

CHAPTER III

RESEARCH METHOD

A. Research Design

The strategy of this study conducted by using mixed-methods. The process of collecting, evaluating, and combining qualitative and quantitative research methodologies into one study is known as "mixed-methods." (Creswell, 2009). In this strategy the reseracher using the sequential approachment. It's mean combining quantitative and qualitative approaches sequentially (Anggara & Abdillah, 2019) .

B. Research Setting

The researcher take the place in English Department of Tarbiyah and Teachers' Training Faculty at UIN Antasari Banjarmasin, which is located in Jl. Ahmad Yani, km 4,5. UIN Antasari takes approximately 30 minutes from the towm square.

The reason why this research taking place at UIN Antasari Bnajarmasin, because there are English Education major's. This University also have program teaching practice for pre-service teacher and the main reason is becuase when doing teaching practice program the researcher realise

that a mastery of technology in teaching is important, and TPACK is framework that integrate technology in teaching and learning process so it so important for pre-service teacher have knowledge of this TPACK to improve their proficiency in teaching before their graduate as teacher.

C. Participants / Subject

1. Population

A population in research is the whole set of people, things, or events that satisfy specific requirements and catch the researcher's attention. It represent the larger group from which a sample is drawn or the group to which the research findings are intended to be generalized (Arikunto, 2006).

This study aimed to EFL pre-service teachers who taking the course of teaching practice II and in the process of participating in a teaching practice program II of Tarbiyah and Teachers' Training Faculty at UIN Antasari Banjarmasin. So the population come from EFL pre-service teacher at sixth semester of English Department. The total number of students at sixth semester of English Department who participate in teaching practice program is 73 students.

2. Sample

Sample in research refers to a subset of a population that is selected to represent the entire population, with the goal of gathering information and drawing conclusions about the population as a whole (Arikunto, 2006).

Non-Probability sampling is the method of sampling used in this study with the convenience sampling type, which is a way of choosing participants without relying on probability. Convenience sampling means picking participants who are easy to reach, and it's practical approach when studying the entire population is not possible. The sample gathered through convenience sampling represent those who are readily available and willing to take part, providing a practical solution for the research limitations. (Sugiono, 2015). There are 20 students who willing to take part as subject in this research to give their responses to the questionnaire.

D. Data

In this research the researcher used quantitative data and qualitative data. Quantitative data involves expressing data statistically or numerically, qualitative data is data that in the form of sentences, words, or pictures (Sugiono, 2015). For the source of data the researcher used the questionnaire

and was doing observation and interview to the pre-service of efl teachers to find the data.

The researcher use questionnaire to find the responses of pre-service teacher about their TPACK (TK, CK, PK, TPK, PCK, TCK, and TPACK) understanding, and the researcher do obseravation find how they implement TPACK (TK, CK, PK, TPK, PCK, TCK, and TPACK) knowledge in their teaching prcatice.

E. Technique of Data Collection

The technique of data collection process holds paramount importance in research, because the main purpose in research is find the data and gathering information. To acquire the necessary data, researcher used questionnaire as the instrument and also done observation .

A questionnaire involves presenting a set of written statements to respondents who then provide their responcees (Sukmadinata & Syaodih, 2006). The purpose of the use questionnaire to obtain information from the respondents, specifically in this context the resaercher are used to know the Pre-service EFL Teachers' Understanding about TPACK (Technological Pedagogical Content Knowledge).

The researcher came to class room to do observation after collect the data by questionnaire. Observation qualitative is the process of observing behavior and activities individuals directly in the field (Creswell, 2009). There are two kind of observation, namely structured observation and unstructured observation. Observation structured is an observation using observation guidelines contains a number of behavioral indicators that will be observed. As for observation unstructured is an observation without any observation guidelines (Anggara & Abdillah, 2019).

The reasercher used structured observation. The reasercher prepared observation guidelines before come into the classroom to observe how the pre-service efl teacher do teaching practice. This observation aimed to provide an accurate and detailed description of how the efl pre-service teacher doing teacging practice in the classroom. By carefully watching and recording what is happening, reasercher can gather information about how the efl pre-service teachers iimplement TPACK in their tteaching ppractice.

F. Research Instruments

A research instrument refers to for a device employed for assessing both natural and social accurances that observed. These occurrences, commonly known as research variables (Sugiono, 2015). In this research, the

researcher used a questionnaire and an observation to obtain the data from the participants.

1. Questionnaire

Questionnaire is the one of the qualitative data collections (Anggara & Abdillah, 2019). According to (Sugiono, 2015), a questionnaire is a data collection technique that involves providing written question or statements to be answered by respondents. There are several types based on their measurement scales, namely Likert scale questionnaire and Guttman scale questionnaire. Likert scale determines an individual's position on a continuum of attitudes ranging from very negative to very positive. The Likert scale has response options of 3, 4, and 5. On the other hand, the Guttman scale requires respondents to provide clear answer as it only has two response options (yes/no or agree/disagree) (Widoyoko, 2012).

The questionnaire utilized in this research was derived from a publication authored by (Muntaha, 2018). Muntaha's adaptation was based on the TPACK framework initially established by (Koehler M. J., Mishra, Kereluik, Shin, & Graham, 2014), specifically tailored to the context of English instruction. Participants in this research were asked to express their opinions using a Likert scale consisting of five points, which

included the following descriptors: “Strongly agree” (SA), “Agree” (A), “Neutral” (N), “Disagree” (D), and “Strongly disagree” (SD).

Seven components make up the questionnaire, each of which represents a distinct facet of technological pedagogical content knowledge (TPACK). Among these components are the following: ten items for Technological Knowledge (TK), eight for Pedagogical Knowledge (PK), seven for Content Knowledge (CK), five for Technological Pedagogical Knowledge (TPK), four for Technological Content Knowledge (TCK), four for Pedagogical Content Knowledge (PCK), and nine for the total TPACK. The questionnaire consists of 47 items in all.

This research employed a questionnaire to categorize Pre-Service EFL teachers into three groups: high, medium, and low. A category method was used to determine the degrees of data interpretation, with the total score serving as a point of reference. (Muntaha, 2018).

| Table 3.1 | | |
|------------------------------|-----------------|-------------|
| TPACK Levels category | | |
| No | Category | Mean |
| 1 | High | 4.00 – 5.00 |
| 2 | Medium | 3.00 – 3.99 |
| 3 | Low | 1.00 – 2.99 |

2. Observation

Observation qualitative is the process of observing behavior and activities individuals directly in the field (Creswell, 2009). There are two kind of observation, namely structured observation and unstructured observation. Observation structured is an observation using observation guidelines contains a number of behavioral indicators that will be observed. As for observation unstructured is an observation without any observation guidelines (Anggara & Abdillah, 2019).

In this observation, the resaercher observed directly the process of implementing TPACK in EFL pre-service teachers during teaching practice in teaching practice program. Various tools were employed for observation, such as cameras and tape recorders, to document the teaching and learning practice in teaching practice program. An observation cheklist was also utillized to assess the implementation of TPACK specifically in the context of the English teaching that adapted from journal thesis (Nurdin, 2023). The observation was done twice with different pre-service teacher and the observation checklist see on the appendix.

G. Data Analysis

The researcher design the research using mixed method. So for the data analysis, the researcher analyzed with sequential explanatory design. In order to explain or expand on the quantitative findings, the researcher first gathers and analyzes quantitative data in the sequential explanatory design. Subsequently, the researcher gathers and analyzes qualitative data. This design allows researcher to use quantitative methods to explore patterns, trends, or relationships in a large sample and the use qualitative methods to gain a deeper understanding of the quantitative results (Cresswell & Plano Clark, 2017).

The process typically begins with the collection and analysis of quantitative data (questionnaire). The researcher conducts statistical analyses to summarize and interpret the quantitative findings by SPSS and provide the data with table. These analysis used descriptive statistical analysis. The researcher one by one analysis the component of TPACK (TK, CK, PK, TPK, PCK, TCK, and TPACK) knowledge with table and explain the data.

In the second phase, the researcher collects qualitative data (observation) to provide explanations for the quantitative results. The qualitative data collection and analysis aim to uncover the reasons, context, or meanings behind the quantitative findings. The researcher describe about the

component of TPACK (TK, CK, PK, TPK, PCK, TCK, and TPACK) knowledge of pre-service efl teachers that the researcher find when do observation in the class room.