

CHAPTER III

RESEARCH METHODS

2.1. Approach and Type of the Research

The purpose of this study is to determine the pattern and proportion of interaction between teacher and students in English speaking skill at SMK Negeri 1 Gido on FIACS analysis, as well as to determine the barriers that occur in the process of interaction between teacher and teacher and students in English speaking skill. This study uses a mixed-method research method by combining descriptive qualitative and descriptive quantitative methods to answer the research questions.

The researcher believes that this research method is the best method to examine the proportion and pattern of interaction between teacher and teacher and students in English speaking skill at SMK Negeri 1 Gido. This research method was chosen because qualitative research adheres to the phenomenological school, which focuses on describing and understanding the observed social symptoms or phenomena, not only from the researcher's point of view but also from the point of view of the subject under study (Hardani et al., 2020). Meanwhile, quantitative research was chosen because it also emphasizes the analysis of numerical data (numbers), which are then analyzed using appropriate statistical methods (Hardani et al., 2020).

3.2. Variables of the Research

In this study, the variable used is a single variable, namely the interaction in english speaking skill. Research variables are concepts or phenomena that are measured, manipulated, or controlled in a study (Sugiyono, 2019). In the context of this study, the variables studied is interaction. To measure this interaction include various methods, techniques, or approaches, response and feedback by teachers and students in teaching.

3.3. Setting and schedule of the Research

Subject of the research is English teacher and students of SMK Negeri 1 Gido, Kabupaten Nias.

3.4. Source of Data

The main sources of data are:

1. Primary Data Sources (Collected first-hand)

- a. Interviews. Conducting one-on-one or group discussions.
- b. Observations. Recording behaviors, interactions, or events in real time.

2. Secondary Data Sources (Pre-existing data)

These are collected by others and used for research purposes. Examples include:

- a. Books and Journals, theories, and literature reviews.
- b. Online Database. Research articles, historical records, and digital archives.

3.5. Data Collecting Technique

Data collection is a process or activity carried out by researchers to reveal phenomena, information or location conditions according to the research. Ahmad (2021) stated that then the data that has been collected is further processed, namely processing and analysis, the method applied in qualitative analysis is to describe it in words, not in numbers. The data is obtained through various techniques, for example by using interview techniques, observations, focused teacher and students' interaction. The researcher used several data collection techniques, namely:

1. Observation

Observation is the process of collecting data by directly observing the situation in the field. Observed data can be in the form of attitudes, behavior, actions and interactions. Nasution (2020) states that observation

is the basis of all science. Scientists can only work based on data, namely facts about the world of reality obtained through observation.

In this study, the researcher used checklist observation as a data collection technique with the aim that the researcher could see and observe directly what and how the teacher and students' interaction, especially in teaching process in SMK Negeri 1 Gido.

Table 3. 1
Coding Framework of Data Analysis

No.	Category	Code
1.	Accepting Feelings	1
2.	Praising and Encouraging	2
3.	Accepting or Using Student's Ideas	3
4.	Asking Questions	4
5.	Lecturing	5
6.	Giving Direction	6
7.	Criticizing or Justifying Authorities	7
8.	Student Talk – Response	8
9.	Students Talk – Initiation	9
10.	Silence or Confusion	10
11.	Teacher	T
12.	Student (1,2,3, etc)	S1, S2, S3, etc.

The purpose of making observations in this study, namely:

- a) To find out the interaction pattern that occur between teacher and students in the classroom. By making direct observations, researcher can see firsthand how interactions occur, who is most dominant in the classroom, how the effectiveness of learning methods and activities used by teacher to encourage interaction with students and get

information related to the context of the classroom situation that can affect the pattern of teacher and student interactions.

- b) Can directly identify the types of interactions that occur.
- c) Can see firsthand the barriers that arise in the interaction between teacher and students and the factors that cause them, such as language barriers or differences in learning styles.

2. Interview

Interview is a process used to ask questions to informants in order to obtain information directly. Clear information needed for research purposes is obtained through interviews. The questions asked in informal interviews used in this study are determined by the interviewer. With semi-structured interviews, informants can provide their thoughts and opinions, and help researchers collect the data needed more transparently. It is hoped that using this interview technique will produce more in-depth information about the teacher and students interaction's quality in SMK Negeri 1 Gido.

3.6. Data Analysis Technique

This data analysis method is a way to process the results of observations and interviews. This processed data can later be interpreted and produce a new thought, opinion, theory, or idea based on the research pattern and theme. Because this research uses mixed methods, it will present quantitative data analysis followed by qualitative data collection and analysis. Then, the results of both will be integrated. In the first step, the research data was analyzed using the Flanders Interaction Analysis Category System (FIACS) theory to obtain comprehensive information about classroom interaction between teacher and students in English speaking skill. In analyzing the data using FIACS, this study found the dominant categories and flowcharts from matrix analysis to determine the learning interactions occurring in English speaking skill. After the observation checklist has been fulfilled, video transcription analyzes the

relevant information. Quantitative data were analyzed using descriptive analysis to analyze the results of the observation checklist. The descriptive analysis used in this study will be in the form of frequencies and percentages. To calculate the percentage of each category, researchers used the formula (Malik & Chusni, 2022):

$$P = \frac{F}{N} \times 100 \%$$

Description:

P : Percentage

F : Category frequency

N : Number of frequencies (total of all categories)

Furthermore, the percentage results will be explained in detail regarding what interactions occur in the classroom during the learning process, which will be adjusted to the categories in the FIACS method. Then, the results of the transcription will also be presented in matrix form so that a flowchart can be obtained that can be used to see the interaction pattern that occur. This analysis will be done by determining pairs of categories, which will then be calculated as the frequency of each pair. The way to determine the pairs is by looking at the interactions that occur in the first and following categories, which can be called initiation and response. For example, interaction in category 4, called initiation, is followed by category 8, which means response in these two categories can be calculated one point for the frequency of pairs 4-8 in the matrix. This calculation is done from the beginning to the end of the dialog in the transcript.

The picture above shows that the first pair represents the 4-8 pair, which means one point. The second pair is represented by the 8-4 pair, which means one point, and the third and fourth pairs which are represented by the 4-8 and 8-3 pairs, each of which counts one point. Then, the number of points will

be summed up in a matrix table with 10 rows representing the initiation or first category and 10 columns representing the response or second category.

Furthermore, the results of the interviews will also be converted into transcripts, summarized, and analyzed to be categorized to be relevant to the existing themes. Then, the data will be analyzed to find similar aspects in each category. This will later be referred to as the teacher's opinion on the interaction and teaching of English language learning in English speaking skill. After determining the relevance of the interactions that occur, the data will be organized to support the previous data related to the description of classroom interactions in English language learning in English speaking skill, and conclusions can be drawn regarding the interaction patterns. Furthermore, the results of the interview transcripts are also analyzed to find barriers teacher and students face in classroom interaction so that it can be concluded what barriers occur during the learning interaction process.