

III. RESEARCH METHODS

This chapter discusses the methods of research used in this study, such as: research designs, subject of the research, data collecting technique, procedures of the research, and data analysis.

A. Research Design

This research is classroom interaction analysis. In this research, the researcher observed some phenomena which occurred in the classroom during the teaching learning process. Interaction research analysis is an analysis of language phenomena found in the interaction activities involving two or more participants. Crookes (1991:4) states that interaction analysis study looks at how the participant in communication reacts. In this research, the researcher analyzed the interaction categories and interaction patterns occurred when the students were communicating in English.

B. Subject of the Research

The researcher used one class of the first year students of SMA Negeri 3 Metro. The researcher used X.3 that consists of 32 students. Based on the researcher's pre-observation, the students of this class are smarter than in other first grade classes of this school, but they rarely practiced speaking in the classroom so that

some students still had the difficulties to express their ideas in English. The source of data was collected from the students' interaction.

C. Data Collecting Technique

In collecting the data , the researcher recorded the activities and conversation between teacher and students during speaking class by using jigsaw tasks. Then, the researcher transcribed the data from recording technique. The recording equipments used in this research were videotaped recorder and audiotaped recorder. The videotaped recorder was used in front of the class, in this case the students and the teacher were shooted. The audiotaped recorder was used in each group to get the clearer interaction in groups. Primary data of this research were the records of classroom interaction in English speaking class by using jigsaw tasks.

D. Research Procedures

To achieve the truest and best result of the research, the researcher will plan the procedure of the research in these following steps:

1. Formulating the research questions and determining the focus of the research.
The formulation of the research questions are really needed as the basic or first step of the research. It means that this process can be used by the researcher in finding the necessity of the research.
2. Determining the case, the way of collecting and analyzing the data as well as the way of reaching the conclusion.

3. Referring the instruments of collecting the data. The instruments of collecting the data are very important in a research. Therefore, the researcher has to be able to select the instruments which are appropriate to gather the data needed.
4. Determining the class which will become the subject of this research. This process is also important since it really influences the appropriate finding of research.
5. Discussing with the teacher about the material that will be taught. The materials should be appropriate so that this process will support the achievement of research objective.
6. Making the lesson plan which implements Jigsaw Task that will be used by the teacher.
7. Observing and recording the activities and conversation of teacher and students during the teaching learning process. The researcher will find out the necessity of this research using the appropriate instruments. In this process, the researcher will observe participation of students' speaking during three types of classroom interaction through Jigsaw Task implementation by using observation sheet, tape recorder, and digital camera.
8. Making transcription of all the activities and conversations that will have been recorded and observed then coding them.
9. Evaluating and analyzing the data and categorize them in the form of patterns of interaction.
10. Reporting the result of the data analysis to induce the research finding.

E. Data Analysis

The data from recording and observation were analyzed using technique proposed by Flanders. Flanders (1970) originally developed a research tool, namely Flanders Interaction Analysis (FIA), which became a widely used coding system to analyze and improve teaching skills. Categories of Flanders' Interaction Analysis used in this research are described in the following table:

Table 1. Table of specification of Flanders' Interaction Analysis Categories

	CATEGORIES
Indirect Influence	1. Accept Feeling: accepts and clarifies the feeling tone of the students in a non-threatening manner. Feelings may be positive or negative. Predicting and recalling feelings are included.
	2. Praises or encourages: praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual, nodding head or saying 'uh huh?' or 'go on' are included.
	3. Accept or uses ideas: clarifying, building, or developing ideas or suggestions by a student. As teacher brings more of his own ideas into play, shift to category five.
	4. Ask questions: asking a question about content or procedure with the intent that a student may answer.
Direct Influence	5. Lectures: giving facts or opinions about content or procedures; expressing his own ideas; asking rhetorical questions.
	6. Gives direction: directions, commands, or orders with which a student is expected to comply.
	7. Criticizes or justifies authority: statements, intended to change student behavior from non-acceptable to acceptable pattern, bawling someone out; stating why the teacher is doing what he is doing, extreme self-reference.
Student Talk	8. Student talk response: talk by students in response to teacher. Teacher initiates the contact or solicits student statement.
	9. Student talk initiation: talk by students which they initiate. If 'calling on' student is only to indicate who may talk next, observer must decide whether student wanted to talk. If he did, use this category
	10. Silence of confusion: short periods of silence and periods of confusion in which communication cannot be understood by the observer.

In analyzing the data, the researcher categorized the transcription of the teacher's and students' speech in terms of the quantity utterances into ten interaction

categories proposed by Flanders as stated in the above table. The example can be illustrated as follows:

T: Open your books to page 160 and answer the first question, Bill? [6]

Bill: Spain and Portugal from the Iberian Peninsula. [8]

T: Very good, Bill [2]

T: Who has the answer to the next question [4]

S: I don't know where we are. [9]

T: We are on page 160, the second question under exercise 1 [5]

T: And if you had been paying attention, you would have known where we are. [7]

T: Martha, can you continue by reading your answer to the second question. [6]

(The example is taken from Allwright and Bailey, 1991: 202)

From above transcription, the researcher should categorize the data and write them down, 6, 8, 2, 4, 9, 5, 7, 6. The entire series should begin and end with the same number. The convention used is to add 10 to the beginning and end of the series. The data now become 10, 6, 8, 2, 4, 9, 5, 7, 6, 10.

After analyzing the interaction categories, the data are also categorized and calculated in term of interaction patterns. There are 6 kinds of interaction patterns. They are: Teacher-Students, Students-Teacher, Teacher-Student, Student-Teacher, Teacher-Student-Student and Student-Student.