

Chapter Three

Research Methodology

This chapter presents several points. It includes the research design that explains the approach of the research. Secondly, there is a research setting that explains about the place and time of the research. Then, there is also the research participant that explains about who and how many participants used in this research, as well as the data gathering/collection technique that explains about the way the data were collected. Afterward, the data collection procedure explains the steps of data collection. Furthermore, the last section explains about the data analysis.

Research Design

This research has the purpose to discuss the use of jigsaw technique in developing English language skills based on students' perception. The other purposes are to find out about the roles of jigsaw technique and the problems that students face in experiencing jigsaw technique in class based on the students' perceptions. From the purpose of the research, it shows that the researcher wants to find out about the in-depth opinion from the students about the use of jigsaw technique in developing English language skills. Thus, the approach that is suitable for this research is the qualitative method. In line with that, Cresswell (2012) stated that "qualitative is a type of educational research method that is best suited to exploring a problem and developing a detailed and specific understanding of the main problem" (p. 16).

The result of the research is an opinion and in-depth information about the use of jigsaw technique in developing English language skills. The research design that the research used is descriptive qualitative. Merriam (1998) stated that “the goal of qualitative descriptive studies is a comprehensive summarization, in everyday terms, of specific events experienced by individuals or groups or individuals” (as cited in Creswell, 2012, p. 255). Therefore, the research uses descriptive qualitative design because the result is about the description of students’ opinions in terms of their experiences on the phenomena, which is joined the class that used jigsaw technique. That is considered to be not quantifiable.

Research Setting

This part explains the place of the research. Afterward, the time of the research was also mentioned. Then the researcher mentioned several classes that used jigsaw technique. Lastly, this part elaborates on the researcher’s reasons about why she selected the particular place.

Setting of Place. The researcher conducted the research in English the Language Education Department at one Islamic private university in Yogyakarta. The researcher has several reasons, the first reason is that the English Language Education Department has used the jigsaw technique in the teaching and learning process. Several classes that used the jigsaw technique are language assessment and evaluation class, instructional development, and curriculum design class. Another reason is that the students in the English Language Education are easy to be contacted because

accidentally one of the students in those department is a friend of researcher's friend therefore it easier for the researcher to get the information.

Setting of Time. The date of the research is November 2018 until May 2019. It is also the time of the interviewing of the participants. The data collection was done on April, 2019. It took two days to collect the data. The researcher needed one week to analyze the data. The researcher also spent three weeks to do the chapter four and chapter five that explained about findings and discussion. The last, for doing this research the researcher needed around one and a half months.

Research Participants

The participants of the research were the students of ELED at an Islamic private university batch 2016, this batch was the recommendation from the lecturer that used jigsaw technique in all of the classes on one batch. She used this technique on all of the classes on batch 2016 in Language Assessment and Evaluation class. The sampling technique that the researcher used is purposive sampling. The participants were chosen based on the criteria that the researcher has decided on. Cohen, Manion, and Marrison (2011) said that "purposive sampling has been chosen for specific purposes" (p. 414).

There are some criteria. All of the participants have experience in a class that used the jigsaw technique so that they can give their perception on using jigsaw technique in the class. Afterward, all participants passed on the intended course. They were who passed in the intended class mostly active on experiencing the class that used jigsaw technique. The active students were the students who often to share their opinion

about the material in front of others and they were the students who want to speak and explain the result of the material that lecturer gave. The researcher needs those criteria to get the finding more in-depth. The last one because in batch 2016 of ELED there are three classes, which are class A, class B and class C. The participants were one from class A, one from class B, and one from class C. This way was done to enrich the data. For getting those participants, the researcher asked the lecturer to recommend the students from every class on batch 2016. Here, the researcher wants to find out about their perception on the jigsaw technique in developing their listening and speaking skills.

The participants were three students in which each of them has experienced in class that used the jigsaw technique. The researcher asked the lecturer about which course that used the jigsaw technique. Then, the researcher got the information from the lecturer that she used the technique in every class batch 2016 in Language Assessment and Evaluation course. Afterward, the researcher asked about the recommendation of the students from each class. After the lecturer gave the recommendations, the researcher took the participants for the research.

All participants in this research were represented by pseudonyms. The first participant was Ajeng, she is the ELED students of Islamic private university batch 2016 class A and had the experienced of jigsaw technique in the class which is Language Assessment and Evaluation.

The second participant was Nisa, she is the ELED students of Islamic private university batch 2016 class B and had the experienced of jigsaw technique in some classes such as Language Assessment and Evaluation, Entrepreneurship, Listening and Speaking for Career Development, then Reading and Writing for Career Development.

The last participant was Tara, she is the ELED students of Islamic private university batch 2016 class C and had the experienced of jigsaw technique in some classes such as Curriculum Design, Language Assessment and Evaluation, and Basic Reading and Writing.

Data Gathering Technique

The research used an interview for the data gathering technique. Kvale (1996) said that “regarding an interview, remarks, as an interview, an interchange of views between two or more people on a topic of mutual interest, sees the centrality of human interaction for knowledge production, and emphasize the social situatedness of research data” (as cited in Cohen., et al., 2011, p. 409). This research wants to find out about the students’ perception and opinion, thus interview is the most suitable technique for this research. The type of interview that the research used is a standardized open-ended interview. With this, the researcher asked the same basic questions in the same order to all of the participants. In line with that, Oppenheim (1992) argued that “standardization should refer to stimulus equivalence, that every respondent should understand the interview” (as cited in Cohen., et al., 2011, p. 412).

The construction of the schedule that the researcher used is open-ended items, which are flexible and allows the interviewer to probe. It can help the researcher to get more in-depth information and make a more reliable assessment of the participants' responses. Kerlinger (1970) stated that "those that supply a frame of references for respondents' answer but put a minimum of restraint on the answers and their expression" (as cited in Cohen., et al., 2011, p. 416).

Lastly, the researcher used the unstructured response of the response modes, which involve allowing the participants to answer the question in whatever way the participants choose to. Tuckman (1972) lists eight such modes, but only two modes which are for the qualitative approach. They are unstructured responses that allow participants to answer however they want or choose to.

Data Gathering Instrument

The first one to design the instrument, the researcher made the interview guideline to make the interview run properly. The researcher used the interview protocol as an instrument. Furthermore, the researcher made an interview protocol to make a coherent interview. Then, the interview protocol gave a piece of clear information about Jigsaw Technique in developing students' English language skill. In line of that, Jacob and Furgerson (2012) mentioned that the interview protocol is more than a list of interview questions, it also extends to the procedural level of the interview and includes the manuscript of what you said before the interview, the manuscript for what you said at the end of the interview, asks the interviewer to collect approval, and asks to remind the interviewer of information that she or he is interested in collecting.

The second one is a mobile phone recorder as the tool. Afterward, the record file explained through written text. The researcher used paper and pen to write or make a note of the important point. Each participant had around ten minutes until fifteen minutes to do the interview. The interview conducted using the Indonesian language to make it easier for the participants to understand, as their first language is the Indonesian language.

Data Gathering Procedure

The researcher was searching for the contact of the participants and contacted them by chatting through WhatsApp to ask about when they can meet or are available to be interviewed. After the researcher and participants have decided on a suitable time to meet, the interview was conducted on the campus or the dorms of the participants. It depends on the agreement between the participants and the researcher. First, with Ajeng, the researcher and Ajeng met on Friday 12th of April 2019 at the cafeteria of the campus. The interview took ten minutes and twenty second. The second was Tara, the researcher and Tara met on Saturday 13th of April 2019 at the dorm of the participants. The interview took fifteen minutes and four second. Then the last was Nisa, the researcher met Nisa on Friday 12th of April 2019 at the café around the campus. The interview took ten minutes and four second. The first participant was interviewed in the cafeteria of the campus. The second participant was interviewed in café around the campus and the last participant was interviewed in her dorm. Furthermore, the researcher used Indonesian language to interview all of participants.

Data Analysis

After collecting the data through the interview, the next step was analyzing the data from the participants. Saldana (2009) mentioned that there are some steps of coding (as cited in Mahpur, 2017, p. 2). The steps of coding are:

Verbatim. The first step was verbatim. Creswell (2012) mentioned that transcribing or verbatim was the way where we described the translation from oral to written language. Additionally, Creswell (2012) said that audio-recorded interviews were the transcribed verbatim. The researcher did verbatim after finishing the interview with all of participants. According to Mahpur (2017), verbatim includes raw data, such as recordings, videos, pictures, and observational scribbles which are changed to the language or sentences that will later be a transcription. In this step, the researcher changes the data from audio to pieces of words. Coding can be done after the data are already changed into words. Then, the researcher gave codes to every category of the data. The code was different between each participant. Coding was the way of the researcher added a simple label in a piece of text that has the purpose to define and classify the data transcribed based on the participants' answers. For instance, in each sentence that answers the research question, the researcher gave a code A.1.1. The A word means the first participant, number 1 means the first research question and another number 1 means answer found from the dialogue.

Member checking. The next one was member checking. Morse and McEvoy (2014) explained that member checking showed as returning back the transcribed

interview to the participants and asked the participants if the answer was described their thought. The researcher contacted back the participants through Whatsapp by sending the transcript file to the three participants to avoid any misunderstanding. The researcher did this step after getting some questions for one of participant's statement. After that, the researcher asked again to the participant and did the follow up interview with all participants on Monday, April 29th by chatting through WhatsApp.

In this case, all of participants confirmed which the data represent enough and there was no other addition for the answers and statements. After checking the answers of the participants, the researcher fixed the coding. Flick (2009) stated that “coding can address fundamental questions such as ‘who’, ‘why’, ‘what’, ‘where’, ‘what for’, and ‘by which’ ” (as cited in Cohen., et al., 2011, p. 561).

Breaking down the data. Breaking down the data has a purpose to acquire psychological facts from the data which have been collected to be sorted. This step takes all data transcripts from the interview result (Mahpur, 2017, p. 4). Here, the researcher reconstructed the subject into sentences in a well-organized manner, which could make it easier for the researcher to understand the meaning of the subjects' narrative. This step is conducted to make it easier for the researcher to grasp the meaning of a sentence which the subject says. Afterward, there is also interpretation, which is the conclusion of the categorization of the facts. The researcher did this step on Sunday, April 14th, 2019.

Probing. The next step is probing. Probing is done when the data is incomplete and raises questions for the researcher. In-depth data is needed for qualitative researchers because it will increase the credibility of the analysis and increasingly show the uniqueness of the results of the study (Mahpur, 2017, p. 6). Therefore, the researcher can achieve cross-checked data from the subjects and make the facts more profound. Probing became a cycle in the deepening of data. The researcher did this step after getting some answer and the answer do not in depth enough. The researcher asked the explanations from the participants by doing following up questions.

Collecting similar facts. According to Mahpur (2017) the purpose of collecting similar facts is done to find out about the quality of psychological facts which have been acquired from verbatim data interview). This step is conducted for the finding and collecting the same answer between the participants and then making placing the same answer into the same data. Collecting similar facts can also facilitate the researcher to find out more about the data that have been acquired in an in-depth manner and are appropriate with research questions. There are two research questions in this research. Firstly, what are the roles of jigsaw technique in developing students' listening and speaking skills as perceived by the students. Secondly, what are the problems that students face in jigsaw technique to develop listening and speaking skills as perceived by the students. The researcher was collected the finding of the data based on the answer for each research questions.

Categorizing. Categorizing can be interpreted as the conclusion of the analysis after the researchers looked at the collection of facts and relationships between facts (Mahpur, 2017, p. 13). After the researcher completed all of the steps above, the specific data was collected into general categories. For example, the specific data are mango, grape, and apple. They are in the form of pseudonyms represented by fruit names. Therefore, the categorization uses fruit names. This research found four categories of the benefits of using jigsaw technique. The first is making students to be confident in speaking, facilitating students to interact with English when group discussion, promoting critical thinking, and improving vocabulary while listening. Besides, there were three categories from the problems such as making shy students difficult to speak, confusing pronunciation, and consuming a lot of time.

Narrating. This is the last step of coding. In this part, the researcher explains the finding of the data analysis in a descriptive way. Afterward, the explanation showed the results of the research questions. According to Mahpur (2017), through this way, the application of the research proposal becomes more corresponding with the reality in the field. The researcher described all of the findings and supported them with the experts' statements.