MOVE STRUCTURE IN NONENGINEERING FINAL PROJECT BACKGROUND

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Abstract

The scientific paper of the final project (TA) of Polban students, especially at the Undergraduate level, has the potential to be published both nationally and internationally. Therefore students must pay attention to the rules in writing scientific work. One rule is to write the background in the introductory chapter. The chapter is a way for the readers to see the contents of the research report. This study aims to investigate the Move and Step in the final project of undergraduate students in nonengineering which are analyzed using the Create a Research Space (CARS) model from Swales and Feak (1994). Qualitative is used because it analyzes the background of the research paper. The researcher investigates phenomenon from the perspective of the participants. There were 173 student final project that were analyzed. Student final project were from non-engineering study programs written in 2022. The result shows that every final project applied Move 1 and Move 3, but slightly Move 2. The Steps in Move 1 were dominated by Step 2 dan Step 3. The Steps used in Move 2 were Step 2 and Step 4, meanwhile in Move 3, Step 1A was found in all the background.

Keywords: Final Project; CARS; Moves; Nonengineering; Steps

INTRODUCTION

Data from Scientific and technical journal articles (worldbank.org) in 2018 shows that there are 2,554,319 journal articles that have been published. This means that the writing of scientific papers will continue and increase from year to year. Looking at these statistical data, it is possible that the scientific work of the final project (TA) of Polban students, especially at the undergraduate level, can be published both nationally and internationally. Writing the final project is very important because it is a requirement for graduation for Polban students. In writing scientific papers, students must successfully fulfill the process to produce good writing. Writing processes such as the use of punctuation, sentence structure, vocabulary, and paragraph organization must be carried out properly. Basically students must follow the rules that have been determined. One of the rules that must be followed is to write a background in the introductory chapter. The background in the final project research is a description of the research. This section serves as an entryway for readers to preview the contents of the research report. (Emilia, 2009) said that in this introduction one should not make mistakes because the reader decides whether to continue reading or stop reading. This shows that a writer or student have to write a good background. (Bajwa et al., 2020) revealed that the introduction is among the most challenging and time-consuming sections to write, even for seasoned writers. Nevertheless, it must be written correctly due to the section's significance.

The first research conducted by (Huda, 2016) aims to investigate the way Indonesian writers construct rhetoric in the introduction to an English thesis and investigate the type of Indonesian rhetoric that is reflected in the introduction to an English thesis. Data were collected using

documentation and text analysis techniques and analyzed based on the model introduced by Swales and Connor & Lauer. The data analyzed in this study were 18 English-language thesis. The results showed that Indonesian writers built their rhetoric reflected in the introduction to the English-language thesis by means of proper scientific writing by following the CARS model. Besides that, the rhetoric used by Indonesian writers in the introduction to English thesis has followed the deductive type of thinking. Research conducted by (Soraya et al., 2020) focuses on developing rhetoric on the background of a research proposal from an eighth semester student of the Department of English Education. This study uses descriptive qualitative research design. The data collection technique in this study was a table based on the Swales model. The research results show that all the proposals have a variety of schematic structures. The schematic structure in each proposal does not follow the ideal schematic structure based on Swales. There are several repeating Stages and steps found in the background. Furthermore, the highest Stage used in the background is Move 1.

In 2020, (Febryanto, 2020) conducted a study analyzing the background structure of students' final assignments by examining the Moves and Steps. The research method utilized was qualitative descriptive. The research examined nine final projects from students in the English Department. The data collection method was document analysis. The study results indicate that Stage 1 delimits the research area, while Stage 3 occupies the niche identified in the final project's background. Move 1 comprises Steps 1 and 3, which involve making topic generalizations by presenting topic background information and reviewing prior research, as well as introducing and evaluating outcomes of prior research. Move 3 outlines the objective.

Furthermore, (Nabilla et al., 2021) explores the cross-disciplinary introduction section with regard to the structure of the rhetorical patterns of the introduction and the linguistic realization of these patterns. The data comprises the opening sections of ten research articles written by inexperienced Indonesian authors, with five from the humanities and social sciences and five from the natural and applied sciences. Research shows that of the two disciplines there are Move 1 Establishing a territory and Move 3 Presenting the present work, and the conventional use of Move 2 Establishing a niche. However, there are differences at each level. With regard to linguistic features, soft and hard science writers prefer to use active voice and present tense in realizing patterns. Another thing that was found was the presence of a number of metadiscourses such as hedges and boosters in the introduction.

Then research conducted by (Lu et al., 2021). This study examines the differences in rhetorical and phraseological characteristics of introduction sections in research articles across five social science disciplines. The dataset includes 500 published research articles from Anthropology, Applied Linguistics, Political Science, Psychology, and Sociology. All text in the dataset was manually annotated for the Rhetoric Stage and steps by a team of seven researchers using a version of the Swales (2004) Create a Research Space (CARS) model. Rhetorical and phraseological analyses of the corpus show significant disciplinary variation in the distribution of rhetorical measures and the relationship between phrase structure and rhetorical strategies among the five social disciplines.

Research from (Rahayu et al., 2022) aims to investigate the stages and patterns of rhetoric in the research background. This study examines 29 background sections in final project reports from students enrolled in the English program at a state polytechnic in Indonesia. The final project report focused on tourism and journalism. The CARS model by Swales (2004) was used to analyze the data. The results indicate that Stage 1 and Stage 3 are present in all background sections. However, Stage 2 is not utilized in certain areas of the background, although completing Step 1 within Stage 2 is obligatory. Regarding rhetorical patterns, seven patterns were found with different frequencies. The most used pattern is M(Step)1-M (Step)3 S(Step)1.

The last research was conducted by (Alsharif, 2023). This research is a type-based study investigating the structure of the rhetorical steps of the introduction of articles in the discipline of business management. 30 articles published in 2020-2021 were selected as data in this study. The results prove that the introduction of business management research articles follows the CARS Swales Model (M1-M2-M3) and deviations from the model are a small number of the articles examined. Deviations were also found as a result of the cyclical nature of the steps, namely Step 1 and Step 2.

Based on the explanation above, this research concentrates on looking at the structure of moves and steps used in the final project background especially for the nonengineering undergraduate students.

The initial organizational structure proceeds from a research overview to a field-specific problem, which is analyzed in three distinct phases. (Swales,John M. & Feak, 2012) with its model called Create a Research Space (CARS) which is more flexible to accommodate more aspects in a longer introductory section. The CARS method is as follows.

1. Move 1: Establishing a Research Territory.
   In this section, the research area is introduced. According to Paltridge and Stairfield (cited in Emilia, 2012: 144), the introduction in English may use varying forms of words depending on the step. Move 1 commonly employs the present tense to indicate the research's significance. The following Steps are included in Move 1:
   a. Step 1 Stating centrality. This step aims to establish the importance, relevance, or interest of the research topic (optional).
   b. Step 2 Make generalization topic. The writer can present general topics related to the research background (optional).
   c. Step 3 Reviewing the prior research. This step requires the writer to introduce and review previous research results in the field.

2. Move 2: Establishing a research niche
   This step determines the position of the study and identifies gaps in previous research that need to be filled. According to Emillia (2011 12: 144), Move 2 involves making a rebuttal to the claims of other researchers (counter claiming) and highlighting special areas that require further research. The Steps in Move 2 are:
   a. Step 1 Counter claiming. The researcher can provide a rebuttal to other research that is considered weak, inappropriate, or problematic.
   b. Step 2 Indicating gap. The researcher can indicate a gap by asking questions related to research problems or expanding the area of previous research in a certain way. This step is mandatory.
   c. Step 3 Question rising. The researcher can raise new questions that have not been answered in other studies. Researcher can identify problems or needs, if applicable.
   d. Step 4: Continuation of Tradition. In this step, researchers can continue to investigate fields that have not been thoroughly explored.

3. Move 3: Occupying the niche. The researcher describes the study by outlining its purpose and how it addresses existing gaps. According to Emilia (2012: 145), researchers must demonstrate the significance of their work. This move outlines the organizational structure necessary for research. The following are the Steps in Move 3:
   a. Step 1A Outline Purposes. The researcher must explain the purpose or state the nature of the study or research question/hypothesis (mandatory).
   b. Step 1B Announcing present research. The researcher may announce current research by stating the main findings or value of the study (optional).

c. Step 2 Announcing principal finding. This involves naming important findings. In this step, the main findings of the study should be presented.

d. Step 3 Indicating the structure of research article. In this step, the researcher involves explaining the structure of the study, which can be achieved by providing an overview of the research structure.

METHOD

This research used qualitative because it analyzes the background of the final project. (Cresswell, 2009) said that in qualitative research the researcher seeks to establish the meaning of a phenomenon from the views of the participants. The object of this research is the final project of undergraduate students. Student final project from nonengineering study programs consisting of six study programs consisting of Government Management Accounting (AMP), Accounting (AC), Islamic Finance (KS), Asset Management (MA), Business Administration (BA), and Marketing Management (MPI) that was written in 2022. Purposive sampling was used to determine the research object to select data. According to (Fraenkel et al., 2012) this method assumes that the data collected provides the required information and the selected data represents the population. In addition (Arikunto, 2002) says that if the number of samples is more than 100, the number of samples can be around 10% -15% or 20% -25% or more. Therefore, there were 173 final projects used as the data from six study programs mentioned earlier.

RESULTS AND DISCUSSION

Results

The data analyzed consisted of six study programs of the nonengineering field. The six study programs are Government Management Accounting (AMP), Accounting (AC), Islamic Finance (KS), Asset Management (MA), Business Administration (BA), and Marketing Management (MPI). Below is the bar graph of moves in the students' final project background.
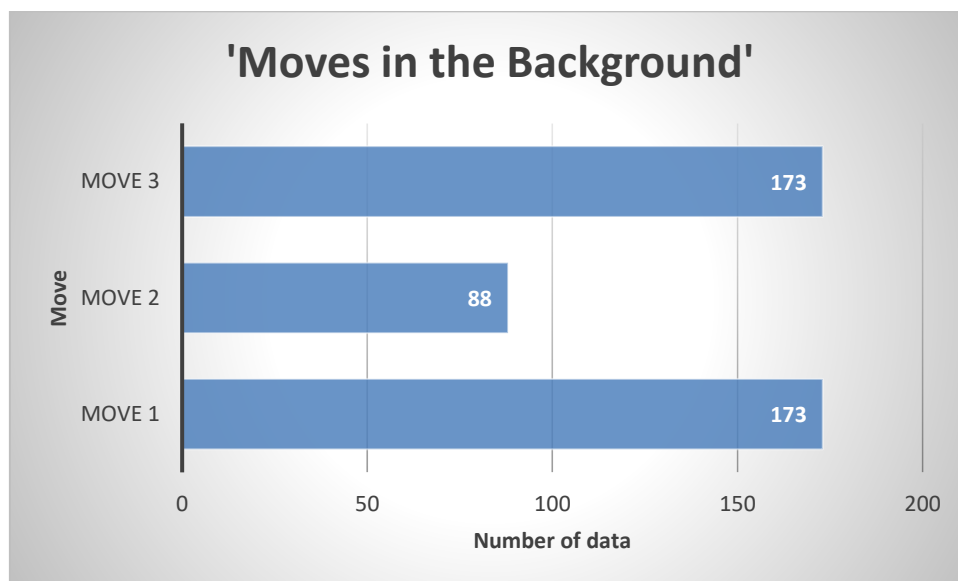

Figure 1. Moves of final project background

The bar graph illustrates that the use of Move 1 is about 173, Move 2 is 88 and Move 3 is 173. As mentioned in the method that the data used are 173 final projects, this shows that the use of Move 1 and Move 3 always occur in every background. It means that Move 1 and Move 3 are always applied in developing background by the students.
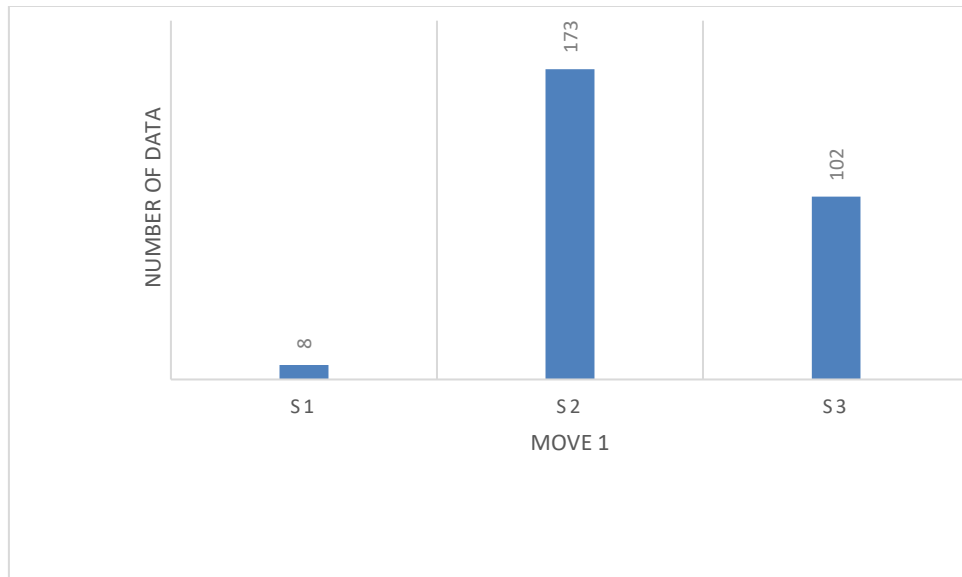

Figure 2. The use of Steps in Move 1

The bar graph above shows the use of Steps in Move 1. The graph shows that all 173 backgrounds of the final project use Step 2. The use of Step 3 is only found in 102 backgrounds while Step 1 is found only in 8 final projects.
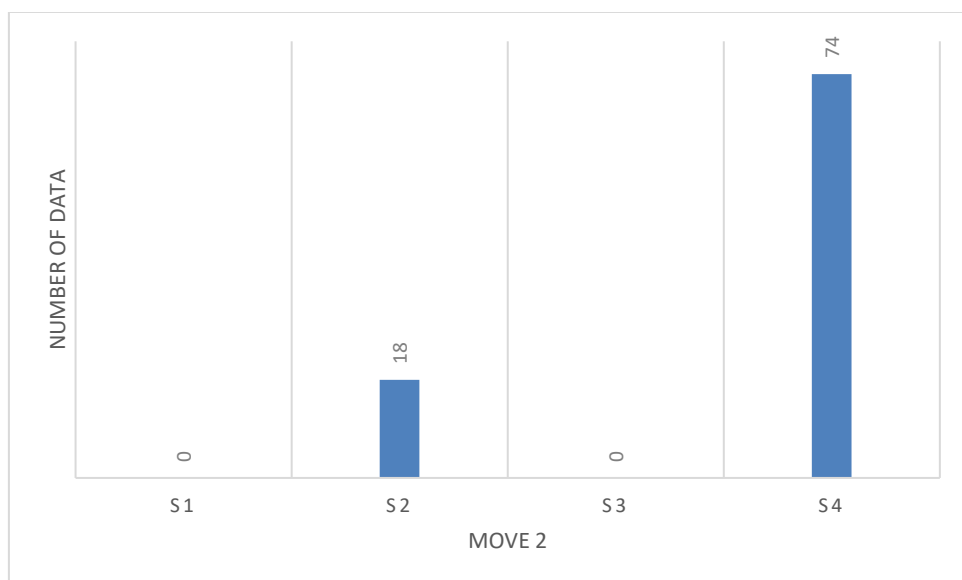

Figure 3. The use of Steps in Move 2

Above is a bar graph of the use of Steps in Move 2. In the bar graph, it can be seen that the use of Steps in Move 2 only has Step 2 and Step 4. The data shows that Step 2 is found in 18 final projects and Step 4 is found in 74 final projects background.
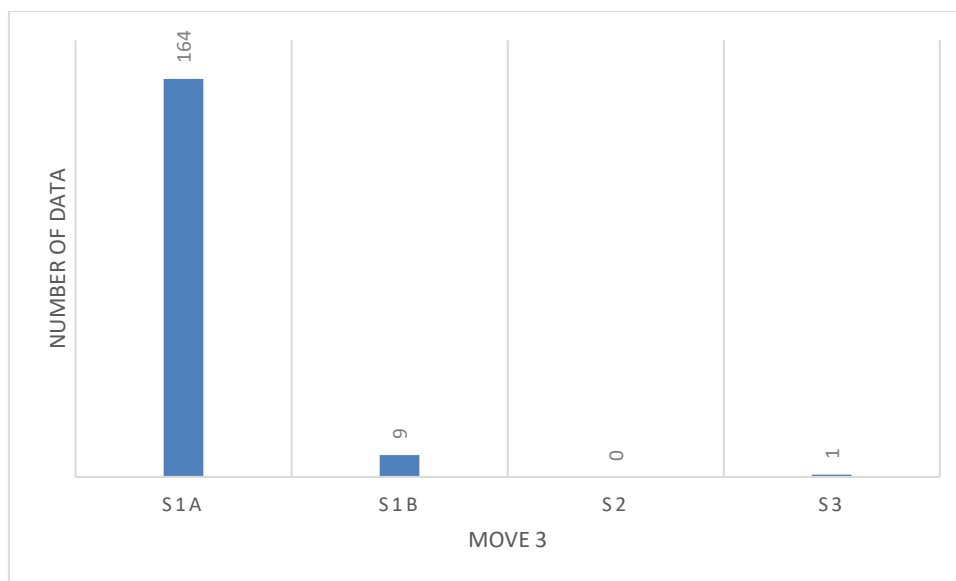
Figure 4. The use of Steps in Move 3

Figure 4 is a graph of the use of steps in move 3. The data shows that the use of step 1A can be found in 164 final assignments. Step 1B was found in 9 final assignments while step 3 was only found in 1 final assignment.

The table below shows that the background of the non-engineering field final project consists of 3 Moves, namely Move 1 establishing a research territory, Move 2 Establishing a special area or topic of study (establishing a research niche) and Move 3 Describing your own study (Occupying the niches). In addition, the steps contained in Move 1 are Step 1, some Steps 2, and Step 3. Steps in Move 2 are and Step 2 and Step 4. For Steps in Move 3, only Step 1A is dominant.

Table 1. The structure of the final project background

Study programs	Moves	Steps
Government Management Accounting	M1-M2-M3	T1:L2,(L1,L3); T2:L4; T3:L1A (L1B)
Accounting	M1-M2-M3	T1:L2,(L3); T2:L2,L4; T3:L1A
Islamic Finance	M1-M2-M3	T1:(L1),L2,L3; T2:L4; T3:L1A
Asset Management	M1-M3	T1:(L1),L2,(L3);T3:L1A
Business Administration	M1-M3	T1:L2,(L3);T3:L1A
Marketing Management	M1-M2-M3	T1:L2,L3; T2:L4;T3:L1A

Discussion
Move 1 establishing a research territory
As can be seen in the piechart, bar graph and tabel in result section, it can be noted that Move 1 is always found in the background of the student's final project. This means Move 1 as the strategy for developing background is always applied by the students. Here is an example of

findings from Marketing Management study program (excerpt 1) *Changes in extreme climate and weather, natural disasters, and many other events caused by global warming are real, adverse effects of the planet's current state. This obligates business stakeholders to utilize natural resources responsibly for business purposes and to continue changing and evolving environmentally friendly products (Toro, 2013). However, in Indonesia, the waste remains a serious challenge.*

Based on (Lokadata, 2021), in 2020, Indonesia's proportion of plastic waste ranked 2nd after wasted food, which accounted for 16.97% of the country's total waste. Still, the waste is improperly managed, such as when it is burned in the open, and it can contaminate waterways and the ocean.

The student develops the idea from the broaden view by saying about natural disaster, global warming, and environmentally friendly products to the narrow idea by saying 'in Indonesia, the waste remains serious challenge.' It can also be noticed that the student shows the research area that is going to be explored. In addition, in developing the idea, the student uses Step 1 and Step 2. The use of Step 1 can be seen when the student says *However, in Indonesia, the waste remains a serious challenge*. This shows that the student claims the centrality of the research. Then the next paragraph the student adds information about the statistics about waste in Indonesia. The additional information can be said as the use of Step 2 that is making generalization about the topic.

Move 2 establishing a research a niche
The use of Move 2 in the data can be seen in the following example. (Exercpt 2) *Expert research is determined by the state of the earth and current society's attitudes. According to Abdulsahib (2019) research, the main reason for the emergence of various green products and green environments worldwide is environmental attitude. Suki (2015) found that consumer knowledge of green products is the most critical factor influencing green product purchase intentions. Based on research by Toro (2013), one of the factors influencing a person's attitude toward green products is their environmental attitude. A different study shows that people's attitudes toward green products are also affected by perceived health benefits, perceived value, and online word-of-mouth (Rofianto & Pratami, 2021). However, combining the two findings into one study has never been done before. Additionally, most earlier studies have centered on green products in general. Therefore, researchers combined these two findings in this study and concentrated on the topic of menstrual cup products.*

From the excerpt above, the student establish the research idea from the general into a specific area. The move determines the place or position of the study that the student already did. In determining the position, the student uses Step 4. Step 4 is continuing a tradition. The student is trying to continue the tradition that the other researchers have done. The student provides several previous research to give the information about what the other researchers have done then where is the position of the research that conducted by the students. The statement *Therefore, researchers combined these two findings in this study and concentrated on the topic of menstrual cup products* shows that the student's position is continuing the tradition.

Move 3 Occupying the niche
Move 3 usually can be found in the last part of the background or in the last paragraph. At this point, the authors describe their research study by stating its purpose and demonstrating how it can fill existing gaps. As Emilia (2012:145) notes, researchers must demonstrate that their work is significant. For example (excerpt 3) *Based on the findings of these studies, researchers would*

like to know if environmental attitude, perceived health benefit, perceived value, and electronic word of mouth impact women's attitudes toward zero-waste menstrual cup products and if these factors influence purchase intention.

The excerpt above shows that Move 3 is used to describe the organizational structure of the research. The student uses Step 1A. The student explains the purpose or state the nature of the study or the research question.

CONCLUSION

Based on the findings and discussion, it can be concluded that the Moves that exist in the background are Move 1, Move 2, and Move 3. The use of Move 1 and Move 3 are always applied in all final project background. At Move 1, three steps were found that were used by students to develop the background. However, Step 2 and Step 3 are used for explaining the general idea of the research then explaining why the research is interesting to be analyzed and showing the previous research. The use of Step in Move 2 is Step 2 and Step 4. The steps are applied to show the gap between the research or to mention that the research is continuing the tradition. At Move 3, mostly Step 1A is found that to show the nature or the purpose of the research.

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