CHAPTER III
RESEARCH METHODOLOGY

In this chapter, the writer discusses the research methodology which consists of the following sections: research design, subject of the study, research instrument, data collection, and data analysis.

3.1 Research Design

Research design is a framework of strategy in collecting and analyzing data, and it is a guideline for a researcher to set up his/her research finding in order to find the answer of the study. According to Creswell (2012:3), research design is an overall plan and procedure to decide what type of method is used, what are data that is obtained, and how the researcher will analyze the data. Research design refers to the decisions from broad assumptions to detailed method of data collection and analysis.

There are two broad categories of research methods in designing a research namely quantitative and qualitative research. This research used descriptive qualitative research since the researcher aimed to gain deeper description about how to implement, advantages and disadvantages of the implementation scientific approach in teaching speaking. According to Ary (2010:424), in descriptive qualitative, the researcher draws in very detail description about phenomena based on the participant experiences and perspectives. The data which are gained is in
forms of word rather than numeric data because the aim is to give in depth understanding about the existing phenomena.

The consideration of choosing descriptive qualitative research in the study is that it customizes with the descriptive qualitative characteristics that are stated by Ary, et al (2010:423-425). First characteristic is that it concerns for context and meaning, meaning that the researcher focused on how people make sense of or interpret their experience. This research was aimed to know deeper information of the implementation of Scientific Approach along with the advantages and the disadvantages. Second characteristic is that it occurs in natural setting. This research took place in a school, especially the seventh grade class in which the researcher did not manipulate teaching and learning process.

Third characteristic is that the researcher interviewed the teacher as a research subject, observed students-teacher teaching and learning activities, and recorded the information in field notes to accomplish the research findings. The last characteristic is descriptive data and inductive analysis. After collecting the data, the researcher presented the data about the implementation of Scientific Approach along with the advantages and the disadvantages in teaching speaking into descriptive data and the data were analyzed by using inductive analysis (proceeding data to theory or interpretation in which the researcher reduces and reconstructs data in the interpretation). Therefore, the researcher took descriptive qualitative research as the method of this research.
3.2 Subject of the Study

In doing a research, the researcher needs to determine who the research subject of this study because data of the study are gained from the subject. According to McMillan, as cited from Millah (2015:33),

“A research subject is an individual who participates in the research or someone who the researcher gains the information from his/her”.

The subject of this study was an English teacher who teaches seventh grade. The main reason to choose the teacher is that the teacher has applied various attractive approaches in the teaching process. For example, the teacher frequently implement scientific approach since curriculum 2013 established. Therefore, the researcher relied on the teacher as the main informant.

3.3 Research Instruments to Collect Research Data

A device that is used by researcher in obtaining information from the subject of research is called as research instrument. According to Wilkinson and Birmingham (2003:3), research instruments are important devices to obtain information relevant to the research problem. The good research instrument has to allow the researcher to obtain and draw accurate answer or conclusion at the end.

Moreover, there are many kinds of instruments such as test, questionnaire, interview guide, observation checklist, documentation, etc. In this study, the writer collected the data by using an observation checklist and an interview guideline. The chosen of the two instruments is under consideration that the data taken will give accurate and detailed information about the implementations of Scientific Approach, advantages and disadvantages in teaching speaking by
English teacher of the seventh grades of SMP N 18 Malang. Those instruments will be explained in detail as follows:

3.3.1 Observation Checklist

Observation is one of the methods used in collecting data. Through observation, the researcher can draw the event, setting, and behavior in a particular situation. According to Fraenkel&Wallen (2009:440), observation is an attempt to describe all of what occurs in a given situation like observing people as they go their activities and record what they do. There are two kinds of observations: Participant observation and non-participant observations. According to Wahyuni (2012, pp: 434-435), participant observation is an observation where the researcher becomes a member of a particular group or organization that is observed. On the other hand, according to Ary, et.al (2010), non-participant observation is an observation in which the researcher is watching rather than taking part in such activities of being observed.

In the study, the researcher acted as a non-participant observer and used video recorder along with observation checklist in observing the teaching and learning process through Scientific Approach in teaching English speaking to the seventh grade of SMP N 18 Malang. The researcher took a seat in the back row of the classroom and wrote the notes using observation checklist in order to pay attention carefully with all of activity happened in the classroom.

3.3.2 Interview Guideline

Besides using observation technique in collecting data, the researcher also used interview to obtain data that is not found in the observation. Interview is a
constructed interaction between participants in which one role as interviewer (asked question) and other roles as interviewee (response question) to discuss point of view about certain situation in detail (Cohen, Manion and Morrison, 2000).

There are three types of interview namely: (1) structured interview, (2) semi-structured interview, and (3) unstructured interview. This research used semi-structured interview in which the researcher improvized the question during the interview based on the interviewee’s response in order to get data as detail as possible. Moreover, the researcher conducted interviews two times by using open question. The researcher can ask that questions without worrying the limitation of explanation that delivered by the interviewee. Therefore, through opened interviewed questions, the researcher can get detail information related to the advantages and disadvantages in implementing Scientific Approach. Additionally, the researcher can make a confirmation what was obtained in the observation section in order to get valid data from English teacher in implementing Scientific Approach for speaking skill at the seventh grade of SMP N 18 Malang.

3.4 Data Collection

After deciding what instruments used in this study, the researcher starts to collect data. The researcher needs to design sequence activities in collecting data or information in order to make her easy in collecting data (Creswell, 2012:204). The following explanation is the procedures that lead the researcher in collecting data:
1. Having direct observation to observe the implementation of Scientific Approach in the classroom for about two times. In the first meeting of the interview, it aims to know the advantages and disadvantages of Scientific Approach while in the second meeting of the interview aims to know more the advantages and disadvantages of the implementation of Scientific Approach that are not found in the first meeting.

2. Interviewing the English teacher two times by using voice recorder. In the first meeting of the interview, it aims to know the advantages and disadvantages of Scientific Approach. In the second meeting of the interview aims to know more the advantages and disadvantages of the implementation of Scientific Approach that are not found in the first meeting.

3. Confirming the data both interview and observation to the teacher. This confirmation was aimed to know the validity of the data about the implementation of Scientific Approach.

3.5 Data Analysis

Data analysis refers to processing and interpreting the data which involves several stages such as organizing and familiarizing, coding and reducing, and interpreting and representing (Ary, et.al, 2010, pp: 481). It means that after conducting data collection, the researcher proceeds to the next research stage, data analysis, in order to present the research finding and to decide the conclusions.
According to Lodico, Spaulding, and Voegtle (2010, pp: 180), the steps of data analysis in qualitative research are as follows: (1) preparing and organizing the data, (2) reviewing and exploring the data, (3) constructing thick descriptions of people, places, and activities, and (4) reporting and interpreting data. However, in this research, the researcher modified some steps that fitted with the research problems and research design. However, the researcher modified some steps in analyzing data that represent the research problems and research design as follows:

1. Transcribing the interview recorder and describing the data in the form of notes from the observation which describe about the implementation of Scientific Approach in speaking skill.

2. Listing and classifying the data gathered from the observation and interview.

3. Analyzing the data based on the research problems by classifying the results of the observation and interview about the implementation, advantages, and disadvantages of Scientific Approach.

4. Constructing and presenting the data into descriptive data based on the research problems through inductive analysis.

5. Drawing conclusions based on the data obtained.