

CHAPTER III

RESEARCH METHODOLOGY

This chapter elaborates several matters dealing with the procedure of conducting this study. It covers; Research Design, Setting of the Study, Data and Source of Data, Data Collection Technique, Research Instrument, Research Procedure and Data Analysis Technique.

A. Research Design

According to Best, there are three types of educational research. The first is historical research that describes, “What it was”. The process involves investigating, recording, analyzing and interpreting the events of the past for the purpose to discovering the past, understanding the present, and limit the extent in anticipating future. The second is descriptive research. It involves the description, the recording, analysis and interpretation of condition that exists. The third type is experimental research which describes what will be if certain variables are carefully controlled or manipulated. The focus is on relationship. In this type of research, there are experimental and control group.¹ Then, this research is a kind of descriptive research, since it analyzed and interpreted the existing students’ writing “argumentative essay”, and

¹ J.W. Best , *Research in Education* Forth Edition (New Jersey : Prentice Hall, Inc, 1981),25.

analyzed some aspects which influenced students' achievement in their readability level. In specifically, the teacher described what the existence of the students' writing is, to their readability level and those aspects that influenced.

Furthermore, Best divides descriptive research into four parts: document or content analysis study, case study, ethnography study, and explanatory observation study. Document or content analysis study is the study which content concerned with the explanation of the status of some phenomenon at particular time. Case study is the way of organizing social reality. Ethnographic study is the process of collecting data on many variables of an extended period, in naturalistic setting. Explanatory observation study is the study that is seeks to find answers to question the variable relationship.² In this research, the researcher found out the data from the existing document "student's writing in argumentative essay." Furthermore, the researcher describes how many number of word, sentence and syllable in each students' writing. Then, she calculated it and found the readability score. Next, she analyzed the EED's curriculum and the last the data from questionnaire.

There are three approaches in research according to John W. Creswell, they are qualitative approach, quantitative approach and mixed approach. He also explains about mixed research, mixed research happens when a

² J.W. Best. *Research in Education*,160.

researcher uses either a qualitative or a quantitative approach.³ In this research, the researcher uses mixed method. She decided it because she wants to seek corroboration of her research's findings. As stated by Donad Ary, the purposes of mixed method are whether to seek corroboration of the findings, to elaborate or clarify findings, to develop further interpretations, to investigate contradictions, or to expand the breadth or depth of a study.⁴ Therefore, this research started with quantitative phase because the researcher determined the students' readability level by using readability formula. In that phase, the researcher was deal with calculating numerical data to get the conclusion of students' readability level. Equally important, in this part, the researcher wants to generalize whether the students' writing from the fourth semester readable or not. Then, to help her establishing a rational research, she analyzed the curriculum of English Education Department in the fourth semester 2013 and sharing questionnaire to the students. This questionnaire is about the aspects, which influence the students' achievement in writing readable writing. In this part, the researcher did the qualitative approach. She can says like that because in qualitative research measures written responses. More specific, the researcher also observed and analyzed written document such as students' writing and curriculum of English Education Department

³ Creswell, J.W. *Research Design: Qualitative and Quantitative Approaches* (Sage Publications: Thousand Oaks, 1994),41.

⁴ Donald Ary. *Introduction to Research Education 8th Edition*. (Canada : Wadsworth : Cengage Learning 2006),561.

and questionnaire. This is including in qualitative approach too. For those reasons, in this research the researcher uses mixed approach.

B. Setting of the Study

The research administered this study in English Education Department (EED) at Faculty of Education and Teacher Training, IAIN Sunan Ampel Surabaya. It is located in Jl. A.Yani 117 Surabaya. EED includes as one of newest department in IAIN as it is firstly developed since year 2005. This department has a vision, that is, to be English Education Department that has popular level best in the field of education and development of language. Furthermore, it is also in research and society dedication with Islamic basic. The mission of EED includes, creating the students become English teacher who have high quality, good attitude, adequate knowledge, and ability to teach, conducting an establishment and have high-qualified research in the field of language and language teaching.⁵

More detail, the subject of this study is the fourth semester students of English Education Department. The reason, which supports the researcher to choose them based on the consideration that they are studying writing argumentative essay. She conducted it in preliminary research. There were four classes of students in the fourth semester in English Education

⁵ Profile of PBI, (<http://www.pbi.sunan-ampel.ac.id/>), accessed on January 23th, 2013 at 9.49 AM)

Department at that time. The writer took two classes because among those four classes just two classes who have taught and practiced in writing argumentative essay. As a result, in this study the researcher uses purposive random sampling to get the data. According to William M.K Trochim, purposive sampling is used when researchers have a certain purpose in their mind. Usually, they would be seeking one or more specific predefined groups. ⁶ Sugiyono also has the same opinion about it, he said that “Purposive sampling adalah teknik penentuan sampel dengan pertimbangan tertentu.”⁷ The certain purposes as like the writer said before related to her preliminary research. Considering those statements, the researcher decided to use this way to find out the sample of data. In finding a valid result of this research, the researcher chose an error rate of 10 % of this study. As a result, from 32 students as a population, there were 29 students as samples.

C. Data and source of Data

Data is information about something, which is acquired through a data collection technique. The data would be processed and analyzed by using certain methods. Furthermore, it will produce information, which describes and indicates something.⁸ There are two types of typical data in research. They

⁶ William M.K Trochim. *The Research Methods Knowledge Base*. (New York : Cornell Custom Publishing, 1999),56.

⁷ Sugiyono, *Statistika untuk Penelitian* (Bandung: Alfabeta, 2010),68.

⁸ Haris Herdiansyah. *Metodologi Penelitian kualitatif* (Jakarta Selatan : Salemba Humanika, 2010),116.

are quantitative and qualitative. Quantitative are the data in numerical form. Whereas, qualitative data are the data, which involves words rather than uses numerical form such as photograph, sound recording, etc.⁹In this research also combines the quantitative approach because it uses numerical calculation to calculate the data from readability score.

The researcher found out the data of this research from the result of readability formula from the students' assignment in writing III. In addition, the researcher found out the data from the result of curriculum and questionnaire.

1. The result of readability formula is used to answer the first research question about the readability levels of students' writing in argumentative essay.
2. The result of observation in analyzing English Education Department's curriculum is used to answer the second research question. It related to the same aspects that influence students' achievement in readability score. It is as supporting data whether the curriculum has six components of a suitable curriculum or not. It needed because it is one of the caused to know what the reasons of their achievement in their readability levels are.
3. The result of questionnaire is also to answer the reasons what the causes of their readability levels are. It related to know the students' educational

⁹ William M.K Trochim. *The Research Methods Knowledge Base*, 11.

background, their capacity in writing, and their process in learning English especially writing.

D. Data Collection Technique

Data collection technique is the way to collect the data that needed by the researchers to answer their research question. There are some techniques to collect the data in research such as interview, questionnaire, observation, documentation and Focus Group Discussion (FGD).¹⁰ In this research, the researcher uses questionnaire, observation and documentation technique.

The researcher used questionnaire in order to get the aspects that influences the students' readability achievement. Those aspects are educational background, ability in writing, readable text, argumentative essay, facilities in EED, teaching and learning in class writing III and the effort and motivation in increasing their ability in English. There are two types of questionnaire, first Closed-ended (or "closed question") is a question for which a researcher provides a suitable list of responses (for example : Yes / No). Then, secondly Open-ended (or "open question") is a question where the researcher does not provide the respondent with a set answer from which to choose. Rather, the respondent is asked to answer "in their own words".¹¹ In this research, the

¹⁰ Juliansyah Noor, *Metodologi Penelitian* (Jakarta, Kencana Media Group, 2012),140.

¹¹ <http://www.sociology.org.uk/methodq.pdf> accessed on Thursday, June 06, 2013 at 12 : 53 PM.

researcher used open-ended questionnaire in order to know the aspects that influences the students' achievement in readability score and level.

After sharing the questionnaire, the researcher observed the EED's curriculum. There are two types of observation in research, they are participant observation, non-participation observation and group observation. Firstly, participant observation is conducted when the researcher involve in the daily activity of the correspondent. The researcher found the data from the observation and through sensory perceptions where is the researcher as the observer involve in the daily activity. Secondly, non-participant observation is happened when the researchers does not use guide in their research. In this research, the researcher has to capable in developing their ability in observation an object. Thirdly, group observation is conducted when some researcher want to observe some objects.¹² Soegiyono also have same statement about it from his book entitled "Metode Penelitian Kuantitatif dan Kualitatif dan R & B". The data collection technique in this research was included in participant observation since the researcher observed the curriculum of English Education Department and she is a student of this department too.

Secondly, the data collection technique in this research was using documentation. According to Burhan Bungin, documentation used to analyze the document. Then, the document itself is the sources that are taken from

¹² Burhan Bungin, *Penelitian Kualitatif* (Jakarta, Kencana Media Group, 2012),121.

written forms such as : books, newspaper, articles, magazines, regulations, etc.¹³ More specific, in this research the data came from two types document such as personal document and formal document. In personal document, the document came from transcript or note from someone. Besides that, there is formal document. In formal document is also divide become two types of document for instance internal document and external document. In internal document as like announcement, instruction, or the rule of an institution etc. Then, from external document, the data come from magazine, bulletin, the news from media, announcement and notification.¹⁴ In this research, the data provided from both personal document and formal document. For the first, the data include in personal document because the data of this research came from the students' writing "argumentative essay". Then, the researcher also found the data from the documentation of English Education Department's curriculum.

E. Research Instrument

The instrument of research is equipment which used by the researcher to collect the data, it is important to get accurate data.¹⁵ In this research, the researcher employed a documentation method that was used to analyze the document. The document itself is the sources that are taken from written forms

¹³ Suharsimi Arikunto, *Prosedur Penelitian*, (Yogyakarta : Rineka Cipta, 2006), Edisi Revisi, 160.

¹⁴ Burhan Bungin, *Penelitian Kualitatif*, 122.

¹⁵ Suharsimi Arikunto, *Prosedur Penelitian*, 160.

such as: books, newspaper, articles, magazines, regulations, etc. The documents in this research came from the students' assignment in writing "argumentative essay" and the curriculum of English Education Department. Furthermore, this research analyzed the readability level of students' writing in "argumentative essay".

In collected the data, this research used some instruments, such as Flesh Readability Formula as a measurement device, observation checklist and questionnaire. They were:

1. Readability Formula

The researcher used readability formula as a measurement device to get the score of their reading ease score. Then, in this part is to find out the readability levels of students' assignment in writing argumentative essay.

2. Observation Checklist

The researcher used observation checklist in order to know whether the English Education Department's curriculum design have fulfill six components of a suitable curriculum that should be achieved by the department.

3. Questionnaire

According to Cambridge Dictionary, questionnaire is a list of questions that several people are asked about some information.¹⁶In addition, the questionnaire is the instrument that contains some written questions including attitude, opinion, preference, and information.¹⁷ Generally, by using questionnaire the researcher wants to find out the students' answer about the aspects, which influences the students' achievement in writing text. The aspects that she wants to know by using questionnaire are:

- a. Students' education background
- b. Students' ability in writing
- c. Students' opinion about the readable text
- d. Students' opinion about argumentative essay
- e. Students' opinion about facilities in EED
- f. Students' opinion about the teaching and learning process in Writing III
- g. Students' answers about their efforts and motivation in increasing their ability in English.

F. Research Procedure

This research will conduct at the following procedures: preliminary research, planning, implementing, and concluding data.

¹⁶ Cambridge Dictionary

¹⁷ Juliansyah Noor. *Metodologi Penelitian*,138.

1. Preliminary Study

In this step, the researcher did preliminary research to get needed information dealing with the readability level of students' writing "argumentative essay" from the fourth semester of English Education Department IAIN Sunan Ampel 2013. First, the researcher asked EED's office to get the syllabus of writing class. After that, the researcher knew that students from the fourth semester are studying argumentative essay in this semester. Then, to conduct the preliminary research, she joined in A and B Class, among four classes in Writing III. It was hold on April 16, 2013. By using purposive sampling, she choose those classes. In addition, during the class, the researcher also knew that at that time the students had to collect their assignment in writing argumentative essay.

Then, the researcher tried to read their writing in order to know their writing. Obviously, after implementing the readability formula to their writing, the researcher knew that their writing is not readable as their education level should be. As a result, the researcher also decided that she would analyze the students' writing from this assignment. The data from preliminary study was used to set up a plan action.

2. Planning

In relation to the application of action research, the researcher made a prior preparation to the implementation of action based on

preliminary study. In this case, the researcher collected all of students' writing in argumentative essay from the A and B class. By having so, the researcher directly met the students as the samples and for the samples who live where the researcher cannot visit, the researcher will use face-book or email. Then, to know some aspects that influence students' readability level of their assignment "midterm test", the researcher spread out questionnaire to the students. In addition, she observed the EED's curriculum. It was conducted to find out whether EED have a suitable curriculum or not.

3. Implementing

The researcher did this part after completing the planning step. In this step, the researcher analyzed 32 of students' midterm assignment in order to find out their readability level. Thus, to answer the research question number two, the researcher analyzed the questionnaire. It was conducted in order to know some aspects that influence students' readability level in their writing. After getting the result of the students' readability level based on readability formula and the aspect that influence it, the following step was transcribe the result.

4. Concluding

In this part, the researcher reflected the data that will have been found out through the related theory. Then, the researcher discussed all

information concerning the study to find out the data. Finally, the researcher concluded the result and finding to answer the research questions.

G. Data Analysis

Data analysis is used to analyze the collected data from the result of readability levels of students' writing in argumentative essay, the result of observation curriculum English Education Department, and the result of questionnaire. The data of this study analyzed by using qualitative method and quantitative method. One could also say that, in this part the researcher present the data by using mixed method too. There are some stages in analyzing data in this study correlated with mixed method research. According to Donald Ary those stages are;

Stage 1 is data reduction, involves analyzing the qualitative data (from curriculum and questionnaire) via theme analysis or thematic coding while also analyzing the quantitative data via descriptive statistics, factor analysis, etc.

Stage 2, data display, involves using tables and graphs to display the quantitative data and using other forms, such as matrices, rubrics, and lists, to describe the qualitative data. Stage 3 is data transformation, in which qualitative data (words) may be transformed into quantitative data

(numbers) and/or quantitative data (numbers) may be transformed into qualitative data (narrative).

Stage 4 is data correlation, which involves comparing the data from the different analyses (quantitizing and qualitzing compared to the originals).

The authors use the term *correlation* in a different sense than typically considered in quantitative research. Here, the researcher is comparing, for example, the original qualitative data and the qualitative data to determine whether the two sets seem to reflect similar findings.

Stage 5 is data consolidation, in which both sets of data are combined to create a new set of data or variables.

Stage 6 is data comparison, involves comparing data from the qualitative and quantitative data sources.

Stage 7 is data integration, in which the data and interpretations are either integrated into a coherent whole or reported in two separate sets (qualitative and quantitative) of coherent wholes.¹⁸

Whereas in this research, in analyzing the data, there were some steps:

First, for analyzing the readability level of students' writing the researcher used quantitative method. Whereas to analyzed the curriculum of English Education Department and questionnaire, the researcher deal with qualitative method.

¹⁸ Donald Ary. *Introduction to Research Education 8th Edition*, 565.

After finding the data, the researcher classified the data into the percentage of students' readability level, observation checklist, and questionnaire.

1. Analyzing the result of readability formula, the researcher counted the score of the student's readability level and categorized it into their readability level. Then the researcher counts the percentage either student who could write as readable as their education level or students could not. There were some steps in analyzing the data from the reading text that produced by students' from the fourth semester of English Education Department. They were as follow:

- a) Analyzing and counting the sentences, words and syllables in each text of the reading text.
- b) Measuring the readability of the text based on the Flesh Readability Formula (Reading Ease Formula). The specific mathematical pattern for the formula is :

c)
$$\text{FRE} = 206.835 - (1.015 \times \text{ASL}) - (84.6 \times \text{ASW})$$

where:

FRE = Flesh Readability Formula

ASL = Average Sentence Length (the number of words divided by numbers of sentences)

ASW = Average Number of Syllables (the number of syllables divided by numbers of words).

- d) Describing and giving further explanation related to the readability.
- e) Analyzing and determining the readability level of each text to know what the levels of the texts are.
- f) After getting the data from the readability formula, to count the percentage of the students' writing readability level who could write as readable as equivalent with their education level from the fourth semester, the writer uses the rule of percentage, which is based on Sudjiono, as follows :

$$P = F/N \times 100 \%$$

Note :

P = Percentage

F = number of students who can write as readable as equivalent with their education level

(college student)

N = All the number of students¹⁹

- g) Drawing Conclusion. (See the table of Flesh Reading Ease Formula in Table 2.1)
2. Observing the curriculum of English Education Department, by use observation checklist. The rubric of this observation checklist was taken

¹⁹ Anas Sudijono. *Pengantar Statistik Penelitian*, (Jakarta : PT. Gravindo Persada, 1993),40.

from the book of Geraldine O'Neil entitled *Programme Design : Coherence, Sequence and Integration in a Programme.*

Table 3.1
The Curriculum's Component

No	The Component of Curriculum	Scale				
		1	2	3	4	5
1.	Scope					
	The curriculum's content include some aspects such as affective (values and attitudes)					
	The curriculum's content includes appropriate Psychomotor skills.					
2.	Sequence					
	The material from each subject starts from the simple concept (basic) in the early year until more complex (advanced) concepts in later years.					
3.	Continuity					
	The curriculum provides opportunities for students to revisit knowledge and skills in more depth					

	as they progress through the years.					
4.	Integration					
	Connecting skills and knowledge from multiple sources and experiences					
	Applying theory to practice in various settings					
	Utilizing diverse and even contradictory points of view and understanding issues and positions contextually					
5.	Articulation					
	Students should receive some indicator of how they will be progressing through the programme, i.e. in student handbooks, used in class, on web					
	Some ideas for mapping of curriculum can be seen in resource.					
6.	Balance					
	Considering how the programme's components are organized and relate to each other.					

Note :

1 = Very Inappropriate

2 = Inappropriate

3 = Average

4 = Appropriate

5= Very Appropriate

3. Analyzing the data based on questionnaire, the researcher used formula: the sum of students' answer of one item question divided into the number of students' and multiplied by 100%. It can be written as follows :

$$\frac{\text{Sum of students' answer of one item question X 100 \%}}{\text{Total number of students}}$$

The researcher used formula in each number of questionnaires to their answer. Then after all number was processed, the researcher knew about the aspects that influenced the students' achievement in writing readable text.

After analyzing all data, the researcher synthesized all data from the result of students' readability level of their writing in argumentative essay, observation checklist, and questionnaire.

Table 3.2
Reading Ease Score²⁰

Description of Style	Average Sentence Length	Average Number of Syllables per 100 words	Reading Ease Score	Estimated Reading Level
Very easy	8 or less	123 or less	90-100	Fifth Grade
Easy	11	131	80-90	Sixth Grade
Fairly Difficult	14	139	70-80	Seventh Grade
Standard	17	147	60-70	Eight to Ninth Grade
Fairly Difficult	21	155	50-60	Tenth to Twelfth Grade
Difficult	25	167	30-50	Thirteen to Sixteen Grade (College)
Very difficult	29 or more	192 or more	0-30	College Graduated

²⁰ William H. Dubay. "The Principles of Readability," 21.