Problems in Writing for Research Articles in English for Publication Purpose:
A Study of PSU Doctoral Students

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Abstract

Since the demand of publishing research articles and dissertations in the international journals has been increasing, academic English writing skills inevitably become the significant language ability required for doctoral students. This study, therefore, aimed to investigate the problems of Thai doctoral students in writing research articles in English for publication. The students’ academic English writing proficiency was analyzed based on the average scores from their writing proficiency tests in 3 consecutive years. Combined with the analysis of the level-rating of the degree of seriousness of problems and in-depth interviews with some of the students, their supervisors, and writing test examiners. The findings revealed that the academic English writing proficiency of PSU doctoral students was low and they have many problems related to academic writing, which involve the use of academic vocabulary, sentence construction and ideas organization. In terms of research article content, the identified problems include the problems in writing research background, purposes and significance, the synthesis of related studies, the interpretation of statistical results, the discussion, and the implication of the results.

Keywords: writing problems, doctoral students, English for Research Publication Purposes
Background

Universities around the world are increasingly seen as the significant knowledge providers (Li, 2006). Written academic documentations (i.e. theses, research articles, dissertations) from doctoral students seem to be strongly demanded as the measurement of one institution’s academic excellence (Cho, 2009). Therefore, doctoral students in many institutions are currently forced to publish their academic paper(s) to qualify them the degree.

In the research community, English becomes the language of publication for the international research presentation (Okamura, 2006). It is clear that the presentation of research findings in English is crucial for Ph.D. scholars, and they now have to cope with both the new developments and the skills of writing academic English. Under this current requirement of research publications, doctoral students in non-native speaking contexts seem to face many academic writing problems. This claim can be proved by many previous investigations, which were conducted in several non-native speaking countries e.g. Hong Kong (Flowerdew, 1999), Japan (Okamura, 2006), Poland (Dusak & Lewkowicz, 2008), Venezuela (Salager-Mayer, 2008), Korea (Cho, 2009), Taiwan (Huang, 2010), Spain (Llantada, Plo & Ferguson, 2011), and etc. As revealed by Flowerdew (1999), doctoral students in University of Hong Kong reflected in the interviews that getting their research papers published in the international journals with high impact factors was highly demanding, and this expectation put them under pressure. Cho (2009) also claimed that sentence structure and expression of the ideas were considered as the most difficult aspects in writing research articles for Korean doctoral students. In the case of Taiwanese Ph.D. students, most of them felt at a disadvantage to publish in English because they believed they could never achieve the native-level English proficiency (Huang, 2010). Although some previous studies have shown difficulties in academic English writing, further research in particular contexts are continuously demanded for finding out the appropriate solutions used in that specific situation and discipline.

The perceived ideas of problems in writing academic English can be spelled out not only from Ph.D. scholars themselves, but also from the viewpoints of their supervisors and academic writing test examiners. As mentioned by Llantada, Plo and Ferguson (2011), some supervisors specified that some research articles contained irrelevant ideas and the presentation was not well-organized. However, there were few studies investigating the academic writing problems from the views of supervisors. Therefore, this study would also examine the academic writing problems from the comments of the Ph.D. supervisors and writing test examiners as the additional information.

To focus specifically on Prince of Songkla University (PSU), international publications are deemed important for staff and students, particularly publications and graduate studies are closely interrelated. This means there is a strong demand of academic language proficiency in order to reach the purpose of international publication. Consequently, Ph.D. students of PSU are required to demonstrate their academic language ability by taking an English proficiency test and obtain the specified scores.
However, based on the average scores of Prince of Songkla University Test of English Proficiency (PSU-TEP), which measures graduates’ academic English proficiency, the mean of English writing scores of Ph.D. students in the last three consecutive years (2009-2011) was only 34.74%. This reflected the critical level of the students’ academic writing performance which needs to be investigated whether it affects the ability to publish international research papers. Therefore, this study attempted to seek perceived problematic aspects in writing research articles in English from PSU doctoral students, their supervisors and the PSU-TEP writing test examiners. All the comments from different perspectives would be coupled with doctorates’ PSU-TEP writing scores in order to analyze the academic English writing problems which could pave the way to tackle these writing difficulties.

Objectives/Research Questions

The purposes of this study were a) to explore PSU doctorates’ level of academic English writing proficiency and b) to investigate the problems of PSU doctoral students in writing English research articles. Hence, this study aimed to answer the three research questions as follows:

(i) What is PSU doctoral students’ level of academic English writing proficiency? And what are the PSU-TEP writing test examiners’ comments on their writing skill?
(ii) What are the problematic aspects in writing English research articles for publication as perceived by PSU doctoral students?
(iii) What are the problematic aspects in writing English research articles for publication as perceived by their supervisors?

Definition of Terms

(i) Medical sciences programs refer to PSU doctoral students who are studying at faculties of medicine, pharmaceutical sciences, nursing and dentistry.
(ii) Other programs refer to PSU doctoral students who are studying at faculties of agro industry, engineering, environmental management, natural resources, management sciences, marine and costal resources, sciences, and science and technology.

Research Methodology

The participants of the study included three groups of relevant parties. First of all, 3 PSU-TEP test examiners were interviewed for comments related to PSU doctorates’ academic English writing proficiency. The second group was 120 PSU doctoral students studying in PSU at Hat Yai and Pattani campuses in 2010-2011 academic years. This group participated in the survey of research articles writing problems. 8 supervisors from 12 Ph.D.
programs were interviewed in order to provide in-depth perceptions about PSU doctorates’ problems of writing research articles in English.

The instruments used in this study consisted of PSU-TEP writing scores from 2009-2011 academic years, a student questionnaire, and interviews. PSU-TEP writing scores were obtained and analyzed with descriptive statistics in order to indicate PSU doctorates’ academic English writing proficiency in general. The next instrument was a student questionnaire. The questionnaire was distributed as the main research instrument. In designing the questionnaire, the items were constructed based on writing skills, strategies used in writing English research articles, and the characteristics of English for Research Publication Purpose (ERPP), which proposed by the American Psychological Association (2001, p 10-12), Katz (2006), and Hartley (2008), and the results from the preliminary interview with 5 PSU doctoral students about their difficulties in writing research articles in English. The questionnaire was written in Thai in order to convey the intended meaning. It was also subsequently examined for its content validity by IOC (Index of Item Objective Congruence) rating by 3 experienced university lecturers. Based on Buckingham and Saunders (2004), the item which gains the average value between 0.50-1.00 is valid, and the overall validity of the questionnaire used in this study was 0.82, which was highly acceptable. For the data collection process, the subjects were asked to rate their perceptions on the degree of seriousness for the problems in writing English research articles using 5-point Likert rating scale and to write some comments in the open-ended items. The problems were categorized into 3 aspects: the usage of English language, paragraph organization, and the writing of research article content. After distributing the questionnaires, 107 completed questionnaires were returned in the specified time. 25 respondents, who already completed the questionnaire, were randomly selected in order to provide more details about their academic writing problems deeply in the interviews. The last instrument aiming to obtain the perceptions from 8 supervisors and 3 writing test examiners was also the interviews questioned about the problems found in students’ academic writing. (See Appendix: A student questionnaire).

For the process of the data analysis, the mean scores of PSU-TEP writing scores from 2009 to 2011 were calculated. Interview information from 3 PSU-TEP writing test examiners was transcribed and summarized to discuss the academic English writing proficiency of PSU doctoral students. Data from the completed questionnaires were analyzed to reveal the rank of the seriousness of the problems according to students’ perceptions. More data from interviews with supervisors were interpreted and summarized. The main findings are reported in the next section.

Findings

1. PSU doctoral students’ level of academic English writing proficiency

Figure 1 illustrates PSU doctoral students’ writing test scores in average across 3 consecutive years: 2009, 2010, and 2011 (n = 427) which were 33.57%, 36.89%, and 33.76%, respectively. These academic English writing scores obtained could identify the low level of
PSU doctoral students’ academic English writing proficiency and show how serious their academic writing problems are. Since the tendency of the scores was slightly decreased, it should be marked that the students seem to face many writing problems without effective helps. These average scores also did not reach the criterion required for Ph.D. degree at 60%. Therefore, it could be indicated that most PSU doctoral students failed in academic writing proficiency test. This claim is raising the need for urgent and effective solutions.

Figure 1 The average scores of PSU-TEP writing test performed by PSU doctoral students in 2009-2011

As unanimously supported by the interview information from the 3 PSU-TEP writing test examiners, all of them mentioned that PSU doctoral students have many problems related to writing academic English. The problems could be categorized into a) the usage of English language and b) paragraph organization. Focusing on the usage of English language, PSU-TEP writing test examiners mentioned that the students had insufficient academic vocabulary knowledge, so they were unable to convey their ideas to the readers with appropriate words. They also produced a lot of simple sentences which made their writing ‘dry’ and ‘cut’. Few compound and complex sentences with appropriate conjunctions were produced. Another problem was that most of them translated directly word-by-word from Thai to English. Very often, their writing did not make any sense.

For the problems related to paragraph and organization, all the 3 test examiners strongly claimed about confusing ideas and lack of paragraph organization. PSU doctoral students seemed to ‘write everything’ or ‘throw any ideas’ in their writing. Besides, those
ideas were unrelated or not be presented in a logical order both within and between paragraphs. Their writing also had no unity and did not include relevant contents due to insufficient background knowledge and/or vocabulary related to the writing topics given in the test.

2. **Problematic aspects in writing English research articles for publications perceived by PSU doctoral students**

Table 1 demonstrates the ten most serious problems in writing English research articles ranked according to the mean scores. The criterion used for analysis was based on Buckingham and Saunders (2004) as follows:

4.21 – 5.00  the most serious
3.41 – 4.20  very serious
2.61 – 3.40  moderately serious
1.81 – 2.60  slightly serious
1.00 – 1.80  the least serious

<table>
<thead>
<tr>
<th>Items</th>
<th>Problematic aspects in writing research articles</th>
<th>Total number of respondents</th>
<th>( \bar{x} )</th>
<th>Std. deviation</th>
<th>Level of seriousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mix both formal and informal language in a paragraph</td>
<td>107</td>
<td>3.52</td>
<td>0.88</td>
<td>Very serious</td>
</tr>
<tr>
<td>2.</td>
<td>Make repetition by using the same word in a paragraph</td>
<td>107</td>
<td>3.47</td>
<td>0.96</td>
<td>Very serious</td>
</tr>
<tr>
<td>3.</td>
<td>Use inappropriate words</td>
<td>107</td>
<td>3.43</td>
<td>0.81</td>
<td>Very serious</td>
</tr>
<tr>
<td>4.</td>
<td>Make run-on sentences</td>
<td>107</td>
<td>3.41</td>
<td>0.91</td>
<td>Very serious</td>
</tr>
<tr>
<td>5.</td>
<td>Unable to write the correct patterns e.g. cause-effect</td>
<td>107</td>
<td>3.36</td>
<td>1.06</td>
<td>Moderate</td>
</tr>
<tr>
<td>6.</td>
<td>Use non-academic words</td>
<td>107</td>
<td>3.35</td>
<td>0.88</td>
<td>Moderate</td>
</tr>
<tr>
<td>7.</td>
<td>Unable to produce meaningful sentences</td>
<td>107</td>
<td>3.32</td>
<td>1.05</td>
<td>Moderate</td>
</tr>
<tr>
<td>8.</td>
<td>Write too many unnecessary details</td>
<td>107</td>
<td>3.27</td>
<td>0.92</td>
<td>Moderate</td>
</tr>
<tr>
<td>9.</td>
<td>Unable to write modifiers and nouns in a correct order</td>
<td>107</td>
<td>3.25</td>
<td>0.88</td>
<td>Moderate</td>
</tr>
<tr>
<td>10.</td>
<td>Unable to produce compound and complex sentences</td>
<td>107</td>
<td>3.24</td>
<td>1.12</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

From the results shown in Table 1, the mean scores of the ten items ranged from moderately serious level (Items 5-10) to very serious level (Items 1-4). Most problems involved the use of academic vocabulary and sentence construction e.g. compound and complex sentences. It could be implied from this finding that the problems related to the usage of English language made them unable to produce meaningful sentences.
When combined with the information from the interview with students, most of them expressed their concerns of difficulties about the usage of English language more than paragraph organization. They mentioned they had neither English academic background knowledge nor English language talents. Most of them also did not know appropriate choices of words and phrases to be used in their academic reports. Although they could use the dictionary, in fact, they were still not sure which word could convey the intended meaning and whether it suited that particular academic context. ‘Google translation’ was the convenient instrument which PSU doctoral students used for finding the meaning of the words, but very often, most of them were not sure whether the translated output came out correct or not. Word-ordering and word-choice were their problems since most of PSU doctoral students found it difficult to use appropriate prepositions with some verbs. In addition, they were unable to form concise and comprehensible sentences when writing compound and complex sentences by using appropriate conjunctions. Most of them tended to write in simple sentences when discussing their laboratory results, so they increased the chance of producing run-on sentences (wrote too many unnecessary details) or fragmentation with inaccurate subject-verb agreement. Concerning on the problems related to writing of research article content, the students perceived some problems about the inability to state research background, purposes, and significance, to paraphrase the information, to describe statistical results, to draw the conclusion, and to suggest implications of the research.

3. Problematic aspects in writing English research articles for publications perceived by students’ supervisors

Information from the interviews with Ph.D. supervisors revealed the details of PSU doctoral students’ academic writing problems in writing research articles in English. However, the findings show some differences and similarities across different disciplines as shown in Table 2.

<table>
<thead>
<tr>
<th>Item</th>
<th>Problematic aspects in writing research articles in English for publication purpose</th>
<th>Perception $n = 8$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The usage of English language</td>
<td>Strongly agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical sciences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Paragraph organization</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Writing of research article content</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
For medical sciences students, their supervisors confirmed about the excellent academic English proficiency of the students. Focusing on the English usage problems, the supervisors mentioned that most of their supervisees could use accurate academic vocabulary in their medical research reports. Although there were inaccurate subject-verb agreement and some fragmentation errors in their writing, these were seen as just ‘minor language mistakes’ which were rarely found.

In contrast, supervisors in other programs complained about poor academic English proficiency of their students. It could be seen that students in other programs seemed to have a lot of English language problems. The supervisors pointed out that their supervisees had limited academic vocabulary knowledge because they tended to use a lot of simple and non-academic words in their research writing. Although their writing was comprehensible, the supervisors expected that the doctorates’ writing should be more academic and more sophisticated to reach the standard of international publications. Another grammatical problem was related to subject-verb agreement, for example, using singular subject with plural verb. Writing compound and complex sentences also became serious writing difficulty since doctoral students did not know what conjunctions or transitions should be appropriately used to combine ideas or how to show relations between sentences. Very often, most doctoral students could not convey the intended meaning or express the comprehensible ideas to the readers when they tried to produce compound and complex sentences. Another problem was that most doctoral students could not identify which events should be written in present tense (to state facts in the experiments) or past tense (to relate, refer, or compare past events which completely occurred in research reviews). The supervisors also claimed that most doctoral students did not know when to use active or passive voice. Translation directly word-by-word from Thai to English by using ‘Google translation’ or assisting unqualified translators was another problem mentioned by the supervisors since the original or intended meaning was frequently changed and the sentences became inaccurate.

Further comments were related to paragraph organization. All supervisors agreed that their supervisees’ research writing had very poor ideas organization. The content was not presented in a logical order and there was no connection between the ideas in each paragraph leading to the ‘unconnected layers’ writing which made the readers easily got confused. The lack of unity could also be observed from having no main idea and irrelevant supporting sentences in each paragraph.

Considering the content of the research article, all the supervisors from medical sciences and the other programs commented on similar problems. Most doctoral students had problems in writing “introduction section” since they could not state the background or significance of their studies or research experiments. Most of them also could not synthesize the research reviews nor conclude or paraphrase the information in their own language. Besides, they could not indicate how the authors’ ideas were related to their own studies. When they illustrated the statistical tables or graphs in the result section, they could not describe the phenomena indicated by these statistics. Moreover, doctoral students seemed to
have problems in writing the discussion. Most of them could not produce convincing arguments based on the current results and related studies. For writing conclusion, some doctoral students could not draw conclusion nor infer the implications from their findings making them unable to suggest for further developments. Finally, some doctoral students produced the incomplete sources of information in the reference section.

Summary of the main findings

Findings from different perspectives reveal the common problems related to PSU doctoral students’ academic writing competence. The difficulties involve English language usage, organization of ideas, and subject-specific research article content. Students identified their seriousness of the language problems ranging from moderately serious to very serious level, and they concerned on language problems rather than ideas organization. As reflected by the supervisors and PSU-TEP writing test examiners, they complained about poor language use except for the supervisors of medical science students. In addition, all supervisors agreed that students had problems related to poor ideas organization and the writing of specific topics of research article content: the statement of research background and its significance, the synthesis of related research, the interpretation of statistical results, and the discussion and implication of the results.

Discussion

This study revealed some aspects related to research article writing in Thai context. The first aspect was about the academic English writing abilities of doctoral students which were found very low based on the average scores from academic English writing proficiency test and the comments from test examiners and the supervisors. This finding is similar to other non-native speaking situations. In a study conducted in Korea (Cho, 2009), Korean graduate students’ English writing proficiency was marked to be very low by their supervisors. Thus, it can be assumed that students in non-native speaking settings are likely to suffer several difficulties in writing research articles in English.

To focus on each problematic aspect, vocabulary and grammatical structure were considered to be more difficult than ideas organization or paragraph unity. The ten most serious perceived by the students were related to specific linguistic features as ranked in Table 1. These findings correspond to the findings in other non-native speaking contexts, for example, Japanese doctoral students, Taiwanese graduates, and Polish scholars felt grammatical and sentence structure were the most concerning problems writing for publication (Casanave & Hubbard, 1992; Bitchener & Basturkmen, 2006; Li, 2006; Duszak & Lewkowicz, 2008; Huang; 2010; Llantada, Plo & Ferguson, 2011). However, those findings contradictorily reported in Hong Kong and Korea context since scholars in these contexts perceived the overall paper organization were more serious than language problems (Flowerdew, 1999; Misak, Marusic & Marusic, 2005; Cho, 2009).
Unlike other situations, this study reflects the viewpoints of students’ supervisors and writing test examiners most of whom complained about the weaknesses of both linguistic aspects and ideas organization. Furthermore, they indicated more problems related to specific content or conventional practice of writing research report which might not be well aware from the students’ perspective based on their degree of seriousness was rated at moderately serious level.

Recommendations

The findings in this research call for urgent action or measures to help doctoral students improve their English writing competence. Thus, a variety of assistance needs to be offered to the students with co-responsibility from both supervisors and English language teachers. For Thai context where students may not be aware of the importance of English as they should be, the use of English needs to be consistently and continuously promoted. One way to do it is to use English as the medium of instruction in students’ coursework and project assignments. This integration or immersion may help the students be more familiar with the academic English language use and the presentation of scientific research in English. In addition, writing classes, writing clinics, and proofreading services can be provided to help and support students’ work on publishing their papers in English (Cho, 2009). Another interesting assistance is conducting workshops on writing research paper on regular basis. Cargill and Conner (2006) succeeded in conducting workshops on “Improving Publishing Skills” in China. Since they designed the workshops based on task-based approach and research genre pedagogy, students had a valuable chance to write and revise the manuscripts from complete set of results prepared in the workshop process before writing their own drafts. The workshops should also include a presentation of well-written published articles and deal with the contents in each section of article structure, which were known as the characteristics of English for Research Publication Purpose (ERPP). With this assistance, the students may engage with more enthusiasm to pay efforts to improve their English writing competence and may be able to write and publish qualified research articles. As a result, the advantages are not only extending the new discovery of knowledge and new research experimental developments to broader research community, but also enabling to ensure the long-term producing of qualified English writing of doctoral students.

References


