



Writing a Research Report in Higher Education: Problems and Solutions for English and Non English Students

Ira Maisarah¹(✉), Sufiyandi¹, Muhammad Fadhli¹, and Reza Satria Rinaldi²

¹ The Faculty of Teacher Training and Education, University of Bengkulu, Bengkulu, Indonesia
iramaisarah@unib.ac.id

² The Faculty of Engineering, University of Bengkulu, Bengkulu, Indonesia

Abstract. Writing a research report is something that must be done for every student in the university. That is why the students must have competence in academic writing. For both English and Non-English students, academic writing for research report is one of the most difficult assignments undertaken by the students at university. This study focused on the students' context on academic writing in the class to write a research report. The method used in this study was a survey research in a small class of English and Non-English classrooms. The survey was asking some questions in the written form. The findings showed that they face linguistic problems with unfamiliar styles in English version. Besides linguistics problem, they also do not understand how to create research report as a process of academic writing that is consists of an introduction, review of related literature, methodology, findings and discussion, and conclusion. Pedagogically, teaching academic writing effectively in any university classroom needs a lot of practice.

Keywords: Research Report · Higher Education · English and Non-English Students

1 Introduction

In education and learning, one of the most important abilities is writing. It is acknowledged as one of the most crucial abilities for students in higher education [1]. As part of their curriculum and to communicate with professionals in their lecture, the students need to write articles, critiques, reviews, and argumentation processes [2]. In this case, an academic writing becomes the most arduous tasks for English and Non-English students in the classroom [3–8]. Moreover, understanding genres makes it challenging for the students [5, 6, 9].

In writing a report, the students are required to have a skill to write effectively and meaningfully based on the context of writing e.g. a research report. Besides, they are also use writing to express their thoughts, ideas, and feelings. As a result, to have successful written communication in their subjects, the learners must acquire the writing abilities [10].

Several studies proved that the competence of writing is a guarantee for the students to be succeed in writing a research report [11, 12]. The rules of writing have the constructing structure as well the processes—pre-writing, planning, drafting, reflection, peer and teacher review, editing, additional research and generation of ideas, final reading and publication [13].

In the academic curriculum at the University of Bengkulu, writing a research report is a course that must be taken by the students in sixth or seventh semester. In writing a report for research, the students are not only required to be able to identify the problems but also to construct the relevant theories. The theories must be based on the latest researches, preferably taken from articles that are published in journals. However, nowadays, the publications in journals are mostly in English. Then, in fact, there are some references that must be cited from international journals.

Understanding a scientific article that is written in English is not an easy way. Most of the students are not familiar with academic English because it is used a formal form of English language. Due to this phenomenon, as the lecturers or educators in the university level, there were two research questions proposed in this study:

1. How is the perspective of English and Non-English students on the writing a research report in higher education?
2. What are the problems faced by students English and Non-English students on the writing a research report in higher education?
3. What are the solutions proposed for English and Non-English students on the writing a research report in higher education?

2 Method

In order to answer three research questions, we conducted the descriptive qualitative research. Qualitative and descriptive research are phrases that are frequently used interchangeably. Qualitative research, on the other hand, is more comprehensive and frequently entails a large gathering of data from multiple sources in order to acquire a better knowledge of individual participants, including their thoughts, perspectives, and attitudes [14, 15]. A descriptive study's purpose is to characterize a phenomena and its characteristics. This study is more interested in what happened than than how or why it happened. As a result, observation and survey tools are frequently utilized to collect data [16, 17]. Data may be collected intuitively in such studies, but it is frequently examined quantitatively, with frequencies, percentages, averages, and other statistical analysis used to discover associations.

The participants of this research were the students at English Education Study Program and Electrical Engineering Study Program as many as 80 students. The participants were active in the Academic Writing class and Academic Experimental Project class that focus on writing a research report.

In gathering the data, we used the instruments of questionnaire and interview. There are thirteen indicators for questionnaire i.e. (1) Title page (2) Abstract; (3) Acknowledgements; (4) List of contents; (5) List of acronyms and abbreviations; (6) Introduction; (7) Literature review; (8) Methodology; (9) Results/data; (10) Analysis and discussion;

Table 1. Degree of Difficulty

Level	Description	Score
1	Simple	1
2	Moderate	0,5
3	Hard/Difficult	0,1

(Modified from Xi Jung et al. [18])

(11) Conclusions; (12) Bibliography; and (13) Appendices [13]. Moreover, the interview was only focus on the question that close related to the problem faced by the students in writing a research report.

Then, the data was analyzed by using percentage of each indicator based on the students’ response to the questions. The level scores given were categorized in degree of difficulty that was modified from Xi Jung et al. [18]. It can be seen in Table 1 as follow.

There are three levels of difficulty. So, the students were only asked to chose the answers based on the categories given in the questionnaire.

3 Findings and Discussion

There three parts that will be presented in this section: first, the students’ perspective on the writing a research report in higher education; second, the problems faced by students English and Non-English students on the writing a research report in higher education; and third, the solutions proposed for English and Non-English students on the writing a research report in higher education.

3.1 The Students’ Perspective on the Writing a Research Report in Higher Education

The following table describes the students’ perspective on the writing a research repot.

Based on Table 2, most of the students ($\geq 70\%$ participants) viewed that writing tittle page, abstract, acknowledgement, list of contents, list of acronyms and abbreviation, introduction, conclusion, bibliography, and appendices are simple. First, as many as 80% participants (64 students) viewed that writing title page was simple, while 20% participants (16 students) viewed that writing tittle page was quite difficult (moderate level). Second, as many as 72% participants (58 students) viewed that writing abstract was simple, while 28% participants (22 students) viewed that writing abstract was quite difficult (moderate level). Third, as many as 70% participants (56 students) viewed that writing acknowledgement was simple, while 30% participants (24 students) viewed that writing acknowledgement was quite difficult (moderate level). Fourth, as many as 95% participants (76 students) viewed that writing list of contents was simple, while 5% participants (4 students) viewed that writing list of contents was quite difficult (moderate level). Fifth, as many as 95% participants (76 students) viewed that writing list of acronyms and abbreviation were simple, while 5% participants (4 students) viewed that

Table 2. Students' Perspective on the writing a research report

Indicators	Percentage (%)		
	1	2	3
Title page	80%	20%	–
Abstract	72%	28%	–
Acknowledgement	70%	30%	–
List of contents	95%	5%	–
List of acronyms and abbreviation	95%	5%	–
Introduction	75%	5%	20%
Literature Review	57%	10%	33%
Methodology	51%	34%	15%
Result/Data	53%	12%	35%
Analysis and Discussion	60%	10%	30%
Conclusion	70%	12%	18%
Bibliography	78%	22%	–
Appendices	95%	5%	–

writing acronyms and abbreviation were quite difficult (moderate level). Sixth, as many as 75% participants (60 students) viewed that writing an introduction was simple, 5% participants (4 students) viewed that writing an introduction was quite difficult (moderate level), and 20% participants (16 students) viewed that writing an introduction was difficult. Seventh, as many as 70% participants (56 students) viewed that writing a conclusion was simple, 12% participants (10 students) viewed that writing a conclusion was quite difficult (moderate level), and 18% participants (14 students) viewed that writing a conclusion was difficult. Eighth, as many as 78% participants (62 students) viewed that writing a bibliography was simple, while 22% participants (18 students) viewed that writing a bibliography was quite difficult (moderate level). Finally, as many as 95% participants (76 students) viewed that writing appendices was simple, while 5% participants (4 students) viewed that appendices was quite difficult (moderate level).

In contrast, the students viewed that writing literature review, methodology, result/data, and analysis and discussion are difficult parts in writing a research report. First, as many as 57% participants (47 students) viewed that writing literature review was simple, 10% participants (8 students) viewed that writing literature review was quite difficult (moderate level), and 33% participants (25 students) viewed that writing literature review was difficult. Second, as many as 51% participants (41 students) viewed that writing methodology was simple, 34% participants (27 students) viewed that writing methodology was quite difficult (moderate level), and 15% participants (12 students) viewed that writing methodology was difficult. Third, as many as 53% participants (42 students) viewed that writing result/data was simple, 12% participants (10 students)

viewed that writing result/data was quite difficult (moderate level), and 35% participants (28 students) viewed that writing result/data was difficult. Finally, as many as 60% participants (48 students) viewed that writing analysis and discussion were simple, 10% participants (8 students) viewed that writing analysis and discussion were quite difficult (moderate level), and 3% participants (28 students) viewed that writing analysis and discussion were was difficult.

3.2 The Problems Faced by Students English and Non-english Students on the Writing a Research Report in Higher Education

Based on the students' perspective and interview, there are five main problems faced by the students in writing a research report. The problems are writing introduction, literature review, methodology, results/data, and analysis and discussion. These problems were also followed by some questions in the interview section with ten participants.

For the first problem, **introduction section**, there are two responses from the participants. The data can be seen as follow:

As student A says:

“My own problem in writing an introduction section is exploring the gap that I’m going to find out in my research”

While, the student B says:

“The introduction section be the most difficult part in writing my research report because I’ve to arrange my ideas from wider context into the narrow one”

Usually, a gap exist between a current condition and a desired [19]. A writer must be able to explain the gap in his/her study—what is the current condition? and what is desired based on the study? The desired of the research can be also called as the motivation of the research—why you did a research about such topic? [13].

In writing **literature review**, the students have difficulty in explaining the theories that have been quoted from the experts. Participant C and D said that they usually quote the theories directly without paraphrasing or giving any explanation after the quotation. The function of literature review in writing a research report is to demonstrate how your research fits into the larger picture; how it relates to the existing body of knowledge on the subject or other related issues. It also demonstrates how your own research is unique and will contribute to that body of knowledge [13].

Sometimes, some of the students got difficulties in understanding the theories that are written in English language. Hence, they used translation method to understand sentence by sentence and paragraph by paragraph. When they copy paste it fully without any paraphrasing, sometimes, it is found as plagiarism.

Then, methodology is the third problem faced by the students in writing a research report. The most difficult thing in this section is designing an instrument to collect the data. Participants E, F, G, and H say:

“Sometimes we got confused in designing the appropriate instruments for the research. Moreover, we must pay attention on the problems and theories used in the research report”.

‘Methodology’ refers to the overall approach to the research process [13]. It refers to collecting and analyzing data. The overall goal of the methodology section, regardless of the field in which you are conducting your research, is to provide the reader with an overview of the methods used so that a judgment can be made as to how appropriate they are given the research objectives and how valid the data they have generated. A good designing of methodology, will affect a good result of the research.

The fourth problem was **writing result or data**. In essence, the result or data must be able to answer the research question(s). In this section, mostly the students were only able to present the data without any interpretation. For instance, they present a table, then they explain the data from the table into sentence(s).

This is more likely to occur when it is believed that the results would prompt immediate questions or worries in the mind of the reader, which may be addressed more effectively at the presentation of the results themselves rather than later, when they may feel more dislocated [13]. The manner you present your data will be influenced by whether it is qualitative or quantitative data. Figures in the form of tables, graphs, charts, and diagrams are commonly used to convey quantitative data. When you present data in this manner, you must, of course, refer to it in your writing, providing commentary to emphasize and explain relevant points.

The last problem was writing **the analysis and discussion**. Most of the students got difficulty in arguing the findings with theories or previous studies. Also, making comparative analysis of findings with others’. Arguing the data in the discussion section is very important to support the findings.

3.3 The Solutions Proposed for English and Non-english Students on the Writing a Research Report in Higher Education

What are the solution proposed for English and non English students in writing a research report? The following descriptions explain the solutions:

The solution to write an introduction section for research report

The introduction provides readers with the background information they need to understand how the paper’s findings expand current understanding in the topic. One of the most important skills is the ability to express the same things many times before, but in a new, engaging, and exciting way. So, in writing a good introduction, you must state clearly the problem(s) of the research, refers to some literatures in order to find out the solution, choose the best solution, make limitation, find the gap, and state your achieve goal of the research [20].

The solution to write literature review section for research report

The literature review generally must answer the two big questions e.g. (1) what are the most relevant with the research topic? and (2) what gap reveals in the theory? There are three main points that must be considered in writing a literature review i.e. (1) organizing the literature search such as books and journal articles; (2) structuring the literature review; and (3) use appropriate language critique [13].

Work that appears to be unrelated to your particular research topic can often contain information that is quite useful or prompts new ideas or avenues of thought. So, making summarizing or note taking while reading the literature review is also the best way.

The solution to write methodology section for research report

There some questions that can be used in guiding a writer to write method in a research report. They are: What is the topic of study? Do we use hypotheses? What are the characteristic of the data? Who will be the population and sample? What instrument(s) that available to be used? How do we analyze the data? Do we use statistical analysis? [20].

Everything should be described in a logical order so that readers can understand what you did. Make sure you've covered all of the necessary steps. Because you are so acquainted with your method, you may overlook important details, either because you believe it is implicit (and hence not worth addressing) or because you simply forget.

The solution to write result/data section for research report

In exposing the result or data, we must present three points such as what did we find? What did we not find? and What did we find and was not expecting to find? [20] When it is found contradiction in the result, present it clearly by giving a deep explanation.

The solution to write analysis and discussion section for research report

In presenting an analysis and discussion, a writer must avoid three things. First, Avoid making claims your data cannot support. Second, Avoid skewing the data to fit your hypotheses: be 'objective'. Finally, Avoid skewing the data to fit your hypotheses: be 'objective' [13].

Making claims that aren't supported by data will make you appear naive and undisciplined, and it could jeopardize the credibility of your entire study, as well as your reputation as a precise and discriminating researcher. It's all too easy to read evidence in support of your hypotheses into your results when evaluating and discussing them, when such evidence may be minor or non-existent. It is nearly impossible to cover all bases, despite greatest attempts to develop a well-designed study and account for all possible confounding variables.

This means that the inferences and conclusions you can make may be less reliable than you'd want in some circumstances. What matters is that you explicitly admit this truth when necessary. Try to look at the data through the eyes of someone who has no stake in the study or its outcomes and is only there to ensure that interpretations are based only on what is visible in the data.

4 Conclusion

Mostly, the students' perspective, both for English and non-English students, are good. It is indicated from the percentage that shows more than 50% students viewed that writing a research report is simple for some items, and difficult for certain items. Then, eventhough the students viewed that writing an introduction is quite easy, but they have some problems in exploring the gap of the research.

Then, there is no differences of students' perspective, both for English and non-English students. The most difficult for both is in using the source of literature reviews that are written in English. Some of them are afraid to paraphrase, because they worry about the changing of meaning if they are not quote fully the statement from the experts.

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