Chapter Three

Research Methodology

This chapter discusses the methodology used by the researcher in this study. Besides, this chapter explores how to conduct and collect the research data. This chapter three consists six parts of methodology namely research design, research setting, research participant, data collection technique, data collection procedure, and data analysis. Several theories are also included in this chapter to support the methodology in this study.

Research Design

The researcher used qualitative research design in this study to find out the students' perception on the use of *Kahoot!* in English language learning. Creswell (2012) stated that qualitative research is a design needed to explore a phenomenon from the students' perspective. From the statement mentioned, using qualitative research was appropriate to this study because the researcher needed the students' feeling to know the use of *Kahoot!* which was effective or not. By exploring students' thought, the researcher can gain deep explanation about the topic.

The researcher chose descriptive qualitative research as the research design of this research. According to Merriam (1998), "description means that the end product is a rich, "thick" description of the phenomenon under study" (p. 29). Besides, the descriptive qualitative research focuses on specific phenomenon. By using descriptive qualitative research, it enabled the researcher to get more explanation from the participants. The goal of descriptive qualitative research is to

discover a comprehensive summary of a specific trend experienced by the participants (Lambert & Lambert, 2012). Therefore, the descriptive qualitative research was suitably applied to this research because it was in line with Lambert to discover specific trend of using *Kahoot!* in English language learning. Since *Kahoot!* had already been used in language learning by the students, they had a lot of experiences to use it. That way, the majority of the students were able to share a lot of experiences in using *Kahoot!*. Thus, descriptive qualitative research was suitable to this research.

Research Setting

The researcher conducted the research at ELED of a private university Yogyakarta. As the reason why the researcher chose this university, *Kahoot!* had been used as one of teaching media in some courses such as Digital Technology in Education course, Language Research, Instructional Design and Academic Reading and Writing. The facility of ELED was also highly supportive to apply *Kahoot!*. As another reason, the researcher got the easy access to the university.

The process of conducting this research took approximately six months from February 2019 until July 2019. The researcher has conducted this research. For the first step, the researcher needed five months to create the research proposal. Then, the researcher started collecting the data in the early of July 2019 until the middle of July 2019. Following this, the researcher conducted the data analysis from the middle of July 2019, and all the data analysis was completed at the end of July 2019.

Research Participants

The participants of this research were four students consisted of two female and two male ELED students in sixth semester from batch 2016. As the reason why the researcher selected these particular students to be the participants, they had already experienced *Kahoot!* in semester four. That way, they had already used *Kahoot!* in English language learning.

There was a specific qualification for the sampling used by the researcher. Cohen, Manion and Morrison (2011) found that there is no standard number of participants in qualitative research. For the participants' qualifications, the students had already involved in fifth semester and enrolled the subject contained *Kahoot!* as the teaching media. Besides, the students had good record in the attendance. For example, the students who had good attendance record meaning that they always paid attention to the use of *Kahoot!* in class well. Thus, the students who were active in class were able to know the daily material towards the use of *Kahoot!* in classroom activity given the teacher.

Data collection technique

The data collection technique used by the researcher in this study was interview. According to Cohen et al. (2011), the interview enables the participants to discuss and express how they consider a phenomenon from their own view. By doing interview, the researcher could get in-depth explanation, so the researcher was able to easily explore the students' perception of using *Kahoot!* in English language learning including benefits and challenges.

The researcher used standardized open-ended interview. The open-ended items allow the interviewer to find out more when the participant's respond is unclear, also with the minimum constraint on the respond it may adding new knowledge for the study. Cohen et al. (2011) stated that open ended interview allows the researcher to probe so the researcher may go into more depth explanation.

In addition, the researcher provided the interview questions used to ask the participant during the interview in order to dig the answers of research questions. So, the researcher followed the sequence of question in the interview guideline. Besides, the researcher used Indonesia language to avoid misunderstanding information and ease the interaction between the researcher and the participants in the interview process. Following this, the researcher applied some tools such cell phone to record the participants' answers, pen and book-note used to help the researcher take note important information related to the research.

This study also utilized the question format. The researcher used the indirect question format. Likewise, the use of the indirect questions aimed to ask the provided questions to the participants generally. Regarding the statement mentioned, Cohen et al. (2011) asserted that the indirect approach provides truthful and open responses. That way, this study used response mode to manage how the participants answered the questions. This study used unstructured response. This response type allows the participants to answer freely (Cohen, et al. 2011). The researcher employed the interview guideline as the instrument of the research. Besides, the interview guideline took three main questions based on

research questions. Therefore, the interview questions were developed by various related questions.

Data collection procedure

In collecting the data, the researcher did some procedures to this research. Firstly, the researcher asked permission to the administration service at ELED, so the lecturer knew the illegible students as the participants of this study. Before asking permission to the administration department, the researcher asked permission from supervisor lecturer first. After having the data of the participants, the researcher contacted the participant one by one to make an appointment regarding the interview via WhatsApp. Also, the researcher asked them whether they want to be participant or not.

After having four participants, the researcher decided the place and the time in conducting the interview. The researcher interviewed all participants by adjusting their time to meet. Besides, the interview was conducted in face-to-face within the researcher and each participant. The interview took approximately thirty minutes for each person. The interviewer used phone recorder to record the voice between participants and the researcher. There were four sessions of the interview process based on four participants. Hence, the interview was conducted by using Indonesian language to ease the participants in answering the provided questions.

Data analysis

After collecting the data through the interview, the next step was analyzing the data from the participants. Analyzing the data intended to identify and find out

the answers regarding the research questions. There were some stages in data analysis namely transcribing the data, member checking, and coding the data. Hence, each stage of the data analysis is explained in the following paragraphs.

Transcribing the data. The first step of data analysis was transcribing the result of the interview from every participant's words, phrases, and sentences.

Creswell (2012) maintained that transcribing the result of interview is the procedure of translating recording or field notes into the form text data. Besides, transcribing is a process data analysis where the researchers represent the translation from oral form into written language form. The purpose of transcribing was to convert an interview record into paragraphs. It also allowed the researcher to find out whether the research question has been answered during interview or not. Creswell (2012) argued that transcription is the process of converting audiotape recordings or field notes into text data. The participants' identities or their names were mentioned using pseudonyms. The researcher disguised the participant name into Indi as the first participant, Kamelia as the second participant, Gerald as the third participant, and Wawan as the fourth participant. Allen and Wiles (2016) asserted that a pseudonym is unreal name which is often used by researcher or writer to personally keep participants' privacy.

Member checking. After transcribing the data, the second step of the data analysis was testing the validity using member checking used to ensure the interview results. Birt, Scott, Cavers, Campbell, and Walter (2016) said that testing validity or member checking is a particular technique to find out the credibility and trustworthiness of a result of the data from the participants whether it is accurate or not. Besides, Morse and McEvoy (2014) explored that member

checking defined as returning back the transcribed interview to the participants and asked those participants if the answers represented their thoughts. The researcher reached back the participants through social messenger by sending the transcript file to those three participants to avoid any misunderstanding. All three participants confirmed that the data sufficiently represented the interview, and there were no any other additions for the answers towards the interview.

Coding. The last step of data analysis was coding. Coding is the process of creating and categorizing text to form details and broad themes in the data (Creswell, 2012). According to Cohen et al (2011), a code is simply a name or label that the researcher gives to a text which contains an idea or piece of information. The function of coding is to give a tag for similar information in order to ease the researcher in grouping the data. Besides, the code was a transition process between data collection and wider data analysis of the research. The statement mentioned was in line with Creswell (2012) who said "coding is the process of segmenting and labeling the text to form description and broad themes in the data" (p.243). Therefore, this research adopted four steps of coding from Cohen et al. (2011). Cohen et al. (2011) mentioned that there were four steps in doing coding such as open coding, analytical coding, axial coding, and selective coding. Hence, for more detailed information each coding step is explained in the following paragraphs.

Open coding. The first step of coding was open coding. Open coding is a process to code important answer from the participants. Open coding can performed on a line-by-line, phrase-by-phrase, sentence-by-sentence, or paragraph-by-paragraph (Cohen et al, 2011). Besides, open coding is the process

when the researcher appends a simple label in a piece of text which aims to define and classify the transcribed data based on the participants' answers. For example, in each sentence which answered the research questions, in here the researcher gave a code such as P.1.1. The P word was the first participant, number 1 was the first research question, and another number 1 was the answer found from the dialogue. In addition, the researcher also highlighted the important answer from participant which appropriate with the question.

Analytical coding. After doing the open coding, the researcher did the analytical coding. In this step, the labels from open coding were changed to be theme. Also, the researcher selected data to make as much code as possible which could be suitable to the axial coding. Cohen, et al., (2011) mentioned that in analytical coding, group of the descriptive code should be explained deeper and becomes more interpretive. Besides, the researcher gave a descriptive code to each key sentence in each sentence. Additionally, they also stated that analytical code is more than descriptive coding, and it becomes more interpretive.

Axial coding. The third step of coding was axial coding. In axial coding, the researcher classified the similar meaning of the label. Cohen, Manion, and Morison (2011) maintained "Axial coding is a category label ascribed to a group of open codes whose referents were similar meaning" (p.561). In axial coding the researcher looked for some words with the similar meaning and grouping for each similar meaning.

Selective coding. The last step of coding was selective coding. According to Cohen, et al., (2011), selective coding identifies point category and collected

them to the related theories. Selective coding explores whether the data from axial coding is appropriate to answer the research questions or not. The researcher looked into axial coding and selected the categories which one was appropriate to be used in selective coding. For example, the researcher summarized the sentences in axial coding and turned them into better sentences to be more appropriate to be used in selective coding and answer provided research question. After conducting the coding in data analysis, the researcher reported the data by explaining in the form of paragraphs to answer the research questions in finding and discussion especially in the chapter four.