

## **CHAPTER III**

### **RESEARCH METHOD**

This chapter deals with research design, subject of the research, time of the research, place of the research, research procedure, techniques of collecting data, research instruments, techniques of analyzing data and credibility.

#### **A. Research Design**

The research design used in this study is descriptive quantitative. In descriptive quantitative research, all populations or research samples are involved which aims to describe the attitudes, characteristics, opinions and behavior of the population (Cresswell, 2012). In this research, all students who attended Academic Research courses were involved in the research.

Sugiyono (2013) explains that quantitative research methods are methods based on the philosophy of positivism, used in researching samples and research populations. Quantitative research is research that presents data in the form of numbers as the result of its research. Calderon (2006) defines descriptive research as the process of collecting, analyzing, classifying, and tabulating data about existing conditions, practices, processes, trends, and prevailing cause-and-effect relationships and then making adequate and accurate interpretations of those data with or without or sometimes with the help of minimal statistical methods. In this research, the researcher focused on investigating the quality of students writing in writing introductions for research articles and identifying the difficulties students faced in writing introductions for research articles.



#### **D. Place of the Research**

The researcher conducted the research in English Education Study Program of STKIP PGRI Pacitan. The location in Cut Nyak Dien streets number 4A Ploso, Pacitan Regency, East Java.

#### **E. Research Procedures**

The research procedures in this research were as follows:

1. Problem definition

The formulation of the problem in this study is regarding the description of student difficulty factors faced in writing the introduction in the research article.

2. Selection of subjects of research

The selection of research subjects is limited to undergraduate students of the English Study Program of STKIP PGRI PACITAN in the fourth semester who are writing research articles.

3. Measurement design

This includes designing and making research instruments in the form of questionnaires that checked by experts before being used to collect research data and getting validation in knowing the quality of writing that has been made using the writing assessment rubric by the researcher.

4. Instrument Distribution

This treatment was given to the target sample after the researchers revised the research instruments that had been analyzed by experts. This treatment aims

to identify what factors most influence students difficulties in writing introductions in research articles.

5. Processing data

Data that has been obtained from the results of questionnaires and student worksheet assessments is processed before it can be analyzed.

6. Data analysis

Analyzing data on students writing quality and factors that influence students difficulties in writing introductions in research articles.

7. Report Arrangement

The results of the analysis that has been collected were compiled into a report.

**F. Techniques of Collecting Data**

The techniques in collecting data were used :

1. Observation

Observation is a very important part of research. Through observation, researcher can systematically document and reflect on the activities and interactions of research subjects. Observations include, general observations of matters related to problems related to students difficulties in writing introductions to research articles. After that, identify aspects that become the center of attention, object restrictions and take notes using field notes.

In this research, researcher have conducted observations to the fourth semester class on May 22, 2023. Researcher find out about the number of

students, the students problem, and the terms of writing assignments from lecturers in Academic Writing courses.

## 2. Document Analysis

According to Guba & Lincoln (1981: 228), documents in qualitative research are any written or film material that can be used as supporting research evidence. The use of documents as a source of data in research is intended to support and add to the evidence. In this research, researchers conducted data collection techniques with documents in the form of student worksheets. In this study, researcher conducted data collection techniques with documents in the form of student worksheets. Student worksheets collected were the results of student writing in writing introductions for research articles. Then researcher assessed the results of student writing using a rubric. Below is the rubric used by researcher :

Table 2 Rubric assesment

<b>Rubric for Introduction in Research Article</b>					
<b>N O</b>	<b>CRITERIA</b>	<b>EXEMPLAR Y</b>	<b>GOOD</b>	<b>ACCEPTABLE</b>	<b>UNACCEPTABLE</b>
1	Purpose	The writer's central purpose or argument is readily apparent to the reader.	The writing has a clear purpose or argument, but may sometimes digress from it.	The central purpose or argument is not consistently clear throughout the paper.	The purpose or argument is generally unclear.
2	Content	Balanced presentation of relevant and legitimate information that clearly supports a central purpose or argument and shows a thoughtful, in-	Information provides reasonable support for a central purpose or argument and displays evidence of a basic analysis of a significant topic. Reader	Information supports a central purpose or argument at times. Analysis is basic or general. Reader gains few insights.	Central purpose or argument is not clearly identified. Analysis is vague or not evident. Reader is confused or may be misinformed.

		depth analysis of a significant topic. Reader gains important insights.	gains some insights.		
3	Organization	The ideas are arranged logically to support the purpose or argument. They flow smoothly from one to another and are clearly linked to each other. The reader can follow the line of reasoning.	The ideas are arranged logically to support the central purpose or argument. They are usually clearly linked to each other. For the most part, the reader can follow the line of reasoning.	In general, the writing is arranged logically, although occasionally ideas fail to make sense together. The reader is fairly clear about what writer intends.	The writing is not logically organized. Frequently, ideas fail to make sense together. The reader cannot identify a line of reasoning and loses interest.
4	Feel	The writing is compelling. It hooks the reader and sustains interest throughout.	The writing is generally engaging, but has some dry spots. In general, it is focused and keeps the reader's attention.	The writing is dull and unengaging. Though the paper has some interesting parts, the reader finds it difficult to maintain interest.	The writing has little personality. The reader quickly loses interest and stops reading
5	Tone	The tone is consistently professional and appropriate for an academic research paper.	The tone is generally professional. For the most part, it is appropriate for an academic research paper.	The tone is not consistently professional or appropriate for an academic research paper.	The tone is unprofessional. It is not appropriate for an academic research paper.
6	Sentence Structure	Sentences are well-phrased and varied in length and structure. They flow smoothly from one to another.	Sentences are well-phrased and there is some variety in length and structure. The flow from sentence to sentence is generally smooth.	Some sentences are awkwardly constructed so that the reader is occasionally distracted.	Errors in sentence structure are frequent enough to be a major distraction to the reader.

7	Word Choice	Word choice is consistently precise and accurate.	Word choice is generally good. The writer often goes beyond the generic word to find one more precise and effective.	Word choice is merely adequate, and the range of words is limited. Some words are used inappropriately.	Many words are used inappropriately, confusing the reader.
8	Grammar, Spelling, Writing Mechanics (punctuation, italics, capitalization, etc.)	The writing is free or almost free of errors.	There are occasional errors, but they don't represent a major distraction or obscure meaning.	The writing has many errors, and the reader is distracted by them.	There are so many errors that meaning is obscured. The reader is confused and stops reading.
9	Length	Paper is the number of pages specified in the assignment.			Paper has more or fewer pages than specified in the assignment.
10	Use of References	Compelling evidence from professionally legitimate sources is given to support claims. Attribution is clear and fairly represented.	Professionally legitimate sources that support claims are generally present and attribution is, for the most part, clear and fairly represented.	Although attributions are occasionally given, many statements seem unsubstantiated. The reader is confused about the source of information and ideas.	References are seldom cited to support statements.
11	Quality of References	References are primarily peer-reviewed professional journals or other approved sources (e.g., government documents, agency manuals, ...). The reader is confident that the	Although most of the references are professionally legitimate, a few are questionable (e.g., trade books, internet sources, popular magazines, ...). The reader is	Most of the references are from sources that are not peer-reviewed and have uncertain reliability. The reader doubts the accuracy of much of the material presented.	There are virtually no sources that are professionally reliable. The reader seriously doubts the value of the material and stops reading.

		information and ideas can be trusted.	uncertain of the reliability of some of the sources.		
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### 3. Questionnaire

To find out what difficulties students face, researcher used questionnaires in collecting data. Researcher has made questionnaire using Google Forms. The researcher spread questionnaires using whatsapp to 33 students of fourth semester English Education Study Program.

#### **G. Research Instruments**

To collect data for this research, the following instruments were used:

##### 1. Field Notes

Field notes are in the form of tables and contain descriptions of activities carried out during observation. In this research, field notes contain the results of observations in the form of subjects for research, the students problem, and the terms of writing assignments from lecturers in Academic Writing courses.

##### 2. Student Worksheets

In this research, the student worksheet in question is the result of student writing in making research articles that have been written by fourth semester students of English education in academic writing courses. The researcher obtained the results of student writing by asking permission from the lecturer of the fourth semester academic writing course. In writing this article, students could freely determine the topic so that researcher got different answers from each difficulty faced by students.



### 3. Questionnaire

According to Ary et.al (2002: 56), a questionnaire is an instrument where respondents provide written answers to questions or mark items that indicate their responses. The questionnaire used in this research was open-ended. It aims to obtain students perceptions regarding the difficulties they face in writing introduction for research articles. The researcher chose this type of questionnaire because the researcher was interested in knowing the process of highlighting the views of the respondents. Students could answer all questions based on how they felt, but the answers had to be related to the topic of the question. There were twelve open-ended questions and one closed ended in questionnaire. The questions are:

- a. The students difficulties in determine the topic and title of the research article.
- b. The students difficulties in identify a problem and formulate a problem in a research article
- c. The students difficulties in writing background in a research article
- d. The students difficulties in find and use references in research articles
- e. The students difficulties in determine the originality of research (Research Gap) in writing research articles
- f. The students difficulties in determine the research method used in writing a research article
- g. The students difficulties in collect research data for research articles
- h. The students difficulties in process and display research data for research articles

- i. The students difficulties in sentence structure in writing research articles
- j. The students difficulties in Grammar, Spelling, Writing Mechanics (full stops, italics, capitalization, etc.) in writing research articles
- k. The students difficulties in related to article writing such as confidence, motivation, anxiety, time management etc.
- l. The students most difficult part of writing a research article

#### **H. Techniques of Analyzing Data**

After the required data has been collected, the next step is to analyzing the data. According to Sudaryanto (2015:7) data analysis is an attempt by the researcher to deal directly with the problems contained in the data. The stages in analyzing student worksheets in this research:

1. First, read intensively the student worksheets obtained from the lecturer of the Academic Writing course.
2. Second, identify parts of the writing according to the assessment rubric. There are eleven aspects of assessment in the rubric, namely purpose, content, organization, feel, tone, sentence structure, word choice, grammar, spelling and writing mechanics, length, use of references, and quality of references.
3. Third, make a note of the assessment results according to the assessment using the rubric. The assessment results are grouped into exemplar, good, acceptable, unacceptable.
4. Fourth, make code using initials for student identity.
5. Fifth, data tabulation stage. Researchers calculated the results of the student worksheet assessment using the percentage formula.

6. Sixth, after the data tabulation is complete, then provide an interpretation of the percentage value obtained.

The stages in analyzing the results of the questionnaire in this study:

1. Checking the completeness of the answers obtained from students.
2. Reading carefully the answers in the questionnaire to understand the meaning of the students answers.
3. Making a code for respondents who answer the questionnaire.
4. Organizing the results of the answers in accordance with the answers of students related to the difficulties encountered in writing introductions for research articles.
5. Drawing conclusions from the results of the questionnaire answers.

#### **I. Credibility**

As a condition that information can be used as research data, it is necessary to check its credibility, so that the data can be accounted for and used to draw conclusions. According to Subroto (1992: 34), the credibility of research data can be seen from the level of validity and reliability of the data. Without meeting these requirements, research cannot be scientifically accounted for.

Triangulation is a data validity checking technique by utilizing something else outside the data for the purpose of checking or comparing the data concerned (Moleong, 1990: 178). The most widely used triangulation technique is checking the validity of data through other sources. Denzin (in Moleong, 1990: 178), distinguishes four kinds of triangulation as a data validity checking technique that utilizes the use of sources, methods, investigators, and theories. In this study,

researchers used experts to check the validity of the data used in the study. The expert used was a lecturer in the Language Testing and Assessment course in the sixth semester and the Advanced English Grammar course in the fourth semester of the English Education Study Program of STKIP PGRI Pacitan. The expert has taken a master's degree in Education Management at UM Surakarta in 2011.

