

CHAPTER III

RESEARCH METHOD

This chapter presents the research design, research settings, research instrument, data source, data collecting technique and instrument, data analysis, and data trustworthiness:

A. Research Design

In this research, the researcher use qualitative & quantitative research (mixed-methods). Qualitative research methods were used to examine questions that can best be verbally describing how participants in a study perceive and interpret various aspects of their environment. Qualitative research is scientific research used to investigate the state of natural objects, where researchers are the central instruments (Sugiyono: 2005). The difference with quantitative research is that this research begins with the data, using the theory there as explanatory material, and ends with the theory. According to Moleong (2005:6), qualitative research is research that aims to understand phenomena based on the experience of the researcher. For example, behavior, perception, motivation, actions, etc. holistically and through descriptions in the form of words and language, especially in a natural context and using various natural methods. Quantitative research methods are studies that use tools for statistical processing of data, the information obtained in this way and the results obtained in the form of numbers. In quantitative research, there is a lot of emphasis on objective results, by distributing questionnaires it is possible to objectively obtain information and test it through validity and reliability

processes. To evaluate the investigated problem, the components of the problem are quantitatively divided into several variables in research, and each variable is defined by a different symbol according to the needs of the researcher or the investigated problems.

This research used a mixed methods approach, which combines quantitative and qualitative data collected simultaneously. According to Creswell (2009), mixed methods utilize the advantages of both quantitative and qualitative research. A sequential explanatory design was applied to integrate and blend the various data sets to be collected and analyzed. The research was structured into several distinct quantitative and qualitative phases, each completed independently before combining the findings from both phases to achieve a more comprehensive understanding from the formulation of the problem. Ultimately, the results from the quantitative and qualitative phases were combined into one mixed methods study.

B. Location & Time of the Research.

The research will be conducting at Islamic Junior High School 3 Padang Pariaman. It is located at Kp. Pauh Street, West Campago, V Koto Kp.Dalam District, Padang Pariaman Regency, West Sumatra. The researcher will conduct from October 2024 to November 2024.

C. Population & Sample

1. Population

Subjects in qualitative research are called informants. Informants are people who provide information regarding the data that researchers want related to the research

being conducted. Providing in-depth and intensive information about the phenomenon being studied so that researchers can understand the phenomenon holistically and not separately. The population is the entire group studied in a certain area and time based on characteristics determined by the researcher, and this population is the source of research data. The subjects or population who will be the informants or main sources in this research are English teachers who teach at Islamic Junior High School 3 Padang Pariaman, especially teachers who teach in seventh grade. In this research, researchers will find out and dig up deeper information from English teachers who teach in seventh grade regarding the problems that will be discussed. In this research, each of class VII consists of five classes, and the number of each students in one class in class VII consists of 156 students.

Table 3.1. Research Population (Teachers)

No.	Teachers	Teaching Class
1.	Teacher 1	VII & IX
2.	Teacher 2	VII & IX
3.	Teacher 3	VIII
4.	Teacher 4	VIII

Table 3.2. Research Population (Students)

No	Class	Number of students
1.	VII.1	30 Students
2.	VII.2	32 Students
3.	VII.3	32 Students
4.	VII.4	32 Students
5.	VII.5	30 Students
	Total	156 Students

2. Sample

Every research has limited resources in terms of time, energy, and budget, making it impossible for researchers to collect data from all target populations. Therefore, in research, researchers need to determine a representative part of the population, this is called a sample. So we can say that the sample is part of the population selected as the purpose of the study.

As a sample, the researcher chose purposive sampling to obtain perfect data. Purposive sampling means that this method is carried out based on certain considerations. In this study, the researcher chose purposive sampling where the researcher researched in class seven, then the researcher will choose an English teacher who teaches in class VII and can be active in implementing innovation in dialogue techniques. While snowball sampling is used when the researcher increases the number of small to large ones gradually. In this study, the researcher

chose class VII.3 from all classes VII, where in this study the researcher took about one to ten students at least in one class in class VII.3, but if one or two students are still incomplete to obtain the appropriate or desired data, then the researcher will add several more students who can complete the data that will be collected from the number of students previously selected.

D. Data Collecting Technique and Instrument

The researcher used three kinds of instruments to collect the data, they are observation, interview, and documentation.

1. Observation

According to Sukmadinata (2005), observation is a method of data collection that involves observing ongoing activities. These activities can encompass various aspects such as teaching methods employed by teachers, learning processes of students, directives provided by school principals, personnel engagements during meetings, and more. According to Riyanto (2001), observation serves as a means of gathering data by closely examining the research subjects. This data collection method can be executed through direct or indirect means. Based on the aforementioned perspectives, it can be inferred that observation is a systematic approach to collecting data on research objects, whether through direct or indirect means.

In the research, to find out the innovations made by teachers in teaching speaking using dialogue techniques through classroom observation research instruments, researchers can pay attention to various aspects that go beyond

ordinary teaching practices. In this observation, researchers will see whether teachers innovate in terms of material preparation, media, and use of time. Innovation can arise in the way teachers select dialogue that suits the classroom situation, students' ability levels, and their interests, beyond standard practice. In addition, researchers will note whether teachers adjust the way they guide students, such as providing more creative dialogue examples or involving interactive media. Special attention can also be paid to teachers' techniques for providing more innovative feedback, such as using collaborative or reflective approaches in evaluating student presentations. Apart from that, innovation can also be seen from more in-depth monitoring methods, such as the use of more specific evaluation rubrics or monitoring strategies that are more personal and adaptive to student needs.

2. Interview

According to Esterberg (2002), interviews can be defined as a form of interaction where two individuals come together to share information and ideas through questions and responses, leading to communication and the collaborative construction of meaning surrounding a specific subject. According to Sugiyono (2019), interviews serve as a valuable data collection method for researchers who wish to conduct preliminary studies to identify research-worthy problems, as well as for those seeking in-depth insights from respondents.

In this study, the researcher used semi-structured interviews, which means that the interview is only used in the form of outlines of the problems to be asked. In this case, the researcher mainly interviewed an English teacher who taught in

seventh grade. In this interview, the researcher asked several questions to the English teacher who would be interviewed to reconfirm with the teacher regarding the innovations carried out by the teacher. The time determined for the interview is when the observation has been completed and to see what research results were obtained during the observation.

3. Questionnaires

According to Sugiyono (2019), questionnaire is a data collection done by giving a set of questions or written questions to the respondents to answer. Questionnaires are an effective way to collect data if the researcher knows exactly the variables to measure and knows what to expect from the respondent. Besides, questionnaires are also suitable for use if the number of respondents is large enough and spread over a wide area. Questionnaires can be closed or open-ended, they can be given directly to respondents or sent by post or online.

With this instrument, the researcher give questionnaires to students studying English in seventh grade. The purpose of filling out this questionnaire is to find out students' responses regarding the dialogue techniques used by the teacher. After the students fill out the questionnaire provided, the researcher will collect data from the questionnaire that has been filled in by each student, where the questionnaire relates to how the students respond to the teacher's innovation in teaching speaking using dialogue techniques.

The questionnaire of this research employed 20 questions which followed the formula of likert scale as follow:

Table 3.3. Questionnaire with likert scale

Category	Score
Strongly Agree (SA)	5
Agree (A)	4
Indecisive (I)	3
Disagree (D)	2
Strongly Disagree (SD)	1

E. Data Analysis

1. The Analysis of Qualitative Data

a. Data Reduction

The amount of data collected at the scene is quite large, so it must be recorded carefully and in detail. With that said, the longer a researcher is in the field, the more complex and complex the amount of data becomes. For this reason, data analysis must be performed immediately by data reduction. Reducing data means summarizing, selecting key elements, focusing on important factors, and looking for themes and patterns. In this way, the reduced data provides a clearer picture and makes it easier for researchers to continue collecting data.

b. Data Display

After reducing the data, the next step is to display the data. By showing the data, it is easier to understand what happened and plan further work accordingly. In qualitative research, data can be presented in the form of short descriptions, tables,

diagrams, relationships between categories, flowcharts, etc. By displaying the data, it will be easier to understand what is happening and plan further work accordingly based on the data obtained from the results of class observations and interviews.

c. Conclusion Drawing/Verification

According to Miles and Huberman, the final step in analyzing qualitative data is concluding and verifying them. The initial conclusions reached remain provisional and will change if strong evidence to support them is not found during the next phase of data collection. However, if the conclusions reached at an early stage are supported by sound and consistent evidence when the researcher returns to the field to collect data, then the conclusions reached are reliable.

2. The Analysis of Quantitative Data

a. Analysis of Questionnaires

Questionnaires are one of the supporting techniques used by the researcher to find out students' responses to the dialogue techniques used by teachers in teaching speaking. In this study, the questionnaire ended with alternative answers chosen by students. Students only choose the answer that best suits them. The questionnaire consists of 20 questions that must be answered by students honestly and correctly. In analyzing and processing student response data, researchers use data tabulation. Data tabulation if the research is conducted with a questionnaire. In analyzing or processing data, researchers tabulate data from the questionnaire using the Excel application by listing what is stated in the questionnaire such as (name, class, school, gender, and answer column for each statement asked) and several aspects

that are calculated using Excel formulas such as (the number of scores on each statement, maximum score, and percentage).

To analyze data on student responses to the dialogue technique used by the teacher, especially in calculating the mean or average, the author used the following formula:

$$\text{Mean Score} = \text{Total Score} / \text{Total Respondents}$$

The following table shows the average scores for each statement option and questionnaire answer option, where the scores given are different for positive and negative statements:

Table 3.4. Average score with response categories

Average Scores	Category
1.00–1.80	Very Negative
1.81–2.60	Negative
2.61–3.40	Enough
3.41–4.20	Positive
4.21–5.00	Very Positive