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THE DIFFICULTIES IN DISCIPLINARY RESEARCH WRITING: A CASE STUDY OF FIRST-YEAR GRADUATE STUDENTS IN TAIWAN

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In the studies of academic writing, graduate-level research writing practices across disciplines have gained increasing scholarly attention in recent years. However, most studies focus on English-as-a-second-language graduate students at the stage of thesis/dissertation writing in English speaking countries. Relatively less work has been conducted on new graduate students in non-Anglophone or English-as-a-foreign-language settings. The purpose of this study was to investigate the concerns and difficulties that first-year graduate students encountered while writing disciplinary research papers at a Taiwanese university. The findings show that research-related and linguistic-related issues are two major difficulties. While research-related issues, such as locating relevant literature and lack of helpful library support, were more of a concern for international graduate students, linguistic-related issues hindered the research writing process of both local Taiwanese and international students. In addition, a lack of disciplinary reading and writing skills posted another problem among these students. Pedagogical implications will also be addressed in light of facilitating first-year graduate students' disciplinary writing practices.

Keywords: Academic writing, Graduate students, Research writing, Taiwan.

Introduction

Socializing into discipline-specific conventions and discourse, written and spoken alike, has been crucial for both native English speaking and non-native English speaking (NES and NNES) graduate students. To achieve academic excellence at graduate schools, most students are required to fulfill various academic tasks and requirements. Among these tasks, being able to do research and report findings in the form of conference papers, journal articles, or theses/dissertations has been one of the most important academic competences for graduate students in most disciplines (Casanave, 2002; Flowerdew, 1999; Paltridge, 1997; Swales & Feak, 2004). To enhance the development of academic writing (AW) competences, an increasing number of studies have examined students' written academic discourse socialization across disciplines, focusing on various graduate-level writing tasks, such as writing for coursework, research papers, lab reports/descriptions of experiments, theses/dissertations, conference or journal articles, and so on (Belcher, 1994; Burrough-Boenisch, 2003; Casanave 2002; Cho, 2004; Dong, 1996, 1998; Flowerdew & Li, 2007; Hsu, 2009; Kuo, 1998; Li, 2005, 2006; Prior, 1991; Shaw, 1991; Yeh, 2010).

While some studies surveyed the types and conventions of disciplinary AW tasks from teachers' perspectives (e.g., Casanave & Hubbard, 1992; Hyland, 2004; Shaw 1991), others investigated master's or doctoral students' writing needs, difficulties, and coping strategies (Casanave, 2002, 2010; Dong, 1998; Hsu, 2009; Huang, 2010; Kuo, 1998; Lin & Joe, 2011; Yeh, 2010). Still others interviewed novice or junior scholars, especially those who have just finished doctoral degrees, to explore their endeavors in

writing for publications (Cheng, 2006; Flowerdew, 2000; Flowerdew & Li, 2007, 2009; Li & Flowerdew, 2009; Li, 2006). However, it should be noted that most of these studies focused on NES or English as a second language (ESL) graduate students in the U.S. Relatively few were on graduate-level AW practices in non-Anglophone or English as a foreign language (EFL) settings. Among those few studies, most included only doctoral students and investigated their AW needs and difficulties (Hsu, 2009; Kuo, 1998, 2001; Lin & Joe, 2011). The perspectives and the actual AW process (e.g., drafting, synthesizing, and revision) and coping strategies of local and international graduate students across disciplines at Taiwanese universities have been scantily researched (Yeh, 2010). Furthermore, little documentation can be found on new or first-year graduate students' conceptualizations of AW, especially research articles (RAs), and how these conceptualizations might change as they proceed with their graduate studies.

In recent years, the number of local and international graduate students, especially those at the master's level, has increased rapidly in Taiwanese universities across disciplines; however, the enculturation process of those students into discipline-specific spoken and written discourse communities has not yet been well documented. To shade more light on the first-year graduate students' written academic discourse socialization process, more studies are needed to examine their concerns and difficulties in writing research papers, as well as their development of AW competences and skills. Research along this line would facilitate comparison across contexts and add to the current literature on teaching English writing for academic purposes.

Review of Literature

Academic writing at the graduate level has received increasing attention among applied linguists and researchers because of its discipline-specific genre conventions and the challenges it poses to both NES and NNES students. Graduate-level academic writing is characterized by its plethora of genre types. Writing tasks and genres can vary to some extent in different disciplines. Even within a single discipline, sub-disciplinary variations also exist in terms of register and textual organization (Shaw 1991; Swales, 2004; Loi, 2010). Because of the genre variations and disciplinary conventions, graduate-level AW is difficult for many NES students and can be even daunting for NNESs (Li, 2006, 2007; Swales, 2004; Prior, 1998). Despite the variations, research articles and theses/dissertations are two of the most common genres for graduate students across disciplines and have drawn considerable research interests recently.

A number of studies have been conducted to investigate both master's and doctoral students' AW needs, difficulties, and coping strategies (Dong, 1998; Hsu, 2009; Kuo, 1998; Li, 2006, 2007; Lin & Joe, 2011; Shaw 1991; Silva, 1992). Many of these focused on NES or NNES students at the stage of writing a thesis or dissertation in Anglophone countries. Shaw (1991), for example, interviewed 22 NNES graduate students (21 male Ph.D. students and 1 female MA student) from engineering and science departments at a British university. The findings show that most of his NNES participants encountered language difficulties, such as using semitechnical vocabulary and adequate sentence connectors, choosing appropriate words and registers for the writing context, and so on. Despite the difficulties, they came up with several "self-help" strategies, including seeking help from advisors and/or peers and taking notes of useful expressions and chunks of language from books or journal articles and then used those in their own writing (1991, p. 191). In addition, they consulted other people's writing by extensive reading and then imitated features of style by adopting chapter headings and formats. These strategies identified in Shaw's study were supported by Bitchener & Basturkmen's (2006) research on four dyads of graduate students and their advisors in humanities and business departments at two universities in New Zealand.

Dong (1998) later followed a similar line of research on AW difficulties, surveying 137 graduate students (31 NES and 106 NNES) and 32 professors in scientific departments at two American research-oriented universities. The participants were mostly doctoral students at the stage of writing their dissertations. Her findings indicate that NNES graduate students had more problems with vocabulary and using correct grammar than their NES counterparts. In addition, most of Dong's (1998) NNES participants had no help with their writing, except the advisors, due to isolated social networks and a

limited use of outside resources such as a thesaurus or a writing guidebook. The professors in Dong's study reported that NNESs, compared to NESs, needed more help with idea development, logical presentation, avoiding plagiarism, and drawing conclusions. The instructors' perspectives from Dong's (1998) study confirm Jenkins, Jordan, & Weiland's (1993) survey findings that engineering faculty did substantially more drafting of NNESs' theses than NESs' and even rewrote a significant portion for them.

Apart from the above survey studies, more recent research on graduate-level academic writing are mostly case studies and looked at how students cope with major writing requirements, genres (e.g., thesis/dissertation, coursework writing projects, and research-based journal articles) or specific parts of such genres, such as sections of introduction, literature review, and discussion (Bitchener & Basturkmen, 2006; Casanave, 2002; Cheng, 2006; Hsu, 2009; Li, 2007; Okamura, 2006). Casanave (2002), for instance, interviewed five NNES MA students in the field of teaching English to speakers of other languages (TESOL) to identify the genre types required in their field, students' perceptions of professors' feedback, and how they developed professional identities during the process of fulfilling writing requirements.

Although a number of studies have been conducted on master's and doctoral students' AW practices, it should be noted that most research surveyed or interviewed students at the stage of writing a thesis/dissertation. Very few have focused on first-year master's students in non-Anglophone settings, such as Taiwan. In Taiwan where English is spoken as a foreign language (EFL), only several study have been reported on the graduate-level AW practices, including one survey study (Kuo, 1998), one textual analysis study on Taiwanese graduate students' thesis proposal (Chang, 2010), two action research on AW instruction (Huang & Liou, 2005; Hsieh & Liou, 2008) and several case studies on students' AW needs, difficulties, and coping strategies (Hsu, 2009; Lin & Joe, 2011; Liu & Chang, 2007; Yeh, 2010). Among these, only Yeh's (2010) case study focused on first-year MA students and the others mostly focused on Ph.D. students at the stage of writing a dissertation. For instance, Hsu (2009) examined two Taiwanese doctoral students' (one in applied linguistics and the other in computer science) difficulties and strategies when writing RA introductions. Lin and Joe (2011) investigated the writing needs of two doctoral students in business at a Taiwanese university and then compared the discussion section of their participants' research papers with those of journal articles written by NES scholars.

Kuo (1998) surveyed 90 Ph.D. students and 38 faculty members in the departments of Electronic Engineering and Information Science at a university in Taiwan, regarding the types of discipline-specific writing tasks, and specific needs and difficulties in writing research papers. Her findings show that conference papers and journal articles are the most frequently required writing tasks, and the introduction section of those genres was considered the most difficult among her participants. Not being able to express ideas clearly and improper use of grammar and diction were identified as the areas that participants needed most help with. Kuo thus suggests implementing more discipline-specific AW courses based on students' specific needs in the graduate programs.

Yeh (2010) interviewed four Taiwanese first-year master's students in applied linguistics at a private university in Taiwan to investigate their concerns, difficulties, and perceived needs in research writing in general. Her participants reported more anxiety in selecting a topic, forming "significant" research questions, and finding and reviewing relevant literature than in actual writing itself (2010, p. A5). Three of the four students had "laid-back" attitudes toward language issues, such as the use of specialized/formal diction. One participant felt academic language was easy "because one can imitate and learn it" by reading RAs in academic journals (2010, p. A7). In addition, some participants thought that professors would be lenient toward language issues and they could always rely on their advisors' help with surface errors in writing. Although Yeh's study provides interesting insights from EFL first-year graduate students' perspectives, the findings cannot be generalized for several reasons. First, the findings are based on one 30-60 minute interview with each participant and the data triangulation procedures seemed to be unclear. Second, some factors that might affect the findings did not seem to be taken into consideration. For example, the participants' future goals might affect their concerns and attitudes toward the language issues in AW. Students' "laid-back" attitudes might have to do with the fact that they might not intend to pursue academic careers after finishing their MA studies. However, this possible contextual

factor was not discussed in her findings. Moreover, Yeh's study only examined the perspectives of students in applied linguistics. The perspectives of graduate students in other fields of study have not been well documented.

Also, it should be noted that all of the above-mentioned studies conducted in Taiwan included only local Taiwanese graduate students who speak English as a foreign language. None of them explored the perspectives of international students, native English or non-native English speakers alike, on academic writing practices. More studies along this line are needed to shed more light on the difficulties and concerns that new graduate students across different disciplines encounter when writing research papers.

As part of a larger research study exploring the nature of written academic discourse socialization of graduate students in Taiwan, this paper focuses on investigating both NES and NNES first-year graduate students' concerns and difficulties as they tried to fulfill the writing requirements (e.g., coursework research papers). More specifically, this paper explores the following two research questions:

1) What writing difficulties do the first-year graduate students encounter at a Taiwanese university?
2) What are some possible causes of the students' difficulties in academic writing?

Methodology

Setting and Participants

Data for the current study was from a larger research project exploring the academic writing practices of a group of first-year graduate students from different MA programs in Taiwan. This paper focuses on the perspectives of four first-year graduate students recruited from two different master's programs in one public university in Northern Taiwan. Two participants were from the international master's program in Asian studies, and the other two, the international master's program in communication studies. Both MA programs offered admission to both local Taiwanese and international students from all over the world, and all the courses were conducted in English. Students enrolled in the courses were required to complete all the coursework related projects and papers in English. Writing a master's thesis in English was required for all the students in the two master's programs before graduation. Table 1 illustrates the detailed participant profiles.

Table 1. Participants' Profile.

Student	Native Language	Gender	Age	English speaking status	Country of origin	Previous degree	Field of study
S1	English	M	26	NES	U.S.A.	B.S. in Biology	Asian Studies
S2	Chinese	F	24	NNES/EFL	Taiwan	B.S. in Business	Asian Studies
S3	Indonesian	M	27	NNES/EFL	Indonesia	B.S. in Psychology	Communi cation
S4	Chinese	M	31	NNES/EFL	Taiwan	B.A. in Chinese	Communi cation

NES = native English speaker.
NNES = nonnative English speaker.
EFL = English as a foreign language.

Data Collection

The data was collected from multiple sources, using several approaches, including a questionnaire survey on students' demographic and educational backgrounds, four semi-structured interviews with each

participant, and collecting drafts of the students' writing samples. While the researcher conducted the interviews in Chinese with the two local Taiwanese participants, the interviews with the two international students were conducted in English. Any available secondary sources, such as course syllabi, assignment sheets, and handouts were also collected. These secondary sources were useful in helping the researcher clarify the participants' accounts and to better understand the participants' challenges and difficulties in writing discipline-special research papers. The use of multiple sources "allows the researcher to address a wide range of issues, to clarify meaning, to confirm the emerging findings and construct plausible explanations, and to ensure validity or trustworthiness" (Morita, 2002 pp. 54-55).

Data Analysis

All the interview data were transcribed verbatim and systematically coded for analysis. The interviews conducted in Chinese were transcribed into English by the researcher. The analysis was inductive and the researcher focused on the categories and themes that emerged from the data. Those categories and themes were checked with other sources of data such as course syllabi, assignment sheets, and students' actual writing for data triangulation purposes. At the final stage of data analysis, follow-up interviews, which served as a participant checking procedure, were also conducted to confirm and/or clarify the interview findings.

Findings

Synthesizing all the data sources, this study has uncovered several important findings on the difficulties and challenges that the participants encountered while writing discipline-specific research papers. One of the major difficulties that concerns both NES and NNES first-year graduate students has to do with searching for the relevant literature related to their chosen topics.

Research-Related Issues

Identifying relevant literature and locating secondary data sources are essential at the early stages of writing research papers. However, they can pose a great concern for many new graduate students for various reasons. S1, a 26-year-old American with a bachelor's degree in biology from a university in the U.S., came to Taiwan to pursue a master's degree in Asian studies. He was concerned about whether he would be able to find the Chinese sources he needed to support his argument in a policy analysis paper he was working on. Because he was interested in Taiwan's National Health Insurance (NHI) policy, many journal articles on his chosen topic were published in Chinese. Although he was experienced in using electronic databases to look for English research articles, he did not know of any online databases mainly for journal articles published in Chinese because none of his professors in the MA program mentioned how to search Chinese journal articles. Some professors even downplayed the importance of their own articles published in Chinese:

> …not all of the famous research, not all of the journals are published in English, so I wonder if some of these is internalized- but the professor says like. Okay like- the stuff that I published in Chinese is not important- or not as important. Don't bring it up…So- if- if there's a feeling in the program is- they don't teach people how to use- or how to use- how to navigate- or even present the Chinese sources. Which should be. Which is like the unique thing that you can get in Taiwan. (S1, 101113)

For native-English speaking graduate students, another research-related issue that makes the research writing tasks difficult is related to the lack of research facilities, such as availability of English online articles on local Taiwanese issues and university library support. Because of his topic was related to Taiwan's NHI policy, S1 had to find secondary data and statistical figures from the Bureau of NHI's

official website. Although the Bureau of NHI's website has an English version, S1 found that the information on its English web pages seemed to be more simplified than the Chinese ones, and the Chinese website was not easy to navigate. Furthermore, some of the most recent information and statistics were only available on the Chinese version of the website and not on the English one. In the following excerpt, S1 was showing the researcher two websites on NHI, one in English and the other in Chinese, on his laptop.

> S1: this website is written by- you know someone- and this is my professor for this class I take, but- so they write in English- and you know- but if you go down to the sources…you will get stuff like this- in Chinese. so this one- this one- they actually have a lot of English in it- …but- uh this is old. There's a lot of old stuff. But if you- if you look at this. This is like- 2004. So you are limited either- and this is- this is actually a big problem with all- a lot of English stuff is that it's old, it's written in 2002, 2003. And there's newer stuff being written-…Okay so- this is- this is the Bureau of National Health Insurance in English. And it's actually not bad- it's a very- very modern site, it has a pretty good amount of statistics, um these- these are about health reports- but if you want actually- do anything. I mean this is the website in Chinese. It's far more than that. A lot more- a lot more stuff. A lot more detailed. And there is where the current stuff is. But it's- once again it's harder to find. As- as- it's hard for- it's harder to find as an English speaker to get these because- it's harder to find the right- the right data- the right- the- publication you are looking for.
> T: Mainly because it was written in Chinese.
> S1: Yeah.
> T: So you mean the- the English version of this website is much more simplified.
> S1: Yes.
> T: And it was difficult for you to navigate the Chinese website.
> S1: Yes…but that's a big- that's the biggest problem when doing research in Chinese.
> (S1, 012513)

In addition, both NES and NNES participants mentioned that the library support at their university was not very helpful in terms of helping them find disciplinary-specific literature and secondary data sources. S3, a 27-year-old NNES from Indonesia studying in communication, recalled one of his experiences looking for newspaper articles in one national university library:

> …this was bad when I was at *X* university (*X* was used in place of the school name to preserve the participant' anonymity.), I was looking for newspapers from the mainland like- but from before Taiwan, so you know like- pre- like 1920s. so and I was looking for these newspapers and more stuff from those newspapers. And- cause I found a lot of them- I found a lot of them- but I wanted to find something specific in them. And then when I asked about it. They didn't know that those newspapers were even there at all…it felt bad- because it's like- I wanted someone who knew more about these sources than what I had been able to figure out just by- looking around- yeah I looked around and I found a lot of stuff but I didn't know where in this stuff I should look and- and they are like- oh wait- I didn't know we had that. Okay. This is not gonna help.
> (S3, 011513)

Linguistic Issues

Another common difficulty that both NES and NNES first-year graduate students experienced is related to the barrier between their native language and the target language in which journal articles were written. S2, a female local Taiwanese graduate student in Asian studies, reported that figuring out the cultural-specific, specialized terms that were phrased differently between Taiwanese scholars and those from mainland China posed a problem when she was reviewing the literature. Moreover, translating those cultural-specific terms into English was even more difficult.

> When I was doing a paper on China's economic development. I found a lot of official information and figures from the Chinese PRC government's websites. Most of them were written in simplified Chinese. So when I wrote my papers, I had to translate those terms into English. For examine, wen-ke or wen-hua-da-ke-min (the cultural revolution in China in 1960s) or da-yiao-jing (the *Great Leap Forward*, an economic and social campaign in China in early 1960s)…How would you translate those into English? I was not familiar with the history of China before I was admitted to the program, it was difficult for me. Even though sometimes I came across the term, the *Great Leap Forward*, in English when reading English journal articles, I didn't even know it referred to da-yiao-jing, in Chinese. That's the problem. (S2, 012213)

Similar language-related issues posed a problem to international first-year graduate students as well. S1 encountered similar difficulties when searching secondary data and journal articles because of language barriers. Since he was working on a policy analysis paper related to Taiwan's National Health Insurance system, many journal articles he needed were published in Chinese. Before being admitted into the MA program in Asian studies, he had been learning Chinese for three years and was able to type Chinese on the computer. Compared to other international students in the same program, he felt he had an upper hand because most of his colleagues did not speak or read in simple Chinese, not to mention typing Chinese on the computer.

For S1, the language-related issues that occurred at the early stage of his research/writing process made him worried a lot. When doing a keyword search in Chinese via networked computers, he often had problems in figuring out the right Chinese terms or expressions/phrases that most local Taiwanese people would use. Things became even harder when the terms or phrases in Chinese had more than one synonym or consisted of many phonetically similar characters:

> …Like- I need to get public opinion polling, and none of that is published in English, all of that is published in Chinese- and that's one of those issues- where if you don't know the phrase- if you don't know how it would be phrased, you can't find it…that is a language issue, and this is actually a bigger language issue than- …the problem is stuff like this where- I know what it is that I want but I don't know the right- phrase- in Chinese. (S1, 101113)

> …but- in any case, you can see sort of the- this is- this is that kind of problem- where it's- because it's a phrase issue, it's not even a translation one. it's more of a- what would- how- how would this refer to in shorthand. Because if you translate it to health care, if you translate it to- you know health care premium is jian-bao-fei. But- sometimes people also call it yueh-fei or something. (S1, 101113)

Even if an NES student was able to find the article he/she needed, understanding and interpreting the original author's ideas in Chinese and then translating those correctly into English posed another great difficulty. Although it was possible to find someone who speaks Chinese as a native language for help with interpreting Chinese articles, the help was not always available due to various reasons, such as time constraints, schedule conflicts, and funding support. Therefore, most of the time, students were left to deal with the problem by themselves:

> …So I- I would be worried that if I found the evidence of that in Chinese. the way that- they write that- would be in a way that I would be able to read it- or in the way that- if- if- I- I would read it as saying one thing when it actually says something else. I would mistranslate it. (S1, 101113)

Lack of Disciplinary Reading and Writing Skills

In addition to the research- and language-related issues, the non-native English speaking participants seemed to be struggling during the actual writing process due to a lack of discipline-specific reading and writing skills. Being unfamiliar with the rhetorical structure of different sections in a research paper is a problem that our NNES research participants commonly shared. Although all of our participants knew

that most research papers followed the general Introduction-Method-Results-and-Discussion (IMRD) structure (Swale, 2004), they did not have a clear idea on how each different section should be set up or organized. Two of the non-native English speaking graduate students reported that writing a literature review section or paper was the most difficult. One of the reasons might be that many first-year graduate students were not familiar with many discipline-specific terminologies and concepts when reviewing the previous literature because most of them were new to the field of their graduate studies and had not much discipline-specific content knowledge. S3 is a case in point.

Before coming to Taiwan to study in the international master's program in communication, S3 had a bachelor's degree in psychology from a university in the U.S. and had experiences in writing research papers that involved citing and synthesizing secondary sources before being admitted into the graduate program. However, S3 still felt that writing a review of literature was more difficult than other parts of a research paper for two reasons. First, writing a literature review section requires one to read and synthesize multiple articles, which can pose a tremendous challenge to many graduate students. The perspectives of the graduate participants in previous studies (e.g., Phakiti and Li, 2011; Shaw, 1991; Yeh, 2010) have corroborated this observation. Furthermore, unfamiliarity with discipline-specific terms and theories and the statistical data analysis approach made the reading and writing tasks even daunting:

> …you have to quote like maybe 12 to 20 articles. It will be super tough…I had to look up a lot of terms…just like- because like- most foreigners have different languages than us. I mean uh- I mean the term that they use. Like- . It means a lot to process…It is not just like the words that are not making sense or something. It's difficult. Like uh- yeah like uh- the theory- the theory that they say- uh- it's like one or two sentences. You can't- I can't understand it sometimes… They use very- very horrible terms. It's hard to understand. (S3, 101112)

> …Sometimes, you missed the results…Sometimes, you don't understand the statistics mostly. The statistics is very difficult…It's like almost statistics that happens in a research paper. You don't understand it unless that's your own. (S4, 012212)

Discussion

This study has examined the difficulties experienced by NES and NNES first-year graduate students in an all-English master's programs in two different fields in Taiwan. The findings show that all the students' difficulties and challenges were interrelated and could be traced to linguistic issues. With respect to the research-related issues at the stage of finding relevant literature, the availability of English sources on local Taiwanese issues and a lack of helpful library support were a major concern. It should be noted that these research-related issues were mainly reported by the international graduate students in the study. None of the local Taiwanese graduate participants mentioned this problem. Also, the research-related issues were more of a concern for the non-native Chinese speaking (NNCS) graduate students in Asian studies than for the NNCS students in communication. One possible reason for this difference might be that consulting sources or the literature published in Chinese might be more common for students in Asian studies than those in communication because those in Asian studies were more likely to work on topics unique in Asian counties. However, many sources related to local Taiwanese issues were published in Chinese, which could result in great difficulties for both NES and NNCS students, especially those who had very limited Chinese language proficiency and typing skills.

For the NNES graduate students in the current study, reviewing and understanding the sources and literature and then writing a research paper in English appeared to be major concerns. As Yeh has also observed, "reviewing the literature—a task that requires skills such as mining sources, integrating, and synthesizing ideas and theories—is often a brand-new experience and constitutes a formidable task" (2010, p. 6). One of the reasons for this might have to do with the heavy reading load often required for graduate students. Moreover, the language barrier between English and the students' native language and the students' unfamiliarity with the terms and theories in their field could exacerbate the problems in

research writing. This often resulted in some problematic issues, such as improper or mistaken citations, or even plagiarism, especially when students had to write multiple papers at the same time near the end of the semester. It has been found that the participants in this study would sometimes cite sources for the sake of fulfilling the assignment requirements, instead of fully understanding the original author's ideas and theories. One of the participants, S3, remarked,

> …so most people they- they will do a short-cut and just- uh- read the conclusion or summary- which is uh- sometimes it helps. But I guess sometimes you need to read more than that…sometimes you think- oh this is uh- related to my study. uh- But actually maybe they don't find anything there- and yes- some people just force it- I don't want to read more articles. I think this is- uh- I think I can quote something from here. And it all counts as one article. Sometimes students do things just like that- I want to finish the assignment. And maybe I am required to have 12 articles. So I'm just like- uh- yeah- as long as I- I can have a quote- that I can- um- put it into my paper, then I will do it…I mean sometimes. Sometimes you just like find something you can find. Even though a literature review is supposed to be- quoting the main point of an article or the result of the article. Like this- this study have found that this- this- this- sometimes students just do this- uh to finish the assignment- Instead of really quoting the main point of the article or the main results. (S3, 101112)

This shows that the difficulties that the first-year graduate students encountered, if not being properly dealt with, could lead to negative impacts on their academic discourse socialization process.

Conclusion

The findings of the present study, which features cases of both local Taiwanese and international first-year graduate students in Taiwan, illustrate the complexity of discipline-specific research writing practices in a non-Anglophone context. The cases of NES and NNES graduate students doing research in this study have revealed context-specific difficulties in their research writing process. Based on the findings, several pedagogical implications can be suggested. First, workshops on undertaking disciplinary research, such as searching the literature both in English and Chinese, and following field-specific writing conventions, could be offered regularly throughout the semester to target new graduate students' specific research and writing needs. These workshops, similar to the short courses described in the studies of Shaw et at. (2007) and Yeh (2010), could involve individual course instructors, library staff, teaching assistants, and senior students to share their experiences and to cultivate first-year graduate students' academic skills. Additionally, disciplinary English-Chinese research support should be available to provide international students with translation aids and guidance in navigating Chinese websites. Although the two international master's programs investigated in this study do not require students to read and cite Chinese sources, some students might still have to do so, especially when their topics are related to local Taiwanese issues or Asian countries. Third, field-specific writing assistance in English should be offered to both local Taiwanese and non-Anglophone international students. The faculty members in the department could take turns to provide more specialized writing assistance, which may be more effective than the establishment of a general university writing center due to the variety of textual and rhetorical conventions in different fields and sub-fields.

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