

### **III. RESEARCH METHOD**

#### **3.1 Research Design**

Interaction analysis is an analysis of language phenomena found in the interaction activities involving two or more participants. In this research, classroom interaction analysis is applied. The writer analyzes some phenomena that might occur in interaction. The writer describes and observes the classroom during English lesson, and he takes notes during the English lesson. This analysis is based on the observation, recording and transcription of interaction. The writer analyzes every question that occurs in the interaction between the teacher and the students.

#### **3.2 Source of Data**

The main source of the data is English lesson classes. The writer used two classes consisting of 40 students each. The classes chosen are class of second year of SMA Negeri 9 Bandar Lampung. The object of the data is the interaction between the teacher and students in English lesson class. In this research, the teacher's

questions and the students' responses are observed and recorded by the writer in 45 minutes for each class.

### **3.3 Data Collecting Procedure**

1. Finding the subject of the research

A class will be randomly chosen from several science classes that are XI Science 3 and Social 2 as the subject of the research to know how the interaction proceeds.

2. Observing the teaching learning process conducted by the English class teacher

Observation is administered for the sake of probing the information about the characteristic as well as the extent of important factors interrelated within social phenomenon, human actions or habits. To be coherently explained, the purpose of observation is to explain the situation being investigated; activities, person or individuals who are involved in an activity and the relationships among them. What the researcher hopes, then, by administering this procedure is to gather information about the teacher's and learners' activities during the classroom interaction.

According to Arikunto (2002), there are four aspects to observe in instructional activities, they are: material, specific instructional objective, teaching learning process and evaluation. In this research, however, the researcher focuses on knowing the pattern and the process of classroom

interaction in the teaching and learning process. The researcher observes the class one time, and lasts for 45 minutes. After the interaction is observed, it is then, writing it in the observation form of note.

### 3. Recording the participants' conversation

At this part, the researcher records the conversation between teacher and learners by video-taping as soon as the material is presented. Besides, the researcher at the same time takes note about all events and problem occurred during the teaching learning process.

### 4. Transcribing the conversation

After recording the conversation between teacher and students during teaching and learning process, the researcher makes a transcription based on the video recording that has been taken previously.

### 5. Coding the transcription

This activity functions to see the questioning types that occur in the teaching and learning process. In coding the interaction from the class, the researcher uses the tables as follows:

**Table 2. Bloom's Taxonomy Question Categories**

Level of Questions	Keywords			
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>◆ What</li> <li>◆ When</li> <li>◆ Who</li> <li>◆ Define</li> </ul>	<ul style="list-style-type: none"> <li>◆ Distinguish</li> <li>◆ Identify</li> <li>◆ List</li> <li>◆ Name</li> </ul>	<ul style="list-style-type: none"> <li>◆ Recall</li> <li>◆ Reorganize</li> <li>◆ Show</li> <li>◆ State</li> </ul>	<ul style="list-style-type: none"> <li>◆ Write</li> <li>◆ Which</li> <li>◆ Indicate</li> <li>◆ Tell How</li> </ul>

<b>Comprehension</b>	<ul style="list-style-type: none"> <li>◆ Compare</li> <li>◆ Conclude</li> <li>◆ Contrast</li> <li>◆ Demonstrate</li> <li>◆ Predict</li> <li>◆ Reorder</li> <li>◆ Which</li> </ul>	<ul style="list-style-type: none"> <li>◆ Distinguish</li> <li>◆ Estimate</li> <li>◆ Explain</li> <li>◆ Extend</li> <li>◆ Extrapolate</li> <li>◆ Rephrase</li> <li>◆ Inform</li> </ul>	<ul style="list-style-type: none"> <li>◆ What</li> <li>◆ Fill In</li> <li>◆ Give an example of</li> <li>◆ Hypothesise</li> <li>◆ Illustrate</li> <li>◆ Relate</li> <li>◆ Tell in your own words</li> </ul>	
<b>Application</b>	<ul style="list-style-type: none"> <li>◆ Apply</li> <li>◆ Develop</li> <li>◆ Test</li> <li>◆ Consider</li> </ul>	<ul style="list-style-type: none"> <li>◆ Build</li> <li>◆ Plan</li> <li>◆ Choose</li> <li>◆ How would</li> </ul>	<ul style="list-style-type: none"> <li>◆ Construct</li> <li>◆ Solve</li> <li>◆ Show your work</li> <li>◆ Tell us</li> </ul>	<ul style="list-style-type: none"> <li>◆ Demonstrate</li> <li>◆ Indicate</li> <li>◆ Check out</li> </ul>
<b>Analysis</b>	<ul style="list-style-type: none"> <li>◆ Analysis</li> <li>◆ Categorize</li> <li>◆ Describe</li> <li>◆ Classify</li> <li>◆ Compare</li> </ul>	<ul style="list-style-type: none"> <li>◆ Discriminate</li> <li>◆ Distinguish</li> <li>◆ Recognize</li> <li>◆ Support your</li> <li>◆ Indicate the</li> </ul>	<ul style="list-style-type: none"> <li>◆ Relate</li> <li>◆ Explain</li> <li>◆ What assumption</li> <li>◆ What do you</li> </ul>	
<b>Synthesis</b>	<ul style="list-style-type: none"> <li>◆ Write</li> <li>◆ Think of a way</li> <li>◆ Create</li> <li>◆ Propose a plan</li> <li>◆ Put together</li> <li>◆ What would be</li> </ul>	<ul style="list-style-type: none"> <li>◆ Suggest</li> <li>◆ How</li> <li>◆ Develop</li> <li>◆ Make up</li> <li>◆ What conclusion</li> <li>◆ What major hypothesis</li> </ul>	<ul style="list-style-type: none"> <li>◆ Plan</li> <li>◆ Formulate a solution</li> <li>◆ Synthesize</li> <li>◆ Derive</li> </ul>	
<b>Evaluation</b>	<ul style="list-style-type: none"> <li>◆ What is</li> <li>◆ Choose</li> <li>◆ Evaluate</li> <li>◆ Decide</li> <li>◆ Judge</li> <li>◆ Check the</li> </ul>	<ul style="list-style-type: none"> <li>◆ Select</li> <li>◆ Which would you consider</li> <li>◆ Defend</li> <li>◆ Check</li> <li>◆ What is most appropriate</li> <li>◆ Indicate</li> </ul>		

The table is used as an observation sheet. It helps the researcher to identify the type of questions that occur in the classroom interaction. It is based on Bloom's classification of questioning types.

#### 6. Analyzing the data

The data obtained from observing the classroom interaction is subsequently analyzed and taken into certain conclusion and suggestion.

### **3.4 Data Collecting Techniques**

To gain the data intended, the researcher uses these techniques:

#### **1. Observation**

The main purpose of observation is to explain the situation being investigated, activities, person or individuals who are involved in the activity as well as the relationships among them. In this research, the researcher focuses on knowing the process of classroom interaction made the teacher and the learners during the teaching and learning process activity, especially when the teacher asks the question to the learners.

What the researcher hopes, then, by administering this procedure, information about the learners' activities during the lesson can be gathered specifically to know the pattern of the questioning types in the classroom interaction process.

The observation is conducted by entering the class directly and investigating the teacher-learners' interaction and keeping detailed records

(field note) from both objective observation (description) and the subjective feeling (reflection) throughout experience.

## **2. Video-Recording**

The researcher chooses to have video recording to record the conversation between teacher and learners instead of audio recording, since this mechanism of research focuses on classroom interaction, then many of the data can be clearly obtained through video recording. The choice depends very much on the purpose of the research. If turn-taking mechanism in the interaction is the focus of the research, then many of the relevant information is lost in an audio recording. By doing this technique, the researcher intends to get clear and perfect data about question utterance proposed by the teacher to the learners in the teaching process.

### **3.5 Data Analysis**

Data analysis is the process of organizing the data in order to get the pattern of other information from whereas data interpretation is the process of giving meaning to the result of data analysis (Setiyadi, 2006).

There are four steps that have to be done in analyzing and interpreting the data.

They are as follows:

1. Making the abstraction of all collected data to be treated in one unit. In this case, the researcher will make the summary of each collected data, and

then he is going to make the accordance of each data to process and put it in one unit.

2. Unitizing all the data collected. In this case, the researcher will write the data systematically and will make it into one unit.
3. Categorizing the data by giving a code for each data. In this case, the writer will categorize the data by identifying them with a coding for each data.
4. Interpreting the data into substantive theory. The writer will interpret the data into category, which means that it is already a part of the theory and completed with the arrangement of functional hypothesis as the theory.  
(Moleong, 1990:189).

### **3.6 Validity of the Data**

In the qualitative research, the researcher has to reveal the data as the real life of the subjects (Setiyadi, 2006). Reliability and validity aspects are related to the collected data. This qualitative research will use some methods to keep the validity of the data in order to have more accurate conclusion.

This method is used since in obtaining the data, the researcher uses distinguished method to gather the authentic data that is in form of observation. The purpose of observation is to explain the situation being investigated activities, person or individuals who are involved in an activity and relationship among them.