Chapter Three

Methodology

Research Design

The research has purposes to know how good the practice of Autonomous Learning at EED UMY is and what the challenges the students in face using Autonomous Learning methods are. Therefore, the researcher makes a decision to use quantitative design in conducting the research.

This research use quantitative design. Based on Suseno (2013), quantitative design, as a method based on the philosophy of positivism is used to examine the specific populations or samples; the sampling technique is usually done by calculating the specific sampling techniques appropriately.

In addition, quantitative research is explaining phenomena by collecting numerical data that are analyzed using mathematically based methods. In this case, this research seeks about how good the application of practice the autonomous learning method is. Therefore, quantitative design is appropriate to measure the practice of autonomous learning method.

Research Setting

The research took place at EED UMY. EED UMY has many students with different skills and characteristics. The researcher can see with how they are active learner. Moreover, EED UMY has already been using KBK in teaching learning process. There is KBK; students are encouraged to study independently. As a matter of fact, EED UMY has already applied autonomous learning method since four years ago. That is all based on the researcher's belief that students in EED UMY ability in some aspects. Additionally, the researcher was also studying at EED UMY. Therefore, it is easy to do the research and collect the data.

Population and Samples

Population of the Research. The population of this research are all of students at EED UMY. Sugiyono (2010) said that the population is object or subject that has quality and characteristics determined by the researcher to learn and then draw a conclusion.

Sample of Research. The sample of this research is the students' batch 2012 of EED, UMY. There are three classes of students' batch 2012. Each class consists of 30 students. The total numbers of 2012 students are 90 students. The total students batch 2012 as many as 134 but, the students who active in the teaching and learning process as many as 90 students. According to Sugiyono (2010), the sample is part of number and characteristic that has by population. The technique of sampling in this

research uses convenience or total sampling because this research involves all students from batch 2012. As a matter of fact, numbers of students in batch 2012 are not many. Therefore, it can be possible to collect all data taking a look at willingness and also availability of students. This researcher uses convenience or total sampling because this is easy, economical in time and money. In addition, the researcher knows most of the students batch 2012. Therefore, the more data collected from respondents, the more valid the result. Besides, students batch 2012 of EED UMY are in the middle of batch at EED UMY. They have already known about autonomous learning method and run it.

The data were collected from 90 students of semester 6 EED UMY. First, the researcher gives questionnaire for students' of 2012 EED UMY. Those questions are in the form of multiple choice statements. It needs sufficient time to analyze students answer in this research. In this case, the numbers of the respondents depend on the redundancy of data. After that, their answers will be categorized in findings and discussion. In the third year of this department, there are 90 students in 3 classes; Class A, Class B, and Class C.

The all of questionnaire conducted namelessly. They also do not have to worry about losing face before the researcher and their peers when they are answering the questions. That way, this system is accepted by all of the students, including their parents. Therefore, the researcher gave questionnaires to 90 students of EED UMY. This way, the researcher knows what the students' opinions of this method are. The questionnaire is attached as Appendix.

Instrument of research

The instrument in this research is questionnaire. The questionnaire uses to determine the level of the practice of autonomous learning method in the learning process. The questionnaire consists of some statements that have been made by the researcher based on the research questions. Then, the statements are supported from the literature review in this research. After the researcher gets the statements, the statements put in the questionnaire. The researcher designed the statements in Indonesian language. This questionnaire uses Indonesian language, because Indonesian language can make respondents understood with the statements clearly.

After that, the researcher needs to determine the type of questionnaire because the questionnaire has some form. Sugiyono (2010) said that the designer of questionnaire needs choose the metric – the scale of data – to be adopted. In this questionnaire, the researcher uses likert scale that has some frequency, like; strongly agree, agree, disagree, strongly disagree. Finally, the researcher also put the instruction at the beginning of the questionnaire because the instruction sentence can guide the respondents to fill the questionnaire.

Data Collection Method

Technique in collecting data is the way used by the writer in collecting the data and the writer use questionnaire as instrument. In collecting the data, the writer spread the questionnaires for students to know how the practice of autonomous learning method used by EED UMY work. Before distributing the questionnaires, the researcher did some steps. First, the researcher makes some statements for the questionnaire and consulted to the supervisor three times. The researcher makes sure about the respondents by present list in teaching room. Thus, the researcher did the piloting to four sample respondents to check the sentences and understanding related to the questionnaire that will be distributed. After all have been done, the researcher distributed the questionnaire to students' batch 2012.

This research applied quantitative design because the researcher wants to know whether the implementation of Autonomous Learning method is good or not. Using questionnaire tends to be more reliable, and it also encourages greater honesty.

The form of questionnaire is close-ended questionnaire because the questionnaire was developed on the existing literature. Thus, the first research question is answered with some statements and measured with unfavorable scoring. The second research question is answered with some statements where actually those statements have been classified.

Conceptual Definition of Variable

This research entitles "The Practice of Autonomous Learning Method at PBI UMY". Here, conceptual definition of variable means that where the variable is analyzed. It is called independent or dependent variable. There is one variable on this research, namely, autonomous learning method.

Independent Variable. The independent variable of this research is autonomous learning method because this is the prominent method is analyzed at EED UMY. Student autonomy is capabilities or abilities of students to get knowledge through process determined independently.

Calibration of the Instrument

Validity. In this research used questionnaire, therefore this research needs a validity to measure whether the instrument that is used valid or not, especially content validity. Suseno (2013) argued that validity is how far the accuracy and thoroughness in an instrument to do its function. This research uses quantitative method; quality of data collection is very depending on quality of instrument or instrument data collection used. Validity is important key to effective research. Content validity refers to how accurately an measurement tool taps into the various aspects of the specific construct in question.

To measure how far the practice of autonomous learning method work in the class, one might survey about the application of autonomous learning method in the class. Such as one survey would be easy to administer (practical) and the scoring quite dependable (reliable).

Based on the explanations, the instrument has constructed validity if there is a relationship between theory and concept of the competence. It was needed to accomplish the questionnaire in this research. The instrument has been consulted to lecturer and related to course books or some journals used by students' university. Therefore, it was categorized into a valid test.

Reliability. Reliability was also important to measure a research except, the validity. Based on Suseno (2013), reliability is how far the result of measurement is reliable. The measurement is reliable if several operations of measurement for the same subject get relatively common result. Macaskill & Taylor (2010) noted that autonomous learning scale has already been used twice and it means that, it has good reliability.

Data Analysis

To analyze the data, because of using data quantitatively, the result of questionnaire is in the form of scores or numbers and called as descriptive statistics. Descriptive statistics is used to describe and present the data, to further analyze and it is used to interpret what the data mean. It contains frequencies, measure of central tendency (means, modes, and medians), and standard deviations. The questionnaire is analyzed by autonomous learning scales that have two factors; they are implementation of autonomous learning method and the obstacles facing by students in autonomous learning method. SPSS V.20 is applied to process the data. It is adjusted with the research questions depending on the appropriate data.