

## **CHAPTER III**

### **RESEARCH METHOD**

In this chapter, the researcher presented the method of the study which was important as a guideline to attain the objective of the study. It provided with research design, research subject, data collection technique, and data analysis.

#### **3.1 Research Design**

Research design was very important to conduct the research. It helped the researcher to find out the problem and showed how the study would be answered, this study purposed to search the answer from the problems as stated in chapter 1. It tried to answer the question. How was students' perception towards e – learning in thesis writing class? Dealing with Nadhara as quoted by Chusniwati(2014 :30) if the researcher was concerned with finding out who, what, where, or how the study is descriptive.

The fundamental steps on qualitative research design were gathering the information from natural setting, direct observation, interviewing, and documentation (Marshall and Rossman in Sugiyono, 2013:225). In this research, the researcher wanted to collect information from each individual about students' perception towards e-learning used questionnaire. This study used qualitative survey or mixed method design. Mixed method design enabled us to gather qualitative input to explain and extended quantitative

results in order to gain the result of the research (Creswell in Nazara 2011).

The researcher analyzed data from questionnaire and interviewed the students.

### **3.2 Research Subject**

The subjects of the study were students' university of Muhammadiyah Gresik at eighth semester who had studied thesis writing in seven semesters. They were A and B morning class. The numbers of the students were 34 students. The researcher chose thesis writing class because it was the first time of implementing e – learning in that class. The researcher took eight semester students because they implemented e – learning in thesis writing class.

### **3.3 Data Collection Technique**

Data collection in this study was held to the subjects of the research who had been chosen by researcher. The subject got questionnaire after that they got interview about the implementation of e – learning at thesis writing class.

#### **3.3.1 Questionnaire**

Questionnaire was instrument which was designed to obtain information about opinion, feelings, and interest. Clarke in Devlin (2002) said that the questionnaire was used to produce student views of good and bad teaching. The questionnaire specifically asked students to comment on their own behavior or activities as well as those of others. Responses to

these questions provide indirect indications of where students perceived responsibility for their learning.

In this study, the questionnaire was pilot instrument that was used by researcher to get data. Questionnaire was given by the researcher to the subject of the study after the teaching learning process to investigate students' perception towards e – learning that had been implemented in subject's class. The total numbers of respondents who were given questionnaire were the entire subject, they were 34 students. The researcher used closed ended question. It means perception option to choose answer that according to which they felt, normally by giving circle, tick or cross in the appropriate option. Zoltan Dorney (2003:43) said multiple choice items were relatively straight forward. It made them more reader – friendly if we could make the response option shorter by including as much information in the stem as we can without repeating this every time. Moreover Cohen (2007:318) stated that the items of questionnaire had to be clear and specific.

The researcher decided to use closed – items questionnaire because it had advantage to the respondents. Respondents could answer easily because the answer items were provided by the researcher. Zoltan Dorney (2003:35) stated that the major advantage of closed items questionnaire was their coding and tabulation was straightforward and left no room for rather subjectivity. According to Best (1981:168) a close form questionnaire was a kind of questionnaire that provided for making a yes

or no, a short response, or checking an item from a list of suggested response. Questionnaire was for the students which are focusing on the students' perception.

Based on Marcrae and Baden Hausen(2001), Person perception was the people outputs (evaluations, memories, impressions) that were gotten and shaped by their knowledge and experience in social phenomenon. That theory gave guiding to the researcher to divide the categories of questionnaire into three parts. Part I composed of seven items concerning respondents' evaluation about implementing e – learning in thesis writing class. Part II consisted of seven items aimed to obtain information about respondents' memory based on their past experiences in the process of learning using e – learning. Part III consisted of seven items in regard to participants' impression toward e – learning.

The researcher also used likert – scale. According to Donald Ary (2002:224-225) a likert scale assessed attitude toward a topic by presenting a set of statement about the topic and asking respondent to indicate for each whether they 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 gave to each item. The subjects selected the perception category that best represent their reaction to each statement: strongly agree (SA), Agree (A), Undecided (U), disagree (D), and strongly disagree (SD) for example: if the students' perception liked and more effective in learning thesis writing through e – learning, they could choose strongly agree (SA), if the students perception just liked, they could choose (A). If the students' perception just this tool still hesitant to learn thesis writing, they could choose undecided (U), if the students' perception were less effective or less interest with this tool, they could choose disagree (D), and if the students' perception did not like and not interest, they could choose strongly disagree (SD) (see appendix I).

### **3.3.2 Interview**

Interview was conversation between researcher and some subjects of the study to get information. The information was to ask the students' opinion, beliefs, and feeling when they studied through e – learning in their own word. Moreover, Best (1981:164) stated that the interview was an oral questionnaire which the subject or interviewee gave the needed information verbally in a face to face relationship, the purpose of interview was to collect the data from the participants' experiences.

The researcher used purposive sampling technique to choose one or some of the students who interviewed. Before conducting the interview, the researcher asked to the lecturer to recommend who were active

students in e – learning activity. Then, researcher used snowball sampling, the researcher chose one subject who was interviewed and asked several questions, then the researcher asked who the next recommended friends that were interviewed. From the recommendation of second students, the researcher continued to interview third students with the same technique and so on. Interview stopped if the data had completed.

The result of interview necessary to ensure the result of the questionnaire that had been conducted by researcher. The researcher used semi structured interview. It means that the interviewer focuses on issues of particular importance to the research question. There were seven items of questions, and then the interviewer asked some structured questions then dug one by one deeply and the researcher could develop her question to get information based on the need of the study about students' perception towards e – learning which had been implemented in students' class.

### **3.4 Data Analysis**

Data Analysis was important step in research in order to conclude the result of the research. The researcher wanted to analyze the data from quantitative and qualitative data.

#### **3.4.1 Quantitative Data**

The Researcher analyzed the quantitative data from the result of survey questionnaire. According to Azad Isik (2009) there were four steps to analyze the data from questionnaire in the following section:

a. Calculating

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

$$P = \frac{F}{N} \times 100 \%$$

Where: P = Percentage

F = Frequency (the number of the students who fulfilled the Questionnaire).

N = Total number of respondents.  
(Sudjono in Madaniyah)

The purpose of formula above was to know the percentage of the number students who fulfilled the questionnaire. Beside the formula above, the researcher also used mean formula to know the average of the students' perception. The formulas as follows:

$$\text{Mean} = \frac{\text{Score}}{\text{Max}} \times P$$

Where: Score = Score of each students.

Max = Amount of multiplying total number of item and Maximum score per item.

P = Percentage of respondents who fulfill the questionnaire

After the researcher calculated the mean of each respondent, the researcher made the categories of students' perception based on the table of range of scale criterion bellow:

Range of scale (%)	Students' perception
81-100	Very positive
61-80	Positive
41-60	Average
21-40	Negative
0-20	Very negative

#### b. Display

After the researcher calculated the percentage of the number respondents who gave participation in questionnaire and calculated the result of questionnaire who had been fulfilled by respondents, then the researcher created the result of calculating in table and chart. The purpose of display was to cultivate the data easily that was done by researcher.

#### c. Conclusion Drawing

The researcher made conclusion of questionnaire result from averages of students' perception from the subject were made on the chart and then the researcher could conclude the students' perception from percentage of each criterion in that chart.

### 3.4.2 Qualitative Data

The Researcher analyzed the qualitative data from the result of interview. According to Azad Isik (2009) there were four steps to analyze the data from interviewing in the following section:

#### a. Coding

The researcher interviewed respondents and dug one by one the questions which had been provided by researcher before and then recorded all the result of interview in audio records were scripted carefully and transferred in narrative form using Microsoft Word for subsequent analysis.

#### b. Ordering and Displaying

In this step, the researcher analyzed the data by making transcription and narration based on interview. Further, the researcher narrated all information based on the result of interview from the subject of the study to recheck the data from students' perception in thesis writing class.

#### c. Conclusion Drawing

The researcher drew the conclusion from the interview data that processed and the researcher made decision about the meaning of data was made, conclusions were drawn and they were included in the dissertation. This conclusion gave clear explanation about students' perception towards e – learning in thesis writing class at Muhammadiyah university of Gresik. The data was analyzed by researcher based on the real and researcher's interpretation. The result of the data were used to complete the result of the questionnaire, then answered the research question, drew the conclusion, and formulated the data into the result of discussion.