

CHAPTER III

RESEARCH METHODOLOGY

In this chapter, the researcher wants to explain about the research methodology that use in research. The research methodology consist of research design, the subject of the study, data collection technique and instrument, and data analysis.

A. Research Design

Research design is a framework of research methods and techniques chosen by the researcher to conduct research. This design allows the researcher to strengthen research methods that are appropriate to the subject matter. According to Creswell (2009,p.22) research designs refer to structured plans and processes that guide a study, starting from general assumptions down to the specific techniques used for collecting and analyzing data. The method used in this research is classroom action research. The research implementation design is to determine that the evidence obtained allows the researcher to answer the questions as completely as possible. As stated by Clark (2020,p.8) classroom action research is a method used to enhance educational practices through a cycle of taking action, evaluating the outcomes, and reflecting on the results. This process involves collecting evidence to support changes in how things are done. In this study, to conduct research, the researcher collaborated directly with the English teacher at the school to overcome students' problems or challenges regarding speaking performance acquired in class. As reported by

Clark (2020, p. 15) classroom action research is a reflective and constructive process where teachers systematically investigate specific problems within their own classrooms by planning, implementing actions, assessing outcomes, refining strategies, and learning from their experiences. It is an ongoing cycle of learning in which educators not only gain new insights but also share their findings with others who can benefit.

In this research, the researcher focuses on how to improve students' speaking performance and also student participation by using role play techniques. Adapted from Burns (2010, p.8) classroom action research has four important parts in each cycle, namely planning, action, observation and reflection.

The following is an action research model by Burns (2010,p.9) what the researcher uses :

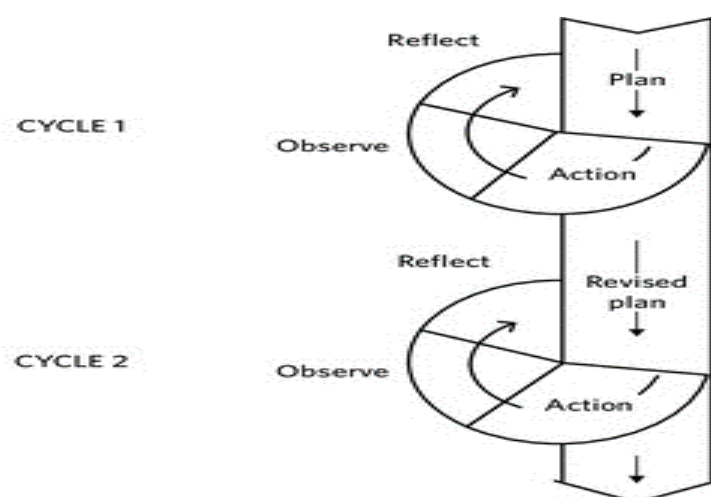


Figure 3.1 CAR Model

Classroom action research is characterized by four phases in the research cycle. These phases include planning, action, observation, and reflection. These four facilities have their respective functions and uses, including :

1. Planning

In this stage, the researcher undertakes a comprehensive preparation process to ensure the research is well-structured and effective. This begins with preparing materials and techniques that will be implemented using a lesson plan, followed by identifying the basic competencies and indicators of achievement required in the learning process. The researcher then develops the lesson plan, compiles and organizes the materials to be used, and selects the appropriate teaching techniques. Additionally, the researcher prepares rubrics and research instruments needed to conduct the study effectively. The learning plan is crafted collaboratively with the English subject teacher, based on the syllabus that has been designed. A relevant topic is chosen to align with the material, and appropriate teaching materials are prepared for each cycle. To ensure the objectives of the study are met, the researcher also conducts student evaluations aimed at achieving the desired learning outcomes by the end of the cycle. For this research, the implementation plan consists of two cycles, with each cycle designed to support the achievement of the research goals.

2. Action

In this step, the teacher and researcher work together to implement the planned actions in the classroom. The researcher begins by delivering

explanatory material and providing clear examples related to the learning objectives. To support students in their storytelling activities, the researcher introduces a set of relevant vocabulary words that students will need to use. Following this, the researcher demonstrates how to tell a story, serving as a model for the students before they are asked to present their own stories in front of the class. Prior to their practice, the researcher ensures students fully understand the process by providing detailed examples. Once this is completed, students take turns practicing individually, presenting their stories to the class.

During this process, attention is focused on observing both the students' engagement in classroom activities and their speaking abilities. The entire procedure is carried out cyclically, starting with an explanatory session during the first meeting, where the researcher introduces the material and methods. This is followed by the second meeting, which emphasizes the application of specific techniques to further enhance students' learning and speaking activities.

3. Observation

At this stage, the researcher, supported by collaborators, conducts thorough observations of the teaching and learning activities in the classroom. These observations focus on various aspects, including student participation, responses, and progress achieved during the instructional process. The researcher closely monitors how students engage with the material and interact during the activities, taking note of their levels of

involvement and understanding. Additionally, the researcher gathers feedback directly from students by asking their opinions about the use of role play techniques in the teaching and learning process, providing valuable insights into its effectiveness and impact on their learning experience.

Collaborators also play a critical role by observing and documenting the actual classroom dynamics. They record detailed notes on the real-time situations and interactions that occur during the lessons, capturing both the challenges and successes encountered throughout the process. This systematic observation helps to evaluate the implementation of the role play technique and provides data for improving future teaching strategies.

4. Reflections

Reflection is the concluding phase in which the outcomes of the previously implemented actions are carefully analyzed and evaluated. During this process, the teacher collaborates with the researcher and other collaborators to discuss and reflect on the activities and strategies that have been carried out. This collaborative reflection aims to identify strengths, weaknesses, and areas for improvement, allowing the teacher to make adjustments and refine future actions.

At this stage, the researcher reviews students' speaking proficiency and evaluates the learning process based on observation results, identified challenges, and their underlying causes. By examining these aspects, the researcher gains insights into the effectiveness of the teaching methods used and the obstacles encountered during implementation. If the outcomes do

not align with the predetermined objectives, the researcher makes decisions to address these gaps, which may include continuing the study into a subsequent cycle. This iterative process ensures that the research objectives are progressively achieved and that any necessary improvements are implemented to enhance the learning experience.

B. The Subject of This Study

The researcher will conduct research at SMAS Nusantara Indah Sintang with tenth grade, with a total of 21 students consisting of 5 male and 16 female. The reason the researcher chose this school and class was that because based on the results of pre-observations there were several obstacles experienced by students at that school, especially the English class, which were caused by several things such as the need to improve vocabulary and also incorrect pronunciation when pronouncing words. Therefore, to improve or motivate students to speak more, the researcher only uses role play techniques.

C. Data Collection Technique and Instrumentation

In this research, the researcher needs data collection techniques to obtain research results. Data collection steps include preparing the data collector. There are several data collection techniques that must be used, namely :

1. Data collection technique

To collect data, there are several things that the researcher needs to do, namely observation, interview, measurements, and documentations. This third

action really helps the researcher in collecting data from the results of the research carried out.

a. Observation

One of the activities carried out by the researcher is to obtain information about the research that will be carried out. As mentioned by Kummar (2011,p.140) observation serves as a method for collecting primary data. It involves intentionally, systematically, and selectively observing and listening to events or interactions as they naturally occur. Observations were also carried out using an observation checklist. An observation checklist was used to determine the situation in the classroom during the study. This allows the researcher to document and reflect on interactions and events systematically because he believes that they really happened. This means that a form of observation is used to collect feedback and comments from observers about the teaching and learning process. Additionally, observations also served as a means to gather feedback and comments from the classroom environment regarding the effectiveness of the role-play technique. This feedback included both positive aspects, such as increased student confidence and participation, and areas for improvement, such as the need for clearer instructions or more time for preparation.

By conducting these observations, the researcher could gain a holistic understanding of the teaching and learning process, particularly the impact of role-play on students' speaking performance.

b. Interview

Interviews are a relatively easy and efficient way to collect various kinds of data that can cover a number of content areas and do not require testing. In this technique, the teacher and the student engage in a direct, face-to-face interaction, following a structured set of questions and instructions.

Interviews are a very flexible data collection method and can be used to explore various topics widely. Interviews are an efficient technique for collecting data, especially in the context of qualitative research. He emphasized that interviews allow researchers to obtain broader information about an individual's behavior, thoughts, and feelings, as well as providing deeper insight into the topic being researched.

c. Measurements

Measurement is the systematic assignment of numbers to individuals as a means of characterizing individuals. These numbers must be established using a well-defined and repeatable process. Measurements can be used in various ways, depending on the type of scale being designed, and assign numbers based on the attribute to be measured. Measurement theory is a field of applied statistics that seeks to characterize, categorize, and convey the qualities of measurement. So, measurements are needed to help the writer calculate scores for student work using an assessment rubric.

In this context, measurements are carried out to map the attributes to be measured, both in qualitative and quantitative form, so that the measurement results can be understood and used for further analysis.

d. Documentation

In this research, the researcher will use documentation to support the data. Consists of several documents, namely public documents and private documents. Public documents are in the form of meeting minutes, official memos, etc., while private documents are in the form of notes, diaries, journals, etc. In this research, the researcher will collect pictures during learning as well as videos of students writing descriptive prose using grouping techniques. The aim is to show the situation during the learning session. This will be real evidence presented by the researcher, as well as a tool for the researcher to note down further information.

2. Instrumentations

Instrumentation refers to the process of selecting, developing, and using tools or instruments to systematically collect data in research. It encompasses the preparation and application of these tools to ensure that the data gathered is reliable, valid, and relevant to the research objectives. Effective instrumentation is crucial for maintaining the integrity of the research process and obtaining accurate results.

The tools or instruments used in data collection vary based on the

research design, objectives, and the type of data required. Common instruments include observation checklist, field notes , interview guideline, student test, and video. Each instrument serves a specific purpose.

a. Observation Checklist

Observation checklist is a checklist used in observations to systematically record and transmit certain behaviors, activities or events. This checklist helps researchers or observers observe certain aspects of a phenomenon in a more objective and structured manner.

An observation checklist is an instrument used to systematically record certain behaviors or events during the observation process, to ensure that the data collected is more objective and measurable.

As explained by Wragg (1999,p.2) classroom observation is now much more frequent than it used to be. With the rise of structured teacher evaluations and lesson assessments, along with a stronger focus on improving the teaching skills of both new and experienced educators, and a growing interest from curriculum developers in classroom dynamics, there is now greater attention being paid to what truly happens during the teaching and learning process.

b. Field Notes

The researcher recorded the consequences of these actions and recorded them in field notes. Meanwhile, collaborators recorded what happened during the learning process in the researcher class. For example, collaborators write comments with suggestions or some of the obstacles and

problems faced by students and teachers in class. Collaborators noted the researcher strengths and weaknesses in teaching students in class how to apply role-playing techniques to students. The researcher took field notes to capture their personal thoughts, ideas, and questions during the study observations and interviews. In this research the researcher will use field notes. The researcher focuses on the important things and problems that arise during class. Notes are the most common method for recording data collected during observations. Field notes are a tool for collecting data during observations.

c. Interview Guideline

Interviews can be conducted in different formats, depending on the goals of the research. They may follow a structured approach where a set of predetermined questions is prepared and presented to each interviewee in the same manner and order. This ensures consistency and comparability of the data gathered. On the other hand, interviews can also be unstructured, resembling free-flowing conversations where the interviewer allows the discussion to develop naturally based on the responses of the interviewee. Each type of interview has its own advantages and can be selected based on the research objectives and context.

In this research, the researcher employed a structured interview format. A structured interview involves preparing a list of questions in advance, which are asked systematically to each participant. This approach ensures that all respondents address the same topics, making the data easier

to analyze and compare. Interview is essentially a conversation with a specific purpose. In the context of this research, the interviews aimed to explore students' perceptions, experiences, and attitudes toward the use of role-play techniques in the process of learning to speak English.

The interview guidelines were designed to focus on key aspects of role-play implementation, such as its effectiveness in improving speaking skills, students' comfort levels, challenges they faced during the activities, and their overall engagement. Questions were crafted to encourage detailed and thoughtful responses, enabling the researcher to gain in-depth insights into the impact of the role-play technique.

By using structured interviews, the researcher ensured a consistent and focused data collection process while also providing an opportunity for participants to express their thoughts and experiences in their own words. This approach not only supports the reliability of the data but also enriches the findings by capturing a variety of student perspectives.

d. Student Test

To see whether students' performance or knowledge in speaking has improved or not, the teacher must carry out an evaluation. One of the most commonly used methods for this purpose is administering student tests. A test serves as a tool to measure students' abilities, knowledge, or performance in a structured and systematic way. Student tests are valuable because they provide quantifiable data that teachers can use to identify progress or areas that need improvement. Through tests, teachers can

evaluate not only the outcomes of the teaching and learning process but also the effectiveness of their teaching methods. Tests can take various forms, such as oral exams, written assessments, or performance-based tasks, depending on the objectives of the evaluation. In speaking assessments, for example, students might be asked to engage in role-plays, deliver presentations, or participate in discussions to demonstrate their speaking skills. Additionally, student tests offer insights into individual and group performance, enabling teachers to adjust their instructional strategies to better meet students' needs. By analyzing the results, educators can ensure that the learning process is achieving its intended goals, ultimately fostering student improvement and success.

e. Video

The researcher will use several audio visual aids as data collection tools in this research, one of which is video recording which is a source of unwritten data. What can help the researcher see activities in the classroom so that the researcher can more easily understand the material that will be presented has a recording device to describe what happens in the classroom during learning in the context of classroom action research. This video serves to capture the atmosphere of the class, details about important or special events that occur. Important or special events that occur can be used to help describe what happens in the classroom during the learning process, so that they can help explain what observers note in field notes and observations. Sheets, photos, video recordings are also useful in interviews,

either to start a conversation or remind the writer not to deviate from the topic or purpose of the interview.

Table 7.2 Scoring Rubric of Speaking Ability

Aspect of speaking	Indikator	Score
Pronunciation	Very clear with no errors.	4
	Generally clear with minor mistakes.	3
	Some errors but still understandable.	2
	Difficult to understand with many errors.	1
Grammar	Grammar is used perfectly.	4
	Minimal errors that do not affect understanding.	3
	Some errors but still comprehensible.	2
	Frequent errors that hinder meaning.	1
Vocabulary	Rich and highly relevant vocabulary.	4
	Varied and appropriate to the context.	3
	Somewhat varied but still lacking.	2
	Very limited and irrelevant vocabulary.	1
Fluency	Very fluent without disruptive pauses.	4
	Fluent with minimal pauses.	3
	Occasional pauses that disrupt flow.	2
	Often hesitates and struggles to continue.	1
	Highly active interaction with fully relevant	4

Interaction	responses.	
	Good interaction with mostly relevant responses.	3
	Limited interaction with less relevant responses.	2
	Unable to respond or interact.	1

Adapted from Brown (2004, pp. 172-173)

The best performance with a predetermined value using the following formula :

$$S = \frac{O}{T} \times 100$$

S : Score

O : Obtained score

T : Total score

1. Determine the value obtained (O) is the score obtained by students in a test or assignment.
2. Determine the total score (T) T is the maximum score that can be obtained in the test or assignment.
3. Divide the value obtained by the total score
4. Count $O:T$ to find out the proportion of scores obtained compared to the total score.

5. Multiply the result by 100. This is done to convert the results into percentage form.

Calculation example:

If a student scores 80 out of a total score of 100

$$S = 80:100 \times 100 = 80$$

This means that the student's final score is 80 of the total possible marks.

Table 1. Level of Student Speaking Ability

No	Category	Value Range
1	Excellent	80-100
2	Good	60-79
3	Average	50-59
4	Poor	0-49

Adapted from Harris (1969, p.134)

D. Data Analysis

This Classroom Action Research uses qualitative and quantitative data.

In this research, the techniques the researcher will use to collect data are qualitative and quantitative data. Qualitative data was collected through observation, interviews, field notes and documentation. Meanwhile, to obtain quantitative data, the author collects it through a speaking test to obtain student scores in students' speaking abilities. After collecting data, the author will then analyze the data that will be used using qualitative and quantitative methods.

1. Qualitative Data

The qualitative method used by the researcher to analyze the data is descriptive qualitative. This approach focuses on understanding and interpreting the meaning behind participants' experiences, behaviors, and interactions. Unlike quantitative methods that rely on numerical data, qualitative research delves into the richness of textual or visual data to uncover patterns, themes, and insights. Descriptive qualitative methods aim to provide a detailed account of the phenomena being studied, making it particularly suitable for educational and social research.

As reported by Huberman (1994, pp.10–11) there are three key steps in qualitative data analysis : data reduction, data presentation, and drawing conclusions. Qualitative data is data in the form of words, images, or objects that function to describe and analyze social phenomena in a more holistic and in-depth way, rather than just relying on numbers or statistics. These steps form a systematic framework for managing and interpreting qualitative data effectively :

a. Data Reduction

Data reduction is an ongoing activity in qualitative research, involving the process of refining and organizing data. It starts even before actual data collection, when the researcher makes decisions on the research framework, cases, questions, and methods. Throughout the research, this process includes summarizing, coding, identifying

patterns, and writing memos, continuing until the final report is completed.

b. Data Presentation

The second key process in qualitative data analysis is data presentation. It involves organizing information in a concise and structured way that enables researchers to interpret the data and make decisions. In daily life, this could take the form of dashboards, screens, or reports. Traditionally, qualitative data was presented as long narrative text, which can be overwhelming and difficult to analyze. Relying solely on extended text may lead to rushed or unsupported conclusions.

c. Draw Conclusions

The third phase in qualitative analysis is drawing and verifying conclusions. From the early stages of data collection, researchers begin identifying patterns, explanations, and potential connections. While these insights may be vague at first, they gradually become clearer and better supported by data. A skilled researcher remains cautious and open to change throughout. Although final conclusions are typically drawn after all data is collected, preliminary interpretations often emerge early even in studies that claim to follow an inductive approach.

2. Quantitative data

As stated by Denscombe (2010,p.272) the way qualitative data is analyzed can vary depending on the type of data and the specific goals of the research. Because of this, there is no universal method that applies to all

qualitative data analysis. Nonetheless, there are several key principles that are generally linked to analyzing qualitative data, and these can act as helpful guidelines for researchers conducting qualitative studies. So, in this research the researcher needs to use numerical data to analyze student grades. The test is used to see the extent to which students' speaking performance improve by using role play techniques. To prove the test results, the researcher needs to calculate them in numerical form. This will help to conclude or prove the effectiveness of role play techniques in improving students' speaking performance in each cycle.

1) Indicator of Success

In this research, the researcher divided classroom action research into 2 cycles and these cycles two meetings. Researcher need criteria at each meeting to assess cycle progress after classroom teaching. Researcher will use these success criteria as a guide.

The success criteria are described based on data collected by writer in the table below :

Table 3.2. Criteria Of Success

Aspect	Description
Observation	If 75% students participate actively, are motivated, and also enjoy the learning process in class, then the cycle can be said to be successfull.

Interview	If 75% students give positive respond and good opinion regarding the learning process by using role play techniques, then the cycle can be said to be successful.
Test	If 75% students score achieve good criteria, then the cycle can be said to be successful.

In this research cycle, it is said to be successful if 75% of students are able to get a minimum good score, then the cycle is said to be successful. However, the researcher also looked at several aspects of the success of this research, including looking at observation sheets, interviews, field notes and documentation in video form. These good criteria can also be seen from student participation and student speaking activities related to learning in the learning process which is carried out using role play techniques.