

## **Chapter Three**

### **Methodology**

This chapter discussed methodology. The first part of this chapter discussed research design implemented in the research. Then the second was the description of participants. The next part explained about data collection method and reasons why the researcher choosed that method. Then, the data collection procedures described in the next part. In the last part, data analysis process explained to complete the description of the methodology for this research.

#### **Research Design**

The aim of this research was to describe students' perception toward Cooperative Learning method in class of Material Design in EED at UMY. In this research, EED students batch 2013 were the participants in this research. The participants revealed their experience after attending Cooperative Learning in class of Material Design. They were selected because when this research was conducted they just had finished the class Material Design.

Based on the aim above, the appropriate research design for this research was qualitative research. This is because qualitative research was aimed to explain or express the experience of the respondents. According to Rahmat (2009), qualitative research was a research procedure that produces descriptive data as a form of utterance and script from a respondent. It means that the result of qualitative research was a description. In line with Denzin and Lincoln (2009) qualitative research aimed to get a better understanding through first-hand experience, truthful reporting, and quotations of actual conversations. It aimed to

understand how the participants derived meaning from their surroundings, and how their meaning influences their behavior.

### **Setting and Participant**

This research was conducted at EED UMY as the researcher observed that the implementation of Cooperative Learning at EED UMY yet studied. The participants of the research consisted of 3 students of EED UMY Batch 2013. There was one student with high GPA (GPA 4.50-3.50), one student with medium GPA (GPA 3.49-2.75), and one student with low GPA (GPA <2.75). This research used different GPA to get the various opinions from the students with low, medium and high GPA. These EED students had experience in Material Design class that they did in the fifth semester. Their experience in doing Cooperative Learning in class of Material Design was the main data for this research. Thus, the students who were eligible for this research was those who have done Cooperative Learning in Material Design class. They were asked to declare their willingness to be recorded. Their identity was disguised to protect the respondents from any foreseen threats.

### **Data Collection Method**

This research used interview as the data collection method. Interview was often used in a qualitative research and considered as an appropriate method since it concerned with the information, understanding and also the feelings of the individual (Hancock, 2002). According to Margono (2004) interview was the data gathering technique with a way asking some questions orally. Through this method, the researcher gave some questions for participant to get

information about the benefits and the problems of Cooperative Learning in Material Design class at EED UMY. The respondents were interviewed one by one. Recorded interview was transcribed in original language then translated into English.

### **Data Collection Procedure**

The procedures of data collection in this research were described in two steps. The first step was recruiting the participants, and then conducting the research with interviews. Then, participants for this research were first recruited through the direct invitation for joining the research, and after that the researcher gave explanation of the research. The participants had enough information to make a decision on whether to participate in the research or not. The researcher gave one day for the participants to consider. The researcher confirmed the participants to get the answer by short message service.

The participant who had agreed to join in this research would be given opportunity to make a schedule of interviews. Arranging schedule of interview was intended because the schedule activity of participant was different from one to the others. Therefore, the researcher needed to make a right schedule. After the schedule had finished, the researcher focused on the duration, place and facility which would be used in the interview process.

The procedures of interview was determined by the researcher. Time allocation for interview was around ten to fifteen minutes each respondent and researcher conducted it in *Bahasa Indonesia*, because it was easier to understand for both respondent and researcher. Then, this interview was recorded with voice

recorder so that the answers given by the respondent was easier to be analyzed. The objective of questions in interview was collecting the information about their opinion in Cooperative learning in class of Material Design in EED at UMY.

### **Data Analysis**

The last step was data analysis. Before performing data analysis, the researcher transcribed the interview. In order to validate the data, the researcher used member checking. According to Satori and Komariah (2014) member checking was one of method used to check the suitability obtained data to the informant. The purpose of member checking was used to make sure there was no misconception, meaning the data were valid and could be used as source in writing research report. Related to the process of validity in this research, all of respondents agreed with the researcher's transcription.

The researcher was using coding procedure to analyze the data. According to Straus and Corbin (1990) coding was a procedure in qualitative approach that usually used in grounded theory principle to analyze collected information. There were three steps of analysis including first was open coding which concerned for breaking down, examining, comparing, conceptualizing, and categorizing data. Second was axial coding means categorizing open coding result into categories that had been determined. Then the third was selective coding which means a process in selecting core category and relating other categories into it systematically then validating those relationships, and filling in categories that needed further refinement and development. The goal of this data analysis was to interpret student answer and the finding could be reported.

