CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

This is a field research in qualitative approach, which the writer analyzed classroom interaction by using Foreign Language Interaction (FLINT) system developed by Mozkowitz. This research was conducted at the 11th graders of private vocational school SMK Bina Banua Banjarmasin academic year 2017/2018.

This research was designed by entering the class to observe the students, recorded the teaching and learning process in the class, do some notes for important things, analyzed the taking time during the lesson, types, and categories of classroom interaction and finally classified them by using FLINT System.

B. Research Setting

The research was conducted in SMK Bina Banua Banjarmasin at the 11th graders of Tourism Major academic year 2016/2017. The school locates at Jalan Pramuka No.17, Pemurus Luar, East Banjarmasin, Banjarmasin City, South Kalimantan.

C. Subject and Object

The subjects of this research were a teacher and students of English for Tourism Class. The object of this research was classroom interaction in English for Tourism Class at SMK Bina Banua Banjarmasin

D. Sources of Data

The sources of data were the whole of classroom interaction in English for Tourism Class at SMK Bina Banua Banjarmasin. There are two sources, they are teacher and students.

The teacher is a male teacher who teaches English in Tourism Class in SMK Bina Banua Banjarmasin. The students are the eleventh grader of tourism major in SMK Bina Banua Banjarmasin. The number of the students is 40 students.

E. Data Collection Procedure

Data collection is a series of interrelated activities aimed of gathering good information to answer the question (Creswell, J.W 200, p. 118).

The writer used observation technique to gather the data. The writer will observe the class interaction and sit in the best position of the class. The writer gives careful attention to the interaction between teacher-students during teaching and learning process. While observation, the writer was recording or videotaping of teaching and learning process. Its purpose is to consolidate the observation and to make analyze the data easier. Also, the writer is making some notes for important things needed towards interaction between teacher and students.

F. Data Analysis

In this research, the writer uses Foreign Language Interaction (FLINT) by Mozkowitz to analyze the data. After the data had been classified according to the FLINT system, they were interpreted. The interpreting activity was done by examining the tallies in each category to build description of what teacher and students said during the classroom interaction.

In applying this system, some procedures were done. Since FLINT is a modification of Flander's Interaction Analysis, the procedure is quite the same.

1. Encoding and Decoding Procedure

The procedure consists of some points. They are:

- a. The observer sits in the classroom in the best position to hear and to see the participants.
- b. At the end of every three seconds, the observer decides which category best represents the communication events just completed. In this process, only the serial numbers of the categories are recorded.
- c. The serial number of that category is recorded on the data sheet by the observer.
- d. In this observation process, the researcher encoded and decoded. The writing of serial numbers of the categories is known as encoding.

While writing details of behavior of the basis of these categories is known as decoding.

2. Rules for Encoding or Decoding

FLINT system has many rules for observation. Without following these rules, the observation is not possible. The observer must remember these rules. These rules help in maintaining consistency and making observations uniform. These rules are as follows:

Rule 1: If more than one type of category occurs during a 3 seconds period, the observer should choose the category that is numerically farther from category 5 (but not category 10). Suppose the observer is in doubt whether the category is 2 or 3, the observer should write 2 categories.

Rule 2: The observer should not involve personal viewpoint.

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 in the category no.10

Rule 5: When teacher calls a child by name, the observer is supposed to record a 4th category.

Rule 6: When the teacher repeats the students' answer and the answer is a 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 behaviour belongs to category no. 3.

Rule 8: The words _ is o', _yes', _yah', _hum', _alright', etc. belong to the category no. 2. (Encouragement)

Rule 9: If a teacher jokes without aiming at any student, this behavior belongs to the category no. 2. However, if he makes any joke aiming at some particular student, then it belongs to the category no. 7.

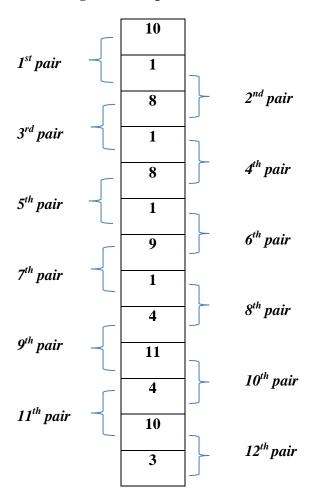
Rule 10: When all the students respond to a very small question collectively, then the serial number of category-8 is recorded.

3. Constructing Interaction Matrix

- a. After encoding, the coded behaviors are written in 11 x 11 tables. This11 (rows) x 11 (columns) table is known as a matrix.
- b. The category numbers of the record sheets are the tabulated in the matrix table. Each number is entered in the form of sequence pairs, being used twice, first as the first numbers and second as second numbers.
- **c.** The row of the matrix represents the first number and the column represents the second numbers.

- **d.** For example, in meeting 1 an observation recorded is 1, 8, 1, 8, 1, 9, 1, 4, 9, 4, 9, 2....
- e. The beginning and end of the coding have the same number of the categories.
- f. It is the tradition of adding number 10 in the beginning and at the end.Hence, the numbers are written as 10, 1, 8, 1, 8, 1, 9, 1, 4, 11, 4, 10,3.... 10 like in following figure.

Figure 3.1 Sequences of the Pairs



g. Sequence of the pairs: (10, 1), (1, 8), (8, 1), (1, 8), (8, 1), (1, 9), (9, 1), (1, 4), (4, 11), (11, 4), (4,10), (10, 3),......

- **h.** While preparing matrices, one pair is marked at a time.
- The matrices have rows and columns.
- The first number of the pair represents —row and second number of the pair represents —column".
- **k.** For example, in the first pair (10, 1), the number 10 represents row and the number 6 represents column.
- **l.** Every pair overlaps the other pair. Total tallies of the matrices (N).
- **m.** In the matrices (N-1) i.e. one less number is marked. In the above example, N=10, (N-1) i.e. 9 numbers will be marked.
- **n.** Each matrix has 110 cells as in the table below.

Table 3.1 Interaction Matrix

| | Column | | | Ro | W | → | | | | | | | | |
|--------------|--------|----|---|----|---|----------|---|---|----|---|----|----|-------|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | Total | |
| | 1 | | | | Ι | | | | II | Ι | I | | 5 | |
| | 2 | | | | | | | | | | | | 0 | |
| \downarrow | 3 | | | | | | | | | | I | | 1 | |
| | 4 | Ι | | | | | | | | | | I | 2 | |
| | 5 | | | | | | | | | | | | 0 | |
| | 6 | | | | | | | | | | | | 0 | |
| | 7 | | | | | | | | | | | | 0 | |
| | 8 | II | | | | | | | | | | | 2 | |
| | 9 | I | | | | | | | | | | | 1 | |
| | 10 | | | | I | | | | | | | | 1 | |

| 11 | | | | I | | | | | | | | 1 |
|-------|---|---|---|---|---|---|---|---|---|---|---|-------|
| Total | 4 | 0 | 0 | 3 | 0 | 0 | 0 | 2 | 1 | 2 | 1 | 13(N) |

4. Interpretation of Interaction Matrix

a. 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.

$$T1 = \frac{C1 + C2 + C3 + C4 + C5 + C6 + C7}{N} \times 100$$

b. Indirect Teacher Talk Ratio (ITT)

It indicates teacher actions in encouraging and supporting pupil's 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)

$$ITT = \frac{C1 + C2 + C3 + C4}{N} \times 100$$

c. 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.

$$DTT = \frac{C5 + C6 + C7}{N} \times 100$$

d. Pupil's Talk Ratio/Percentage of Pupil Talk (PT)

It indicates verbal activities of pupils 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.

$$PT = \frac{C8 + C9}{N} \times 100$$

e. Silence and Confusion Ratio (SC)

$$SC = \frac{C10}{N} X 100$$