

CHAPTER III

RESEARCH METHOD

A. Research Design

Type of this research is field research with phenomenological research design where the researcher comes to the internships program directly to measure, observe and find how the pre-service teachers anticipate multi-cultural education students' differences in designing and instructing collaborative learning activities. In addition, the researcher conducted some interview and qualitative questionnaire to find the pre-service teachers' best response to the attitudes of students who encounter multi-cultural educational differences in collaborative learning. While the method that researcher chose to use is qualitative research.

Qualitative research itself is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem (Creswell, 1998). Qualitative researchers are interested in understanding what those interpretations are at a particular point in time and in a particular context, learning how individuals experience and interact with their social world (Merriam, 2002). The scope of a qualitative study is linked to the agenda of exploring and justifying why a particular phenomenon is the way it is (Stewart, 2008). Whereas phenomenological research design is one approach of qualitative research, Phenomenology research tries to explain the nature of things through the way people experience them. So, the data is built on the assumption and depends on how its participant experiences it, in other words "study of phenomena".

In this context, the researcher uses phenomenological research to explore and analyze the phenomenon of responses or actions given by pre-service teachers to multi-cultural education cases faced by students. This is considered appropriate for research because the teachers (include pre-service teachers) are an agent who is directly in contact with the teaching and learning process of students, so the data obtained from the teacher's experience will be very useful for analyzing this phenomenon. Because this

approach is emphasizes explaining the meaning of things through an individual's perspectives and self-experiences (Selvi, 2008)

The research procedure was taken from Neville Greening (2019). The procedures represented a clear and comprehensive stage in conducting this phenomenological research. The steps are described as follows:

Step 1. Bracketing

At this stage, the researcher analyzes, isolates, captures and concludes the phenomenon to study objectively and purely without entering the surrounding considerations or opinions on the results of the phenomena. This is considered the main component of phenomenological research where the isolation of the original phenomenon is carried out regarding what has been determined from the event.

So, at this stage, the researcher focused on the phenomenon of multi-cultural education and the influence of a teacher's actions or responses on students. The aim of this research was to explore and analyze the phenomenon of responses or actions given by pre-service teachers to multi-cultural education cases faced by students. To identify the phenomenon, the researcher uses the depth interview and qualitative questionnaire to the pre-service teachers (as the participant).

Step 2. Intuiting

After stage bracketing, Intuiting step is carried out. this is a process where the researcher goes directly to get valid data from participants (in this case, the researcher conducted in-depth interviews, observations, and qualitative questionnaire). Through this process, the researcher created research instruments by developing various questions or data collection tools to gain a deep understanding of the multi-cultural phenomenon under study. After that, the researcher selected some participants to study and contacted them for conducting in-depth interviews, observation, and a

qualitative questionnaire.

Step 3. Analyzing

After accomplishing the intuition process, the analysis is the next step. In this process, coding is done where categorizing and making sense of the significant meanings of the phenomenon is created. The researcher organized and categorized the data obtained from the interviews, qualitative questionnaire and classroom observations with 10 pre-service teacher participants.

Step 4. Describing

This is an important final step of the phenomenological research methodology. At this stage, the researcher explains and interprets the understanding and definition of the phenomenon from the collected data. Then connects these results with relevant theories to the issue being studied. the purpose of this stage is to provide descriptions, conclusions and results of the phenomenon under study.

B. Research Setting

This research was conducted at four different schools located in three cities (Mecca, Banjarmasin, and Banjarbaru). More specifically, at Indonesian School of Mecca (in Mecca, Saudi Arabia), MAN 2 Banjarmasin (in Banjarmasin, South Kalimantan), MAN 3 Banjar (in Banjar Regency, South Kalimantan), and SMAN 4 Banjarbaru (in Banjarbaru, South Kalimantan).

The Indonesian School of Mecca was selected because it is the sole Indonesian-affiliated institution located in Mecca, Saudi Arabia. This school possesses a highly heterogeneous student population, as it serves Indonesian children or children of mixed Indonesian and foreign parentage (such as Saudi Arabian) residing abroad or outside of Indonesia itself. This demographic structure fosters various significant and unique differences that are crucial to investigate, particularly

concerning the phenomenon of multi-cultural education.

The selection of MAN 2 Banjarmasin, MAN 3 Banjar, and SMAN 4 Banjarbaru, on the other hand, was based on the diverse student profiles encountered by the pre-service teachers involved in this research during their internship program. Furthermore, the considerable geographical distance between these three schools provides a rich source of data for the researcher to observe.

The study was carried out from July 31, 2025, to September 13, 2025 or amounting to 45 days.

C. Participants

The participants in research are 10 pre-service teachers with 3 different backgrounds of education in UIN Antasari. More specifically, 8 pre-service teachers from the English Language education department, 1 pre-service teacher from Arabic language education, and 1 pre-service teacher from Islamic religious education. They have completed 6 semesters of active classes and have participated in an internship training program (PPL I) as well. Hence, they carried out an internship or teaching training program (PPL II) to become a teacher at their respective schools for 30 days. It was during the time when they were teaching in schools that observations, interviews, and qualitative questionnaire were conducted.

D. Data Collection Technique

The researcher used the phenomenology approach in this research, so the researcher chose an in-depth interview and qualitative questionnaire to collect data. In addition to triangulation data, the researcher also conducted direct observation to take some field notes.

1. In-depth Interview

In-depth interview is research technique that involves conducting intensive individual interviews with a small number of respondents to

explore their perspectives on a particular idea, program, or situation. Commonly, this technique used to understand complex social phenomenon and discover answer to question “how” and “why”. In-dept interview is in the form of conversation between people in which one person has the role of the researcher (Arksey & Knight, 1999).

2. Qualitative Questionnaire

Qualitative questionnaire is a not-so-popular data collection technique but very helpful way to obtain memories, opinions and experiences from the respondents about a particular ‘phenomenon’. It is a structured or semi-structured set of questions designed to gather detailed and open-ended participant responses. The qualitative questionnaire is consist of several questions that intends to collect information based on respondents’ own interpretations (Eckerdal & Hagström, 2017).

3. Direct Observation

Observation is one of the most popular and vital methods to collect data in the research. Observation itself involves activity such as monitor, analyze, evaluate, draw conclusions, and make comments on interactions or relations about something that being study (Ciesielska et al., 2018). Impressions, experiences, and knowledge from observations can help revise the research problem and provide necessary information. Observation also captures the entire social setting in which people function, interact authentically, and records the context in which people act (Mulhall, 2003).

The researcher managed the observation from July until September, which is detailed in the following:

Table 3.1 Observation Schedule

No	Participant Number	Date	Time
1	Participant 1	Thursday, 31 July 2025	10.00 – 10.25
2	Participant 2	Thursday, 7 August 2025	12.50 – 14.00
3	Participant 3	Tuesday, 26 August 2025	07.30 – 09.00
4	Participant 4	Tuesday, 26 August 2025	09.00 – 10.30

5	Participant 5	Tuesday, 26 August 2025	13.00 – 14.30
6	Participant 6	Wednesday, 27 August 2025	08.50 – 10.10
7	Participant 7	Wednesday, 27 August 2025	10.30 – 11.10
8	Participant 8	Thursday, 28 August 2025	09.20 – 09.50
9	Participant 9	Thursday, 28 August 2025	11.00 – 12.10
10	Participant 10	Thursday, 28 August 2025	13.00 – 15.00

E. Data Analysis

Since this research employed a phenomenological study as the qualitative research design as well as using qualitative questionnaire, observation, and also in-depth interview for data collection techniques to collect data. Interpretative phenomenological analysis (Smith & Osborn, 2007) was chosen as a data analysis technique that is in accordance with the objectives of this study. Interpretative phenomenological analysis (IPA) is an experiential qualitative approach that explores the lived experience of participants as well as how they make sense of it. Interpretative phenomenological analysis is not simply to examine in detail how participants are making sense of their personal and social world, but also emphasizes that the research exercise is a dynamic process with an active role for the researcher in that process (Flowers, 2009).

Interpretative phenomenological analysis (IPA) was used in this research because it helps the researcher to find meaningful themes which are then interpreted in relation to the current issues. This data analysis technique also facilitates the researcher to understand the experiences of pre-service teachers in the phenomenon of multi-cultural education being discussed. The four idiographic steps of Interpretative phenomenological analysis based on Smith (as cited in Flowers, 2009) will be described within this framework: looking for themes in the first case, connecting the themes, continuing the analysis with other cases, and writing up.

Step 1. Looking for themes in the first case

Looking for themes in the first case is the first step to finding meaningful answers by reading and re-reading the transcript closely in order to become as familiar as possible with the result of the instrument conducted by the researcher to collect data. This stage includes annotating and transcribing so that the researcher can easily view the data and highlight potential information items.

So, at this stage in this study, the researcher transcribed the obtained data from pre-service teachers through the recorded interviews, the qualitative questionnaire, and field notes observations. The researcher also carefully annotating the meaningful answer from pre-service teacher about how to design and instruct collaborative learning activity to anticipate multicultural education in the classroom as well as the actions of pre-service teacher when facing deviant behavior from students as the effect of diversity in their learning process.

Step 2. Connecting the themes

Once the data has been transcribed, coded and organized, the next step is to build and connect the themes. Connecting the themes stages is a process of grouping related codes together and look for patterns, overlaps, and connections between different codes in order to get meaningful themes (something important about the data in relation to research questions).

In this step, the researcher sought and connected the biggest theme of all the answers obtained for the two existing research questions. The researcher also comparing and contrasting the data to get more analytical or theoretical ordering to simplify the drawing of conclusions about the multicultural phenomenon being studied. At this stage, researcher exclude data that is too far from the discussion of issues in this study.

Step 3. Continuing the analysis with other cases

After the transcripts and themes of one participant are

completed, the next process is continuing the analysis with other cases. This is a process where the researcher continues to transcribe each answer from each different participant. The researcher can use the themes from the first case to help orient the subsequent analysis.

In this step, the researcher transcribed, coded, and connected themes carefully and thoroughly for each of ten pre-service teacher participants in this study. Although some participants had varied educational backgrounds, the researcher decided to exclude differences in teaching materials in order to prioritize universal pedagogical skills and focus on exploring the attitudes and actions of pre-service teachers toward multicultural education. This process continued until the researcher can create a final table of superordinate themes to synthesize dominant themes and develop final conclusions about existing research questions.

Step 4. Writing up

The writing up process is the final step of interpretative phenomenological analysis where the researcher would translate, explain, illustrate and nuance the themes into a narrative account. The researcher must draw the right conclusions from informal writing of notes, codes and themes to become more formal analysis and report writing. The report should be convincing, and clear but complex as well as embedded or connected in a scholarly field.

In this study, the researcher provided final conclusion, answer, or report for each research question about multi-cultural education phenomenon in this research. Every conclusion, result, and discussion regarding how pre-service teachers design and instruct learning, as well as respond to students' deviant attitudes toward diversity in the classroom, must be compiled systematically. Data from each pre-service teachers needs to be compared to reach logical and academically acceptable conclusions. With good, accurate, and effective writing of results and discussion, the

multicultural phenomena studied in this study can be resolved.

Then, to build the data trustworthiness, the researcher referred to Lincoln and Guba's data trustworthiness criteria. as following:

a. Credibility

Lincoln and Guba define that credibility determines whether research findings represent plausible information drawn from participants' original data and trustworthy interpretations from the researcher (Anney, 2014). Thus, the researcher's assurance that the collected data is genuine, tested, and valid is an area of credibility in research.

Therefore, in this study, the researcher used data triangulation. Data triangulation is the use of multiple supplementary data to explore an issue (Donkoh, & Mensah, 2023). In this case, the researcher interviewed, observed, and distributed the qualitative questionnaire to different pre-service teachers to collect the same information about the phenomenon of multi-cultural education's response at different times and places. With this data triangulation, the researcher can confirm whether the instrument is appropriate for studying this phenomenon and overcome bias in a single data.

b. Transferability

Transferability leads to the possibility that the research results can be transferred to other contexts with other respondents for future research. So in this study, the researcher provided a detailed description of the original data obtained from participants (through interviews and qualitative questionnaires), the researcher's interpretation of the answers and field observation, as well as the relevant theories used.

c. Dependability

Dependability refers to the durability of results over time

(Anney, 2014). To achieve dependability in this research, the researcher provided a complete record of all phases of the research or audit trail, and prepared transcripts of the interviews.

d. Confirmability

Confirmability is the determination that the data results, interpretation of findings, and final results are not the imagination of the researcher, but clearly derived from the data. So in this research, every data and interpretations made by the researcher were displayed both in the results of the discussion itself or in the appendix.

F. Research Instrument

The main data collection was carried out by in-depth interviews and qualitative questionnaires as the instrument for the current research, while observation was used as a supporting data collection method so that it can produce field notes made by the researcher directly. As Creswell (1998) stated that phenomenological research attempts to explain the nature of things through the way people experience them, which is then processed through investigation based on distinct methodological traditions of inquiry that explore a social or human problem. Therefore, the researcher applied in-depth interviews, qualitative questionnaire, and observation as the instruments in order to explore the pre-service teachers' actions towards students' attitudes in multi-cultural education diversity (different backgrounds, genders, abilities, social-economic, and cultural among others) in designing, instructing or the collaborative learning activity process itself directly. Table 3.2 serves as the research instrument to answer each research question (RQ).

Table 3.2 Research Instruments

No of RQ	Point of Research Question	Research Instrument
1	The way of pre-service teachers anticipate multi-cultural education	In-depth Interview Direct Observation

	students' differences in designing and instructing collaborative learning activities.	
2	pre-service teachers' best response to the deviant behaviors given by students in the collaborative learning activity as an active party facing multi-cultural education in the classroom	Qualitative Questionnaire Direct Observation