This chapter is intended to describe the research methodology that is used to conduct the study and the way of collecting and analyzing the data. In this chapter the researcher describes the Research Design, Population and Sample, Instrument, Data Collection, and Data Analysis.

### 3.1 Research Design

Research design is an important thing to conduct the research it can help the researcher to find out the problem and show how the study would be solved. According to Kinner (2009), research design is a basic plan, which are the data collection and analysis phases of the project. A research design is the strategy for a study and the plan by which strategy is to be carried out. It specifies the methods and procedures for the collection, measurement, and analysis of data.

In this study, the researcher uses quantitative design by using descriptive survey to conduct the English teacher’s perception of outdoor teaching and learning activity at elementary school in Gresik. That is why, it is conducted by quantitative method. Which to know the respond of English teacher’s perception.
3.2 Population and Sample

3.2.1 Population

According to Ary (1985) the large group about which the generalization was made called a population. The population in this study is 280 English teacher in Elementary school at Gresik based on Department Education. The researcher takes 15% from the population for about 42 English teachers to implement outdoor teaching and learning activity. The population was the English teacher’s perception of outdoor teaching and learning activity at elementary school in Gresik.

3.2.2 Sample

According to Ary (1985), the smaller group that was observed is called a sample and they must represent the characteristics and features of population. Research sampling based on Arikunto (2006) is the population for researcher should be more than 100, so it can be taken 10% - 15%. The population is the English teachers who implement outdoor teaching and learning activity in their school for about 280 English teachers at Elementary school in Gresik. So, the researcher will take the sample which is 15% of the population and give the questionnaires for 42 English teachers who implement outdoor teaching and learning activity at Elementary school in Gresik.

3.3 Instrument

The instrument which is used in this study is questionnaire which to find out the answer of the questions and to achieve the purpose of this study. The researcher decides to use likert
scale questionnaire because it has advantage for the respondents. Respondents can answer easily because the answer items were provided by the researcher. The questionnaire which is made for the teacher is focus on the English teacher’s perception.

Based on Marcrae and Badenhausen (2001), Person perception is the people outputs (evaluations, memories, impressions) that are gotten and shaped by their knowledge and experience in social phenomenon. That theory gives guidance to the researcher to divide the categories of questionnaire into three parts. Part I composed of eight items concerning to evaluation of outdoor teaching and learning activity. Part II consist of seven items aimed to obtain information about the respondents’ memories based on their process of outdoor teaching and learning activity. Part III consist of five items in regard to respondents’ impressions about outdoor teaching and learning activity.

3.4 Data Collection

In this descriptive study, the researcher will use quantitative technique of data collecting. To get the detail about English teacher’s perception of outdoor teaching and learning activity and questionnaire will be conducted as the instrument of this study.

The researcher comes to school in Gresik. After that, she asks for permission to headmaster and meet English teachers. Then, the researcher asks the teacher to fill out this questionnaire about the outdoor teaching and learning activity in their school. So the researcher spreads widely questionnaire for English teachers in Gresik.

The researcher also uses questionnaire likert scale. According to Donald Ary (2002:224-225), a likert scale assesses attitude toward a topic by presenting a set of statement about the topic and asking respondent to indicate for each whether they are strongly agree, agree, undecided, disagree or strongly agree. The various agree disagree responses were assigned a numeric value. They were as follow:
• SA = Strongly Agree = 5
• A = Agree = 4
• UD = Undecided = 3
• D = Disagree = 2
• SD = Strongly Disagree = 1

The various agree–disagree responses give for each item. The subjects are to select the perception category that best represent their reaction to each statement: strongly agree (SA), Agree (A), Undecided (U), disagree (D), and strongly disagree (SD).

3.5 Data Analysis

To know the percentage number of the subject from questionnaire data will be calculated by using the formula as follow:

\[
P = \frac{F}{N} \times 100\%
\]

Where: 
- \( P \) = Percentage
- \( F \) = Frequency (the number of the students who fulfill the Questionnaire).
- \( N \) = Total number of respondents.
(Sudjono in Madaniyah)

The purpose of formula above is to know the percentage of the number teachers who fulfill the questionnaire. Beside, the researcher also uses mean to know the average of the teacher’s perception by using the formula below:

\[
\text{Score Mean} = \frac{\sum \text{Score} \times P}{\text{Max}}
\]

Where: \( \text{Score} \) = Score of each teachers.
Max = Amount of multiplying total number of item and
Maximum score per item.

P = Percentage of respondents who fulfill the questionnaire

After calculating the mean of each respondent, the researcher makes the categories of teacher’s perception based on the table of range of scale criterion below:

<table>
<thead>
<tr>
<th>Range of scale</th>
<th>81%-100%</th>
<th>61%-80%</th>
<th>41%-60%</th>
<th>21%-40%</th>
<th>0%-20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher’s perception</td>
<td>Very positive</td>
<td>Positive</td>
<td>Average</td>
<td>Negative</td>
<td>Very negative</td>
</tr>
</tbody>
</table>