

## CHAPTER III

### RESEARCH METHOD

#### A. Research Design

This chapter discusses the method applied in conducting this research. The content of this chapter deals with research design, population and sample, data and source of data, research instrument, data collection technique, and data analysis technique.

The design of the research is quantitative research which relevant to John D. Anderson, in quantitative research design, the researcher attempts to find the answer of the research problems. This research design is suitable for this research since it fulfills the characteristics of quantitative research. There are ten features of quantitative research, they are: Objective, Test theory, Facts are value-free and unbiased, Measurable, Report statistical analysis; it means that basic element of analysis is numbers, Researcher is separate, Hypothesis, Establish relationships or causation, Use instruments, Strive for generalization; it means that generalizations leading to prediction, explanation, and understanding<sup>1</sup>.

And clearly, this research design is ex post facto-correlational, since this research is aimed to discover the relationship between the students' study skills and their achievement in TOEFL Test through the use of correlation statistics<sup>2</sup>.

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<sup>1</sup> John D. Anderson, 2006, *Imperial COE*, Superintendent of Schools, P.3

<sup>2</sup> Yogesh Kumar Singh, 2006, "*Fundamental of Research Methodology and Statistics*", Mahatma Gandhi Chitrakoot rural University; New Delhi, P.304.

The researcher also wants to find out the influence of those six study skills on students' achievement in TOEFL Test.

In this ex post-facto research, the writer as the researcher cannot control the independent variable or variables by manipulation or randomization: change in the variables have already taken place. Furthermore, there is no control group as there is in an experimental research. There is also no treatment given the independent variable or variables have occurred naturally.

Basic design of correlation research is very simple, involving nothing more than two sets of scores or variables and computing a correlation coefficient. There are two computation of coefficient of correlation (linear), those are: rank difference method and product moment method. In this research, the researcher uses product moment method. The degree of linear correlation can be represented quantitatively by the coefficient of correlation which symbolically represented by ' $r$ '. A perfect positive correlation is +1.00. A perfect negative correlation is -1.00. A complete lack of relationship is zero (0).

Inferential statistical analysis is used to test the hypotheses and analyzes the influence of independent variables, those are: textbook reading, note-taking, memory, test preparation, concentration, time management. So, in this research the researcher uses linear regression and multiple regression. Linear regression uses to know the influence of students' study skills simultaneously and multiple regression uses to know the influence of students' study skills partially to students' TOEFL Score.

## **B. Population and Sample**

### 1. Population

Population is larger group which the generalization is made<sup>3</sup>. In other words, population is group that the researcher wishes to study. The research will take place in State Islamic University of Sunan-Ampel, which is located in Jl. A. Yani Surabaya. In State Islamic University of Sunan-Ampel, there are 5 faculties: Tarbiyah, Dakwah, Ushuluddin, Adab and Syari'ah. The researcher focuses on Tarbiyah Faculty. So, in this research, the population is students of English Intensive Course.

### 2. Sample

Sample is the small group that is observed<sup>4</sup>. In other words, sample is a part of population that the research is focused on in order to gain the data relating with the research. The more the samples are taken, the better the research will.

In this research, the researcher uses simple random sampling. Simple random sampling is the each member of the population has an equal chance being selected and the probability each member of the population being selected is unaffected by the selection of other members of the population<sup>5</sup>. The sample of this research is 2<sup>nd</sup> semester students of English Intensive Course who are given study skills inventory by the researcher.

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<sup>3</sup> Donald Ary, et.al, 2010, "Introduction to Research in Education", 8<sup>th</sup>, USA.

<sup>4</sup> Donald Ary, et.al, 2010, "Introduction to Research in Education", 8<sup>th</sup>, USA.

<sup>5</sup> Louis Cohen, et.al, 2007, "Research Methods in Education", 6<sup>th</sup> Edition, USA: Routledge, P.110.

### **C. Research Instrument**

Since this research employs ex post facto-correlational design, the Instrument uses in this research are human instrument (The researcher), questionnaire, and test.

Human instrument means that the researcher herself, who collects, organizes, analyzes, and draws the conclusion or the results of the research. The researcher analyzes the data based on the questionnaire and students' score. So, the researcher does not reduce or increase the data.

The questionnaire is distributed to the students so that they can give their opinion through the questionnaire honestly. The questionnaire consists of some points related to students study skills; textbook reading, Note-taking, memory, test preparation, concentration, time management. The questionnaire is design in liker style format: List attitude statements and ask participants to respond on a five-point scale (e.g. almost always, more than half of the time, about half of the time, less than half of the time, almost never). The last instrument is TOEFL test which is conducted by P2KB cooperates with Tarbiyah Faculty. The TOEFL Test is Paper-Based TOEFL.

### **D. Research Variable**

There are two types of variables in this research. The first is independent variable, independent variable is variable occurs naturally; there is no control or manipulation over it (influence of dependent variable). The independent variable

is study skills (textbook reading, note-taking, memory, test preparation, concentration and time management) and the symbol variable of this variable is X. The second variable is dependent variable; dependent variable is variable which influenced by independent variable (output). The dependent variable is TOEFL score of the students and the symbol of this variable is Y.

In this research, the researcher collects the data by giving Study Skills Inventory to the 2<sup>th</sup> semester students at English Intensive Course in order to find out the students' study skills. The researcher also obtains the data by analyzing the result of the students' study skills inventory and their achievement (students' Post-TOEFL Score).

#### **E. Data Collection Technique**

In collecting the data, the researcher uses several techniques as it follows:

##### **1. Questionnaire**

To answer the statement of problem number one, the researcher gives the 2<sup>th</sup> semester students of FITK at English Intensive Course a study skills inventory by Dennis H. Congos. The researcher gives questionnaire as the technique of gaining the data. From this questionnaire, the researcher gets much information about the study skills of 2<sup>th</sup> semester students, what kind of study skills which are dominant and subdominant and whether the study skills of the students need refinement or not. This questionnaire also shows the students' lack ability and good ability at certain study skills.

In English Intensive Course, there are 25 classes (A Class till Y Class): PBI students (V Class - Y Class) and Non-PBI students (A Class - U Class). There are 25-30 students in every class. The researcher distributes the questionnaire to 10 students in every class. The total of the students at English Intensive Course is 620. So, in this research, the sample is 250 students. The researcher uses simple random sampling in distributing the study skills inventory based on their attendance list.

## 2. Test

To answer the statement of problem number two and three, the researcher takes students' Post-TOEFL Score for measuring students' achievement. This test is conducted by P2KB cooperates with Tarbiyah Faculty. Then the researcher analyzes the result of the students' study skills inventory and students' achievement (Post-TOEFL score). From this analysis, it can be concluded whether the students study skills have relationship and influence or not on student's achievement in TOEFL Test.

## **F. Data Analysis Technique**

The researcher collects and analyzes the data based on the data collection technique which is gained from questionnaire and students' achievement in TOEFL Test. The researcher prepares the study skills inventory questionnaire by Dennis H. Congos and give it to the students. After gaining the data, the researcher describes the information from the result of questionnaire which is representing everything about their study skills at English Intensive Course by using analysis statistic descriptive. Then, Pearson product-moment correlation,

linear regression and multiple regression run to find the relationship and influence between students' study skills and their achievement in TOEFL Test. In order to predict the value of dependent variable (students' achievement in TOEFL Test) from independent variable (Students' study skills) and SPSS (statistical product and service solution) 20 for analysis.