

New graduate students' perspectives on research writing in English: A case study in Taiwan

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Graduate students often have to prepare a thesis to fulfil degree requirements. Research on thesis writing has thus received increasing scholarly attention. However, the literature has generally used student writers at the thesis and dissertation writing stage as informants. Perceptions and difficulties of new graduate students are seldom addressed. In this case study, in-depth interviews were conducted with four first-year Taiwanese EFL graduate students, who were attending a master's program where English was the language for all the course work and thesis writing. Issues addressed in the interviews included students' major concerns, difficulties encountered in the research/writing process, and their perceived needs in research writing instruction. Results indicate that selecting a topic and reviewing the literature were the students' major concerns about research writing. Additionally, they exhibited a rather laid-back attitude towards the language problem, a pervasive concern for many English L2 researchers. Finally, they were found to hold different opinions about research writing instruction, suggesting that traditional academic writing or research methods courses may not adequately address students' needs in research writing. In response to this problem, formative feedback and personalized guidance are called for. The alternative approaches proposed in this paper have implications for stakeholders including academic language and learning (ALL) professionals.

Key Words: academic writing, EFL (English as a foreign language) writing, graduate student writing, student perceptions

1. Introduction

Learning to write and writing to learn are two of the most important activities for graduate students. Yet, academic writing is far from a natural ability. In fact, as Bartholomae (1985) argues, students writing in the university have to learn "the peculiar ways of knowing, selecting, evaluating, reporting, concluding, and arguing" (p. 134) that define the discourses of the academic community. While Bartholomae's chapter mainly addresses undergraduate education, his observations seem to hold equally true for graduate students at both master's and doctoral levels. In order to facilitate the socialization process of graduate students, an increasing number of studies have been undertaken on different aspects of students' acquisition of advanced writing (Cheng, 2006; Dysthe, 2002; Ferenze, 2005; Petrić, 2007; Riazi, 1997; Yeh, 2007). While some studies on advanced literacy focused on the course design (Allison et al., 1998; Feak, 2008; Rubdy, 2005; Shaw, Moore, & Gandhidasan, 2007; Swales & Lindemann, 2002), others examined academic tasks from instructors' or institutional viewpoints (Cooper & Bikowski, 2007; Jenkins, Jordan, & Weiland, 1993). Relatively few studies seek to picture the acquisition of academic literacy from students' own perspectives. It is argued, however, that

students' perspectives offer important insights into how they interpret writing tasks and grapple with the difficulties involved in the writing process. In addition, research into student experiences should enable academic language and learning professionals to better provide more informed and closely targeted support including specialized courses and programs and/or personalized instruction. The current study therefore set out to investigate Taiwanese EFL students' perspectives of research writing and the difficulties encountered in the research process. In particular, this study focused on students in the first semester of a master's program and at the very initial stage of acquiring research literacy.

2. Studies on English L2 graduate student writing

Students writing a thesis or dissertation (the terms are used interchangeably in this text) in English as a second language have drawn considerable research interest in recent decades. Focusing on student writing difficulties, studies have found that language often presented a major problem for English L2 students. For example, in Cooley and Lewkowicz's survey (1995) of 362 graduate students at Hong Kong University, 50% of Chinese-speaking respondents reported experiencing serious difficulty with written English. Shaw's study (1991) also revealed that English L2 students were often worried about their command of the English language. Semitechnical vocabulary and finding the right word for the context were named as the most difficult aspects of research writing, while some students reported worries about the use of formal language. Comparing English-speaking and English L2 graduate students, Dong (1998) found that the latter were more likely to identify vocabulary as a weak point in their writing. Furthermore, studies on faculty perceptions seemed to confirm students' self-reports about their writing problems. In Casanave and Hubbard's (1992) survey study on professors' perceptions of student writing, English L2 students were judged to have more writing problems than their English-speaking peers, with their vocabulary use perceived as the most serious problem by faculty in humanities and social sciences. In fact, full-fledged English L2 researchers have also reported experiencing difficulty with language (Flowerdew, 1999; Okamura, 2006), indicating that the language problem is a pervasive concern for many English L2 research writers.

Turning to the genre level, studies have also examined student perceptions of writing different parts of dissertations. For example, respondents in Shaw (1991) reported that the Introduction and the Discussion were the most difficult parts to write, while the Literature Review produced diverse reactions among students. It was further found that students who saw the Literature Review as merely repeating other people's ideas found the part easy to write, while those aiming to be more selective and critical tended to feel more difficulty in reviewing the literature. Focusing on the Discussion, Bitchener and Basturkmen (2006) indicated that students' understanding of the role of the part was limited, possibly because students did not receive "macro feedback on the overall structure and content parameters" (p. 13). This interpretation echoes Dong's (1998) findings that faculty seemed to provide more error correction on word usage, grammar and mechanics, while neglecting, to a certain extent, areas such as paragraph organizing and idea developing, or other aspects of the research undertaking such as topic decision and literature reading.

Researchers were also interested in strategies adopted by graduate students to overcome writing problems. Two levels of strategies can be identified in this line of literature: textual and social. At the textual level, students at the dissertation planning stage may read four or five theses on related topics and adopt the chapter headings and formats to use in their own writing (Shaw, 1991). They also reported studying examples of previously produced student papers (Riazi, 1997). Bitchener and Basturkmen (2006) revealed that students transferred "expressions and chunks of language" (p. 11) found in books to their own writing. Similarly, Li's (2007) case study student "borrowed" specialist terms and phrases from the literature. At the social level, students reported using their academic social network to help alleviate writing difficulties. Research has found that graduate students consulted both professors and peers when dealing with unfamiliar writing tasks (Ferenze, 2005; Riazi, 1997; Shaw, 1991). In particular, supervisors played a significant role in students' research writing process. For example, they influenced students' choice of the thesis topic, helped with written English, suggested reading,

and referred students to particular dissertations as models. On the other hand, students recognized their peers as a useful source of help on references and practical tips (Shaw, 1991). In addition, students may rely on academic peers for feedback on the research and writing process (Ferenz, 2005).

While most research has focused on dissertation writers, Casanave (2002) examined how new graduate students, both English and English L2 speakers, tackled a myriad of academic writing tasks in an MA TESOL program. Her study shows that students learned to play the “writing games” partly through carefully following assignment descriptions, and partly through attending to their professors’ written feedback on individual papers. These students not only recognized the central role that writing played in the MA program, but also happily witnessed changes in their ability to write after a year’s study. While Casanave (2002) is a successful survival story, Zhang in Schneider and Fujishima (1995) did not seem to fare well in the “writing games”. With all his diligent work, Zhang, a Chinese speaker enrolled in both an ESL program and several subject-area classes in a US university, failed the graduate course work after a year’s struggle. Possible explanations for the unfortunate failure included his inadequate English proficiency, seeming lack of interest in American culture, and failure to use strategies to overcome language problems. Schneider and Fujishima therefore called for more contacts among graduate faculty to meet students’ specialized needs.

The above studies have revealed that English L2 graduate students faced a range of difficulties during the research and writing process. Some employed strategies to complete writing tasks successfully, but others may fail and drop out of graduate programs altogether. It should be noted, however, that the literature has generally used student writers at the thesis and dissertation writing stage as informants. Perceptions and difficulties of new graduate students are seldom addressed. However, to ensure that students are provided with the best possible start in graduate programs, it is imperative to understand new graduate students’ experience in the learning of research writing. With this purpose in mind, this study set out to investigate first-year graduate students’ experience in research writing, with a specific focus on their major concerns and difficulties encountered in the research and writing process, as well as students’ perceived needs in research writing instruction.

3. Methodology

3.1. The research site

The current study was conducted in a master’s program in applied linguistics at a private university in southern Taiwan. English was the language for all the course work and thesis writing in this program. Students normally spent two years taking a dozen courses before they proceeded to the thesis writing stage, which often took them another year to complete. Among the courses taken in the first semester of the master’s program were two required courses focusing on research methods and academic writing, entitled “Approaches to Research” and “Advanced English Writing” respectively. As the two courses were apparently closely related with my informants’ research writing experience, I shall supply more detailed information as follows. The course “Approaches to Research”, according to the syllabus laid out by the year’s instructor, aimed “to provide each student with the skills necessary to understand, interpret, and conduct research at an introductory level.” The main textbook was *Educational Research: An Introduction* (Gall, Gall, & Borg, 2003), on which the course was closely based. A few sample topics included: searching related literature, selecting a sample, collecting research data with questionnaires and interviews, experimental research designs, and qualitative research traditions. The other required course, “Advanced English Writing”, as the syllabus stated, aimed to provide students an opportunity “to develop ... basic composition skills and to brush up on sentence structure and mechanics.” The main textbook was *Writing Academic English* (Oshima & Hogue, 1998). Sample instructional topics included outlining, proofreading, paragraph structure, concrete supporting details, “quotations, paraphrases, and summaries”, “writing an essay: the introductory paragraph”, and “writing an essay: the concluding paragraph”. In addition to these credit-bearing subjects, students did not seem to have access to additional

writing support either in the form of workshops or individual assistance. This lack of writing support may possibly be due to the perceived limited demand on Taiwanese campuses because graduate students in disciplines other than English and applied linguistics are not often required to write dissertations in English.

3.2. The participants

When recruiting participants for the current study, I decided to target the research methods class for two reasons. First, the participants of the course would be mostly first-year graduate students, just initiated into the academic research culture. Second, for this course students had to write a research proposal (complete with Introduction, Literature Review and Methodology) for the end-of-semester assessment. Therefore, students of this course could be described as new graduate students with hands-on experience in research writing and were in a particularly good position to help inform this study.

The instructor of the course was first contacted. She was asked to pass the message to her students that volunteers were invited to participate in in-depth interviews about their perceptions of research writing. Four students responded to the invitation and the following is a profile of the participants (in pseudonyms).

Ying, a female student, compared undergraduate and graduate-level writing and found the latter a more straightforward task. When she wrote in undergraduate years, she was always given a topic to work on. She normally had to spend hours wandering from ideas to ideas before she could finally settle down with an organizing outline. However, with research writing, she could simply use established formats and set expressions such as "This study intended to investigate the effect of ...". She rated her writing ability as average.

Guo was a male student. He rated his English writing ability as good, or, the best of the four language skills. He attributed this perception to the habit of diary writing in his freshman and sophomore years, although he did not continue the practice afterwards. He reported that he had limited experience in research writing.

Like Ying and Guo, Pong was in his first semester of the master's program. However, he was different from the other study participants in that he had already started his thesis research under the supervision of a professor. In his undergraduate years, Pong took a research methods course, completed a project, and co-wrote a report of 40 pages with a classmate. He rated his writing ability as average.

While Ying, Guo, and Pong were in their mid-twenties, Mae-ling was a returning student in her late thirties. After she obtained her bachelor's degree from a prestigious university, she worked as a secretary in an export company, parented two children, taught English at the junior high level in a South Asian country before she moved back to Taiwan and was admitted into the graduate program in the previous academic year. Due to personal reasons, Mae-ling did not start her graduate work until the spring semester. Therefore, she had completed two semesters of courses when she participated in the current study. At the time of the study she was also attending a thesis writing course required for second-year graduate students. She rated her writing ability as good.

3.3. Data collection

Semi-structured interviews of between 30 and 60 minutes were conducted with the four study participants. At the time of the study, the students had just completed their first semester in the master's program. To allow for greater flexibility, only a limited number of questions were scripted beforehand. They were presented to the students before the interviews formally started (See Appendix A for the interview questions). The interviews, conducted in the students' first language (Mandarin Chinese), were carried out in a university study room assigned to these graduate students. All the interviews were audio-recorded, with the participants' consent. The interviews were transcribed, translated into English, and prepared for analysis.

4. Results and discussion

As outlined earlier, the aim of the current study is to investigate new graduate students' perspectives on research writing. In this section, I will first report on students' perceived difficulties involved in different stages of research writing. Then, students' perceived needs in research writing instruction will be examined.

4.1. Undertaking the research

4.1.1. Selecting a topic

When asked to name their concerns about research writing, all but Guo stated that topic selection was one of their biggest concerns. Besides, they seemed to hold similar criteria as to what could be deemed a good, or worthwhile, research topic. For example, Pong held the opinion that creativity was important in selecting a topic:

You should be creative in choosing your topic. It's quite often the case that people just slightly modify the questions [of the previous research]. They are not saying anything new. In my opinion, you should always have something original in your writing.

This eagerness to say "something original" can also be demonstrated by his later remarks: "Perhaps you can even try some eccentric, but still acceptable, topics. (*laugh*) Exploring different ideas will help in your thinking."

Along a similar vein, Ying wanted her research writing to be distinct from others'. Referring to her future thesis work, she voiced her concern that her research might turn out to be meaningless:

There are so many theses around. So I'm thinking, is it possible that I can write something meaningful? I don't want to hear comments like "just another master's thesis!" You pass the oral defence. You get your degree. That's all. And your thesis just sits quietly on the shelf.

Ying shuddered at the idea of her thesis sitting unnoticed on the shelf and went on to assert that "I should like my thesis to make an impact on the later generation. I should like it to be valued. In my opinion, when you write, you should aim to write something like that."

Mae-ling considered a "significant" research question to be the most important element in research writing. She went on to define a significant question as one "worth researching" and one that would be able to "make certain contributions". She explained that she would first explore the related literature and see if the topic was already well-researched. She went on to note that: "If it is already well-researched, it's not worth spending my time and effort on it."

While Mae-ling enthusiastically elaborated on the importance of a worthwhile research topic, she showed an awareness of the realistic aspects of doing research. As a student researcher with limited experience, she did not aspire to pioneer or to explore paths that had not been trodden:

You'd better not repeat what is already said. Having said that, a master's student can't have very good research skills. So, when you are a beginner, although you try not to repeat what is already said, you don't want to be a pioneer. It would be dangerous.

Mae-ling continued by naming one more criterion for a good research topic: it should be local-based. On the one hand, logistics considered, a research project involving long-distance travels would not be feasible for a graduate student; on the other, she believed that the findings of her study should be able to contribute to the local society.

These students' preoccupation with a legitimate topic may represent their attempt to make sense of the research culture that they were entering. Graduate students in natural sciences may experience less difficulty in deciding on a research topic because their thesis work is usually part of a team project (Dysthe, 2002). Those in humanities and social sciences, on the other hand, are generally given less constraint on research topics either for their course-based or thesis research, but this freedom may serve to create uncertainty or even confusion regarding what

counts as a legitimate, feasible, or significant research question. Furthermore, students having embarked on thesis writing may receive help from advisors with topic decision (Dong, 1998); however, as evidenced in the current study, personalized guidance is not normally enjoyed by first-year graduate students, a point that will be discussed in a later section.

4.1.2. Reviewing the literature

Following topic selection, reviewing the literature presented another challenging task for these new graduate students. These students reported that they had little experience in searching the literature and writing from sources. They further pointed out that their previous English writing instruction required them to write predominantly “personal writing” – “prose that gives significant attention to the writer’s experiences and feelings” (Gere, 2001, p. 204), rather than source-based writing. In fact, such writing experience is by no means unique to Taiwanese EFL learners. Norwegian students in general, as Dysthe (2002) noted, also had little research writing experience in their undergraduate years. Referring to international students, Feak (2008) likewise reported that students’ previous English writing instruction often focused on personal or trivial topics, following a rigid five-paragraph format. Therefore, for EFL graduate students, 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. My informants’ experience in searching and reviewing the literature seemed to corroborate this observation.

Mining library sources in this information age appears easier than before when one can obtain a long list of references with a few keystrokes into a database. Yet, it can prove to be frustrating when one lacks library and information literacy skills, as evidenced in the students’ accounts. While my informants usually turned to the Internet for sources, Ying reported that she was not good at manipulating electronic databases. When she first started the program, she was rushed through a library tour which included both a physical tour of the university library and demonstrations of electronic database search. However, Ying felt that she did not benefit much because “the demonstrations were not targeted at students in [her] discipline area.” When she actually needed to sit down and perform the search for her research project, she found that her input of “keywords” often produced irrelevant results. On the other hand, Guo was troubled by an enormous number of results that turned up in his search. He had difficulty determining if they were relevant to his research question. These episodes reported by my informants are, in fact, not limited to new graduate students. Brown’s (1999) survey study found that graduate students (both master’s students and Ph.D. candidates) experienced negative sentiments, such as puzzlement, fatigue, disappointment, ineffectiveness, anxiety, and being lost, during their electronic information seeking process. For example, some of her informants expressed frustration with “not being able to find exactly what they need” (p. 431). Others reported problems with not knowing the correct keywords. Still others reported feeling uneasy because “there is too much out there to choose from” (p. 433). These student accounts support the observation that searching for relevant references in this information age is increasingly a huge and challenging task (Xu & Chen, 2006), indicating that information literacy is a skill that students need to acquire in the early stages of their graduate study.

The difficulty with the literature search did not stop with identification of relevant references. Locating the sources can sometimes pose a problem for researchers (Canagarajah, 1996). Although university libraries in Taiwan are generally well-equipped, English-language books and articles are still less available, given the fact that English is a foreign language in this country. Pong, therefore, complained about the limited sources available. He pointed out that the library collection at his university was small. While some articles could be downloaded from the Internet, others were not available online. In some instances, payment was required to read an article, but the option was considered a luxury that most students could not afford.

After these students successfully obtained sources, a majority of which was written in English, reading and synthesis posed another great obstacle. Guo expressed frustration in this aspect: “There are so many articles, so many books. You have to read and synthesize the information in

them. You have to write in your own words. You need to grasp the point. It's the difficult part." This comment of Guo's fully depicts the anxiety experienced by many graduate students undertaking the literature review. For novice researchers, the prospect of reading a vast amount of literature can be overwhelming and the experience may even be extremely frustrating. Ying, for example, considered reading as her strongest among the four language skills, but she still constantly struggled with the reading load entailed in a research writing task:

Reading takes time. Understanding the contents takes time. When you have problems, you have to ask someone. After you get an answer, you try to understand the whole thing. It, again, takes time. And to be honest with you, among the four skills, reading is my strength.

The analysis also reveals that her reading problem was compounded by the language and background knowledge factor. Ying added that she was not yet familiar with the language used in the field. Therefore, when encountering specialist terms such as "schema" and "morpheme," she had to stop and appeal to her peers for help.

4.2. Writing up the research

Compared to the seemingly overwhelming difficulty experienced in undertaking the research, these students appeared to perceive actual writing as a far more manageable task. For example, although they acknowledged the importance of knowledge of rhetorical structure in research writing, they seemed to see it as a technical, rather than conceptual, issue. For example, Guo felt that problems with rhetorical structure could only be minor: "After you have a rough draft, if the professor says there is a problem with the structure, you can simply adjust it. It will be small scale revision." Similarly, Mae-ling did not see rhetorical structure as a difficult element to master: "All you need to do is to refer to a few sample writings. You will then have a good idea of what it is like." This arguably simplistic view of rhetorical structure indicates that these students had not fully grasped the functions of different sections of research articles, nor had they recognized the subtleties of disciplinary writing, which involves more than a straightforward application of writing formulae.

On the other hand, while the literature on graduate writing suggests that English L2 students often experienced difficulty in vocabulary and use of formal language (Casanave & Hubbard, 1992; Shaw, 1991), most of my informants did not appear to be worried about writing in a foreign language or about using academic language. In fact, Mae-ling exhibited full confidence and claimed that writing was "not much a source of pressure" for her. Ying considered using academic language "an easier part in the process of writing a research paper" because one can "imitate and learn it". Similarly, Guo was not worried about academic language. However, it was not because he was confident in his writing ability, but because he believed that he could appeal to instructors' help: "As to academic language, well, you can use plain English. Then, perhaps the instructor will tell you that you should replace it with a more formal word. She will give you a more academic word."

This seemingly laid-back attitude toward language issues in research writing is somewhat surprising, considering that the students were working in English as a foreign language. However, there are several possible explanations. Professors working in an L2 context may be more tolerant of students' language errors, partly because they can sympathize with the language difficulty that an L2 writer inevitably experiences, and partly because they may want to focus more on students' research skills. In fact, an informal discussion with their course instructor consolidates this speculation. When asked about her expectations of student writing, the instructor reported that she tended to focus on developing students' research skills and their understanding of various research methodologies, to the inevitable downplaying of language requirements. On the other hand, having received little feedback on language use in research writing, the students might not have developed awareness of the language difficulty frequently reported by English L2 researchers (Flowerdew, 1999; Okamura, 2006). It is also possible that my informants did not feel a pressing need to address language problems. As Braine (2002) pointed out, while EFL graduate students often have to read and write in English, they can use their L1 to communicate with professors and peers. This advantage may have prompted these

new graduate students to focus full attention on research-related issues, such as designing research and searching the literature.

In contrast with his peers, Pong was fully conscious of his inadequate command of academic written English. As noted in the participants' profile, though still in his first semester, Pong had started his thesis research under the supervision of a professor. Compared with the other three informants, he appeared to show more alertness to language issues in writing: "[A difficulty I have is] language. I can not write fluently. I can not express myself well." Apart from general writing ability, Pong was also concerned about his limited knowledge of specialized language: "My advisor said my writing was more like general writing than research writing. She suggested that I should read more scholarly papers and use more specialized language rather than simple English." Pong reported that he was alerted to these issues during consultation with his advisor. This suggests that students can become sensitized to language issues in research writing when given feedback on these aspects.

4.3. Perceived needs in research writing instruction

As described earlier, these students had taken a required advanced writing course in the semester, but they apparently found it inadequate in addressing their writing needs. Ying, for example, pointed out explicitly that the writing course did not help in the research writing task at all, although she still gave credit to the training received in the course, such as use of transitional words and idea-generating techniques. Nevertheless, she was aware that constructing a research paper demanded more than the general writing skills focused on in the writing course: "The research paper is more than that – 'You have a topic, you introduce the topic, elaborate and then conclude it.' – The research paper, I think, is not just that."

When asked about their needs in research writing instruction, all study participants agreed that they needed more guidance and instruction in research writing. Nevertheless, they disagreed on the form this instruction should take. Pong hoped for more lessons on the use of formal language, one of his major concerns about research writing. Guo did not name any specific writing needs, but he was willing to take more writing courses, assuming that they would provide more writing opportunities, which, he believed, would lead naturally to better writing: "when you write a lot, you will probably learn how those scholars write."

While Pong and Guo were contented with traditional writing courses, Ying and Mae-ling seemed to prefer writing workshops or individualized feedback. Ying was apparently dissatisfied with the research/writing instruction she had received so far. Recalling her struggle during the research process, she said:

So far, no one has taught us how to narrow down. Here's the typical scenario: we submit a topic and we are told, "This does not do. Try again." I wonder if there is something we can follow, like some sort of guidance that can help us narrow down a topic.

Her accounts clearly revealed that she felt lost in the research world and yearned for more tailored guidance to help her navigate through the challenging task at hand. She therefore preferred short workshops on various aspects of the research writing process. Similarly, having taken all the required writing courses offered in the graduate program, Mae-ling now looked forward to individualized feedback and more personalized instruction: "After I collect my data, I will need individual guidance. I need to know if I have used the right methods to analyze, if I have interpreted the findings properly. I'm more interested in this kind of guidance."

These students' different perceptions towards research writing instruction indicate that traditional academic writing or research methods courses can not adequately address students' needs in research writing. Rather, these formal courses need to be supplemented by research and writing workshops as well as individualized guidance from either course instructors or learning development staff.

5. Conclusion

This study has identified and described first-year graduate students' concerns, their difficulties and perceived needs in undertaking and writing up research. The findings of this study in part concur with those revealed in previous ESL research. For example, students in this study shared similar concerns about research-related issues such as selecting a topic and reviewing the literature with their counterparts studying in ESL contexts (Paltridge, 1997; Shaw, 1991). Nevertheless, a somewhat surprising finding emerging from this study was the EFL students' seemingly laid-back attitude toward language issues in research writing. A probable explanation is that at this early stage of learning in the master's program, the students were too preoccupied with the novelty of doing research (e.g., identifying research questions and understanding research designs) to attend to language problems (problems that seem to be inherent in English L2 speakers' writing). As to the students' perceived needs, the study has revealed that the students were not satisfied with the writing training that they had received. Although their program had thoughtfully designed an advanced English writing course for these EFL students, the course seemed to focus on general writing skills, instead of addressing the students' pressing need: research writing. On the other hand, their research methods course instructor assumed that she should concentrate on teaching research methodologies and leave the writing part to the instructor of the advanced writing course. Such course design proved rather inadequate, and students were left to fumble around for ways to survive the research writing task.

In response to this problem, a few approaches at both course and program levels might be taken. First, individual subject instructors can aim to provide formative feedback during students' research and writing process. Unlike summative evaluation where teachers focus on assessing student's written work against a set of pre-defined criteria, formative feedback seeks to address individual writers' specific needs (McGarrell & Verbeem, 2007). While most students at the thesis and dissertation writing stage have a chance to meet with supervisors regularly to obtain ongoing feedback, students in humanities and social sciences often start working closely with an advisor in their second (or even third) year. In other words, first-year students in soft disciplines may be left to struggle with their studies in a transitional period in which more assistance is needed. To alleviate this problem, course instructors may seek to offer personalized instruction by holding regular consultations with individual students to learn about their specific writing problems and the underlying reasons for the problems (Chanock, 2007). Furthermore, this attention does not have to be limited to students' written work. Rather, consultations can be held regarding various aspects of research writing, such as topic selection and literature searching, or other areas of need as identified in the present paper. In this way, instructors can hope to provide timely and effective guidance rather than merely dictating rules and expecting students to understand and follow them without assistance. Certainly, providing individualized assistance would mean that subject instructors need to spend extra time and effort to coach their students. Yet, the results can be rewarding, particularly when students' learning and writing skills are visibly improved.

At the program level, research or writing workshops can be held regularly to provide short courses on various topics of research writing (Rubdy, 2005). Another possibility is to solicit assistance from ALL professionals if they are available on campus. Subject instructors can work closely with ALL professionals and design a joint course to target students' research/writing needs in the discipline. A similar intervention course is described in Shaw et al. (2007), where faculty, learning development staff, library staff, and tutors collaborate to scaffold advanced literacy development through a formative and task-based approach. In this course a learning development professional taught academic skills for six weeks and remained available for consultation for the rest of the course. Such an intervention course can be tailored to suit the target student population and should successfully initiate them into a new educational culture.

In addition, students could be encouraged to form study groups. In a study group, students may feel less isolated in a new study environment and find comfort in the realization that the difficulties they encounter are shared by their peers. They may also learn to help each other cope with unfamiliar learning tasks. In addition to peer sharing, they can invite senior students

of the program to join group meetings and share experience of learning in the discipline. Faculty members may want to avoid direct intervention with the functioning of study groups, but they can serve an advising role and suggest ways of using study groups to facilitate educational experience. For example, students can be encouraged to seek faculty advice after they discover their shared concerns or difficulties. Faculty members can also help contact library staff or learning development professionals to offer workshops on learning concerns identified in study group discussion. One problem with such study groups is that they may not necessarily address language issues if students themselves are not aware of the need. However, if combined with other measures such as the intervention course mentioned above, study group discussion should more likely focus on the language problem when students' awareness is heightened. Once students' awareness of their writing needs is raised, they can be further encouraged to form pairs or small groups for peer advice on each other's English writing.

The establishment of centres for specialized writing assistance is another strategy to address the needs of such students. While such centres have been widely available on American campuses since the 1930s (Williams & Severino, 2004) and in Australian universities since the 1980s (Stevenson & Kokkinn, 2009), they are still rare in Taiwan. In addition to the needs of students as featured in this study, there is a growing trend for doctoral students and faculty members to publish in English-language international journals (Flowerdew, 2000; Lillis & Curry, 2006). Specialized writing assistance on campus could play a vital role in addressing these expert and novice researchers' English academic writing needs.

As this is a study focusing on graduate students in applied linguistics, future research is needed to find out if disciplinary differences exist regarding graduate students' perspectives on research writing. Students in humanities and social sciences often work in an independent manner, unlike their peers in sciences and engineering who typically work and learn in a research team. This difference will likely influence students' perceptions of research and writing. In addition, it would be valuable to conduct longitudinal studies to examine if students' perspectives on research writing evolve over time and if students at different stages of thesis writing adopt different strategies to complete their research writing tasks. Finally, student dissatisfaction in this program with the existing generic academic language course and their desire for more targeted research writing assistance, for more formative feedback, and for individual guidance, sends strong signals about best practice for all language and learning lecturers working with master's students.

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Appendix A. Interview questions

1. What was your study background? Can you describe your English writing experience? Can you describe your research writing experience?
2. What are the most important elements in a research paper?
3. What problems or difficulties did you encounter when writing a research paper?
4. Do you think you need further instruction on research writing? If yes, what would you like to learn in these courses?

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