

NNS Master's Academic Writing Challenges

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ABSTRACT: Written academic genre is one of the most important written genres studied during the last few decades as a result of the large number of students who travel abroad to continue their academic studies. Academic writing has always been a great challenge especially for non-native speaking (NNS) students, mainly because of their insufficient second language mastery. Thesis writing as the final requirement for a postgraduate program is of high standards which many students fail to meet in their efforts to produce high quality academic language. Thus this study investigated nine master's thesis in Universiti Teknologi Malaysia (UTM) across different disciplines to identify some of NNS master's students' second language difficulties in their academic writing. The results revealed second language insufficient mastery and knowledge especially in terms of grammar and sentence structure among NNS master's students.

1.0 INTRODUCTION

ESP academic writing might be basically considered as a difficult task both for native-speaking (NS) and non-native speaking (NNS) students due to its novelty and difference with high school writing, IELTS writing, or other types of writing the students are familiar with (Swales and Feak, 1994; Kruse, 2003); however, it definitely is more challenging for NNS students due to their insufficient second language mastery. This fact is well proven by the high dropout rate among foreign-born students, which is more than twice that of NS students, as well as the low quality of their accepted theses compared to those of NS students (Hinkel, 2004). This has attracted a large body of research to NNS academic writing issues; however, considering the vastness of these issues, the research in this area is still sparse.

Thus this study was based on a motivation to identify some of NNS master's students' second language problems in academic writing in Universiti Teknologi Malaysia (UTM). This article is a brief report of this study. However, in addition to providing a brief report of this study, this article also provides a general typology of the previous research trend on academic writing to achieve the following two objectives.

Firstly, in terms of the vastness of the issues and problems faced by NNS students in academic writing, this article presents an overall review of some of these issues which might be helpful and informative to many students from different disciplines. Secondly, in terms of the wide research potentiality in this area, this article provides a general insight into the research trend on academic writing, which can be informative to those who want to contribute to this research trend.

2.0 PROBLEM STATEMENT

As will be discussed later, master's thesis writing is truly the most difficult academic writing for the students (Swales, 2004). Thus, in a survey conducted on 60 NNS master's students from different disciplines in UTM, the students were asked to select the most difficult thesis chapter in terms of academic writing skills and to explain the reason.

For the vast majority of the students (88%) the 'Introduction Chapter' was the most difficult, for in this chapter the students cannot rely on strategies such as paraphrasing or summarizing others' works and they have to rely on their own writing skill. Furthermore the Introduction Chapter seems to contain the most writing especially for engineering disciplines whose theses are mainly filled with formulas. As the students mentioned their main problem was due to their insufficient mastery of the second language. Thus this study was aimed to analyze lexico-grammatical features of 9 NNS master's thesis introductions across different disciplines.

3.0 LITERATURE REVIEW

As discussed previously, this section provides a typology of the previous literature on academic writing. This section respectively introduces 'academic writers', 'different approaches to study academic writing' as well as 'the features studied in each approach'.

3.1 Academic Writers

Academic writers can be categorized as two groups, namely novice and professional writers. The mission of ESP academic writing studies is to find out the strengths of professional writers to be taught to novice writers as well as to identify the weaknesses of novice writers to be avoided or corrected. This has motivated a number of studies to compare either NS and NNS academic writers (Hinkel, 2002) or successful and unsuccessful NNS writers (Okamura, 2006). Hinkel (2002) studied syntactic structural difference between NNS and NS essays to find an overuse of sentences with 'be' as the main verb in NNS texts for their easy construction, while the frequency rate of passive sentences was considerably higher in NS essays. In another study, Okamura (2006) compared the types of strategies used by 5 junior, 5 middle-ranking and 3 established L2 writers while writing L2 articles to cope with their difficulties.

However, NNS students as novice writers have been by far the most studied group in academic writing research (Hyland, 2002; Samraj, 2002; Belchera & Hirvela, 2005; Bitchener and Basturkmen, 2006) due to the wide range of problems they confront during academic writing. Among various academic writing tasks NNS students usually deal with, such as 'class assignments, projects, essays, thesis writing, etc.', master's thesis writing is truly one of the most difficult tasks. As Swales (2004) states 'for a majority of master's students, the dissertation/thesis is the most sustained and complex piece of academic writing (in any language) they will undertake'. This difficulty can be due to the fact that master's thesis is usually the students' first high standard academic writing experience. Thus master's thesis writing would deserve a lot of attention (Edith et al., 1985; Bitchener and Basturkmen, 2006; Petrić, 2007; Samraj, 2008); however, other types of academic writing such as class assignments (Braine, 1989), essays (Hinkel, 2002), or other types of students' academic

writing, should not be ignored since it is through them that a student is actually familiarized with academic writing and prepared for thesis writing.

4.0 DIFFERENT APPROACHES TO STUDY ACADEMIC WRITING

Among various approaches applied to study writing, in general, and academic writing, in particular, two are dominant in the literature: writing as a product and writing as a process. This part provides a review of these two approaches as well as some of their studied features using a few sample studies.

4.1 Writing As A Product

Traditionally, text has been viewed as a product long before it came to be known as a process. A product-based study views text as merely a reproduction and conveyance of previously learned structures. A product-based analysis ignores the invisible complex writing process a writer goes through and only explores visible final printed text on paper. In fact a product-based analysis explores textual features which can be categorized as either linguistic or discourse features.

Linguistic features refer to lexical or grammatical features of the text, for instance Ward (2007) studied lexical collocation, while McGirt (1984) studied the number of allowed grammatical errors in NNS academic writing, or Edith et al. (1985) studied finite verbs in different chapters of NNS thesis. While the scope of linguistic features is at word, phrase, or sentence level, discourse features are usually studied at higher levels, beyond sentence level. As an instance, Hyland (2002) explored the notion of identity in NNS undergraduate theses. He found a significant underuse of first person pronoun especially when making arguments or claims concluding that the individualistic identity may be problematic for many NNS students. In another study, Samraj (2002) conducted a study on research article introductions using Swales (1990) Create-A-Research-Space (CARS) model that is a set of patterns or moves that authors should use in the introduction section of research articles based on readers' expectations to facilitate their reading and comprehension. As can be noticed, while discourse features might be a difficulty both for NS and NNS students, lexico-grammatical features are challenging especially for NNS students.

Both lexico-grammatical or discourse features can be investigated through either macroscopic or microscopic analyses. A macroscopic approach attempts to identify the overall parameters of textual features (e.g. identifying grammatical difficulties of NNS students' thesis writing – as the focus of this master's thesis), while the focus of a microscopic approach is on the functions of individual features to provide a detailed functional analysis of one or a few individual features (e.g. investigating the usage of 'present tense' across a large number of texts).

Micro and macro approaches to text analysis have complementary strengths and weaknesses. While micro analysis identifies the potentially important textual features to be included in a macro analysis, it is not able to identify the overall parameters of linguistic or discourse variation within a set of texts for its restriction to the analysis of few features. However, macro analysis gives an overall account of linguistic and discourse variation among different texts and provides a framework of similarities and differences among particular genres (Biber, 1988).

In addition to the product-based approach, another approach was later introduced to view writing as a process.

4.2 Writing As A Process

In the late 1970s and early 1980s, writing came to be known as a process (Hayes & Flower, 1980; Flower and Hayes, 1981). A process-based study investigates the complex nature of writing process as various sub-processes, factors influencing writing process, the type of problems writers may confront during writing process as well as the strategies taken by both novice and professional writers to solve these problems. The aim of a process-based study is to help novice writers to use the same process as expert writers or to familiarize unsuccessful writers with successful writers' strategies. Two main distinguished views in this area are cognitive and sociocultural views.

Considering writing as an essentially cognitive process dates back to 1980 (Hayes & Flower, 1980; Flower and Hayes, 1981) and the research in this area is on writers' mental processes during writing as the main source of production of the text. For example, Bitchener and Basturkmen (2006) explored NNS students' difficulties in writing the Discussion Chapter of their theses. The findings showed students' limited understanding of the function of this chapter among other reasons.

More recently, after the introduction of Vygotsky's Sociocultural Theory (1978) there has been a research trend to consider writing as a sociocultural mediated process resulting from interactions among individual minds and the environment rather than considering writing as merely a set of cognitive processes happening in writers' mind. Lei (2008) explored writing strategies used by two EFL learners to reveal different types of writing strategies used by them; among which artifact-mediated strategies (such as using internet and dictionaries) as well as community-mediated strategies (such as interaction with their teachers or classmates) can be mentioned.

Considering this categorization we can identify the position of all studies on academic writing as well as their contribution to this field of study.

5.0 FINDINGS AND DISCUSSION

This section provides a brief discussion and a short account of the findings obtained in this study. After analyzing NNS master's students' thesis introductions, the following two main findings among others were obtained:

- The analyzed sample of NNS master's students' theses in UTM showed a rather low grammatical accuracy.
- The analyzed sample of NNS master's students' theses also revealed insufficient knowledge and mastery in terms of sentence structure.

As an instance of grammatical accuracy, the following sentence was taken from one of the sample theses in Chemical Engineering.

“At present, the major interest in membrane technology is focused in [on=preposition] findings [=tense] [an=article] inorganic material that [is=missing word] resistant to thermal

and chemical influences, *[that can=missing] withstand harsh environment[s=countable noun] and also could [can=time] produce a higher permeability and selectivity compared to polymeric membrane[s=countable noun].*”

As can be seen in the above-mentioned example, the author seems to be weak in using correct prepositions, correct forms of tenses, and plural/ singular nouns.

In terms of sentence structures, besides the above-mentioned example which shows insufficient skills in combining clauses to make a long sentence, the following example taken from another thesis shows an overuse of ‘be’ as the main verb which results in simple and monotonous sentence structures.

*“To date, research on the application of zeolite-based catalyst on treating of organic substances in wastewater **is** well known. ZSM-5 and Beta **are** two commonly used zeolite-based catalysts in wastewater treatment. However, a comparative performance study between in these two catalysts on the degradation of phenol solution **is not** available in literature. Thus, it **is** aptly (that such study be carried out to investigate their relative performance in degradation of phenolic solution, particularly under the influence of ozonation)*. In addition, study on the performances of modified-metal-based zeolite catalyst (using ferum and titanium on the degradation of phenolic compound under influence of ozonation)* **is** very limited.”*

As can be seen in this example, besides the grammatical mistakes, the author has used the simplest sentence structure, i.e. all sentences contain ‘be’ as the main verb – as reported by Hinkel (2002) who found an overuse of sentence structures with ‘be’ as the main verb in NNS students academic writing. Moreover in the above example there are only two subordinate clauses – as marked with * – which might be an indication of the writer’s insufficient skill in using subordination and coordination. Although academic words seem to be used appropriately in both of the examples, overusing simple structures and grammatical violations has resulted in an unbalanced tone of writing.

6.0 CONCLUSION

Based on the findings obtained from analyzing overall lexicio-grammatical features in 9 master’s thesis introductions in UTM it can be concluded that NNS master’s students seem to have insufficient knowledge and skills in terms of second language grammar and sentence structures.

7.0 PEDAGOGICAL IMPLICATIONS OF THE STUDY

Based on the findings of the study the following recommendations are made to help NNS students improve the quality of their academic writing.

Firstly, the students need to be taught various grammatical rules. Secondly, the students need to be familiarized with various sentence structures (e.g. ‘be’ as the main verb, passive structures, etc) as well as the appropriate frequency of each structure as used by NS students in their academic writing. Finally, NNS students should be familiarized with subordination and coordination as two ways of combining clauses to produce more sophisticated sentences.

8.0 LIMITATIONS OF THE STUDY

Although some patterns of grammatical rules violation were identified while investigating the grammatical accuracy of the theses, the sources of these violations were not clear since part of the grammatical violations may be due to carelessness, fatigue, or lack of attention rather than incomplete grammatical knowledge and thus would be classified as mistakes rather than errors (Richards and Schmidt, 2002). Hence, interviews with the authors were required to clarify this issue. However, since the authors were not available, no distinction was made between errors and mistakes in this study. Thus, although the findings of the study were clear and straightforward in answering the research questions, it seems that the additional data collection instrument of 'interview' would provide useful information to discuss some of the findings.

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