CHAPTER III
RESEARCH METHOD

This chapter highlights the method that was employed in this study. The discussion covers the research design, data sources of this study, data collection that provide data collection technique and data collection procedure, and data analysis used in this study.

3.1. Research Design

This research used mix-method research design as it attempts to find out the pre-service EFL teachers' problems in designing a lesson plan and give clear description about the possible causes of the problems. The problems and the possible causes need to be presented comprehensively in order to get deep explanations of the real condition.

Quantitative approach was used to find out pre-service EFL teacher problems in designing a lesson plan. The variables on the instrument were measured in the numerical data. Thus, the numerical data can be analyzed by using statistical procedures (Creswell, 2009). In this study, questionnaire was used as the instrument to collect the quantitative data. The quantitative data were derived from pre-service EFL teachers' problems based on the nine components of lesson plan Curriculum 2013, namely lesson profile, basic competence (KD), indicator, learning objectives, teaching material, teaching method, teaching scenario, instructional media and sources, and assessment.

Meanwhile, qualitative approach was used to describe the possible causes of pre-service EFL teachers' problem in designing lesson plan. Creswell (2009) states that qualitative approach is a mean for exploring and understanding the meaning individual or groups ascribe to a social or human problem. He further describes the process of the qualitative research involves emerging questions and procedures, collecting data in the participants' setting, analyzing the data inductively, building from particulars to general themes, and making interpretations of the meaning of the data. Therefore, the final written report has a flexible writing structure.

In line with those approaches, mixed method was used as the research design in the present study. Creswell and Clark (2007) state mixed method is an approach to inquiry that combines or associates both qualitative and quantitative forms which involves philosophical assumptions, the use of qualitative and quantitative approaches, and the mixing of both approaches in a study. Thus, it is more than simply collecting and analyzing both kinds of data. It also involves the use of both approaches in tandem, so that the overall strength of a study is greater than either qualitative or quantitative research. In addition, a mixed-method study can employ either the qualitative or the quantitative approach in which a need exists to both understand the relationship among variables in a situation and explore the topic deeper.

3.2. Data Sources

In this subchapter, setting of the study and the participant as the sources of the presents study was explained as follows.

3.2.1. Setting of the Study

This research was conducted in Peer Teaching Class, English Language Education Study Program, Universitas Brawijaya Malang, academic year of 2015/2016. English Language Education Program of Universitas Brawijaya was chosen by the researcher because of the quality of the university and the study program itself. Universitas Brawijaya is one of the best universities in Malang and the sixth best universities in Indonesia (Dikti, 2015). Although the English Language Education Study Program in Universitas Brawijaya is relatively new, the accreditation shows that this study program has good predicate from BAN-PT in 2015 (See Appendix 1). Therefore, this research was conducted by the researcher to give contribution for the betterment of this study program through the description about pre-service EFL teachers' problems in designing lesson plan during Peer Teaching Course and the possible causes that may lead to those problems.

Peer teaching course is administered in the sixth semester. This course requires English Language Education students to have practical simulation on teaching and learning process or micro-teaching. The micro teaching is done with other pre-service EFL teachers as their students. In this course, they are also required to design a lesson plan for their teaching simulation and implementing it with the other pre-service EFL teachers. Peer teaching course is also the starting point of pre-service EFL teachers in designing a lesson plan and implementing it in the classroom. If pre-service EFL teachers face some problems in designing lesson plan, they are expected to be able to solve their problems before teaching in the real classroom when they conduct internship program (PPL). Therefore, Peer Teaching

Course was chosen by the researcher as the setting to conduct this research. There are five classes of Peer Teaching course that consist of class A, B, C, D, and E. The study was conducted in Peer Teaching class A, B, C, and D while Peer Teaching class E was used as the tryout of the questionnaire.

3.2.2. Participant of the Study

The participants of the present study were five instructors and 100 pre-service EFL teachers. In this study, the instructors were used initial I1, I2, I3, I4, and I5. The first data source was the instructors since they were guiding them in designing a lesson plan and scoring the pre-service EFL teachers' lesson plan. The data were about instructors' experience in teaching, their perspective about teachers' roles, lesson plan, pre-service EFL teachers' problems in designing lesson plan, and possible causes in designing lesson plan when they guide pre-service EFL teachers in designing lesson plan.

The second data source was 100 pre-service EFL teachers of Peer Teaching. There were four classes of Peer Teaching course that consisted of class A comprising 28 pre-service EFL teachers, class B comprising 23 pre-service EFL teachers, class C comprising 22 pre-service EFL teachers and class D, comprising 27 pre-service EFL teachers as the participants of this study. Prior to conducting this study, tryout of the questionnaire was conducted in Class E. From 21 pre-service EFL teachers that became the respondents in trying out the questionnaire, six pre-service EFL teachers did not come, so that the respondents in trying out the questionnaire were only 15 pre-service EFL teachers. The data from the pre-service EFL teacher was important because the main objectives of this research were meant

to describe their problems and possible causes in designing lesson plan. Therefore, pre-service EFL teachers' opinions can be used as the answer of the objectives in this present study.

3.3. Data Collection

The data of this study are qualitative and quantitative data. Quantitative data was used to gain pre-service EFL teachers' problem in designing lesson plan, while the qualitative data was used to gain possible causes of pre-service EFL teacher problem in designing lesson plan. The technique and procedure in collecting the data was explained as follows:

3.3.1. Data Collection Technique

The data were collected quantitatively and qualitatively. A questionnaire was used to gain the quantitative data. Meanwhile, interview, observation, and documentation were used to gain the qualitative data. The explanation of each technique is explained as follows:

1. Questionnaire

According to Sugiyono (2012), questionnaire is a data collection technique in which the respondents were given a set of questions or statements to answer based on their condition. Questionnaire is an efficient data collection technique as it can be used when there are fairly large number of respondents and researchers have some variables to be measured and know what can be expected from the respondents. It was appropriate to be used in this study since the participants were 100 pre-service EFL teachers in Peer Teaching Class A, B, C, and D. Besides, the

questionnaire of this research was also used as a measurement for pre-service EFL teachers' problems in designing lesson plan based on the nine components of lesson plan in curriculum 2013 which is in the form of number through statistical procedure in analyzing the data.

In this study, closed-ended questionnaire was used to help the respondents answer the questions easily and the alternative answers for each question were clearly provided for the respondents who only need to choose the provided answers (Sugiyono, 2012). In this study, the questionnaire was divided into two parts. The first part was about pre-service EFL teacher experiences in designing lesson plan. This part consisted of five questions and the respondents answered the questions by choosing one of the answers based on the provided options. The second part consisted of 29 statements that concerned with pre-service EFL teachers' problems in designing lesson plan based on nine dimensions adapted from Kemendikbud (2013), Kizklik (2015), and Reiser & Dick (1996). The dimension framework of the questionnaire can be seen on table 3.1

Table 3.1. The dimension framework of questionnaire
(Adapted from Kemendikbud, 2013; Kizklik, 2015; and Rieser and Dick, 1995)

No	Dimensi	Indikator	Items
1	Lesson Profile	- Mentioning school identity and course	1
		- Mentioning class / semester in delivering material	2
		- Mentioning the topic of lesson	3
		- Determining time allocation in delivering one topic in lesson plan	4
2	Basic Competence (KD)	- Determining basic competence appropriate with the topic in syllabus	5
		- Identifying the attitude (affective) competence	6
		- Identifying the knowledge (cognitive) competence	7

		-	Identifying the skill (psychomotoric) competence	8
3	Indicator	-	Mentioning the specific measurement	9
		-	Matching indicator with objectives	10
4	Objectives	-	Arranging specific instructional objectives based on indicator	12
		-	Arranging directed instructional objectives based on indicator	13
5	Teaching material	-	Choosing appropriate material with student's characteristics	14
		-	Choosing appropriate material with student's need	15
		-	Considering material with time allocation	16
6	Teaching method	-	Choosing the appropriate approach in delivering material	17
		-	Choosing the appropriate method in delivering material	18
7	Instructional media	-	Using the effective media that relevant with students' characteristic	19
		-	Using media that relevant with the classroom facilities.	20
8	Teaching scenario	-	Integrating the four skills (listening, speaking, reading, and writing)	21
		-	Determining activity in pre- teaching, whilst-teaching and post teaching	*22-24*
		-	Allocating time to each activity	25
9	Assessment	-	Mention appropriate assessment	26-27
		-	Making scoring rubric	28-30

In this study, the questionnaire was made in negative and positive statements to make the respondents consistent in giving their answer. In total, there were 16 negative statement items and 13 positive statement items. In this questionnaire, likert-scale was used to know the frequency of pre-service EFL teacher problems faced in designing a lesson plan. According to Bertram (2012), likert-scale is a psychometric response scale primarily used in questionnaires to obtain participant's preferences or degree of agreement or frequency with set of

statements. Respondents were asked to indicate their level of agreement or frequency with given statement by way of an ordinal scale. Bertram (2012) further describes the scale ranging from the most commonly seen as a 5-point but sometimes a 4-point (or other even-numbered) scale is used to produce an ipsative (forced choice) to measure where no indifferent option is available. This study used 4-point scale ranging from "never" on number one, "seldom" on number two, "often" on number three, and "very often" on number four to know the frequency of pre-service EFL teacher's problems faced in designing a lesson plan. Sugiyono (2012) states that each answer should have score in order to analyze the data. In this study, every statement have scores 1-4 refers to weight of the problems. The positive statement, "never" (1) scores 4, "seldom" (2) scores 3, "often" (3) scores 2, and "very often" (4) scores 1, while for negative statements, "never" (1) scores 1, "seldom" (2) scores 2, the answer "often" (3) scores 3, and "very often" (4) scores 4 as seen on table 3.2.

Table 3.2. Scoring system questionnaire

Positive Statement		Negative Statement	
Answer	Score	Answer	Score
(1) Never	4	(1) Never	1
(2) Seldom	3	(2) Seldom	2
(3) Often	2	(3) Often	3
(4) Very often	1	(4) Very Often	4

After determining the score of each statement, the ideal score of the questionnaire was made to determine the range score for the level of the problem (Sugiyono, 2012). There were 100 pre-service EFL teachers as the respondents. The

ideal score was made by multiplying the scoring scale with the number of respondents, which can be seen on table 3.3.

Table 3.3. Ideal score of the questionnaire

Score	Scale
4 x 100 = 400	Very often
3 x 100 = 300	Often
2 x 100 = 200	Seldom
1 x 100 = 100	Never

After finding out the ideal score, the ideal score were input into the following rating scale as figure 3.1.
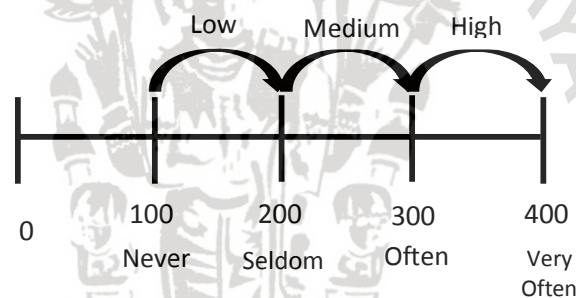

Figure 3.1. Rating scale of questionnaire

Based on the rating scale, the range score for level of the problem was determined by the researcher on table 3.4 as follows.

Table 3.4. Range Score for Level of problem

Score	Scale
100-200	Low
200-300	Medium
300-400	High

The level above means the frequency of Pre-service EFL teacher in designing lesson plan. Level "Low" means they seldom meet the problems, while level "Medium" means they often face the problems, and level "High" means they very often face the problems.

In this study, the questionnaire was administered in Bahasa Indonesia to ease the respondents in understanding and giving response (see Appendix 3). In order to make sure that the instrument is valid and reliable to use, validity and reliability test was conducted. First, the instrument was scrutinized through some aspects as follows: (1) the integration between indicator and dimension; (2) the appropriateness between the statement and the measured indicator; (3) the appropriateness between statements and objectives; and (4) the appropriateness of language used. After that, the questionnaire was tried out on Saturday 28th May 2016 in Peer Teaching Class E with 15 participants. Then, the result was calculated statistically by using Bivariate Pearson Correlation technique in SPSS 21 to ensure the level of validity of each item. The data can be said whether it is valid or not if validity coefficient score is more than 0.3 (Sudarmanto, 2005). In order to measure the validity, product moment correlation was used by the researcher in calculating the data. Besides, in order to measure the reliability, Alpha Cronbach were used to calculate the data. Reliability test was used to find out the consistency of each items in the questionnaire. If coefficient alpha is more than 0.6, the dimension can be said reliable (Sudarmanto, 2005).

The result of statistical instrument validity showed that from 35 items, 22 items were valid and 13 items were not valid (see Appendix 4). Based on the result,

more than 60 % of the statements was suitable to be used as the instrument of the research. In this case, from the 13 not valid items, 6 items were not used while the 7 remaining items were changed because they were the main idea of the dimension. (see table 3.1) Therefore, the questionnaire was revised and then approved by the expert. The instrument also passed the expert validity which was administered by an English Language Teaching expert. The results of expert validity shows that the instrument can be used to collect the data (see Appendix 5).

2. Interview

According to Brown (2003), interview is used to exchange information with two other people about one topic. In addition, Kothari (2004) mentions that the purpose of an interview is to get information about certain data to answer the research problem so that the researcher knows the information deeply. Therefore, in this study, interview was used in order to get further information about pre-service EFL teachers' problems in designing lesson plan and exploring the possible causes that deal with it.

In this study, the interview was administered in Bahasa Indonesia to make the respondent easy to answer the question. The interview was conducted to five instructors and ten pre-service EFL teachers of Peer Teaching Class, English Language Teaching Study Program Universitas Brawijaya. The main topic of the questions was about pre-service EFL teachers' problem in designing lesson plan and their possible causes based on instructors' perspective and experience in guiding pre-service EFL teachers in designing lesson plan. In getting the information from the instructor, semi-structured interview guideline was used by

the researcher. According to Cohen (2006), the characteristics of semi-structured interview were the interviewer and respondents engage in a formal interview, the interviewer develops and uses an interview guide, and the list of questions was arranged in a particular order and the topics need to be covered during the conversation. The questions of interview guidelines were open-ended, yet they were specific and allowing individual response. The interview guideline for the instructors can be seen on Appendix 6.

Interview for pre-service EFL teacher was also conducted to further investigate pre-service EFL teachers' problems in designing lesson plan and the possible causes that deal with it based on pre-service EFL teachers' perspective and experience in designing lesson plan K-13. For this purpose, snowballing technique was used to collect the data. The participants were chosen randomly and interviewed until the researcher thinks the data is enough if all the information from one respondent and other respondent is similar (Wahyuni, 2012). In interviewing pre-service EFL teacher, interview guideline is used to help the researcher be on the right consistent track with the topic of this study (See Appendix 7).

In conducting interview, notes and recording were utilized by the researcher in order to keep the information authentic. The following table summarizes the specification of the interview questions.

Table 3.5 Interview Guideline
(Adapted from Ministry of National Education, 2013)

No	Dimension	Sub- Dimension	Question items	
			Teacher	Student
1	Experience in teaching	- Identifying instructor experiences in teaching Peer teaching Class	1	

		- Identifying instructor experiences in teaching lesson plan	2-3	
		- Identifying instructor training experience to increase their capability	4-5	
2	Teacher Roles	- Identifying an ideal English teacher roles	6	2
		- Identifying teacher roles as planner	7	3
3	Lesson Plan	- Identifying the importance of lesson plan	8	4
		- Identifying the advantages in designing lesson plan	8	5
		- Identifying time for consultation lesson plan	9	6
4	Problem in designing lesson plan	- Identifying the finding of problems in designing lesson plan	10	7
		- Identifying the problems in designing lesson plan based the component of lesson plan	11	8
5	Possible causes	- Identifying students motivation in designing lesson plan	12	1
		- Identifying students skill in designing lesson plan	13	9
		- Identifying students external causes in designing lesson plan	14	10

3. Observation

The observation was conducted to get the real picture of pre-service EFL teachers' problem in designing lesson plan by observing their implementation in micro-teaching simulation. According to Creswell (2009), observation is the process of gathering the data, by observing the people and the place at a research site. In conducting the observation, passive participant observation was used by the researcher. Passive participant observation is technique observation in which the

researcher has not involve in micro-teaching process because she only observe without participate micro teaching in Peer Teaching Class

In this study, field notes and camera were used to do the observation. Obviously, taking notes of all important information is strongly needed because it includes the discussion section to answer the problems of the study. Field notes were used to give clear description about pre-service EFL teacher performance and the instructor feedback of pre-service EFL teacher in designing lesson plan. The field note (see Appendix 7) consists of two parts. The first part is identity which explains the Peer Teaching class, the name of instructor, the date of observation, and the time allocation. The second part is the notes which are provided in a blank space for the field notes to be written. During the observation, the focus was Pre-service EFL teachers' problem in designing lesson plan process based on the components lesson plan K-13 whether the lesson plan matches with the simulation or not. Camera was also used to take some pictures and record some activities which were important to be recorded.

4. Documentation

Documentation is the data from the transcripts, books, documents, notes, and pictures (Arikunto, 2006). Furthermore, Creswell (2009) explained that document is a good source of the text (word) data in qualitative research. Those definitions signed that documentation was one of qualitative data collection techniques to be analyzed and described based on oral or written documents.

In this study, the documentation was the lesson plans which were designed by pre-service EFL teachers to conduct micro teaching in Peer teaching class. The

lesson plan itself was implemented in micro teaching and has received feedback from the instructor. The documentation was considered important since the data gained authentic written lesson plans that useful to identify pre-service EFL teachers' problem in designing lesson plan. It also helped the researcher describe the real process and the result of designing lesson plan based on the instructors' feedback.

3.3.2. Data collection procedure

In this study, concurrent mixed method procedure was used to collect the data. As Creswell (2009) states, concurrent mixed method procedures are procedures to collect the data in which the researcher converges or merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem. The sequential explanatory strategy was used as the appropriate strategy to reach the objectives of this research.

The sequential explanatory strategy is a method design that often appeals to researchers with strong quantitative leanings. It is characterized by the collection and analysis of quantitative data in the first phase of research followed by the collection and analysis of qualitative data in the second phase that builds on the results of the initial quantitative results. Weight is typically given to the quantitative data, and the mixing of the data occurs when the initial quantitative result informs the secondary qualitative data collection. Thus, the two forms of data are separate but connected. An explicit theory may or may not inform the overall procedure. The steps of this strategy are pictured in Figure 3.2.
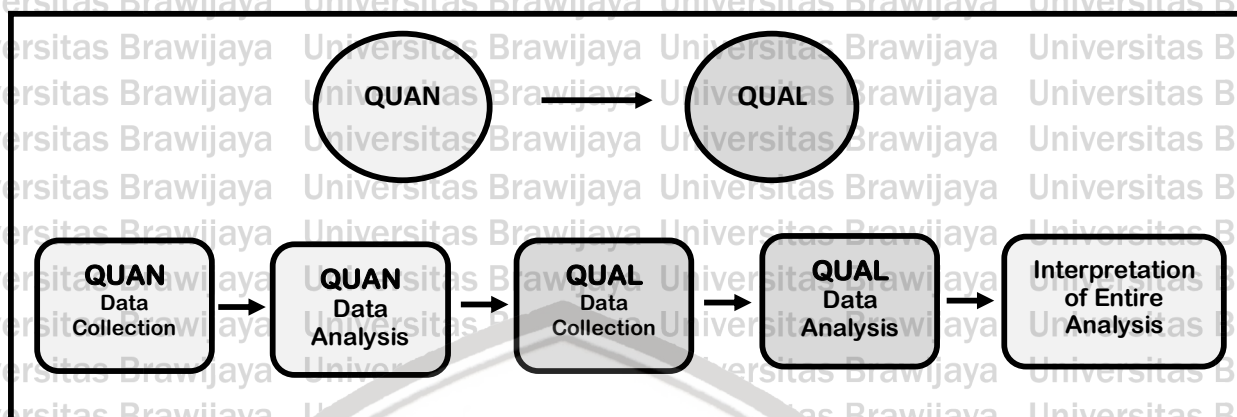
Figure 3.2.Sequential Explanatory Design (Creswell, 2009)

A sequential explanatory design is typically used to explain and interpret quantitative results by collecting and analyzing follow-up qualitative data. It can be especially useful when unexpected results arise from a quantitative study (Morse, 1991). In this case, the qualitative data collection that follows can be used to examine these surprising results in more detail.

In the present study, the procedure in collecting data consist of several steps. First, questionnaire was distributed in Peer Teaching in class A, B, C, and D to collect the data of pre-service EFL teacher problems in designing lesson plan. After that, first observation of pre-service EFL teacher's implementation in micro-teaching and taking their lesson plan as the documentation was conducted. Next, interview with the instructors of Peer Teaching was conducted to gain pre-service EFL teachers' problems and possible causes based on the instructors experience during teaching Peer Teaching Course. After that, interview with five pre-service EFL teachers was conducted using snowball technique. Then, second observation of pre-service EFL teacher's implementation in micro-teaching and taking their lesson plan as the documentation was conducted to know the problem were happen

in the field. Finally, the data was interpreted and analyzed quantitatively and qualitatively.

3.4. Data Analysis

In analyzing the data from those instruments, the data were analyzed quantitatively and qualitatively as follows:

3.4.1. Quantitative Data Analysis

Descriptive statistic technique was used to analyze quantitative data in which this technique is intended to present quantitative descriptions in simple form of the study without deriving a conclusion about a population of the study (Sarwono, 2006). In addition, in applying descriptive quantitative technique, the ordinal data were analyzed to find out the proportional percentage of pre-service EFL teachers' problems in designing lesson plan based on the items that occur in the questionnaire.

The ordinal data refer to the level or stage which portrays a situation and each stage differs from the others regarding the number contained by each object. All the respondents' answers were calculated statistically to find out the exact percentage and the results of the calculation are served in the form of a table. In order to analyze the data, computer software for statistical analysis, which was Microsoft Excel was used to calculate the results. Furthermore, the results of the questionnaires were classified into the scoring rubric to identify the level. In this study the level of the problems consist of three levels namely high, medium and low (see table 3.4). Through this way, the result showed the most influential problems based on the component of lesson plan faced by pre-service EFL teacher.

According to Sarwono (2006), statistical data analysis comprising seven phases, namely: Data editing, variable expanding, coding, checking, constructing data, computerized test, and tabulation as in figure 3.3. The explanation of each steps as follows:

1. Data Editing

Data editing involves the process of clarifying the collected data to avoid interpretation bias of the analysis result, just giving justification, making sure the stability of data, and checking the completeness of the data needed. In this study, the data needed based on the component lesson plan namely lesson profile, basic competence (KD), indicator, learning objectives, teaching material, teaching method, teaching scenario, instructional media and sources, and assessment.

2. Variable Expanding

Variable expanding involves the process of specifying all variables in the data that have been collected to see whether it is already complete or not in the instrument. In this study the variable was specify into some indicator and items that can be seen in the blueprint on Appendix 2

3. Coding

Coding involves the process of giving code to the data collected in order to be able to transfer it to the computer. Sugiyono (2012) states that the code is given in the form of numbers by considering the score for each answer. In this study 4-point scale was used to ranging from "never" on number one, "seldom" on number two, "often" on number three, and "very often" on number four to know the

frequency of pre-service EFL teacher's problems faced in designing a lesson plan. In order to analyze the data, every statements have scores 1-4 that can be seen on table 3.2

4. Error Checking

Error checking involves the process of checking the data before being inputted to the computer to see if there are some errors. In this steps the whole data was ensured that there is no sloppy stuff or erroneous act in data.

5. Data Structuring

Data Structuring involves the process of making the structure of the data needed to be analyzed and transferred to the computer.

6. Computer pre-analysis checking

Computer pre-analysis checking involves the process of preparing the structured data to be analyzed by checking the computer pre-analysis to see the consistency and completeness of the data. In this study, the researcher will use a computer software to analyze the statistical data that is Microsoft Excel 2013.

7. Tabulation

Tabulation involves the process of describing the respondents' answers in a specific way by making table or diagram. In this study, the respondents' answer was analyze into the score of pre-service English teacher problems in lesson planning based on each items. After giving score, the total score was found and classified into three levels namely high, medium, and low. The range of level can

be seen on table 3.4. The level represents the frequency of pre-service EFL teacher's problems in designing lesson plan. Level "high" means they very often face the problem, while level "medium" means they often face the problems, and level "low" means they seldom meet the problems. After that, the proportional percentage of each item in each dimension was found. Next, the mean score of each dimensions or components of lesson plan were found, then it was classified into three level of the problems namely high, medium, and low. Then, based on the mean score, the proportional percentage of each dimension was found. (see Appendix 9). Finally, the data serve in table or diagram.
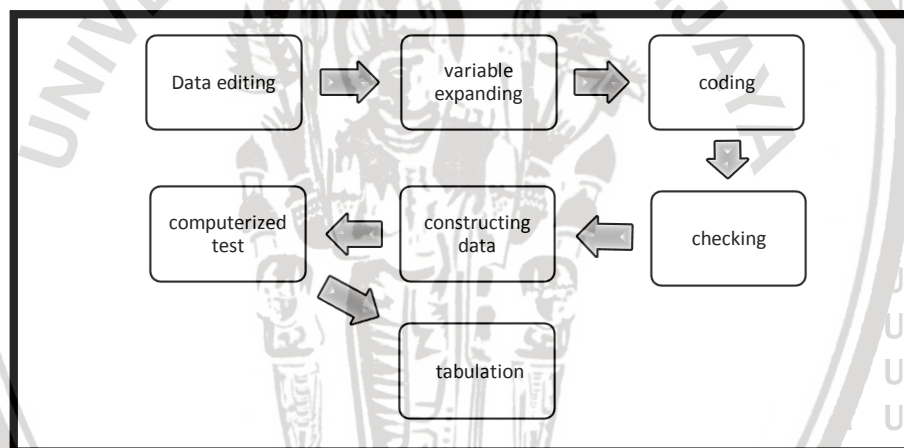

Figure 3.3. Statistical Analysis Data (Sarwono, 2006)

3.4.2. Qualitative Data Analysis

In analyzing qualitative data, the data gained from interview transcript and field notes were arranged by the researcher to increase the understanding toward the results of the used instruments and to present what the researcher discovered from each instrument (Bogdan and Biklen, 1998). All the data collected through interview and observation were organized systematically and analyzed descriptively. First, the recorded data from the interviews were transcribed and

classified into some related items. The semi-structured recorded data were gained from the interview with the instructor and pre-service EFL teacher. Secondly, the data collected from the observations were summarized in order to neatly describe the process of micro-teaching activity at Peer Teaching Course. After that, the data which were obtained was processed through three stages which are drawn in figure 3.4.
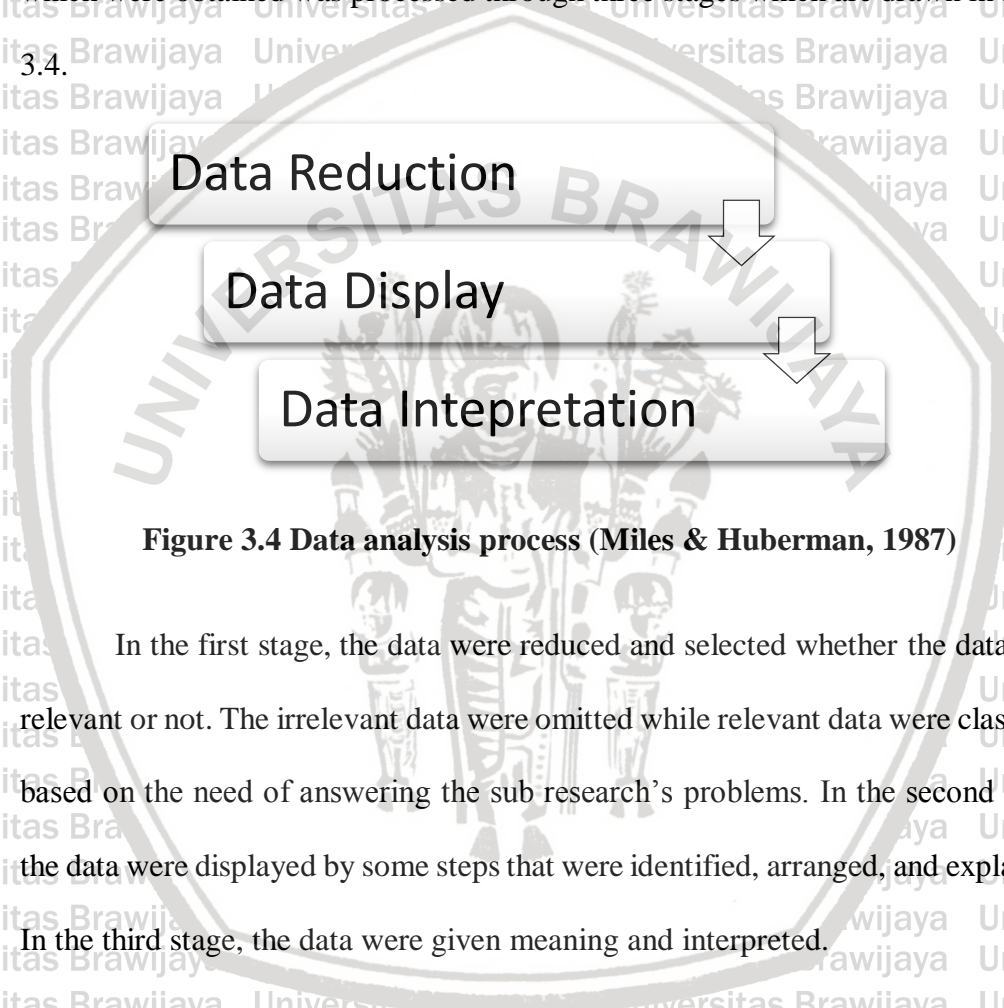

Figure 3.4 Data analysis process (**Miles & Huberman, 1987**)

In the first stage, the data were reduced and selected whether the data were relevant or not. The irrelevant data were omitted while relevant data were classified based on the need of answering the sub research's problems. In the second stage, the data were displayed by some steps that were identified, arranged, and explained. In the third stage, the data were given meaning and interpreted.

3.5. Data Triangulation

Triangulation process had also been conducted by the researcher in order to make sure that the data from the questionnaire, interview, observation, and document analysis were valid and supporting each other. The focus on this triangulation was to check whether analysis of data from each of four instruments

lead to the same results. In this study, the triangulation process was the triangulation by method which was done by crosschecking the result from the pre-service EFL teachers' questionnaire, instructors and pre-service EFL teachers' interview, observation in the peer teaching class, and documentation from the pre-service EFL teachers' lesson plan. The process was described in the figure 3.4 below:
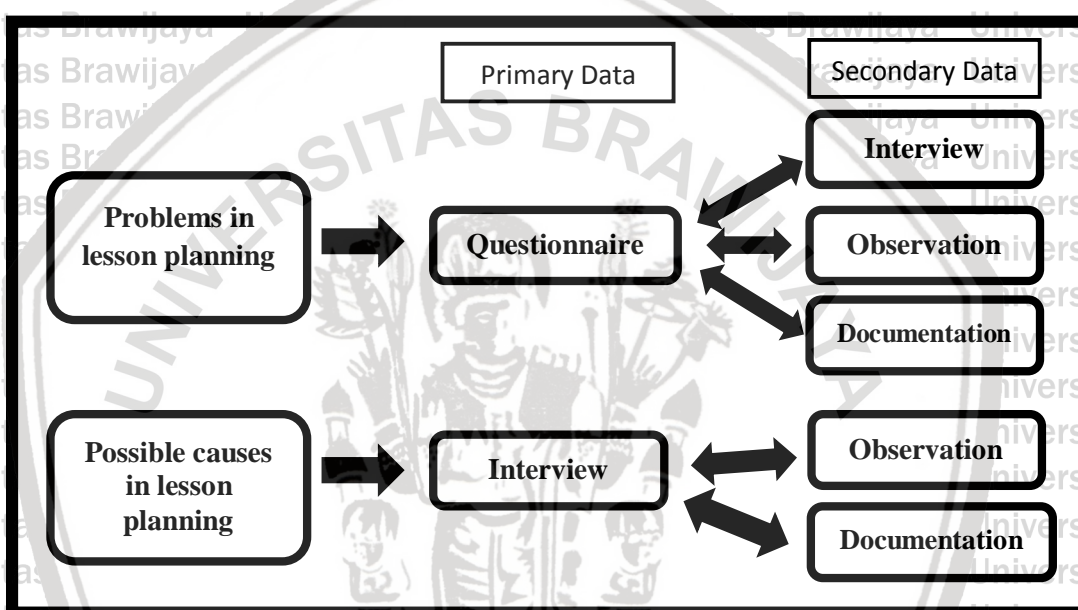

Figure 3.5. The flow chart of triangulation process.

Based on the figure 3.4, in order to crosscheck pre-service EFL teacher problem in designing lesson plan, the data collected through the questionnaire were crosschecked with the finding of the interview based on instructor and pre-service EFL teachers' perspective then confirm by observation on the field and documentation from pre-service EFL teachers' lesson plan. Meanwhile, in order to crosscheck the possible causes of pre-service EFL teacher problem in designing lesson plan, the data through instructors and pre-service EFL teachers' interview

were crosschecked with observation on the field and documentation from pre-service EFL teachers' lesson plan.