

CHAPTER III

RESEARCH METHOD

A. Research Design

This study is designed by using interaction analysis which is categorized as a qualitative research. The researcher analyzes classroom interaction in English subject at MTs 1 Muhammadiyah Banjarmasin in academic year 2017/2018 and the researcher also observes the class.

Bryman and Bell (2007) stated that qualitative research is a research strategy that indicates the relationship between theory and research and usually emphasizes on how theories were generated. As a research strategy qualitative research is inductivist, constructionist, and interpretivist, but qualitative researchers always do not subscribe to all three of these methods.

According to Cresswell (1994) "A qualitative study is defined as an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting.

Based on the theories above the reason why the researcher used qualitative research because the theories is suitable with the problem that the researcher used to analyze the research. Qualitative research explained the result of the research with the words.

The researcher observes a teacher and the students, then records the teaching and learning of the class, makes some notes for important things,

analyzes the types and categories of classroom interaction and finally classifies them by using FIACS (Flanders Interaction Analysis Categories System).

B. Research Setting

This research took place in English class of the ninth grade at MTs 1 Muhammadiyah Banjarmasin. The researcher chose the place because when the researcher in teaching practice (PPL 2), the researcher found that there is less interaction between the teacher and students. The research was done for 2 months on August to September 2017.

C. Subject and Object of Research

The subjects of this research are 20 students and 1 English teacher of MTs 1 Muhammadiyah Banjarmasin. The object of this research is teacher-student classroom interaction in the ninth grade of MTs 1 Muhammadiyah Banjarmasin.

D. Data and Source of Data

The data which the researcher gets is interaction between a teacher and students. The sources of data which the researcher investigates this study and people around the school are the English teacher at MTs 1 Muhammadiyah Banjarmasin and the 9th grade students.

E. Data Collection Procedure

Creswell (2009, p. 166) notes that “data collection procedures in qualitative research include collecting information through un-structured or

semi-structured observation and interviews, documents and visual materials, as well as establishing the protocol for recording information”.

The steps of data collection involve several steps:

a. Observation

The researcher observes the 9th of grade of MTs 1 Muhammadiyah Banjarmasin and sits behind the students and notices interaction between teacher- students during teaching and learning process. The observation done for 3 (three) times, once in a week.

b. Record

To analyze the data easily, the researcher records the teaching and learning process using mobile phone, handycam, camera etc.

c. Making some notes

The researcher makes some notes for important things needed towards interaction between teacher and students.

F. Data Analysis Procedure

The data analysis involves several steps:

1. Analyzing

The researcher analyzes the data using Flanders Interaction Analysis Categories System (FIACS) and also the researcher uses some references to support this research.

Table 3.1 is explaining about categories and description for FIACS

Table 3.1 List of Categories for FIACS

Category of Talk	Details Category and Description
Teacher Talk	<p>Indirect influence</p> <ol style="list-style-type: none"> 1. Deals with feelings: accepting, discussing, referring to, or communicating understanding of past, present or future feelings of students in non-threatening way. 2. Praises or encourages: Praising, complimenting, telling students what they have is valued. Encouraging students to continue, to give them confidence, confirming that answers are correct. 3. Uses ideas of students: Clarifying, using, interpreting, summarizing the ideas of students. 4. Asks questions: Asking questions to which the answer is anticipated.
	<p>Direct influence</p> <ol style="list-style-type: none"> 5. Gives information: Giving information, facts, opinions, lecturing. Corrects without rejection which refers to tell students who have made a mistake the correct response without using words or intonations which communicate criticism. 6. Gives direction: giving directions, request, or commands that students are expected to follow; directing various drills; facilitating whole-class and small-group activity. 7. Criticizes student's behavior and response: Rejecting the behavior and response of students; trying to change the non-acceptable behavior; communicating anger, displeasure, annoyance, dissatisfaction with what students are doing.
Student Talk	<ol style="list-style-type: none"> 8. Student's response, specific: Responding to the teacher within a specific and limited range of available or preciously practiced answers. 9. Student's initiation: responding to the teacher with students own ideas, opinions, reactions, feelings. 10. Silence: Pauses in the interaction. Periods of silence quietness during which there is no verbal interaction. This includes silence which a piece of audiovisual equipment, e.g., a tape

	recorder, is being used to communicate (Silence-AV).
	11. Confusion: more than one person at a time talking, so the interaction cannot be recorded.

Flander (1970) cited in Singh et al. (2008)

From the table above, category of talk is divided into 2 categories, first is teacher talk that is divided into indirect influence deals with feelings, praising or encouraging, using ideas of students, asking question, and for direct influence is divided into giving information, giving direction, and criticizing student's behavior and response. For student talk is divided into student's response and student's initiation, and for the last is silence and confusion.

Because at each three seconds might involve some categories both teacher and students talk, there are some rules for deciding which one the best category should be put out code consistencely. These rules are as recommended by Flander (1970) cited in (Singh et al. 2008) had to be followed by the researcher as follow:

Table 3.2 List of rules for deciding which category should be put in code consistents.

Rule 1	When it is not certain in which of two or more categories a statement belongs, choose the category that is numerically farthest from the category 5. For e.g., if an observer is not sure whether it is 2 or 3 then choose 2. If in doubt between 5 and 7, he chooses 5.
Rule 2	The observer should not involve his personal viewpoint. If a teacher attempts to be clever, students see his statements as critics of students; the observer sues category 7
Rule 3	If more than one category is active in a span of

	3 seconds, and then all the categories should be recorded. If after 3 seconds, no category changes, then the same serial number should be repeated in the next 3 seconds.
Rule 4	If the time period of silence exceeds 3 seconds, it should be recorded under the category No.10
Rule 5	When teacher calls a child by name, the observer is supposed to record a 4 th category.
Rule 6	When the teacher repeats the student's answer and the answer is correct, that is recorded as a category No. 2 This tells the student that he has the right answer and therefore functions as praise or encouragement.
Rule 7	When a teacher listens to a student and accepts his ideas for a discussion, then this behavior belongs to category No. 3.
Rule 8	The words "All is ok", "yes", "yah", "hum", "alright", etc belong to the category No. 2. (Encouragement)
Rule 9	If a teacher jokes without aiming at any students, this behavior belongs to the category No. 2. But if he makes any joke aiming at some particular students, then it belongs to the category No. 7.
Rule 10	When all the students respond to a very small question collectively, then the serial number of category 8 is recorded.

Flander (1970) cited in Singh et al. (2008)

Flander's category has many rules for observation without following which the observation is not possible. The researcher must remember these rules. In general, the list of the rules help the researcher in maintaining consistency and making observation constant.

In addition, the researcher used observation tally with a constant time to know each teacher and students talk at a certain time in order to calculate how the teacher and students talk in the classroom. Because FIACS suggests that at the end of each three seconds interval, the

researcher had to decide which one of the best category of teacher and students talk represents the communication at each three seconds. It was called as plotting the coded data. According to Tichapondwa (2008), the researcher has to code the teacher and students talk at three seconds intervals when the researcher uses FIACS technique.

2. Classifying

After analyzing, the researcher classifies the data based on the table (see in appendix). Teacher indirect talk consists of accepting feelings, praising or encouraging, accepting or using ideas of students and asking questions. Teacher direct talk consists of lecturing, giving direction and criticizing or justifying authority. Students talk consists of students talk response and students talk initiation. The last is silence or pause or confusion.

3. Calculating

Calculating the data to categorize teacher-students interaction used during English lesson of the ninth grade at MTs 1 Muhammadiyah Banjarmasin. After the researcher got data from observation sheet of Flander interaction analysis, the researcher calculated how much the teacher and students talk time in classroom interaction by using Flander's formulation (1970, cited in Singh et al. (2008) and Nugroho (2009). In order to get expected data, the researcher used it to find out

the percentage of teachers and students talk during classroom interaction. Here are the formulas:

Formula to find category for FIACS

a. $af = \frac{cell}{total} \times 100\%$

b. $pe = \frac{cell}{total} \times 100\%$

c. $ai = \frac{cell}{total} \times 100\%$

d. $aq = \frac{cell}{total} \times 100\%$

e. $lc = \frac{cell}{total} \times 100\%$

f. $gd = \frac{cell}{total} \times 100\%$

g. $cj = \frac{cell}{total} \times 100\%$

h. $sr = \frac{cell}{total} \times 100\%$

i. $si = \frac{cell}{total} \times 100\%$

j. $sc = \frac{cell}{total} \times 100\%$

k. Teacher Talk Ratio / Percentage of Teacher Talk (TT)

The tallies of first seven categories are added and divided by the total tallies of the matrices (N) and hence the percentage can be calculated.

$$TT = \frac{\text{Sum of tallies of first seven categories}}{\text{Total tallies of the matrices (N)}} \times 100\%$$

l. Indirect Teacher Talk Ratio (ITT)

It indicates teacher actions in encouraging and supporting students' participation. Its percentage can be calculated by adding

the tallies of the first four categories and dividing by the total tallies of the matrix (N)

$$ITT = \frac{\text{---}}{\text{---}} \times 100 \%$$

m. Direct Teacher Talk Ratio (DTT)

It indicates the teacher actions restricting student participation. In this ratio, the tallies of 5th, 6th and 7th categories are added and divided by “N” to calculate the percentage.

$$DTT = \frac{\text{---}}{\text{---}} \times 100 \%$$

n. Students’ Talk Ratio/Percentage of Students Talk (PT)

It indicates verbal activities of students in response to the teacher. In this ratio, the tallies of 8th and 9th categories are added and divided by “N to calculate the percentage.

$$PT = \frac{\text{---}}{\text{---}} \times 100 \%$$

o. Silence or Confusion Ratio (SC)

It represents silence during teaching which may be due to confusion or any other reason

$$SC = \frac{\text{---}}{\text{---}} \times 100 \%$$