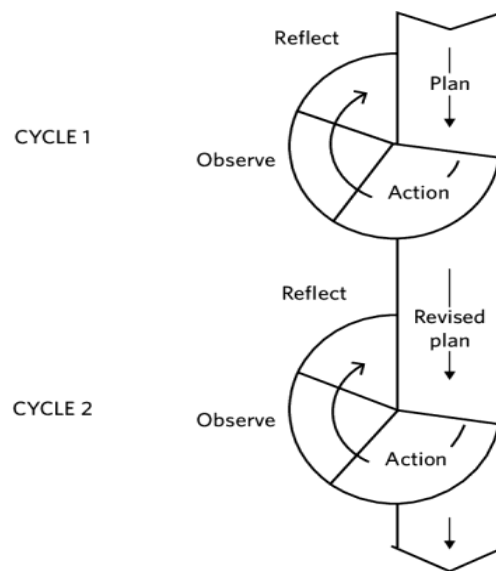
A research design is a framework that consists of various research methods and techniques chosen by the writer to systematically conduct their research. This framework ensures that the methods applied align with the research objectives, allowing for a more robust and comprehensive investigation. In this research, the method employed is Classroom Action Research. Classroom Action Research is conducted to improve students' participation in learning, particularly in teaching how to describe places. This study focuses on helping students describe various locations by providing clear guidelines and structured activities. Through Classroom Action Research, students are encouraged to actively engage in speaking tasks, such as describing specific places like schools, homes, or parks, which improves their speaking skills, vocabulary use, and confidence in delivering information accurately and fluently. The design of this research is structured to ensure that the data collected allows the writer to address the research questions thoroughly. Classroom Action Research involves systematic observation and reflection conducted within the classroom setting, aimed at

collecting data directly related to the classroom environment. In this research, the writer collaborated with the English teacher at the school to address students challenges in developing their speaking skills.

According to Cohen (2018, p. 441), Action research is a method that combines both qualitative and quantitative approaches. Classroom Action Research is a problem-solving approach employed in educational settings, aimed at identifying and resolving specific issues that arise in the teaching and learning process. Classroom Action Research focuses on improving classroom practices through the active involvement of teachers in diagnosing and resolving student-related challenges. In the context of this research, the primary goal of Classroom Action Research is to address problems related to students' speaking skills, with the ultimate aim of improving the quality of students' learning experience s and improving their oral communication skills.

In this research, the writer concentrated on improving students' speaking skills and increasing their participation through the use of the tree diagram technique. According to Burn (2010, p. 8), Classroom Action Research consists of four key stages in each cycle, which are planning, action, observation, and reflection.

The following is the action research model developed by Kemmis and McTaggart (2014, p. 9), which the writer applied in this research :



Adapted from Kemmis and McTaggart (2014, p. 19)

Figure 1 CAR Model

Classroom Action Research is defined by four distinct phases within each research cycle: planning, action, observation, and reflection. Each of these phases serves a specific function and has its own importance in the research process. The four essential stage in this process are as follows :

1. Planning

In this phase, the writer collaborated with the English teacher to develop a lesson plan based on the syllabus. The writer selected topics relevant to the material and prepared the necessary teaching resources for each cycle. Additionally, the writer assessed students' prior knowledge to determine their initial speaking proficiency. For this research, the writer planned two cycles to be implemented. Each cycle was designed to help students improve their speaking skills by describing places using the tree diagram technique. Students were encouraged to describe various aspects

of a place, such as its physical characteristics, functions, and atmosphere, fostering a more personalized and engaging learning experience. Classroom action research typically involves multiple cycles, with two cycles being common practice. This approach allowed for iterative improvements in teaching strategies and student learning outcomes. By implementing two cycles the writer aimed to systematically improve students' speaking abilities in describing places, ensuring that each cycle built upon the previous one to address any challenges and reinforce learning objectives. This method aligns with best practices in action research, promoting continuous development and adaptation in educational settings.

2. Action

In this phase, the writer and the teacher collaborated to implement the planned activities. The writer introduced the topic, explained the concept of the tree diagram technique, and provided examples to show how it can be used for describing places. Relevant vocabulary related to the features of a place, such as size, color, and location, was introduced to help students prepare for the speaking tasks. The writer then demonstrated how to describe a place using the tree diagram. After the demonstration, students practiced describing their own favorite places in front of the class, using the vocabulary and examples from the lesson. This practical activity helped students improve their speaking skills by discussing familiar topics in a structured way.

3. Observation

During this stage, the writer observed students' participation, responses, and progress in speaking throughout the learning process. The writer monitored how well students use the tree diagram technique to describe a place, noting their fluency, vocabulary, and confidence in speaking. In addition to these observations, the writer collected feedback from students about their learning experience with the tree diagram method. The classroom environment and student behavior were also recorded to evaluate the overall effectiveness of the teaching approach.

4. Reflection

Reflection involved evaluating the results of the activities carried out in previous stages. The writer examined students' speaking performance based on observation data and identified any challenges or areas for improvement. If the results do not meet the expected objectives, adjustments were made for the next cycle. This reflection process helped the teacher and writer improve teaching methods and strategies to better support students in the second cycle. This ongoing evaluation and adaptation ensured that the research effectively improved students' speaking skills and engagement, especially in describing places using the tree diagram technique.

B. The Subject of this Research

The writer conducted a research at SMP Nusantara Indah Sintang with the subjects of this research consisting 24 seventh-grade students. The reason

for selecting this school and class was based on the results of a pre-observation, which revealed several challenges faced by students in their English classes. These challenges primarily included a lack of participation due to low motivation, resulting in limited vocabulary knowledge and incorrect pronunciation. To address these issues and encourage students to engage more actively in speaking activities, the writer implemented the place tree diagram technique as a strategy to improve both participation and speaking skills.

C. Data Collection Technique

In conducting this research, the writer employed various data collection techniques to obtain comprehensive results. Data collection involved organizing strategies and tools to gather relevant information accurately. There are several key techniques as follows:

1. Data Collection Technique

In order to collect relevant data, the writer applied several things that the writer needs to do. The techniques used included observation, interviews, measurements, and documentation. Each of these methods contributed to a deeper understanding of the speaking skills and participation levels of seventh- grade students at SMP Nusantara Indah Sintang.

a. Observation

Observation is an essential method for collecting direct information about student behavior and classroom interactions during

the learning process. Burns (2010, p. 8) explains that structured observation helps writers systematically record classroom events and student interactions, ensuring an accurate analysis of what happens during lessons. In this study, the writer used an observation checklist to monitor student participation and involvement during the use of the tree diagram technique for describing a place. This technique involved students describing places based on characteristics such as size, features, and surroundings. The observation checklist helped capture the classroom dynamics, allowing the writer to evaluate the immediate impact of the teaching method on students speaking skills.

b. Interview

Interviews are a powerful method for collecting qualitative data, particularly when writers seek to gain insights into participants' experiences and perceptions. According to Gill et al. (2008, pp. 291-292), interviews can be utilized to explore individuals' views, experiences, beliefs, and motivations in depth. In the context of this study, interviews were conducted to obtain direct information from students regarding their perspectives and experiences in learning English, particularly through the use of the Tree Diagram technique.. The selected interviewers included three students with low scores, three students with medium scores, and three students with high scores These interviews provided a clearer understanding of how the students perceived the tree diagram technique, their level of comfort

in speaking English, and any challenges they faced with vocabulary and pronunciation. The qualitative data obtained from the interviews complemented the observations and provided a more nuanced view of student progress.

c. Measurements

Measurement is essential in quantifying student outcomes, especially when assessing the development of specific skills like speaking. According to Cohen (2018, p. 563) describe measurement as the systematic assignment of numerical values to student performance, allowing for the objective evaluation of learning progress. In this research, a speaking assessment rubric was used to evaluate students' vocabulary use, pronunciation, fluency, and content during their speaking skill. By using this rubric, the writer assigned scores to each student's performance. Providing a quantifiable measure of improvement over the course of the research. The data derived from these measurements were crucial for evaluating the overall effectiveness of the tree diagram technique in improving speaking skills.

d. Documentation

In addition to observations and interviews, documentation was also used to support the data collection process. As explained by Creswell (2012, p. 223) documents are important tools for understanding specific phenomena and verifying data from other

sources. In this study, the writer documented classroom activities using photographs and videos, capturing key moments during both the observation and intervention stages. These visual materials provided evidence of the students' involvement with the Tree Diagram technique, especially how they described places using relevant vocabulary related to size, location, and features. Moreover, the writer collected student work samples, such as descriptive texts about various places. These documents helped confirm the findings from observations and interviews, providing a complete picture of the students' learning progress and their ability to describe places.

2. Instrumentation

Instrumentation refers to the tools and instruments used by the writer to collect data systematically and effectively during the research process. In this research, the writer employed several instruments, including an observation checklist, field notes, interview guidelines, student tests, and video recordings. These instruments were designed to gather comprehensive data on the students' performance, participation, and progress in improving their speaking skills through the tree diagram technique.

a. Observation Checklist

The observation checklist was used as a tool to record key information and issues identified during the classroom learning process prior to the implementation of the Tree Diagram technique

According to Creswell (2012, pp. 213-215) observation checklists help in systematically documenting classroom events, student behaviors, and interactions. The observation checklist in this research focused on capturing the baseline conditions of student participation, speaking confidence, vocabulary usage, and pronunciation challenges. This instrument guided the writer in identifying existing problems that needed to be addressed in the research cycle.

b. Field Notes

Field notes are a crucial instrument for collecting descriptive data during the teaching and learning process. As noted by Phillippi and Lauderdale (2017, pp. 383-386) field notes help writers document spontaneous occurrences, reflections, and specific observations. In this research, the writer used field notes to record significant classroom events, both before and after the introduction of the Tree Diagram technique. The notes included observations on student participation, difficulties faced, and responses to the lesson. Collaborators in the classroom also provided their input on the challenges and successes observed during the teaching process, offering additional insights into the effectiveness of the technique.

c. Interview Guidelines

The interview guideline is an instrument used to gather qualitative data from students regarding their experiences and challenges in learning English speaking skills. According to Creswell

(2012, p. 217) explains that interviews allow for in-depth exploration of participants' perspectives. The writer employed semi-structured interviews with a selection of students (those with low, medium, and high scores) to explore their opinions on the learning process and their struggles with speaking. The structured questions aimed to gain insight into the students' motivation, understanding of the vocabulary, and their skill to describe places in English.

d. Student Test

To evaluate the improvement in students' speaking skills, the writer administered a student test. As defined by Cohen et al (2018, p. 563) state that test is an essential tool for assessing students knowledge, skills, or performance. In this research, the test focused on assessing students' ability to describe places using the appropriate vocabulary, pronunciation, and fluency. Tests had various functions. They measured what students know and can do, identified their strengths and weaknesses, and assessed their natural abilities. Tests also evaluated students' skills, performance, and speed. They could be used to compare students, check if a student met certain standards, or identify learning problems. Some tests focused on how fast students work, while others measured how well they had mastered specific skills. The evaluation criteria were based on a rubric adapted from Brown (2004, p. 160), with the following scoring components :

Table 3.1 Scoring Rubrik For Speaking.

No.	Aspects of Speaking	Indicators	Score
1	Pronunciation	Speaks clearly, most words are easy to understand.	4
		Most words are clear, but a few are hard to understand.	3
		Many words are hard to understand.	2
		Very hard to understand, making communication difficult.	1
2	Fluency	Speaks without many pauses, sentences flow easily.	4
		Few pauses, but it doesn't make the speaking hard to follow.	3
		Frequently pauses while speaking, making it a bit hard to follow.	2
		Often pauses, making it very difficult to follow what is being said.	1
3	Vocabulary	Uses simple words to describe places (e.g., "big," "quiet").	4
		Uses basic words but sometimes struggles to find the right word.	3
		Limited vocabulary, often using the same words or not enough to describe.	2
		Very little vocabulary used, making it hard to understand the description.	1
4	Grammar	Uses correct grammar most of the time with only a few minor mistakes.	4
		Uses mostly correct grammar, but with some noticeable errors.	3
		Frequent grammar mistakes that make the meaning unclear.	2

		Grammar mistakes make it difficult to understand what is being said.	1
5	Content	Gives clear and full descriptions of place, using the tree diagram.	4
		Descriptions are clear but missing some details.	3
		Descriptions are incomplete or unclear.	2
		Very little description or not clear enough.	1

Adapted from Brown (2004, p. 160)

$$O = S \times 5$$

$$O = P (4 \times 5) + F (4 \times 5) + V (4 \times 5) + G (4 \times 5) + C (4 \times 5)$$

$$O = 20 + 20 + 20 + 20 + 20$$

$$T = 100$$

S : Score

O : Obtain Score

T : Total Score

e. Video Recording

Video recording was used as an additional tool to document the classroom environment and the learning process during the intervention. According to Creswell (2012, p. 223) the value of using video recordings in classroom research to capture non-verbal behaviors, interactions, and special events that may not be fully captured through written observation. The video recordings in this

research served to document student presentations, group work, and individual speaking tasks, providing a visual record of classroom activities. This helped the writer to later review and analyze specific moments related to student participation and the effectiveness of the Tree Diagram technique.

D. Data Analysis

This Classroom Action Research incorporated both qualitative and quantitative data analysis to obtain comprehensive insights into the students' progress and participation in speaking activities. The writer employed qualitative methods through observation, interviews, field notes, and documentation to gain descriptive insights. Quantitative data, primarily gathered through speaking assessments, provided measurable evidence of students' improvement in speaking skills. As suggested by Creswell (2014), combining qualitative and quantitative data allows for a more holistic understanding of the research findings.

1. Qualitative Data Analysis

The qualitative data in this research were analyzed using descriptive qualitative methods. Miles et al. (2014) propose three primary steps for qualitative data analysis: data reduction, data display, and drawing conclusions.

a) Data Reduction

Data reduction is the initial process in which the writer systematically selected and condensed data gathered from

observations, interviews, and documentation. This step helps filter and organize raw data, enabling a more focused and meaningful analysis. Data reduction is essential to refine information, allowing for clearer insights during analysis.

b) Data Display

Data display involved organizing the processed information in a way that made it easier to interpret and draw conclusions. This data can be presented as field notes, tables, charts, or other visual aids. Effective data displays facilitate understanding and action based on the collected data.

c) Drawing Conclusions

The final step involves interpreting the data to extract patterns, relationships, or recurring themes. This phase involved examining qualitative data to deduce meanings, recognizing patterns, and drawing out implications. Miles and Huberman emphasize the importance of concluding qualitative analysis by developing structured understandings from the data.

2. Quantitative Data Analysis

Quantitative data complemented qualitative findings by providing measurable outcomes of the students' speaking skills before and after using the Diagram technique. Muijs (2010, p. 2) notes that quantitative analysis is beneficial for assessing improvements by using numeric data processed through statistical methods. In this research, students speaking

scores from assessments were evaluated and compared across the research cycles. By analyzing test scores quantitatively, the writer tracked progress in vocabulary usage, pronunciation, and fluency. This numerical data supported the qualitative findings, enabling an objective assessment of the effectiveness of the Tree Diagram technique in improving students' speaking skills.

Indicator of Success

This research was conducted in two cycles, with each cycle comprising two sessions. Success criteria were defined based on measurable improvements in student participation and speaking proficiency.

These criteria served as a benchmark to evaluate progress throughout each cycle, aligning with the qualitative and quantitative data collected.

Table 3.2 Criteria Of Success

Aspect	Description
Observations	The cycle is considered successful if at least 75% of the students actively engage, feel motivated, and enjoy the learning process during classroom activities.
Interview	The cycle is deemed successful if 75% of the students provide positive feedback and express favorable opinions about the learning experience using storytelling techniques.
Test	The cycle achieves success if 75% of the students reach the established criteria for good performance based on their test scores.

In this research, a cycle was considered successful when 75% of students achieved a minimum score of "good." However, the success

criteria extended beyond mere scoring and included a variety of observational and participatory elements. The writer used observation sheets, conduct interviews, analyze field notes, and review video documentation to evaluate the outcomes comprehensively. The criterion of "good" performance was further defined by assessing student participation levels and speaking skills, particularly as they related to active engagement in the tree diagram technique. Through this technique, students were encouraged to participate in structured storytelling, which improved their speaking performance by describing and discussing about a place. The assessment of student success was multi-dimensional, focusing on both quantitative achievement and qualitative factors, such as enthusiasm, interaction quality, and verbal expression during speaking activities. This multi-faceted approach provided a more holistic view of student progress and engagement with the tree diagram technique as a tool to improve speaking skills.