

## **CHAPTER III**

### **METHODOLOGY**

This chapter discussed the method of this study. It discusses purpose of the study and research question, research site and participant, data collection techniques, and analysis.

#### **3.1 Research Design**

This study employed a qualitative approach that is considered appropriate to “explore attitudes, behavior, and experiences” (Dawson, 2007: 15). WhatsApp group observations, questionnaires, and interviews in this study are aimed to get deeper understanding of phenomenon of the use of Whatsapp from participants’ point of view. As McNamara (1999) states that qualitative approach is to understand participants’ phenomenon from their point of views. The WhatsApp group observations, interviews, and questionnaires are employed as multiple source of evidence. As Emilia (2009:191) states, “Qualitative research employed multiple sources of evidence—converging from the set of issues or multiple data collections and analytic procedures to allow for in-depth study.”

#### **3.2 Research Site and Participants**

The subjects of this study were thirteen university students in Bandung who take intensive English course for two months. They are heterogeneous in terms of majors because they are from some different universities. Their level of English are categorized as intermediate. There were several reasons why the researcher chose them as the subjects of this study. First, the researcher teaches in this English Course so it easy to get access for collecting the data. Second, the students are digital natives who are usual to use mobile device in their daily life. They are familiar with WhatsApp as a mobile social network. All students are experienced in using this mobile social network. They have access to the internet anywhere anytime. Based on this fact, the researcher chose these students to find

out how far they can learn English outside classroom in mobile learning environment using WhatsApp platform.

### **3.3 Data Collection Procedures**

Data collection procedure employed in this study were observation, questionnaire, and interview. It will be described below.

#### **3.3.1 WhatsApp group Observation**

Observation was used in this study since it is possible to record behavior as it is happening (Merriam, 1991). Observation is used to document and reflect interaction and events in Whatsapp group. Data from observation was gained from teacher's field notes. The teacher's field notes can be seen in Appendix.

Things happened during the teaching and learning process by using WhatsApp group were recorded in teacher's field notes. The writer copied the notes immediately after each meeting to keep the fresh memory of the observation (Van Lier, 1988 as cited in Emilia, 2005). It is also to help "increase the researcher sensitivity to her own classroom behavior and its effect and influence on students" (Allwright, 1988 as cited in Emilia, 2005). The type of observation in this study was participant observation (Merriam, 1991) since the writer also took part as the teacher.

A group of thirteen students was created on WhatsApp by the teacher, titled 'English Group'. The teacher became the administrator of the group who can invite and remove the member of the group. The observation was conducted once a week when the live discussion was held via WhatsApp group for one hour every session. Some guidelines and instructions were delivered for the medium of communication, topics, flow of conversation etc. The discussion sessions were done in a group conversation, in which students could talk each other at the same time. To stay in touch via WhatsApp application, students needed to save each other's number and downloaded WhatsApp application on their mobile phones. Students' posting and comments were observed and analyzed qualitatively.

#### **3.3.2 Questionnaires**

Questionnaires were administered to obtain the additional information related to the students' responses to the use of WhatsApp as mobile learning environment that were administered to the students by the end of program for the WhatsApp group interaction. The questionnaires used closed questionnaire type that was made by Kabilan, Ahmad & Abidin (2010). The items in the questionnaire covered the aspects of students' motivation, confidence, and responses to the use of WhatsApp as a mobile learning environment. The respondents marked range scale which is a 5-point for strongly agree to 1-point for strongly disagree. The questionnaire can be seen in Appendix.

To check the validity of the questionnaires, the researcher asked feedback from the supervisors. This was in line with Alwasilah (2002: 176) stated that it was good to ask feedback to promote higher validity.

### **3.3.3 Interview**

Interview was conducted to get deeper information which is not gained through questionnaires. The interview was conducted at the end of implementation of WhatsApp with ten participants who were chosen randomly out of the thirteen participants. The interviews were meant to get deeper information of the participants' response to the use of WhatsApp as a mobile learning environment. They were conducted to gain information about what they liked and disliked, issues of difficulties and enjoyment when participated in the WhatsApp group. The interview was audio taped and transcribed. The interview can be seen in Appendix.

The questions were structured, so that every student got the same opportunity to answer the same questions. The questions were posed in informal situation in order to obtain sincere statements or answers from the sample (Moleong, 2000).

The use of those instruments was aimed at attaining data as completely and accurately as possible. It is called triangulation; that is the use of multiple-data-collection methods which contribute to the worthiness of the data. It can increase confidence in research findings (Glesne and Peshkire: 2004).

### **3.4 Data Analysis Procedures**

This section focused on data analysis procedures got from observation, questionnaire, and interview, as they are discussed, as follow:

#### **3.4.1 Analysis of observation data**

Three stages of data analysis (transcribing, categorizing, and interpreting) were administered in analyzing data from observation then they are analyzed and categorized to find central meaning of what the participants' says, then, lead to central themes (Laforest, 2009). Moreover, Miles & Huberman (1984: 15-21) suggest that "data reduction, data display, and conclusion drawing/verification" are used in analyzing data from observation.

Observation sheet contained a list of features to be addressed during particular observation such as "time/date/location of the observation, names/positions of persons being observed, specific activities and events related to the research questions of person being observed, and initial impressions and interpretations of the activities and events under observation" (Hancock & Algozzine, 2006: 46).

The number of participants, postings and comments from WhatsApp group observation were analyzed both qualitatively and quantitatively based on content analysis approach. Content Analysis approach is used to reveal the exposure of English in this study through analyzing the product of the WhatsApp by the students quantitatively and qualitatively. Quantitatively, the analysis started with words, topic, and frequencies. Qualitatively, the frequencies and percentages could lead to make inferences the study for answer the research questions.

#### **3.4.2 Analysis of questionnaire data**

Data from questionnaires were analyzed through descriptive statistic. The description of items, mean scores, frequency and percentages were employed to

describe the students' response to the use of WhatsApp as a mobile learning environment. It is described and interpreted by using Likert scales which are formulated into three categories (positive, uncertain, and negative) as suggested by Azwar (2012). The description of data analysis from questionnaires, students' responses to the use of WhatsApp as mobile learning environment per category and whole category, is described, as follow:

- a. The categories of students' responses to the use of WhatsApp as mobile learning environment per aspect

Table 3.1. The categories of students' responses to WhatsApp per aspect

Categories	Range of Scores
Positive	> 216
Uncertain	108 - 216
Negative	< 108

- b. The categories of students' responses to WhatsApp as mobile learning environment the whole aspect

Table 3.2. The categories of students' responses to WhatsApp the whole aspect

Categories	Range of Scores
Positive	> 650
Uncertain	325 - 650
Negative	< 325

The data above shows that there were two aspects: per-aspect and whole-aspect. Data questionnaires from per-aspect portrayed students' responses to the use of WhatsApp as mobile learning environment for each sub-aspects (4 sub-aspects) separately. Then, data questionnaires from the-whole aspect described students' responses to the use of WhatsApp as mobile learning environment in one unity, as will further be discussed in chapter four. The data gain from questionnaire were triangulated to answer the research questions. Then it can provide more accurate data and conclusions (Cohen et al., 2000; Wieman et al., 2001).

### **3.4.3 Analysis of interview data**

Data from interviews were analyzed with three stages of data analysis. They were transcribing, categorizing, and interpreting. The record of interviews were transcribed into written texts (Kvale, 1996). Then the written texts of data from interviews were analyzed and categorized. The participants' says were analyzed to find central meaning in accordance to research questions (Laforest, 2009).

In this study, the data from interviews which "long statements are compressed into briefer statements in which the main sense of what is said is rephrased in a few words," (Kvale, 1996). Furthermore, one category to another was compared to get conclusion that was selected as the final data in form of condensed body of information.

### **3.5 Concluding Remarks**

This chapter discussed the methodology of data collections in this study. This study attempted to find how WhatsApp as a mobile learning environment can support EFL students to learn outside classroom. Qualitative study was used as the design of this study. 13 students in one of English courses in Bandung participated in this study. The data collection techniques were WhatsApp group observation, questionnaire and interview. This study used both quantitative and qualitative approach to analyze the data. The findings and the data analysis will be discussed in the next chapter.