

CHAPTER III

RESEARCH METHOD

In this chapter the researcher presents research method. It focuses on the method used in conducting this study. The decision covers research design, population and sample, research instrument, validity and reliability testing, data collecting method and data analysis.

A. Research Design

The approach which was applied in this study was descriptive quantitative with survey design. According to Creswell (2013:18) a descriptive survey is a research design that intended to describe quantitatively the tendency, behavior, opinion of a certain population by taking some samples as the representation. Surveys permit the researcher to summarize the characteristics of different groups or to measure their attitudes and opinion toward some issues (Ary et al., 2010:372).

Descriptive survey design is suitable to be used because it aims to describe the condition of the population. Lodico in Ary et al., (2010) stated that survey research has some purposes those are; gathering opinions, beliefs, or perceptions about a current issue from a large group of people. In educational research, these issues can be wide ranging and may include school improvement and classroom instructional practices.

Related to those purposes of survey research, this research is conducted to investigate the students perception about their classroom

instructional practices. Moreover, this survey research is intended to describe the students' perceptions toward peer review implemented on reflective writing in ELT course at fifth semester in IAIN Tulungagung.

B. Population

Population is all subjects being studied. Ary (2010: 647) states that population is the larger group to which a researcher wishes to generalize; it includes all members of a defined class of people, events, or objects. According to Creswell (2008: 151) population defined as a group of individuals who have the same characteristic. Population is the general area consist of object and subject with a certain quantity and characteristic which is determined by the researcher to study and conclude. Referring to this statement, population is not only the existing quantity of subject and the object studied but also involves their characteristics.

In this research, the researcher used population research because the amount of the population is not too large, so the researcher can got the data from all students. In addition, the population research is chosen to have an accurate data. Leslie Kish (2011) stated that because population survey is large and complete, it is precision and detailed to obtain the better coverage than using sample surveys especially for small local area.

Moreover, the population of this study is all the students of English Department IAIN Tulungagung at fifth semester from class 5A until 5E. Especially, all students who joined ELT course which the teacher giving the task to write reflective essay and applying peer review in the process of

writing. The total of the students were 173 students. The table 3.1 showed the number of fifth semester of English Department IAIN Tulungagung.

Table 3.1 The Population of The Research

No.	Class	Students
1.	TBI 5 A	36
2.	TBI 5 B	37
3.	TBI 5 C	36
4.	TBI 5 D	34
5.	TBI 5 E	30
Total		173

C. Research Instrument

Research instrument is the tools that the researcher uses to collect the data. According to Fraenkel and Wallen (2013:111) instrument is the devices such as: pencil-and-paper test, a questionnaire or rating a scale that the researcher uses to collect the data. There are two types of instruments employed in this study, they are questionnaire and interview.

1. Questionnaire

The first instrument is used in this study is questionnaire. It used to know the students' perception toward peer review implemented on reflective writing in ELT course at fifth semester in IAIN Tulungagung. The respondent directly supplies his or her own answers to a set of questions or statements.

In this study, the researcher used structured questionnaire in closed form by using Likert scale. It provided five choices of response for the respondents in answering the questionnaire. Those are, strongly agree, agree, neutral, disagree and strongly disagree. The likert scale was chosen

because this study intended to measure about the people views or perception. According to Adams (2008:21) the most commonly used attitude or opinion scale is likert scale. In addition, Wilkinson and Birmingham (2003:15) using likert scale will offer a number of possible responses that provides more flexibility to the respondents and affords greater accuracy in recording their views on a given subject. The table 3.2 showed the score for each rating scales.

Table 3.2 The Score for Each Rating Likert Scales

No.	Scales	Score
1.	Strongly Agree	5
2.	Agree	4
3.	Neutral	3
4.	Disagree	2
5.	Strongly Disagree	1

The questionnaire was in the form of statements that drawn based on the theory and previous studies. It consists of 34 statements. There are 8 (Eight) statements asked about the procedures of Peer Review to know how well the students' understanding about Peer Review Process. Next, there are 7 (Six) statements asked about the students' perceptions about the benefits of peer review toward their writing improvement. Then, there are 13 (Thirteen) statements asked about the students' perceptions toward the benefits of peer review. Those benefit are: provide each other with constructive feedback, facilitate the students' collaboration, develop students' critical thinking, develop students' awareness and develop students' learning autonomy. Finally, the last 6 (Six) statements asked about the students' perception toward the challenge of peer review. The

questionnaires were administered by using *Bahasa Indonesia* in order to make the respondents fully comprehend about the whole questions. (see appendix 1)

2. Interview

Not only questionnaire, the researcher also used interview as the way of collecting data. It is used to get additional information from the students. As stated by Leedy and Ormrod (2001) in quantitative research (survey research), interviews are more structured than in qualitative research. In a structured interview, the researcher asks a standard Set of questions and nothing more. In addition, Easwaramorthy (2006) in structured interview the interviewer asks a set of standard, predetermined questions about the particular topics, in a specific order. So, during process of interview researcher used interview guide that is created based on the blueprint and the result of the students' questionnaire. (see appendix 2)

D. Validity and Realibility Testing

Validity and reliability of instrument are integral parts in conducting a study since the instrument which will be used must be valid and reliable before using it to collect the data. In this research the researcher ensured that the instrument (questionnaire) was valid and reliable by doing validity and reliability testing as follows:

1. Validity

Validity is measuring what it is designed to be measured. In language testing, Brown (2004:22) defines validity as the extent to which

inference made from assessment results are appropriate, meaningful, and useful in terms of the purpose of assessment. Before conducting the research, the researcher will ascertain that the instrument had three kinds of validity as follows:

a. Construct Validity

To understand the definition of construct validity, it is first necessary to understand what a construct is. According to James Dean (2000) a construct or psychological construct as it is also called, is an attribute, proficiency, ability or skill that happens in the human brain and is defined by established theories. In addition, the test items developer should provide evidence that the scores really reflect the construct, by reviewing the theory and the previous studies (Ary et al., 2010:231). So, it should be measured to prove that the items in the instrument measure the construct that was designed to measure and not some other theoretically unrelated construct.

In this study the construct provided in the Blue Print. The Blue Print is used to create the formation of the instrument. In this research, the questionnaire had high construct validity if it contains the statements investigating the students' perception toward peer review. (see appendix 3)

b. Face Validity

Face validity refers to the degree to which a test looks right and appears to measure the knowledge or abilities it claims to measure based

on subjective judgment or the examinees who take it (Brown, 2004:26). The questionnaire in this research is used to investigate the students' perception toward peer review. So, to achieve validity the researcher provided statements asked about the students' perceptions toward peer review.

c. Content validity

Content validity is requires the test takers to perform the behavior that is being measured (Brown, 2004:22). The purpose of this study is to investigate the students' perception about peer review implemented on reflective writing in ELT course at fifth semester in IAIN Tulungagung and statements in this questionnaire related to the purpose of this study. That is asking about the students' opinion about the implementation of peer review.

Before being used as an instrument, the researcher gave the questionnaire to the 15 A class students of third semester of English Department in IAIN Tulungagung as a trials. They are chosen because one of the lecturer in their class has implemented peer review as the teaching strategies of writing. At least, they have been familiar about the process of peer review. So they could give the response in the questionnaire well.

After got the students' score for each statements the researcher calculated the validity for each items in the questionnaire by using

coefficient correlation formula of *Pearson Product Moment* in IBM SPSS Statistic 16.

Each items are considered to be valid if the value of $r_{\text{obtained}} > r_{\text{table}}$. From 15 (N) samples with significance level 5% the r_{table} was 0.514. The result of its calculation is summarize in the table 3.3 below:

Table 3.3 The Result of Validity Testing for Each Items

	r-obtained	r-table (N=15, $\alpha=5\%$)	Notes
ITEM 1	0.650	0.514	Valid
ITEM 2	0.590	0.514	Valid
ITEM 3	0.604	0.514	Valid
ITEM 4	0.720	0.514	Valid
ITEM 5	0.612	0.514	Valid
ITEM 6	0.771	0.514	Valid
ITEM 7	0.556	0.514	Valid
ITEM 8	0.655	0.514	Valid
ITEM 9	0.606	0.514	Valid
ITEM 10	0.559	0.514	Valid
ITEM 11	0.639	0.514	Valid
ITEM 12	0.556	0.514	Valid
ITEM 13	0.600	0.514	Valid
ITEM 14	0.585	0.514	Valid
ITEM 15	0.650	0.514	Valid
ITEM 16	0.590	0.514	Valid
ITEM 17	0.604	0.514	Valid
ITEM 18	0.720	0.514	Valid
ITEM 19	0.682	0.514	Valid
ITEM 20	0.771	0.514	Valid
ITEM 21	0.526	0.514	Valid
ITEM 22	0.655	0.514	Valid
ITEM 23	0.755	0.514	Valid
ITEM 24	0.666	0.514	Valid
ITEM 25	0.638	0.514	Valid
ITEM 26	0.612	0.514	Valid
ITEM 27	0.673	0.514	Valid
ITEM 28	0.678	0.514	Valid
ITEM 29	0.545	0.514	Valid
ITEM 30	0.592	0.514	Valid
ITEM 31	0.574	0.514	Valid
ITEM 32	0.579	0.514	Valid
ITEM 33	0.741	0.514	Valid
ITEM 34	0.542	0.514	Valid

As the table 3.3 shows, the r_{obtained} for all items are bigger than r_{table} 0.514. It means that all items were valid. In other words, based on those calculation from IBM SPSS Statistic 16 all the items can be used to get the data.

2. Reliability

Reliability is the consistency of the instrument in producing the same score on different testing occasion or with different raters. According to Fraenkel and Wallen (2013:97) reliability refers to the consistency of the score obtained how consistent they are for each individual from one administration of an instrument to another and from one set of items to another.

After calculating the validity of the instrument, the researcher also calculated the scores of 15 A class students of third semester of English Department in IAIN Tulungagung as a trials to find out the reliability of the instrument. All items were easily understood by respondents and none of the items was ambiguous. To find out the reliability of the score for each statements' obtained, the researcher calculated the score by using *Cronbach's Alpha* from IBM SPSS Statistics 16. The table 3.4 below shows the statistical calculation of *Cronbach's Alpha* from IBM SPSS Statistics 16.

Table 3.4 The Reliability Statistics of *Cronbach's Alpha* from IBM SPSS Statistics 16

Reliability Statistics	
Cronbach's Alpha	N of Items
.950	34

As the table 3.4 shows, The result of the test was found reliable based on the value of the Cronbach's Alpha that is 0.950. According to Ridwan (2004:118), the criteria of reliability instrument can be divided into 5 classess as follows:

1. If the *alpha cronbach* score 0.00-0.20: less reliable
2. If the *alpha cronbach* score 0.21-0.40: rather reliable
3. If the *alpha cronbach* score 0.41-0.60: enough reliable
4. If the *alpha cronbach* score 0.61-0.80: reliable
5. If the *alpha cronbach* score 0.81-1.00: very reliable

It can be concluded that the instrument was very reliable. More clearly, the result of realibility calculation for each items can be seen in appendix 4.

E. Data Collecting Method

In collecting the data, the researcher distributed the questionnaire about the students' perception toward peer review implemented on reflective writing in ELT course at fifth semester in IAIN Tulungagung on Monday and Tuesday, 11th-12th December 2017.

The researcher entered one of English Department lecturer class from 7 a.m to 3 p.m because on Monday he taught TBI Class 5A-5D. Then on Tuesday, the researcher entered TBI 5E to conduct a research at 08.40 a.m. The researcher was given the last 30 minutes of each class to give the questionnaire and explain how to fill the questionnaire to the students. Then, the researcher is waiting for the students when they work on the questioners and retrieve the completed questionnaire. Finally, the researchers analyze the existing data.

Actually, the number of the students of TBI 5A-5E who joined ELT Course is 173, it is minus 10 students who were absent. It means the total of the students who filled the questionnaire were 163 students. The table 3.5 showed the number of fifth semester of English Department IAIN Tulungagung who joined ELT Cours

Table 3.5 The Number of Fifth semester of English Department IAIN Tulungagung who Involve in the Study

No.	Class	Students	Involved in This Study	Absent
1.	TBI 5 A	36	33	3
2.	TBI 5 B	37	35	2
3.	TBI 5 C	36	35	1
4.	TBI 5 D	34	32	2
5.	TBI 5 E	30	28	2
Total		173	163	10

F. Data Analysis

After collecting the data from the students, the next step is analysing the data. The purpose of the data analysis is to give the meaning and finding the essence of the numbers in the data itself. In applying descriptive

quantitative technique, the researcher analyzed the ordinal data to find out the percentage of the students' perceptions of the procedure, the benefits and the challenges of peer review that have implemented to assess the students' reflective writing in ELT course at fifth semester in IAIN Tulungagung.

The first step of the data analysis is making the interpretation by finding the maximum (X) and minimum (Y) score by using the formula as follow:

$X = \text{The maximum likert score (5) x total respondent}$

$Y = \text{The minimum likert score (1) x total respondent}$

From those formula can be calculated that the maximum score in this study is 815 and the minimum score is 163. After knowing the maximal and minimum score, the next step is calculating the total score for each items.

In order to compute the data, the researcher used computer software statistical analysis, which was Microsoft Excel to calculate the result in form of percentage by using the formula:

Percentage Data:

$$\text{indeks \%} = \frac{\text{TS}}{X} \times 100$$

Notes:

TS = total score for each items

X = maximum score

After getting the precentage result, the next step is finding the category for the result of each items whether it means strongly Agree, agree, neutral, disagree or strongly disagree. The interpretation for each

Percentage data can be shown in the table 3.6 below:

Table 3.6 The Category for Each Result of Percentage Data

Indeks %	Note
0% - 19.99%	Strongly Disagree
20% - 39.99%	Disagree
40% - 59.99%	Neutral
60% - 79.99%	Agree
80% - 100%	Strongly Agree

After knowing the result of index value and the category of each items, the last step is the researcher categorize the result of answers from all items in the questionnaire, then add it with the result of interview with some students. The result of the findings will be discussed to be related with the theory.