

CHAPTER III

RESEARCH METHOD

This chapter presents the methodology of the study. The review comprises: research design, data and data sources, technique of data collection, technique of data verification, data analysis.

A. Research Design

Quantitative research methods are research methods dealing with numbers and anything that is measurable in a systematic way of investigation of phenomena and their relationship (Leedy, 1993 :4). Data in quantitative research methods have to be analysed and interpreted. Generally, statistical procedures are quantitative data approaches. Quantitative research is explaining phenomena by collecting numerical data that are analysed using mathematically based methods in particular statistic (Gunderson, 2002 :1)

Descriptive research involves collecting data in order to answer research questions by explaining and describing the topic of a problem based on the theory used. Sudaryanto (1993 :62) says that descriptive research is a research done based on the fact or phenomenon that empirically is in society. Moreover he also proposes three steps in the research namely; collecting the data, analyzing the data, and preventing the result of the analysis. Quantitative research design fall under the board heading of descriptive research.

Hence, this study is categorized into a case study by using quantitative descriptive approach. Merriam in Nunan (1992: 77) stated that the qualitative case study can be defined as an intensive, holistic description and analysis of a single entity, phenomenon, or social unit. Case studies are particularistic, descriptive, and heuristic and rely heavily on inductive reasoning in handling multiple data resources. In other words, qualitative case study is an empirical enquiry that investigates a contemporary phenomenon within its real life context, and in which multiple sources of evidence is used. In short, the research design of this study is case study with Quantitative descriptive approach. Based on the quotations above, the researcher used descriptive quantitative approach, because the research was case study, the types of grammatical error and the factors that causes of grammatical error in English paragraph writing written by first semester students of IAIN Tulungagung in academic year 2017-2018.

B. Data and Data Sources

Because this research was quantitative descriptive research, data and data sources of this research was concerned with the kinds of data going to be collected and analyzed and from which sources the data were obtained. Generally, the data source of qualitative research could be categorized into event, place, person or informant and artifact. Thus, data sources in this study were the first semester students documents in English paragraph writing text, and the first semester students as informants. In other words, the data sources of this research were in the form person or informant and artifact. Therefore, related to the data sources,

data used by the researcher were any information found in writing or so-called documents, (test) is used get data from the students writing and documentation (photoes) is to get data from students' photoes was doing test.

C. Technique of Data Collection

Data collecting methods are the way of collecting data used in this research. The data collection was a systematic and standard procedure to obtain necessary data. Furthermore, the data itself had very important role in a research, because without data it was impossible to get result of the research.

In conducting error analysis, the researcher combines some techniques in collecting the data.

1. Test

According to Cohen, et al. (2007 : 414) test is one of data collection used to cover all aspects about students' life and for all ages, included diagnosis of difficulties. To collect the data, the researcher used a writing test as the technique of data collection. The tests is making English paragraph writing. The researcher used a writing test because it will be used to know the students ability in writing English and the errors which they make in their writing. So, the researcher can analyze the types of and the factors that causes grammatical error in English paragraph writing.

2. Documentation

According to Arikunto (2012 :133) in the execution of documentation methods, researchers investigating the written items such as books, magazines,

documents, regulations, meeting minutes, diaries, etc . This opinion is supported by Moelong (2010 :280) who say that document is a kind of source data involves anything notes aimed to examine a research. The document refers to students' writing English paragraph paper as the object of qualitative data.

D. Technique of Data Verification

Triangulation is an approach to validate the data in qualitative research as Flick (2010 :405) said “Triangulation was first conceptualized as a strategy for validating results obtained with the individual methods”. It also stated by Campbell and Fiske (cited from Cohen et al., 2007) that in qualitative research, triangulation is the important thing in showing the convergent validity. Denzin (cited from Flick, 2010 :405) divided triangulation into four types:

- a. Data Triangulation, this triangulation use different data sources. The method of producing data should be distinguished
- b. Investigator Triangulation, using multiple analyst to review findings or using multiple observers and analysts;
- c. Theory Triangulation, using multiple theoretical perspectives to examine and interpret the data;
- d. Methodological Triangulation, checking out the consistency of findings generated by different data collection methods.

In this research, the researcher used data triangulation by comparing the result of data collection from the data sources, which is the researcher use test and documentation for the participants. While theory triangulation used by the

researcher to analyzing types of error made by the first semester students of IAIN Tulungagung based on the theory of error analysis. The last is methodological triangulation which is the researcher gathered the data from different method of data collection from the students' test results and documentation from teacher and also students.

E. Data Analysis

In this research, error analysis was the methodology used in analyzing the data. The error analysis was used since it fit to the characteristics of the data and the nature of this research. Corder (1967 :160) explains that error analysis can deal effectively only with learner production; speaking or sentences, not with learner reception; reading and listening. Its compatibility was then strengthened by the fact that this study tried to uncover the errors occurring in language construction made by a specific group of learners and the error analysis itself. Based on Gass and Selinker (1994 :67) is a type of linguistic analysis that focuses on the learners' error make. It means that the errors analysis here focused on the grammatical errors made by the first semester studentsof IAIN Tulungagung in English paragraph writing text.

There were some steps in applying the error analysis to analyze the data. The following steps were based on the procedure stated by Corder as quoted by Ellis (1994: 48). The steps are presented below:

1. Identification of errors

In this step, the researcher studied the gained data and tried to find out the grammatical errors by underlying the errors. She tried to analyze the data as objective as possible.

2. Classification of errors

Once the errors have been identified, she classified them in the following categories of grammatical rules, namely:

- a. Errors in using subject-verb agreement.
- b. Errors in using singular-plural agreement.
- c. Errors in using to-infinitive.
- d. Errors in using clause.
- e. Errors in using from of adjective
- f. Errors in using passive voice.
- g. Errors in using redundancy.
- h. Errors in using parallel structure.
- i. Errors in using misplaced word.
- j. Errors in using pronoun antecedent agreement.

3. Calculation of errors

In this step, she calculated the errors in order to know how frequent those errors have been made by the college students of first year at IAIN Tulungagung. In calculating the frequency of each error, she employed the following formula:

$$P = \frac{n1}{\Sigma N} \times 100 \%$$

In which,

P : percentage of each error

N1 : total of the given error

ΣN : total of the whole errors

By calculating the frequency of each error, she could identify the most frequent error and the least frequent error made by first semester students of IAIN Tulungagung in academic year 2017-2018.

4. Tabulating result

Once the errors were calculated and arranged, she tabulated the result of the analysis. This table was meant to ease the identification of the percentage of each error. Therefore, the result of the analysis of the grammatical errors in narrative text made by the college students of IAIN Tulungagung was presented in the form of a table.

5. Drawing a conclusion

The last step would be drawing a conclusion based on the analysis. In this step, she had to make a valid conclusion in the form of a brief error description.