A Corpus-based Investigation of Macro and Micro Structures in Applied Linguistics Research Articles in the TCI Database: Descriptive and Pedagogic Dimensions

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I hereby declare that this thesis is my own work, except where acknowledgement is given to outside sources. It was conducted under the supervision on Dr Sue Wharton. It is submitted to the University of Warwick in support of my application for the degree of Doctor of Philosophy in English Language Teaching and Applied Linguistics. It has been composed by myself and has not been submitted in any previous application for any degree.

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Abstract

Previous studies have used a genre approach and move-based analysis as a tool for unpacking discourse organisation of text. Likewise, corpus-based approaches, as a bottom-up method, have been applied to investigate vocabulary patterns, their distribution and typical linguistic characteristics within the text. These two approaches are considered complementary, offering insights into the discourse patterns of a genre. Few studies, however, have attempted to combine these two methodological perspectives and then develop a pedagogic intervention based on the description. This study integrated move-based and phraseological approaches with the specific objectives of scrutinising the macro- and micro-structure of applied linguistic research articles written in English indexed in the Thai Citation Index (TCI) database, along with investigating Thai novice researchers' and graduate students' perceptions of article writing for publication and responses to a workshop. The research comprised two constitutive strands: one descriptive, and one interventionist. The descriptive phase began with developing a move-based coding protocol. I then examined the four conventional sections of 50 research articles (RAs) to identify the ways in which the discourse of these texts was organised. A corpus-based approach, with qualitative support, was then applied to extract pedagogically interesting n-grams: functional n-grams and content-based n-grams, from a dataset of 110 RA texts (the original group of 50 plus an additional 60). Concerning the interventionist strand, I carried out workshops applying the knowledge obtained from the descriptive phase to raise Thai novice scholars' and graduate students' awareness vis-à-vis article writing. Data regarding perceptions of this process were elicited through semi-structured interviews with six faculty members and two graduate students.

This study highlights the significance of discourse organisation, component discourse units and typical linguistic characteristics used in this particular research genre, which in turn can facilitate an understanding of the genre by novice writers and graduates. The body of knowledge generated by this study could be useful for the teaching of academic writing, particularly teaching graduate students how to write scholarly publications, and devising relevant reading and writing materials for advanced learners to improve their writing skills to disseminate discoveries in their fields.

Keywords: move-based genre analysis, corpus-based analysis, phraseology, research articles, TCI database, EAP, academic writing, learning materials

CHAPTER 1

INTRODUCTION

1.1 Overview

Thailand needs to produce graduates of quality, and one of the essential characteristics they should have is the ability to share, exchange, and disseminate their research findings, discoveries and any new advances in English. Research articles (hereafter, RAs) written in English are one of the main vehicles for disseminating and sharing knowledge among scholars worldwide. However, non-English speaking scholars find the task of writing research papers daunting. The ability to effectively read and write RAs in English is particularly crucial for Thai graduate students because having RAs published in refereed journals is a requirement for their graduation. Scholars in the field of Applied Linguistics are no exception to this general situation as they are involved in language studies and expected to have their research work published in English in refereed journals. To enhance publication opportunities for novice Thai article writers and graduate students in this field, the present study has four main objectives of: 1) identifying the schematic structure commonly followed in a set of 50 applied linguistics RAs written in English; 2) identifying multiword combinations and their pragmatic functions in contextual environments from a larger corpus of 110 texts (the original group of 50 plus an additional 60); 3) investigating the relationship between the rhetorical structure and multiword combinations identified in each section of the articles in terms of their pragmatic functions; and 4) investigating novice writers' and Thai graduate students' awareness of the knowledge of rhetorical structures and phraseological patterns when writing an article.

To accomplish these objectives, this study consists of two main phases, namely descriptive and pedagogic. In the first part of the study, a dataset of 50 Applied Linguistics RAs written in English and published in journals indexed in the Thai Citation Index (TCI) database was systematically selected and compiled. Initially, following the typical process of conducting a corpus-based move analysis advocated by Connor, Upton, and Kanoksilapatham (2007, p. 13), these RAs were analysed to determine rhetorical structures commonly found. In the second part of the study, as a

micro-approach to description, a larger corpus of 110 texts (the original group of 50 plus an additional 60) was compiled, and n-grams which appear to be interesting in terms of their semantic/grammatical and pragmatic relations were identified. The n-grams occurring more frequently in each of the sections of the corpus were carefully selected and checked for their pragmatic functions so as to create an empirically derived list of multiword combinations for pedagogic purposes and a list of content-based strings. Following these descriptive phases, I initiated a pedagogic dimension. The description of rhetorical patterns and phraseological patterns frequently found in the articles, and the knowledge generated from the analyses were taught to faculty members and Thai graduate students wishing to have their research work published in journals in order to raise their awareness of this subject matter.

1.2 Rationale

As an impact of globalisation, English has achieved the status of being one of the most dominant international languages, as evidenced by the ever-increasing number of speakers for both intranational and international communication. English has been indispensable in modes of communication in all activities, including business, tourism, science and technology transfer, and education (Graddol, 2004; Kirkpatrick, 2012b, 2014). Most people today need to improve their command of English in order to ensure that they can competently communicate with the world and participate in international communities. Within academia, English has been increasingly adopted as the medium of instruction in higher education worldwide (Coleman, 2006; Crystal, 2004). Scholars and researchers need to use English in advanced education. Learners themselves wish to be able to master English to a high level of accuracy and fluency in order to be successful in job applications, whereas employers want their employees to have good English language skills and fluency in English (J. C. Richards, 2006). English proficiency is, thus, deemed a prerequisite for success and advancement in many fields both academically and professionally in today's world. Thailand is no exception to this scenario.

In Thailand, scholars have aptly expressed that "a good knowledge of English is no longer a luxury but a necessity in Thai society" (Wongsothorn, Hiranburana, & Chinnawongs, 2002, p. 453). Since Thailand is one of the members of ASEAN

(Association of South East Asian Nations), and due to the advent of AEC (ASEAN Economic Community) integration at the end of 2015, English has attained the status of the official working language, and has been endorsed as being the language of the region (Kirkpatrick, 2012a). English, as a core foreign language, is now a compulsory subject for all Thai students from grade 1 onwards. They study English as a compulsory subject at primary, secondary and tertiary levels of education (Office of the Basic Education Commission, 2008). Emphasis in the current English curriculum is placed on the five key competencies of communication capacity, thinking capacity, problem-solving capacity, capacity for applying life skills, and capacity for technological application. In order to boost students' English language proficiency and raise English language standards in Thailand, in 2014, the Common European Framework of Reference for Language (CEFR) was officially adopted as the conceptual framework of English language education. It is used to inform curriculum design, methodological options for language teaching and learning, testing and assessment, and the development of teacher-training programmes (Office of the Basic Education Commission, 2014). Thai students must have the ability to use English in various communication situations, acquiring knowledge from other areas, interacting and engaging with people from different cultures and societies, and pursuing further education at higher levels.

At tertiary level, English is compulsory both as part of the university entrance examination and for all university students. Thai university students today are required to achieve 12 credits, six in general English and six in English for academic or specific purposes (Darasawang, 2007; Fitzpatrick, 2011; Foley, 2005). The Ministry of Education aims that all university classes in all subjects be conducted in English or adopt English-medium instruction. A communicative and learner-centred approach, therefore, has been adopted in English language teaching, aiming to prepare Thai English students for interactions with English native speakers and their cultures (Fitzpatrick, 2011; Hengsadeekul, Hengsadeekul, Koul, & Kaewkuekool, 2010). Furthermore, Thai university students are currently required to be assessed on their English proficiency against standardised benchmarks of achievement before their graduation.

In addition, writing for publication in English is in focus more than ever. Thai scholars and researchers from all academic disciplines have been under tremendous

pressure to not only get access to information, but also to share their research findings in English in refereed journals. A series of strenuous attempts have been made by the Thai government to increase the number of RAs published in international journals; for example the establishment of the National Research Fund in 1992, the establishment of the Royal Golden Jubilee program in 1996, and the establishment of the Office for National Education Standards Quality Assurance in 2004 (Chalapati, 2007). These strategic plans have pushed Thai academics to publish their works in top-tier journals in the English language. Furthermore, many Thai universities have recently set up a bonus payment scheme stipulating that for RAs published in journals indexed in the SSCI and A&HCI, the authors will be rewarded. Successful publication is a key "indicator guaranteeing tenure and enhancing authors' reputation, prestige, monetary awards, promotions, grant awards and acceptance in the field" (Kanoksilapatham, 2007b, p. 173). Faculty members work at RA publication to secure their positions. As for Thai graduate students, having their research, especially PhD theses, published in indexed journals is crucial as it is one of the requirements for graduation (Jaroongkhongdach, Watson Todd, Keyuravong, & Hall, 2011; Svasti & Asavisanu, 2007).

However, as stated by Canagarajah (1996) and J. Flowerdew (1999), without receiving formal instruction in academic English, publishing RAs is somewhat difficult for many non-native English-speaking researchers. The task of writing an RA poses challenges not only to doctoral students and novice researchers (Kwan, 2010), but is also considered daunting to Thai graduate students (Kanoksilapatham, 2007b). Specifically, Thai graduate students in the field of social sciences seem to have some difficulties in producing publications in English for a number of reasons. Firstly, they need to know how to conform to the overall organisation, the use of certain expressions and lexical items commonly followed in their respective discourse communities and academic disciplines. Secondly, opportunities for publishing in English, including venues for publication with a huge number of academic journals, are more abundant in the hard sciences than in the humanities and social sciences (Cargill & O'Connor, 2006, 2013; J. Flowerdew & Li, 2009). Furthermore, the turnover time of social science publication in general is infrequent (quarterly or biannually). Lastly, there is a great variation in structure and style deemed acceptable in research writing in social sciences (Hall, 2007). Hence, there is a need to support

these writers in a higher education setting. The present research focuses particularly on the article writing needs of one set of Thai graduate students: their target RA genre and their responses to instruction concerning it.

1.2.1 Publishing in English for Thai graduate students

Scholarly publication is acknowledged to play a crucial role in academic communities, and recently there has been a trend in the Thai higher education sector towards preparing graduate students for this. In the past, the focus during graduate education might have solely been on learning bodies of knowledge associated with the field. But more recently, the Thai government has proposed an education shift to aid graduate students with the transition to academia or professional life, preparing them for participation in the international community. They are expected not only to possess the knowledge learned, but also share it and disseminate their research findings to the wider research community from diverse disciplines, both locally and internationally. Consequently, Thai academics and graduate students are encouraged more than ever before to be actively engaged in research activities and publish their work in academic journals. Thus, many Thai universities offer courses in writing for publication in order to help their postgraduate students disseminate their research work.

In many Thai universities, research publication is one of the requirements for graduation of graduate students. Specifically, many universities require candidates wishing to graduate with a master's or doctoral degree to publish their research findings in at least one RA in an academic journal. For instance, Mahidol University candidates must publish a part of their thesis in at least one RA in a peer-reviewed journal where the student's name must appear as the first author. Similarly, Chulalongkorn University, Silpakorn University and Kasetsart University require students submitting their request for graduation to attach the full research paper and the acceptance-for-publication letter from either a recognised national or international journal. In so doing, the university, in turn, receives more credibility, approbation, and accreditation of academic achievement.

Finding a suitable outlet for publication is always a challenge for Thai graduate students. In 2004, sponsored by the Thailand Research Fund (TRF) and King Mongkut's University of Technology Thonburi (KMUTT), the Thai-Citation Index (TCI) Centre set up the TCI database to encourage the development of more academic journals published in Thailand, and also to regulate their quality. The database collects local and national journals published regularly for at least three years, with articles written in Thai or English, including RAs, academic articles, reviews, and short reports. The database has been continually developed, providing a useful source to search for publications and citations. It reports the journal quality index of Thai academic journals on a yearly basis while ensuring that the quality of the journals can be compared to international standards. The TCI has, therefore, played an increasingly significant role in driving, increasing and ensuring the visibility and quality of local and national research studies in parallel with international studies. I will discuss the TCI database in more detail in the next section.

1.2.2 The Importance of the TCI database

Prior to establishment of the TCI database, a number of national publications were housed within universities. It was difficult to widely disseminate work and research to the community. No citations were obtained, and no quality control was in place. The TCI centre established criteria for assessing and classifying journals published in Thailand based on their quality. The main criteria used in the evaluation include content and format of the journals, peer-review process, publication policy, citation rates, diversity among editorial board members, managerial process, etc. Consequently, the journals indexed in the database are categorised into three groups: 1st group, 2nd group and 3rd group. The journals placed in Tier 1 are also included in the ASEAN Citation Index (ACI). This recognition means that articles published in the journals provide sufficient scientific merit and serve the interests of the research-orientated and perhaps professional section of the country and the region. Importantly, the Royal Golden Jubilee PhD Program (RGJ-PhD) of the TRF has recognised this evaluation of journal categorisation by the TCI by approving journals placed in Tier 1 as journals in which RGJ-PhD scholars can publish their research findings to complete scholarships and research projects. The TCI database is considered as an indication

of high standards by the academic journal community in Thailand as it clearly sets out detailed criteria for assessment and classification of the journals based on their quality, editorial policy, and ethical publishing practices.

The database is used as a comprehensive searching system for retrieving RAs, especially those published in Thailand, in several fields of study, including science and technology, and humanities and social sciences. It is widely accepted by Thai scholars and the Ministry of Education as an identification of significant quality improvements in Thai academic journals (Svasti & Asavisanu, 2007). In addition, the database reports the Thai Journal Impact Factor (T-JIF) values of the journals on a yearly basis, which are similar to those provided by the ISI (Institute for Scientific Information, now called Thomson Reuters).[1] These T-JIF values are of great importance because they may lead journal editors to incorporate other essential criteria for improving the quality of their journals in order to meet international standards.

The TCI database has had a huge effect on the Thai academic arena, especially the assessment of the productivity of national research and the research community in Thailand in various ways. As the number of published journals is increasing with time, the database allows Thai academics to search information on publications, citations, and detailed information about publication policies of the indexed journals, which was not possible in the past (Sombatsompop et al., 2012).

The TCI database plays a key role in academic employment and progression. For faculty members, having their research papers published in at least the TCI database journals is initially a necessity for renewing an employment contract and becoming nationally and internationally more visible in the field, while it also constitutes one of the universities' quality assurance regulations. In addition, the procedure for assigning academic ranking to Thai university lecturers involves the TCI database as one of the requirements of academic promotion criteria. That is, the university lecturers who request an academic ranking promotion (from lecturers to assistant professors), must have research publications in journals, at least, in the TCI

[1] According to the Journal Citation Report (JCR), the impact factor is a measure of the frequency calculated by dividing the number of current citations to articles published in the two previous years (Garfield, 2006). This figure is useful for evaluating a journal's relative importance, especially when compared to others in the same field. It is used as a standard dimension and an indicator of quality of research articles published by scholars in the field.

database, among other types of academic works; for example, textbooks, teaching materials, peer-reviewed book chapters, etc.

For their part, Thai graduate students are encouraged to share new insights and findings based on part of their theses or research studies with the wider academic community through publication in journals indexed in this database. They are required to submit a published article or an acceptance letter for publication before graduation. Specifically, a candidate must be stated as the first author, with their academic advisor as the corresponding author. According to the Office of the Higher Education Commission announcement, Thai graduate students who receive a scholarship from the Royal Golden Jubilee Program are also required to publish their research findings in a national journal within the TCI database (only the journals in Tier 1) or in international journals, in order to be eligible for the scholarship.

While the TCI database mostly indexes academic journals published in Thailand which might be seen as local or national, the database is becoming of greater interest to international accreditation bodies and has been accredited by both Thai graduate students, Thai researchers and other research communities. Moreover, the content of the articles published in the journals has been accepted by researchers and scholars in the field, giving more international recognition of the database among the academic community. The database is certainly noteworthy, and it may serve as a waystage and is considered as a stepping stone for Thai graduate students and novice researchers to attain publication in higher ranking journals. The journals indexed in the database seem to be some of the most favoured and appropriate publication outlets for publishing an RA investigating a problem which is localised to the country. It suits scholars who are not proficient in English as they have the option or chance of publication either in Thai or English, depending on the target journal's requirements and expectations. Furthermore, as Swales (2004) points out, publication success requires a set of factors, including linguistic and textual knowledge, levels of experience, support and networking; for graduate students, having research published in English in international journals can be a daunting task if they have not had publication experience before. Publishing articles in the journals in the TCI database is therefore deemed to be a first step for them. Sometime afterwards, when they are confident and have enough publication experience and research-writing abilities, they

can move on to being published in international journals, which are considered more visible and widely-read than national ones.

1.2.3 Applied Linguistics in the Thai context

Despite being relatively long established in western countries, Applied Linguistics is a relatively new area in the Thai context.

Only three state-run universities, Mahidol University, Khon Khen University and King Mongkut's University of Technology Thonburi, offer a postgraduate programme in Applied Linguistics. However, as reflected by the programme objectives and curriculum, the programmes generally place an emphasis upon research within the areas of instruction, autonomous learning, computer language-assisted learning, teacher training and development, discourse analysis, and intercultural communication.

Several Thai universities have provided Master's and doctoral programmes related to the area of English language studies concentrating on ELT, communication studies, and interdisciplinary areas. Thammasat University, for example, has a programme in ELT, focusing on three areas of specialism: Applied Linguistics, intercultural communication, and literary studies. Chulalongkorn University has a Master's and doctoral programme in English as an International Language (EIL), but the specialisation areas only cover three topics: English linguistics, instruction, and assessment and evaluation.

This scenario and areas of studies observed from study programmes demonstrate that the scope or breadth of studies in Applied Linguistics in the Thai context is relatively limited, and almost exclusively focused on ELT and pedagogical practices. A possible explanation for this is that many of those who decide to study these programmes have been involved at some level in ELT. Some, perhaps many of them are English teachers who have attempted to improve the quality of the level of English language instruction and approaches to teaching English in Thailand.

Since the field of Applied Linguistics and its community in Thailand is relatively young, there have never been any symposia or conferences focusing on this area as it is understood in the West. In Thailand, the topics of English language

teaching and learning, English studies, and language and education are dominant in most conferences on language and foreign language studies. Other elements of Applied Linguistics are presented as sub-topics of interest.

In comparison to the scope of studies in Applied Linguistics in general or in Western contexts, the Applied Linguistics field in the Thai perspective is relatively distinctive and limited. The International Applied Linguistics Association (AILA) provides the explanation on the disciplinary position of Applied Linguistics as follows:

> (…) an interdisciplinary field of research and practice dealing with practical problems of language and communication that can be identified, analysed or solved by applying available theories, methods and results of Linguistics or by developing new theoretical and methodological frameworks in Linguistics to work on these problems. […] The problems Applied Linguistics deals with range from aspects of the linguistic and communicative competence of the individual such as first or second language acquisition, literacy, language disorders, etc. to language and communication related problems in and between societies such as e.g. language variation and linguistic discrimination, multilingualism, language conflict, language policy and language planning.

It can be said that the Applied Linguistics field in general is concerned with a broader range of language-related issues, in order to understand the roles of language, its users and conditions, compared to that of the Thai context. According to J. C. Richards and Schmidt (2013) and Schmitt (2013), the discipline draws on a wide range of theoretical and methodological approaches from various disciplines to understand and resolve language problems. This includes studies on second and foreign language learning and teaching, or the study of language and linguistics in relation to practical problems, such as lexicography, translation, speech pathology, etc. Nicholas and Starks (2014) argue that Applied Linguistics is concerned not only with language, but with communication, and with an understanding of language as it is used in social contexts. It is highly relevant to language education.

As noted above, although the Applied Linguistics field has some connection with language teaching, the range, depth and breadth of studies in the Applied Linguistics field in Thailand and in the Western context is very different. However,

regardless of the scope of studies in Applied Linguistics in Thailand, the importance of the field cannot be disputed as it has a great impact on language, communication, English studies, and ELT practices in the Thai research community and society today.

1.2.4 Knowledge and skills needed for publication

According to J. Flowerdew (1999) and Kanoksilapatham (2015), in order to write an RA in English certain reading and writing skills are essential. Writers need to have read widely and have a full understanding of the RAs published previously in order to know the state-of-the-art of a field. Likewise, writing skills are essential to ensure that writers can efficiently express themselves academically. Celce-Murcia (1990) and McCarthy (1991) suggest that writers need to make use of both macro- and micro-skills. The macro-knowledge of an RA genre starts with the knowledge of structural organisation of the discourse units, before moving on to lexical and grammatical features used in a text. The micro-knowledge of the RA, in turn, starts with the smallest units of discourse, such as grammatical items, before moving on to more general features, such as sentences, discourse units, and structural organisation of the discourse units. Congruent with Hyland (2004b), writers need to have knowledge of genre and linguistic characteristics, including lexico-grammatical features, rhetorical organisation, communicative functions, and content.

These macro- and micro-language components have different but complementary characteristics. Previous studies (e.g. J. Flowerdew, 2001; L. Flowerdew, 2016; Kanoksilapatham, 2005, 2007b, 2012a, 2012c; Samraj, 2002, 2008) demonstrated that each section of an article, including Introduction, Methods, Results, and Discussion (IMRD), had its own structural organisation and pragmatic functions. As an RA is regarded as a genre which is built ‘within a frame of social action’ (Bhatia, 1993, p. 13), patterns of lexical and grammatical features used in RAs usually vary according to the writer’s English proficiency, writing experience, and the expectations of the discourse community to which they will be addressed. Connor et al. (2007), thus, suggest that article writers need to improve their awareness of the kind of information presented, the sequence in which the information is organised, and what linguistic features are typically used to express each information element.

1.2.5 The contribution of move-based genre analysis

A plethora of genre-based studies have provided invaluable insights into the general ways in which RAs are rhetorically organised, and what should be included in each section of the articles. Move-based genre analysis proposed by Swales (1990, 2004), for instance, highlights the components of the Introduction section of RAs. The basic notion of Swales' analysis is that the text is described as a sequence of moves. A rhetorical move represents a stretch of text serving a particular communicative purpose, and each of the four conventional sections of an RA consists of an identifiable sequence of rhetorical *moves*. In turn, each move consists of subunits called *steps* (Swales, 1990) or *strategies* (Bhatia, 1993). In short, the main objective of move-based studies is to identify the organisation of texts, by capturing the types of moves and steps prevalent and how these moves and steps are organised in a particular text (Connor et al., 2007).

Swales' analytical model was created to facilitate the task of writing RAs, especially for those whose mother tongue is not English. The model, however, has been criticised by scholars for its subjectivity. Conducting a move analysis lacks explicit rules for decisions on move boundaries, leading to questions about the reliability and empirical validity of the analysis (Paltridge, 1994). However, as suggested by Dudley-Evans (1994), decisions about the classification of move patterns are made on the basis of linguistic evidence, text comprehension, and the understanding of the academic discourse community. According to Swales (2004), the model proposed is not to prescribe, but to provide guidelines with regard to how ideas are marshalled in writing the Introduction section of an RA.

Although there has been criticism concerning the usefulness and validity of the model, the model has been subsequently validated in a number of RA Introductions across several disciplines (e.g. Samraj (2002) in wildlife behaviour and biology conservation; Anthony (1999) in computer science; Kanoksilapatham (2012a, 2012c) in engineering; Ozturk (2007) in second language acquisition and second language writing). These studies show the same schematic pattern as the model suggested, and disciplinary variation in the structural pattern was also observed. The approach was also used to analyse other internal sections of RAs in various disciplines, i.e. Brett (1994) in the Results section; Peacock (2011) in the Methods sections in eight disciplines; Lim (2006) in the Method sections of management RAs; in Results and

Discussion sections of applied linguistics RAs; and Nwogu (1997), Li and Ge (2009), and Basturkmen (2012) in the Discussion section of medical and dentistry articles, respectively. These studies have congruently demonstrated that each section of RAs has its own distinct structural organisation.

By extension, Swales' analytical approach has also been applied to explore other professional genres, including application essays to medical and dental schools (Ding, 2007), research grant proposals (Connor & Mauranen, 1999; Connor & Upton, 2004), emails (Upton, 2002), movie reviews (Pang, 2002), legal discourse (Bhatia, Candlin, & Engberg, 2008), fund-raising letters (Connor & Gladkov, 2004), case reports (Hung, Chen, & Tsai, 2012), and replies to customer inquiries (van Mulken & van der Meer, 2005). These studies indicate that the existence of rhetorical patterns and patterns of text organisation seems well established in both academic and professional texts.

1.2.6 The contribution of lexically-based genre analysis

Micro-level analysis like lexically-based genre analysis has established itself as an important field of study within corpus linguistics. The analysis of phraseological patterns or lexical bundles incorporates automatic computational techniques which can be easily applied to textual analysis. According to Biber et al. (1999), the basic notion of lexical bundles is that in a particular register, they are a group of three or more words that frequently recur together as "recurrent expressions regardless of their idiomaticity, and regardless of their structural status" (1999, p. 990). With the use of computer programs, statistical procedures identified by cut-off points for frequency and range are applied to the corpus and the analysis to identify patterns of recurrent words usually found in text materials (Cortes, 2013).

Experimental studies on formulaic sequences have been conducted in different genres, including everyday conversation (Biber et al., 1999), RAs in sciences (Cortes, 2004), Master's theses and dissertations (Hyland, 2008a, 2008b), university textbooks and lectures (Biber, Conrad, & Cortes, 2004), and university spoken and written language (Biber & Barbieri, 2007). The findings of these studies can be used to describe tendencies in the use of formulaic expressions in different types of text. Moreover, pedagogical implications for language teachers and learners can be

identified, especially in writing academic works and RAs, and in various areas related to academic communication (Biber & Barbieri, 2007; Cortes, 2004; Hyland, 2004b, 2008a, 2008b).

1.2.7 Pedagogic application of descriptive findings

Descriptive findings from genre-based analysis and phraseological patterns can contribute to the development of academic reading and writing materials, and teaching academic reading and writing. Knowledge of this line of research can lead to raising novice researchers' and advanced students' awareness of the schematic structure, and the repertoire of formulaic sequences in RAs while engaging in the task of research paper reading (Bishop, 2004; Schmitt, Jiang, & Grabe, 2011). That is, they are involved in the reading process not only to understand the meaning and content of the text, but also to identify the structural organisation and a set of linguistic features.

As for writing skills, knowledge of schematic structure and phraseological patterns can provide students with a head start in embarking on an academic research writing task. It is "pre-packaging of information or of the structures used to present information" (Reppen, 2004, p. 83), which helps writers by reducing the processing load. The frequency of occurrence of the typical organisational pattern and phraseological patterns facilitates fluency in language production, especially how to start crafting and organising their own RAs effectively (Bybee, 2002).

Considerable attention has been paid to the role of phraseological units in language teaching and learning (Cortes, 2004, 2007). Cortes (2004), for example, compared the frequency and function of lexical bundles in the written production of professional authors and student writing in history and biology. The study showed that some lexical bundles were extremely frequent in the corpora of RAs, while these bundles were rarely found in the students' works. Cortes confirmed that exposure to the use of lexical bundles in reading materials did not transfer directly into students' active production of lexical bundles in the writing process. Therefore, the acquisition and appropriate use of lexical bundles does not seem to be a natural process. Jones and Haywood's (2004) work seemed to corroborate Cortes' findings, indicating that the absence of the use of lexical bundles in students' academic writing may result in

inadequate writing. The study revealed that after a 10-week instruction period focusing on the production of lexical bundles, university students taking EAP classes found that knowledge of word strings could assist them technically to express complex ideas in writing tasks, to facilitate the structure of different writing stages, and to show the necessary level of formality. However, in Li and Schmitt's (2010) study, the development of students' formulaic sequence repertoire over the one-year MA in ELT course tended to be slow, even though these students were language majors. Recurring word combinations have thus been considered "important building blocks of coherent discourse and characteristic features of language use in a particular setting" (Hyland, 2008b, p. 8). This knowledge can be taught to novice writers and students to help them produce texts in a particular genre.

In summary, although move-based genre analysis and phraseological patterns have very different strengths, these two approaches to textual analysis both have pedagogic relevance. To facilitate the long and arduous process of getting accepted for scholarly publication, this empirical research aims to investigate the application of a combination of these two approaches to teaching Thai graduate students and faculty members writing RAs for publication.

1.3 Objectives of the Study

The objectives of this research are as follows:

1. To identify rhetorical moves and steps used in each section of texts in a corpus of 50 Applied Linguistics RAs published in journals indexed in the TCI database;
2. To identify phraseological patterns frequently occurring in a corpus of 110 Applied Linguistics RAs from the same journals;
3. To investigate the relationship between the rhetorical structures in each section of these articles and phraseological patterns used in each section, as well as to investigate the relationship between the communicative purposes of the rhetorical moves and steps identified and the pragmatic functions of multiword combinations in context; and

4. To use the findings above in workshops designed to enhance faculty members' and Thai graduate students' awareness of rhetorical structures and phraseological patterns when writing an RA for publication.

An additional objective to be included in the study is to create and develop instructional materials which can be used in the teaching of writing for research publication. The content of these teaching materials is obtained from the results of the descriptive and pedagogic phases carried out in the study. The corpus-informed materials also feature pedagogical activites and accompanying commentary.

1.4 Research Questions

Specifically, this research aimed to address the following questions:

1. What are the move and step patterns commonly used in each section of texts in a corpus of 50 applied linguistics RAs published in journals indexed by Thai-Journal Citation index (TCI) database?
2. What are the most frequent phraseological patterns used in a corpus of 110 Applied Linguistics RAs from the same journals?
3. Is there a discernible relationship between the rhetorical moves and steps identified in each section of the articles and the use of phraseological patterns? If so, is there a relationship between the communicative purposes of the rhetorical moves and steps identified and the pragmatic functions of phraseological patterns in context?
4. To what extent can the instruction of the knowledge generated from questions no. 1 to 3 raise faculty members' and Thai graduate students' awareness of move analysis and phraseological patterns when writing an RA?

1.5 Significance of the Study: The Way Forward

The findings of this thesis will be beneficial to a large number of people, including Thai graduate students, novice authors, and scholars, particularly in Applied Linguistics. The findings will provide them with comprehensive, effective and practical guidelines to draft their manuscript in a manner which is acceptable to

refereed journals, especially those indexed in the TCI database. This means that the findings of this study will be useful and practical.

Theoretically, the study offers insights into the schematic structure and fixed expressions frequently occurring in each section of RAs. The study thus provides a more detailed and complete global picture of both macro- and micro-level structures of Applied Linguistics RAs. The successful integration of macro- and micro-approaches contributes to genre theory as it suggests that both approaches are necessary for a comprehensive understanding of a target genre.

Pedagogically, the results generated by this study can be applied to EAP classes focusing on research genres. Instructors can teach advanced students that when reading or writing RAs, they can expect to encounter rhetorical patterns and recurrent word combinations that predominate in each section of RAs. Consciousness-raising approaches to language teaching suggest that making students aware of the rhetorical structure and linguistic characteristics when reading or writing RAs can help prepare them to better cope with when they are encouraged to publish the results of their research works in scholarly journals (Birch-Bécaas & Cooke, 2012; Henry & Roseberry, 1999; Levis & Levis, 2003; Zarrati, Nambiar, & Maasum, 2014).

1.6 Overview of the Thesis Structure

This thesis contains eleven chapters. Following the Introduction, Chapter 2 provides a theoretical concept of genre and phraseological patterns. The chapter specifically revisits and reviews previous studies on genre analysis, phraseological patterns and academic word lists, which shows the current state of research in this line. Chapter 3 provides the reader with key ideas and concepts of genre approaches to teaching writing. In the final part of this chapter, I will discuss some problems and challenges associated with genre-based instruction. Chapter 4 discusses the research methodology and analysis used in the descriptive phase of the study which involves two parts-- move-based genre analysis and corpus-based analysis. The chapter also describes the selection process of academic journals and research articles to be studied. Chapter 5 presents a detailed account of the procedures that I used to conduct the preliminary study. I then move on to Chapter 6 which deals with establishing the

genre framework by comparing the results of the text studied with those of the preliminary study. Under the construction of the genre framework, I will present a schematic representation of the RA text and linguistic features commonly found in the four main sections of Applied Linguistics RAs. I will propose the overall framework of the RA genre at the end of the chapter. Moving away from the macro views provided in Chapter 6, the next chapter is devoted to the identification of phraseological patterns, using frequency, statistic measures and a psycholinguistic approach by EAP experts to eliminate meaningless combinations of words. The majority of Chapter 8 is spent on the methodology of the pedagogic phase employed in the study. It covers the approach to the development of instructional materials and specific activities carried out in the workshops. The focus of Chapter 9 is on the evaluation of the workshops, describing the selection process of interview informants, the approach to interview data coding, and the results of the interviews with involved parties. Chapter 10 presents additional teaching materials created from the results of the interviews, which are part of the originality of the thesis and the contribution that the research makes to the field. The chapter also presents guidelines on how to make use of corpora in learning about literacy practices of research writing and developing learning materials. In the final chapter of this thesis, I will discuss the main contributions and limitations of the study. Some implications and recommendations for future research aiming at writing for publication are also offered. The final chapter provides a conclusion to the thesis, and suggests that conforming to the proclivities of the target genre by using the conventional syntactic constructions and key linguistic features with specific communicative function and purpose contributes not only to the opportunities for getting an article published, but also to successful participation in the research community. It also argues that a research-based and corpus-based approach is crucial for the development of instructional materials.

CHAPTER 2

GENRE ANALYSIS AND PHRASEOLOGICAL PATTERNS

2.1 Overview

This chapter reviews the past literature on two major topics relevant to the present study. The first part of the chapter introduces the central theoretical framework of the current study, namely genre analysis. The conceptual background of genre from three distinct approaches is discussed: *New Rhetoric School*, the *Australian Systemic Functional Linguistics* (SFL) and the *English for Specific Purposes* (ESP) approach, in order to determine the most appropriate method for the present study. Previous studies on textual organisation, using Swales' move analysis are reviewed. The chapter then discusses the concept of phraseological patterns, with reference to the characteristics and functional classification of formulaic sequences. The chapter ends with a review of research on phraseological patterns on academic discourse.

2.2 Genre Analysis

During the past decade, genre has become one of the most popular areas of Applied Linguistics research. Its applications have had considerable influence on language pedagogy in educational contexts across the world. In this chapter, the concept of genre will be discussed initially, and subsequently the three principal traditions of genre studies, and how they relate to the present study.

2.2.1 Concept of genre: A philosophical concept

Several different and/or overlapping definitions of genre are offered by researchers from a wide range of perspectives (Bhatia, 1993; Biber & Conrad, 2009; Coe, 2002; Hyland, 2002b, 2003; Martin, 2005; Martin & Rose, 2008; Swales, 1990, 2004; Widdowson, 2007). These scholars generally attribute genre to language use as social action, representing the relationship between text and context. Martin (1984), for example, describes genre as "a staged, goal-oriented, purposeful activity in which

speakers engage as members of our culture" (p. 25). For Coe (2002), genre is the relationship between the function and meaning of language in a particular context, specifically referring to "functional relationship between a type of text and a type of rhetorical situation" (p. 197). Similar to Coe (2002), Johns et al. (2006) consider genre as grouping texts together and representing how writers use language to respond to and construct texts for recurring situations. It involves the relationship between language and the expectations of the context in which the language is being produced. This is because genres are "ways in which people get things done through their use of language in particular contexts" (Johns et al., 2006, p. 235).

Focusing on the significance of social context and language use, Hyland (2002b) states that "genres are abstract, socially recognized ways of using language" (p. 114), whereas Bhatia (1993) sees genre as "an instance of a successful achievement of specific communicative purpose using conventionalized knowledge of linguistic and discoursal resources" (p. 13). According to Hyland (2002b), genre not only embeds social realities, but also constructs them as texts that will display the writer's awareness of their context and the readers who form an audience in that context (Hyland, 2003). With the notion that there are norms and conventional expectations for the rhetorical structures of different text types, Widdowson (2007) states that genre is "a use of language which conforms to certain schematic and textual conventions, as agreed by a particular discourse community" (p. 129).

Concerning a theoretical distinction between the terms register, genre, and style, Biber and Conrad (2009) argue that genre is "similar to the register perspective in that it includes a description of the purposes and situational context of a text variety, but its linguistic analysis contrasts with the register perspective by focusing on the conventional structures used to construct a complete text within the variety" (p. 2). This definition clearly includes the notion of the conventional discourse structure of texts and the way language is typically used in particular contexts.

Another very influential and comprehensive definition of genre in the literature is proposed by Swales (1990, p. 58). His definition includes notions of "structure, style, content, and intended audience" which members of a particular discourse community share.

> A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognised by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constraints choice of content and style. Communicative purpose is both a privileged criterion and one that operates to keep the scope of a genre as here conceived narrowly focused on comparable rhetorical action. In addition to purpose, exemplars of a genre exhibit various patterns of similarity in terms of structure, style, content and intended audience…. The genre names inherited and produced by discourse communities and imported by others constitute valuable ethnographic communication, but typically need further validation.
>
> (Swales, 1990, p. 58)

Subsequently, inspired by the notion of communicative activity and the significance of discourse community, Bhatia (1993) condenses and extends Swales' definition of genre, as follows:

> It is a recognizable communicative event characterized by a set of communicative purpose(s) identified and understood by the members of the professional or academic community in which it regularly occurs. Most often it is highly structured and conventionalized with constraints on allowable contributions in terms of their intent, positioning, form and functional value. These constraints, however, are often exploited by the expert members of the discourse community to achieve private intentions within the framework of socially recognized purpose(s).
>
> (Bhatia, 1993, p. 13)

According to Swales (1990) and Bhatia (1993), the importance of genre is primarily characterised by the writers' communicative purposes. From the perspective of community participation, a shared set of communicative purposes in a discourse community shapes and creates an internal structure of the genre, and in turn, differences in communicative purposes result in different genres. Genre is, thus, regarded as a linguistic product of the members of any discourse community and as one of the major mechanisms through which the members may communicate with their respective community. Bhatia suggests that community members, as experts of the community, are more knowledgeable about the construction and the use of particular genres and their intended communicative purposes than those outside.

Taking into consideration all these different, but overlapping definitions of the concept of genre, I would argue that they share common ground in the sense that genre involves the interaction of a social purpose with a performed social activity, leading to creating and producing a particular text and, as such, it is a highly context-sensitive construct. I will discuss the three main traditions of genre theory in the following section.

2.2.2 Genre studies in three schools

According to Hyon (1996), genre scholarship can be classified into three traditions, namely *the New Rhetoric School*, the *Australian Systemic Functional Linguistics* (SFL) and the *English for Specific Purposes* (ESP) approach. These three traditions of genre analysis have conceptual overlaps as well as differences in terms of the research and pedagogies they encourage. These differences and overlaps were alluded to in the section above, and will now be discussed in detail.

2.2.2.1 New Rhetoric Approach

Freedman and Medway (2003), from the perspective of *the New Rhetoric Approach*, view genre as dynamic texts shaped and influenced by other related texts and utterances of the sociocultural context. Genres are used to fulfil actions in different situations. The objective of New Rhetoric studies is primarily to serve the needs of university students and novice professionals to help them understand the complex relations between text and context (Hyon, 1996). Johns (2002), however, argued that the context not only consists of the traditional rhetorical situation, such as audience, purposes, and occasion, but also involves who and what texts are in power. With the aim of uncovering the attitudes, values, and beliefs of the communities of text users that genres imply and construct, Artemeva (2008) and Coe (2002) explained that this approach is concerned with the sociocultural context of different text types, including ethnographic descriptions of a particular community and knowledge of and writing styles within genres in a given community. Studies in the New Rhetoric School, therefore, principally focus on the role of social, cultural, and institutional

contexts and the way they interact with text and affect the manifestation of a particular genre (Freedman & Medway, 2003).

New Rhetoric researchers argue that ESP and SFL approaches over-emphasise the conventional nature of the text. Such linguistic approaches also fail to take account of the multiple purposes of genres; of the different purposes of reader and writer or speaker and hearer; and of how purposes develop as a genre progresses (Johns, 2003). As opposed to the ESP approach, genre studies in the New Rhetoric focus more on situational context than linguistic forms, and emphasise "social purposes and the actions resulting from these purposes within specific situations" (J. Flowerdew, 2011, p. 132).

With regard to the pedagogic dimension, most researchers in this tradition disagree with the possibility of teaching written genres in classroom settings as they suggest that genres are constantly evolving through the dynamic process of interaction in a context or social interaction. Hyland (2004a) argues that a classroom appears to be an inauthentic environment that cannot fully provide the quality of the complex nature of negotiations and audiences that an actual situation has. This genre theory generally lacks an explicit instructional application for teaching students the language features and functions of academic and professional genres (Hyon, 1996). Adam and Artemeva (2002) contend that, without explicit instruction, genre can be learned and taught as people learn to use genres at home, at work, or in a community.

Nevertheless, a New Rhetoric approach to teaching and learning of English in EAP classes was applied in Adam and Artemeva's (2002) study at a Canadian university. They argued that teachers have to be experts in the academic field, in both content and language use to be able to teach EAP. After findings obtained from a study on the conversational mode on the course newsgroup, they concluded that the use of electronic discussion groups could allow students to learn both content and create appropriate response to the rhetorical situations they will meet in disciplinary classrooms. At the end of the course, the students had learned how to participate in the discussion, to listen to others' opinions, and to consider their ideas in light of new information. The study concludes that content is important, but teachers and curriculum developers need to be experts in academic fields to evaluate how they teach and what they require students to do and learn in EAP classes.

2.2.2.2 Systemic Functional Linguistics Approach

Systemic Functional Linguistics (SFL) theory is associated with the University of Sydney in Australia. SFL approaches to genre have been centred on primary and secondary schools as well as adult migrant English education and workplace training programmes (Macken-Horarik, 2002). The approach focuses on the close correlations between language and its social function which are a characteristic of specific genres (J. Flowerdew, 2011). Using systemic functional grammar as an analysis tool, this approach aims to explain how language is systematically linked with context through patterns of lexico-grammatical and rhetorical features, and how language is structured for its different usages (Eggins, 2004).

Martin (1984) views genre in the SFL approach as "a staged goal oriented and purposeful activity in which speakers engage as members of our culture" (p. 25), while Eggins (2004) sees genre as "the staged, structured way in which people go about achieving goals using language we are describing genre" (p. 10). Focusing on social contexts and how texts are constructed, Kress (1989) stresses that the context and social occasions which shape the use of language should be prioritised in defining genres. For Kress, genre refers to texts with "specific forms and meaning which are derived from the functions, purposes and meaning of the social occasions … some examples of genre are interview, essay, conversation, tutorials, sports commentary, seduction, office memo, novel, political speech, editorial, sermon, joke and instruction" (p. 19).

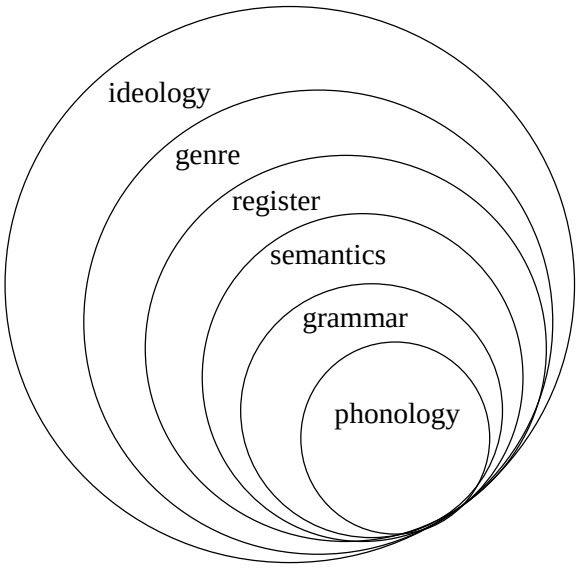
Eggins (2004) makes a link between genre and the earlier Hallidayan idea of Register (Michael A Halliday & Hasan, 1989). She supports the explanation of the relationship between text and context provided by Michael A Halliday and Hasan (1989), indicating that "it is possible to identify parts of the language system that are concerned with realising each type of the register variable" (Eggins, 2004, p. 76). She argues that a genre develops when particular values for *field*, *tenor* and *mode* which are identified by *register* tend to linguistically co-occur and eventually become stabilised in the speech community.

Similar to Halliday and Eggins, Macken-Horarik (2002) suggests critical aspects of context. Macken-Horarik explains that the context of situation can be realised in the following domains: 1) *genre* describing the goals or purposes of the

users, affecting the schematic structure and type of text; 2) *field* referring to the subject matter or the social activities of the texts; 3) *tenor* pertaining to the relationship of the participants engaged in the communicative events, including the status, familiarity, and degree of feeling assumed in the interaction; and 4) *mode* denoting how language is being used with respect to the channel or medium selected for the communication.

Martin (1993) viewed genre as a combination of "language and its semiotic environment" (p. 132), and suggested a conception of language as social semiotic system. Again, with reference to Michael A Halliday and Hasan (1989), Martin (1993) added three more communication planes to the genre concept, including *register*, *genre*, and *ideology*. To illustrate, register here refers to the context of a situation, while genre refers to the context of culture and social purposes. Ideology deals with the whole ensemble of language in social context. Martin's (1993) ideas regarding the relationship between genre, register, and ideology is presented in the following figure.

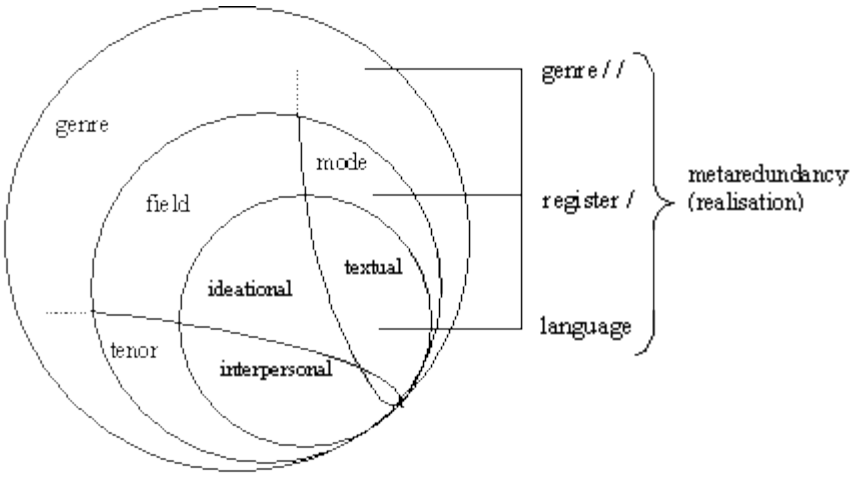
Figure 2-1 Language and context in the SFL perspective (Martin, 1993, p. 132)



Subsequently, in 1997, Eggins and Martin (1997) represented genre as an aspect of a comprehensive social semiotic theory of language and context. The 1997 model demonstrates the differences and relationship between register (as mode, field, and tenor), and genre. This new model indicates that language is made up of knowledge of sound systems of phonology, clausal systems of lexico-grammar, and textual systems of semantics and discourse semantics. Furthermore, since a language variety functionally associates with particular contextual or situational parameters of variation, characterised by its linguistic features, the patterns of discourse for

expressing meanings in context, and the basic components of meaning, or macro-functions, are controlled by meta-functions of language, comprising *ideational*, *interpersonal*, and *textual*. The following diagram demonstrates how language is related to the situational parameters of variation.

Figure 2-2 Genre as an additional stratum of analysis beyond tenor, field and mode (Martin & Rose, 2008, p. 17)



With respect to pedagogic implications, the SFL approach has been applied to classroom settings most consistently in the Australian school system (Feez, 2002). Hyon (1996) suggests that, in class, teachers first present model texts from a genre and discuss text features with students, then assist them to explore the genre's social purposes. When the students become comfortable with particular text types, they are given an increasing amount of independence and encouraged to negotiate text structure and content.

The SFL approach has also been greatly influential in L2 English language teaching, learning and pedagogical practices, particularly the process of teaching students to engage with and create texts (Hyland, 2007). Many teaching and learning cycles have been created as descriptive models suggesting classroom activities and input in order to increase students' ability to use their existing linguistic and cultural resources in the writing process (Burns & de Silva Joyce, 2005; Butt, Fahey, Spinks, & Yallop, 2000; Feez & Joyce, 1998). Please refer to Section 8.4 in Chapter 8 for a more detailed discussion.

At the curriculum level, to address the literacy needs of primary school students in Australia, Martin and Rose (2008), for example, conducted the "Writing Project" which involved a study of student writing. They categorised primary school text types or genres, resulting in five major genres of stories, histories, reports, explanations, and procedures. Each genre proposed in this project was characterised by distinctive schematic structures, which were in turn identified by typical lexico-grammatical and cohesive patterning. The results of this project have been adopted and applied to curriculum development in several schools in Australia.

2.2.2.3 English for Specific Purposes Approach

The English for Specific Purposes (ESP) approach to genre was initially developed in the UK and then in North America. This approach is based on Swales' pioneering work (1990) on the discourse pattern and linguistic features of written language in academic and research settings, and then Bhatia's (1993) work in professional discourse. To Swales (1990, 2004), genre represents a class of structured communicative events associated with particular discourse communities who regularly participate in a given genre and who share a set of communicative purposes.

Hyland (2004a) pointed out that the ESP approach is more interested in linguistic analysis than the New Rhetoric approach, and more oriented to the role of social discourse communities than the SFL approach. Inspired by Swales, most ESP research aims to investigate the relationship between the communicative purposes of genres, the structures, and meanings of text as it is believed that the text is expressed in the staged or sequenced manner (J. Flowerdew, 2011). In this manner, both the functions and forms of the text can be analysed to see how they are used to achieve communicative goals of the text.

In order to address the needs of non-native speakers of English learning to read and write RAs proficiently, Swales proposed the model of RA Introductions called the Create a Research Space (CARS) model in 1990 and went on to fully develop it in 2004 (see Section 2.3.1 for further information). The model represents the organisational structure of texts and the conventional linguistic features associated with a particular genre. It argues that a text is built up systematically through a series

of what are called *moves* and *steps* (Swales, 1990), or *strategies* (Bhatia, 1993). These moves and steps may be considered "obligatory or optional, may vary in their sequencing, may be repeated, and may be embedded one within another" (Swales, 1990, p. 58). From this perspective, I would argue that knowing the schematic structures and the specific form-function correlations of each stage is vital for those who participate in a genre, but do not feel themselves to have a command of these specific patterns. Because these structural patterns are part of the socio-cognitive domain of discourse shaped by the communities, this knowledge is needed where non-native speakers try to compete with native speakers in academic and professional contexts (J. Flowerdew, 2011).

With regard to the application to pedagogy, the ESP approach has been extensively applied to teaching, especially ESP or EAP writing instruction (Hyon, 1996). According to Paltridge (2001), the ESP approach is mostly used to teach international students in English-medium universities in English-speaking countries and elsewhere to improve their writing performance.

Swales and Feak (2004, 2012) put genre knowledge into practice by providing models of academic genres as well as tasks to help non-native speaking graduate students and researchers to master the discourse conventions of a variety of genres in their own writing. All tasks and activities presented in their book emphasise the analysis of the rhetorical structures and linguistic features necessary for academic and research writing. The students are required to use their analytical skills to discover the discourse and linguistic properties of the specific genres, explore, and discuss how effective academic writing in specific disciplines is achieved. Even though specific ideas about teaching methods to be used when teaching genre in the classroom are not explicitly described, most of the tasks, activities, and text samples presented in their book have the potential to raise readers' awareness of research genre, and to enable students to organise the texts in ways that meet local conventions and yet create a space for themselves.

Bhatia (1993) used genre knowledge to develop learning materials to be used as self-access supplements for several polytechnics in Singapore. These materials aim to promote an awareness of linguistic systems underlying a particular genre and offer a genre-specific explanation of why certain features of language contribute to the

specific values in the individual genres. The learning materials consist of a wide range of genres, including sales promotion letters, business memos, job application letters, laboratory reports and project reports. In each genre, the materials start by providing a model example of a particular genre, focusing on the communicative purpose, organisational structure, and language use encountered in that genre. They are followed by three worksheets focusing on: 1) the main discoursal strategies conventionally used to achieve communicative purposes in specific genres, 2) the use of linguistic features and their grammatical explanation appropriate for rhetorical moves and the genre, and 3) editing and revising exercises with explicit guidelines enabling students to concentrate on improving variations in style, grammatical appropriateness, and other aspects of genre construction. Bhatia's work, therefore, helps us understand what should be focused on and taught in the classroom according to the ESP approach to teaching of genres, particularly professional genre.

Given the objectives of the present study, Swales' ESP approach is the most appropriate research tool for three main reasons, based on its approach to textual analysis and its application contexts. First, the strength of the ESP approach lies in its situating academic discourse socially and in relation to rhetorical goals (Swales, 1990, 2004). Second, the theory basically considers the genre by seeing the schematic structures as macro-structures and then moves to the level of lexico-grammatical features as micro-structures. It tries to link the functional aspects of a text to its formal properties. Third, the theory aims to target non-native speakers of English in academic and professional settings (Bhatia, 1993, 2002, 2004; Swales, 1990, 2004; Swales & Feak, 2004; Thompson, 1994; Widdowson, 1993, 2007). In the following section, I will discuss Swales' move-based genre analysis in detail.

2.3 Swales' Genre Analysis

In this section, I draw primarily on Swales' move-based analysis (Swales, 1990, 2004), as it provides a description of the communicative purpose of the text associated with macro-level structures of the text. Firstly, Swales' analytical framework of move and step analysis is presented. Subsequently, some previous studies using Swales' move analysis framework are reviewed to analyse texts in various genres.

2.3.1 Swales' framework of move and step analysis

As discussed above, Swales' framework was originally designed to help non-native speakers of English in a university setting to master the macro-level of organisational structures and the micro-level of linguistic features conventionally used in texts required in their disciplines and professions (Hyon, 2002; Swales, 1990). The labels of 'genre analysis' and 'move analysis' tend to be interchangeably used in this framework. The basic aim of move analysis is to consider and describe texts as a sequence of 'moves', where each move presents a stretch of text serving a particular communicative function. Each move, thus, not only has its own purpose but also contributes to the overall communicative purpose of the genre.

A move can be identified as a segment of text performing a specific communicative purpose, and therefore a text consists of a series of moves. Some moves occurring more frequently than others can be classified as obligatory, or optional if moves do not occur frequently over a series of texts in a genre. Each move can contain a number of elements, which are referred to as 'steps' by Swales (1990, 2004) or 'strategies' by Bhatia (1993). The constituent step(s) of a move primarily function to achieve the purpose of the move to which it belongs. To be precise, a move captures the function and purpose of a segment of text at a more general level, whereas a step presents more specifically the rhetorical means of realising the function of the move. The set of steps for a move is, thus, the set of rhetorical choices most commonly available to authors to realise a certain communicative purpose.

Swales (1981) analysed 48 RA Introductions written in English from diverse disciplines, including the hard sciences, social sciences and life and health sciences. By categorising units of discourse in the text according to their communicative functions, Swales found that, although his corpus was taken from different academic disciplines, the notion of an RA Introduction as a single genre could be argued for. The study led him to propose the original framework for RA Introductions consisting of four moves as follows:

Move 1: Establishing a territory

Move 2: Summarising previous research

Move 3: Establishing a niche

Move 4: Occupying the niche

Subsequently, due to a difficulty in separating the first two moves in his original framework, Swales (1990) offered a modified version of his framework by merging the first two moves, resulting in only three underlying distinct move and step patterns. This modified model is called Create a Research Space (CARS) consisting of a preferred three-move schema for RA Introductions, as presented in the following figure.

Figure 2-3 Swales' CARS model for article Introductions (Swales, 1990, p. 141)

Move 1	**Establishing a territory**
Step 1	Claiming centrality and/or
Step 2	Making topic generalisation(s) and/or
Step 3	Reviewing items of previous research
Move 2	**Establishing a niche**
Step 1A	Counter-claiming or
Step 1B	Indicating a gap or
Step 1C	Question-raising or
Step 1D	Continuing a tradition
Move 3	**Occupying the niche**
Step 1A	Outlining purposes or
Step 1B	Announcing present research
Step 2	Announcing principal findings
Step 3	Indicating RA structure

Swales' CARS model can be considered as one of the most popular analytical models used to describe text structures, and widely accepted for its contributions and implications for ESP and EAP learning and teaching situations (Anthony, 1999; Hyland, 2003, 2007; Kanoksilapatham, 2013, 2015; Paltridge, 2002). However, certain criticisms underlining Swales' 1990 model have arisen probably because it has been extensively used in other academic disciplines and professional genres (see Sections 1.2.5 and 2.3.2. for examples). Eventually, incorporating the findings generated from these genre-based studies conducted on RA Introduction sections from various academic disciplines during the last two decades, Swales (2004) modified the CARS model to reflect the contemporary structural pattern of RA Introductions. A 2004 revised model of CARS is presented in the following figure.

Figure 2-4 Swales' revised model for research article Introductions (Swales, 2004, p. 230, 232)

Move 1 **Establishing a territory*** via**
Topic generalisations of increasing specificity

Move 2 **Establishing a niche*** via**
Step 1A Indicating a gap or
Step 1B Adding to what is known
Step 2 Presenting positive justification*

Possible recycling of increasingly specific topics

Move 3 **Occupying the niche**
Step 1 Announcing present research descriptively and/or purposively (obligatory)
Step 2 Presenting RQs or hypotheses*
Step 3 Definitional clarifications*
Step 4 Summarising methods*
Step 5 Announcing principal outcomes**
Step 6 Stating the value of the present research**
Step 7 Outlining the structure of the paper**

* *Optional and less fixed in order*
** *Probable in some academic disciplines*
*** *Possible cyclical patterning of moves particularly in longer Introductions*

The major changes in this 2004 revised model concern the cyclical status of moves in two respects. First, the literature review is no longer restricted to Move 1, but can appear in all moves. Move 1 and Move 2 also have a potentially cyclical nature, depending upon the discipline in which the Introductions are written (Swales, 2004, p. 230). Secondly, the number of steps in Move 3 has been expanded from three to seven, with one obligatory, three optional and three PISD (probable in some disciplines, unlikely in others), in response to disciplinary variation. In short, an important point made by Swales is that moves and steps can occur in any order, especially in Move 1 and Move 2, as some of them are obligatory and some of them are optional.

Swales' model in its various iterations has been applied to the Introduction section of RAs in many disciplines (e.g. Hirano, 2009; Kanoksilapatham, 2013; Loi, 2010; Ozturk, 2007; Samraj, 2002, 2008). It has been extended beyond Introductions

to serve as a foundation for research into the four conventional sections of empirical RAs (Introduction, Methods, Results, and Discussion or IMRD prototypical structure) in a range of discipline-specific and cross-disciplinary studies (Arsyad, 2013; Bruce, 2009; Chang & Schleppegrell, 2011; Hirano, 2009; Kanoksilapatham, 2005, 2012a, 2012b, 2012c, 2013, 2015; Lim, 2006, 2010; Loi, 2010; Nwogu, 1997; Ozturk, 2007; Peacock, 2011; Samraj, 2002, 2005, 2008; Tessuto, 2015; I. A. Williams, 1999; Yang & Allison, 2003). These studies have demonstrated the power of genre analysis as an analytical tool to reveal how academic text is constructed and facilitate the development of learning and instruction materials (Stoller & Robinson, 2013). A review of studies of RAs is presented in the following section.

2.3.2 Previous move-based studies of research articles

A multitude of studies have been conducted on individual sections of RAs. Focusing on the Introduction section, Samraj (2002), for example, analysed the Introduction sections of 12 RAs on wildlife behaviour and conservation biology using Swales' (1990) model of move analysis. The study revealed that "background information" of wildlife was usually found, and RAs often begin with establishing the importance of the general topic within which the research being reported is situated. Centrality claims and generalisations key to the area of interest may be explicitly stated. In addition, Samraj's study showed that citations were not limited to Move 1, but could play a vital role in every move of the Introduction section of the two disciplines, particularly in Move 2. This finding is one of the reasons the CARS model proposed in 1990 was modified to account for the discourse features found in the Introduction of the two disciplines, contributing to the revision of the CARS model in 2004.

With the intention of investigating cultural differences in writing, using Swales' (1990, 2004) framework, Loi (2010) investigated the rhetorical patterns of 20 English and 20 Chinese RA Introductions in the field of educational psychology. Chinese RA Introductions were found to use fewer moves and steps than English ones. Although the move pattern of M1-2-3, as outlined in the CARS model, appeared to be a common move sequence in writing the Introduction section of RAs, Loi suggests that cultural differences might explain the variations.

A comparative study was conducted by Hirano (2009) on the structural organisation of RAs written in English and in Brazilian Portuguese. Hirano analysed 10 RAs from *English for Specific Purposes* published in English, and 10 RAs from *The ESPecialist* published in Brazilian Portuguese. Using Swales' (1990) CARS model, the findings were very intriguing, showing significant deviation from the structure proposed by the CARS model. Seven Introductions taken from *the ESPecialist* did not contain Move 2: Establish a niche. Furthermore, none of them followed a strict move pattern of M1-2-3, but the only move pattern frequently repeated was the M1-3 pattern. Nonetheless, the articles written in English followed the pattern proposed by the CARS model more closely. Similar to Loi (2010), this study highlighted the importance of cultural variation in respect to solidarity with the local research community. Hirano suggests that Brazilian writers may avoid the strategy of establishing a niche for one's research because doing so exposes a state of ignorance on the part of the scientific community, which may invoke a negative attitude from other researchers.

Ozturk (2007) analysed 20 RA Introductions sampled from two journals in the field of applied linguistics: *Studies in Second Language Acquisition*, and the *Journal of Second Language Writing*. Employing Swales' (1990) CARS model, the analysis conformed to the predominant pattern of M1-2-3 proposed in the model. Additionally, the patterns of M1-2-1-3 and M1-3 were shown to be predominant in the organisation of the RA Introduction section in these journals. The study suggested that the two sub-disciplines of applied linguistics displayed cyclical occurrence of Move 1, intervening between Moves 2 and 3. Ozturk also pointed out that the patterning might be explained by referring to the editorial policy of the journals analysed.

To explore how RA authors achieve an authoritative voice in writing the RA Introduction section, Chang and Schleppegrell (2011) conducted an insightful study combining the Engagement framework, a part of Appraisal theory in SFL (Martin & White, 2003), with the linguistic resources identified through that framework with Swales' moves (Swales, 1990, 2004). Focusing on the Engagement system, especially heterogloss divided into expand (entertain and attribute) and contract (disclaim and proclaim), the study showed that, first, Move 1: Establishing a territory, and Move 2: Establishing the niche, could be accomplished by linguistic realisations, e.g. modality of probability (may, might, perhaps, probably), evidentials (seem, apparently),

conditionals (unless, when), and questions. These features enable the article writers to review related research by hypothesising, exploring assumptions, comparing and generalising the results. Concerning contracting options, the analysis revealed that the writers could build up an assertive argument to explicitly introduce the gap in other previous research and the foci of the study (e.g. but, however, unfortunately). This occurs at the very end of the Introduction section. Their study highlights the significance of macro- and micro-analysis, elucidating that "different lexico-grammatical use can be deployed to achieve the same rhetorical purposes identified by move analysis equally convincingly" (Chang & Schleppegrell, 2011, p. 148). This study facilitates knowledge of developing an authoritative stance, and how interpersonal meanings are presented when writing an RA Introduction.

With regard to the Methods section, according to Swales and Feak (2012), this section includes a variety of headings and subsections that might deal with materials, definitions employed, the participants in the study, and the statistical procedures used. Disciplinary differences and the type of study being conducted can result in the difference of the presentation of the Methods section. It can vary in terms of how much information and explanation are described so that readers understand what was carried out in the study. As a result, Swales and Feak (2012) classified the Methods sections into two types: condensed and extended. Condensed methods includes information with little elaboration or justification, while extended ones present readers with considerable detail and a rationale of why and how researchers did what they did in the study.

Lim (2006) analysed 20 Methods from high-status management journals: *Journal of Management* and *Academy of Management Journal*. The findings indicated that the Methods section consisted of three major moves: 1) Describing the data collection procedures, 2) Delineating procedure(s) for measuring variables, and 3) Elucidating data analysis procedures. Each move consists of a number of steps. For instance, Move 1 consists of three steps: Step 1) Samples (location, size, and characteristics of population); Step 2) Detailing experimental procedures; and Step 3) Justifying procedures by stating advantages and disadvantages. To confirm the findings of the move analysis, four specialist informants who had had their RAs published in national and international refereed journals were interviewed. The results of move analysis were mostly congruent with the aspects specified by the four

specialist informants in that the descriptions of the Methods basically consisted of: 1) the sample and sampling technique, 2) data collection procedures, 3) the use of the instrument(s), and 4) procedures for measuring variables and/or data analysis procedures.

Peacock (2011) compared the rhetorical structures of 288 RA Methods sections across eight disciplines of physics, biology, chemistry, environmental science, business, language and linguistics, law, and public and social administration (36 for each). The study revealed that most of the Methods sections from these disciplines consisted of seven possible moves: Overview, Research aim/question/hypotheses, Subjects/materials, Location, Procedure, Limitations, and Data analysis. Similarities and disciplinary variations regarding rhetorical structure of these Methods sections were reported. For instance, Move 5: Procedure was found in all 288 Methods, whereas two other moves (Move 3: Subject/materials and Move 7: Data analyses) were very common in biology, chemistry, and physics. This finding suggests differences in move types across these disciplines.

Following the model of Lim (2006) and Peacock (2011), Arsyad (2013) explored the structural organisation of 51 RA Methods written by Indonesian researchers. He confirmed that the model was effective enough to capture the communicative units or moves in the Indonesian RA Methods section. However, regarding the occurrence of moves and steps, a few minor differences compared to the findings of Peacock (2011) and Lim (2006) were found. For example, 'statistical testing' was a common step in the Methods section, especially in quantitative research; however, this step was not included in Lim's finding. Moreover, Move 1: Overview of research method, was the dominant move in the Indonesian RA Methods sections, but not in Peacock's data as it was rare in biology, chemistry, and physics. Again, Arsyad's (2013) study highlights the importance of variation across disciplines and individual styles of writing.

Regarding the Results section, I. A. Williams (1999) analysed a small sample of eight Results sections in medical RAs, and ten moves were found. These moves are: 1) Pointer; 2) Structure of section; 3) Procedures; 4) Statement of findings; 5) Substantiation of findings; 6) Non-validation of findings; 7) Explanation of findings; 8) Comparison of findings with literature; 9) Evaluation of findings referring to

hypothesis; and 10) Interpretation of findings. Williams also reported that the Results sections were usually further segmented into sub-sections, indicating the complexity and diversity of the research being reported and the prevalent disciplinary variation.

Similar to Williams, Nwogu (1997) analysed the four sections of 30 texts selected from five medical journals. The analysis revealed eleven moves: 1) Presenting Background Information; 2) Reviewing Related Research; 3) Presenting New Research; 4) Describing Data Collection Procedure; 5) Describing Experimental Procedure; 6) Describing Data-Analysis Procedure; 7) Indicating Consistent Observations; 8) Indicating Non-Consistent Observations; 9) Highlighting Overall Research Outcome; 10) Explaining Specific Research Outcomes; and 11) Stating Research Conclusion. Specifically, the first three moves were found in the Introduction section, whereas Moves 4, 5 and 6 were in the Methods section. The Results section comprised Moves 7 and 8, and Move 9 to Move 11 appeared in the Discussion section. As can be expected, each move consisted of a number of steps, which corroborates Swales' notion of the schematic structure of the discourse.

The comparison of the findings of the two comparable studies (Nwogu, 1997; I. A. Williams, 1999) focusing on the Results section showed that their findings were not identical and were even incomparable. These discrepancies could be possibly due to different writing styles and the lack of systematic compilation of the datasets analysed in terms of the journal selection criteria. Additionally, the fact that move analysis is driven by the interpretation of textual meanings means that rhetorical macro-structures in RAs could be diversely interpreted by different individuals.

Yang and Allison (2003) analysed a sample of 20 Applied Linguistics RAs. They investigated structural organisation of the Results and Discussion sections separatedly and found six moves in the Results sections, consisting of: 1) Preparatory information, 2) Reporting results, 3) Summarising results, 4) Commenting on results, 5) Evaluating the study, and 6) Deductions from the research. Move 1: Preparatory information was a dominant move; however, its occurrence was not as high as Moves 2 and 3. Reporting results and commenting on results were reported to occur frequently in the Results section. As for the Discussion sections, Yang and Allison found three distinct rhetorical moves: 1) Summarising the study; 2) Evaluating the study; and 3) Deductions from the research. Move 1 was the most frequent move

based on its occurrence and cyclical nature. Even though reporting and commenting on results were reported in both sections (found as moves in the Results and steps in the Discussion), the study claims that the Discussion section focused more on commenting on specific findings, while the Results section was more concerned with highlighting the major findings and evaluating the study being presented.

Congruently with Yang and Allison (2003), a study on the Results section by Bruce (2009) investigated the Results sections of 20 RAs taken from the two disciplines of sociology and organic chemistry. Bruce followed the proposal of Bhatia (2004), consisting of three levels of textual analysis: 1) textualisation of lexico-grammatical resources; 2) regularities of organisation of discourse; and 3) contextualisation of discourse. The study, congruent with other previous studies in other disciplines, demonstrated that this section across disciplines was rhetorically different, displaying the use of different combinations of moves and steps. Similar to Lim (2006), Bruce conducted a semi-structured interview with a sociologist and an organic chemist, and reported that significant differences between these two disciplines were found in terms of the use of context, epistemology and writer stance in writing the Results section of RAs.

Kanoksilapatham's (2012a, 2012b, 2012c) studies are enlightening. Her studies focused on three closely related disciplines in the field of engineering: civil, software, and biomedical engineering. Each of the three datasets representing the three disciplines consisted of 60 RAs, yielding 180 RAs in their entirety. The comparison of rhetorical structures of each section across these disciplines is intriguing. For instance, in the Introduction section, the move "Reviewing literature" found in every discipline varied a great deal in terms of its frequency of occurrence. That is, the presence of this move in civil engineering and biomedical engineering was very high, with 93% and 98% of occurrence, respectively. In contrast, the presence of this move in software engineering was much lower (73%). This finding implies that even though the Introduction sections of RAs seem, to a certain extent, to follow the structural model outlined, each discipline has its own preferred rhetorical pattern that might be identical to, or vary from, the model in terms of presence/absence of moves and frequency of occurrence.

Some researchers have explored the entire structure of RAs written in English by determining the discourse units in a representative sample of texts from a particular discipline. For example, Tessuto (2015) investigated the overall generic structure of empirical law RAs together with communicative move categories represented across internal sections. The corpus was 90 law RAs taken from three journals published in 2010 to 2012. Adopting genre models from previous empirical research, namely Abstracts (Bhatia, 2014; Hyland, 2004c; Swales, 2004), Introduction (Swales, 2004), Methods (Peacock, 2011), Results (Brett, 1994), Discussion (Dudley-Evans, 1994; Peacock, 2002; Swales, 1990), and Conclusion (Yang & Allison, 2003), Tessuto has argued that the IMRD framework for empirically grounded research papers was not the defining characteristic of the articles published in the law discipline. The Background Review section was considered an expansion of the key points stated in the Introduction section by placing a research problem in a detailed context, whereas the Conclusion section was seen as a 'free-standing' section (Tessuto, 2015, p. 18). The study indicated that the structural model was represented by hierarchically organised structural sections with 25 rhetorical moves, namely six in the Abstract, three in the Introduction, three in the Background Review, three in the Methods, three in the Results, four in the Discussion, and three in the Conclusion. Tessuto also observed that legal research styles deal with 'interdisciplinary engagement' (p. 23) in that authors in the law discipline employ methods used in other social science disciplines to generate empirical data for analysis and discussion in order to answer the research questions established.

Wannaruk and Amnuai (2015) showed that a move-based study is just as important when it comes to reading and writing an RA. They reported on the comparison of the rhetorical organisation of English RAs in the field of Applied Linguistics written by Thai authors and those written by authors of different nationalities. Drawing on move-based genre analysis, Wannaruk and Amnuai used different move models to identify the organisation of the internal sections of 60 articles of the two corpora (30 each). These models included Swales' (2004) model for the Introduction section, Peacock's (2011) model for the Methods section, and Yang and Allison's (2003) model for the Results and Discussion section. Wannaruk and Amnuai described the occurrence of the rhetorical moves of the two corpora as similar, but they differ in presenting gaps in research and describing the process of data analysis.

They suggested that our understanding of academic language, especially the use of linguistic features, needs to be enhanced through more research on the pivotal role of linguistic features in developing academic language proficiency and publication writing. The study can provide support for novice writers and researchers by developing their understanding about how language works and how to construct an RA in the Applied Linguistics field.

Most of the works on structural patterns reviewed above indicate that, although Swales' CARS model was very informative and solid, the scrutiny of individual disciplines demonstrated that each discipline has its own unique characteristics. Many studies have analysed a small number of texts which were subjectively selected (Anthony, 1999; Basturkmen, 2009). Some studies did not clearly report linguistic features prevalently used in each move identified. In addition, most previous studies have focused on individual RA sections. Only a few studies (Ackermann & Chen, 2013; Kanoksilapatham, 2015; Pho, 2008; Tessuto, 2015; Wannaruk & Amnuai, 2015) were conducted to scrutinise the overall organisation of RAs across IMRD sections, contributing to the fragmented knowledge of how an RA in its entirety is constructed.

In order to maximise the application of genre analysis for the benefits of scholars, and to enhance the opportunities for publishing research work of Thai researchers and graduate students, it is imperative that the rhetorical structure of every section of RAs be made explicit. Therefore, the present study aims to analyse Applied Linguistics RAs in all the four conventional sections. This study will first elucidate how Applied Linguistics RAs in TCI journals are structurally organised and will then use these insights in a pedagogic intervention to facilitate novice Thai scholars and graduate students to effectively share their knowledge in academic journals.

2.4 Phraseological Patterns

In recent years, with current technology, phraseological patterns have established themselves as an important field of study within corpus linguistics. Implications for the teaching and learning of language can be made, in writing academic works and RAs, and in several areas related to academic communication (Biber & Barbieri, 2007; Conrad & Biber, 2004; Cortes, 2004, 2013; Hyland, 2008a,

2008b; J. Li & Schmitt, 2010). It is commonly agreed that phraseological patterns play a facilitative role in learning and using a language because they represent fluent linguistic production, particularly in spoken language (Pawley & Syder, 1983), and academic texts (Biber et al., 1999; Conrad & Biber, 2004; Cortes, 2013; Hyland, 2008a, 2008b; McCulley, 1985; Nesi & Basturkmen, 2006).

2.4.1 Definition and characteristics of phraseological patterns

It seems appropriate to begin the discussion with a definition and features of phraseological patterns. A well-known study concerning phraseology was conducted by Altenberg (1998), who preferred to use the term "*recurrent word-combinations*" in investigating word patterns typically recurring in spoken English. The term "*lexical bundles*" was first defined in 1999 by Biber, Johansson, Leech, Conrad and Finegan to describe the patterns of "words that show a statistical tendency to co-occur" (Biber et al., 1999, p. 989). Lexical bundles are groups of three or more words that co-occur frequently and statistically in a register as "recurrent expressions regardless of their idiomaticity, and regardless of their structural status" (Biber et al., 1999, p. 990). Erman and Warren (2000) stated that they were "combinations of at least two words favoured by native speakers in preference to an alternative combination which could have been equivalent had there been no conventionalization" (p. 31). This definition is related to what Biber et al. (1999) discussed in that, based on our intuition, the word units considered to be lexical bundles must be unrecognised by language speakers and researchers. Fixed expressions or so-called idiomatic phrases that have fixed meanings and can be understood by language speakers, therefore, cannot be included because lexical bundles are distinct from those. Some examples of lexical bundles in academic prose, as suggested by Cortes (2004), are *as a result of, on the other hand, in the case of the, the context of the*, and *it is likely to*.

Given the umbrella of formulaic language, scholars differently define and use various terms in research on phraseology. For instance, the term "lexical bundles" is used in many studies (Biber & Barbieri, 2007; Biber et al., 2004; Biber et al., 1999; Chen & Baker, 2010; Conrad & Biber, 2004; Cortes, 2004, 2013; De Cock, 1998; Hyland, 2008b). Schmitt (2004) preferred the term "formulaic sequences", whilst "phraseology" and "phraseological patterns", introduced by Charles (2006) and

Granger and Meunier (2008), or "multiword constructions" by Liu (2012) were used to refer to sets of recurrent word combinations. As cited in Chen and Baker (2010), the terms referring to phraseological patterns include "lexical clusters" (Hyland, 2008a), "recurrent word combinations" (Altenberg, 1998; De Cock, 1998), "phrasicon" (De Cock, Granger, Leech, & McEnery, 1998), and "n-grams" (Forchini & Murphy, 2008; Stubbs, 2007). Among these terminologies, Wray's (2005, 2009) definition seems to be broad, and not strictly formulaic. She preferred to use the term "word sequences" and explained that they are stored in the mental lexicon and are, therefore, glued together in everyday discourse.

Even though several terms are used to refer to multi-word combinations, I would argue that these terms share some common ground in terms of phraseological patterns as they are a type of word combination or phrase frequently recurring in text, performing particular discourse functions (Cortes, 2004), helping to shape meanings and contributing to a sense of coherence in a text (Hyland, 2008b). Biber (2006) asserted that the identification of lexical bundles is a strictly quantitative activity, based solely upon frequency and distribution criteria obtained from computer programs. Cortes (2004, 2013) suggested that basic techniques employed to identify lexical bundles are word frequency counts, while concordance lines, lexico-grammatical profiles, and keyword analysis are techniques that can be used with phraseological units once they have been identified, in order to determine their pragmatic functions in context, and their occurrence in the texts. Given the fact that frequency is a key issue in analysing phraseological patterns, and their functions in context are one of the purposes of the present study, the analysis of phraseological patterns in this study involves both quantitative identification and qualitative interpretation.

The frequency criteria used for identifying phraseological units of meaning in previous studies differ, depending on the corpus size of each study. The cut-off point of strings[2], for example, which occurred over 10 times in a million words and appeared in 5 or more texts was employed in Biber et al.'s (1999) seminal work, whereas 40 times per million words was used in a work by Biber et al. (2004). Meanwhile, Hyland

[2] The word 'string' here refers to lexical strings which mean all the lexical items occurring sequentially in the corpus. According to Eggins (2004, p. 44), lexical strings are words that tend to cluster to build sets of words through an expectancy relation.

(2008b) decided on the more conservative cut-off of 20 times per million words, and only included those occurring in at least 10% of the texts. In contrast, as Nesi and Basturkmen (2006) discuss, researchers using smaller corpora often employ much lower cut-offs. Hence, to determine the cut-off point in identifying recurring word combinations, the size of corpus should be taken into account.

The identification of formulaic sequences needs to combine quantitative analysis and psychological judgement as corpus evidence alone might not be wholly convincing. Wood (2015) noted that it is necessary for a phraseological unit to be more than just frequent, and it needs to have a unitary meaning or function. Additional steps should be taken into consideration to eliminate meaningless combinations of words from functional analyses. Gilquin and Gries Stefan (2009) and Herbst, Faulhaber, and Uhrig (2012) also argue that a complementary use of corpora and a psycholinguistic approach are needed in conducting formulaic research. Wood (2015) explains that approaches to the identification criteria of formulaic sequences generally include frequency, range and function. However, due to the different types of data studied in the literature, the criteria used to determine formulaic sequences have changed over time, and perhaps somewhat overlap.

In addition to investigating phraseological patterns frequently occurring in a particular register and/or comparing those across disciplines, pragmatic functions of the strings are often categorised and ascribed as they express different communicative meanings in texts. The subsequent section presents functional classification of phraseological patterns with reference to previous studies.

2.4.2 Functional classification of phraseological patterns

In order to disambiguate the functions of phraseological patterns, Conrad and Biber (2004) investigated four-word bundles from a corpus of 3,929,500 and 5,331,800 words extracted from conversations and academic prose in English, respectively. After using concordance listings and making interpretations of their function in context, they placed bundles into groups unified by similar discourse functions, and then proposed the functional classification of the bundles comprising four general categories as follows:

1) **Stance Expressions** are usually used when speakers and writers would like to express their attitudes, ideas or assessments needed for the interpretation. The stance expressions include *I don't know if*, and *it is necessary to*. These expressions convey two major types of meaning, namely, epistemic (e.g. *I don't know what, I don't think so,* and *the fact that the*) and attitude/modality (e.g. *I don't want to,* and *I'm not going to*).
2) **Discourse Organizers** are expressions used to reflect relationships between prior and coming discourse. Two major functions of discourse organizers include topic introduction/focus (e.g. *do you know what, I tell you what*) and topic elaboration/clarification (e.g. *what do you mean*).
3) **Referential Expressions** are used to make direct reference to physical or abstract entities, or to textual contexts. Four types of referential expressions are identification/focus bundles (*one of the most*), imprecision bundles (*something like that*), specification of attributes including quantities (*per cent of the*), tangible attributes (*in the form of*), and intangible attributes (e.g. *the nature of the, in the absence of, the way in which*), and time/place/text references (e.g. *the end of the*).
4) **Special Conversational Functions** can be categorized into three groups, namely, politeness routines (*thank you very much*), simple inquiry (*what are you doing*), and reporting clauses (*I said to him*). This kind of function specifically occurs in conversation.

Conrad and Biber (2004, p. 64-67)

Subsequently, based on the findings generated by the corpora from a range of university lectures and written texts such as textbooks and learning materials from six major academic disciplines, Biber et al. (2004) revised the functional classification which is primarily inductive. As a bottom-up approach, they used concordance listing to examine the use of each bundle in its discourse contexts. Bundles that serve similar functions were then grouped together based on the typical meanings and use of each bundle. The revised functional classification is presented in the following table.

Table 2-1 Biber et al.'s 2004 functional classification of lexical bundles (p. 389-393)

Categories	Functions	Sub-categories and examples
- ***Epistemic stance expressions***	Express attitudes or assessments of certainty that frame some other propositions	**A. Personal epistemic bundles**: *I don't know if, I think it was, are more likely to, the fact that the* **B. Impersonal epistemic bundles:** *are more likely to, in the fact that the* **C. Attitudinal/modality stance bundles** - Desire bundles: *if you want to, I don't want to* - Obligation/directive bundles*: you need to know, you might want to, it is important to* - Intention/prediction bundles: *I'm not going to, what we're going to, it's going to be* - Ability bundles: *to be able to, can be used to*
- ***Discourse organizers bundles***	Reflect relationships between prior and coming discourse	**A. Topic introduction/focus bundles**: *what do you think, if you look at* **B. Topic elaboration/ clarification bundles**: *I mean you know, on the other hand*
- ***Referential bundles***	Make direct reference to physical or abstract entities, or to the textual context itself	**A. Identification/focus bundles**: that's one of the, those of you who, of the things that **B. Imprecision bundles**: or something like that, and things like that, and stuff like that **C. Bundles specifying attributes** - Quantity specification: *there's a lot of, how many of you* - Tangible framing attributes: *the size of the, in the form of* - Intangible framing attributes*: the nature of the, in the case of* **D. Time/place/text-deixis bundles** - Place reference: *in the United States* - Time reference: *at the same time, at the time of* - Text deixis: *As shown in figure, as shown in figure* - Multifunctional reference: *the end of the, the beginning of the*
- ***Special conversational functions***		**A. Politeness**: *thank you very much* **B. Simple inquiry**: *what are you doing* **C. Reporting**: *I said to him/her*

As shown in Table 2-1, Biber et al.'s (2004) functional classification includes four major pragmatic functions, consisting of 1) epistemic stance expressions; 2) discourse organizer bundles; 3) referential bundles; and 4) special conversational functions. It is noticeable that the classification in the table seems to refer to oral expressions. Most of the functions classified in this version are very similar to those of Conrad and Biber's (2004) functional classification of lexical bundles. However, Biber et al.'s (2004) revised version seems to be more comprehensive and exhaustive

as it can capture a wide perspective on phraseological unit functions, particularly multifunctional reference in time/place/text-deixis bundles, which is not included in Conrad and Biber's (2004) functional taxonomy.

Biber et al.'s (2004) functional classification of lexical bundles was widely used in a great deal of research (e.g. Biber & Barbieri, 2007; Herbel-Eisenmann, Wagner, & Cortes, 2010; Staples, Egbert, Biber, & McClair, 2013) and was later substantiated by Hyland (2008a, 2008b). Hyland's (2008a, 2008b) functional taxonomy was developed because the corpus used in Biber, Conrad and Cortes' (2004) study was from a variety of registers and academic disciplines, including spoken and written texts, while the focus of Hyland's study was on academic texts: Master's theses and doctoral dissertations from four different disciplines of electrical engineering, biology, business studies, and applied linguistics. Based loosely on Halliday's (M. Halliday, Matthiessen, & Matthiessen, 2014; Michael AK Halliday, 1994) linguistic macro-functions, clusters identified could be grouped into three categories: "research, or real-world clusters serve an ideational function, text-oriented clusters are combinations concerned with textual functions, and participant-oriented bundles express interpersonal meanings" (Hyland, 2008b, p. 49). The following table displays Hyland's (2008b) functional classification.

Table 2-2 Hyland's functions of lexical bundles in academic writing (Hyland, 2008b, pp. 13-14)

Functions	meanings	Sub-categories and examples
1) ***Research-oriented bundles***	Help writers to structure their activities and experiences of the real world	**Location - *Indicating time/place***: *at the beginning of, at the same time, in the present study* ***Procedure bundles***: *the use of the, the role of the, the purpose of the, the operation of the* ***Quantification***: *the magnitude of the, a wide range of, one of the most* ***Description***: *the structure of the, the size of the, the surface of the* ***Topic***: *related to the field of research, in the Hong Kong, the currency board system*
2) ***Text-oriented bundles***	Concerned with the organization of the text and its meaning as message or argument	**Transition signals - *Establishing additive or contrastive links between element***: *on the other hand, in addition to the, in contrast to the* **Resultative signals - *Mark inferential or causative relations between elements***: *as a result of, it was found that, these results suggest that* **Structuring signals - *Text-reflexive markers which organize stretches of discourse or direct the reader elsewhere in text***: *in the present study, in the next section, as shown in figure* **Framing signals - *Situate arguments by specifying limiting conditions***: *in the case of, with respect to the, on the basis of, in the presence of, with the exception of*
3) ***Participant-oriented bundles***	Focused on the writer or reader of the text	**Stance features - *Convey the writer's attitudes and evaluations***: *are likely to be, may be due to, it is possible that* **Engagement features - *Address readers directly***: *it should be noted that, as can be seen*

As the table depicts, Hyland's (2008b) categorisation of lexical clusters is in some ways similar to that of Biber et al. (2004), but greatly differs with regard to metadiscourse. It is possible that Hyland's (2008b) functional classification represents bundles exclusively found in written texts. The taxonomy, thus, reflects either the

writer or reader involvement in the text (L. Flowerdew, 2011). The taxonomy would seem appropriate for researchers who analyse and describe the functions of bundles of written texts. In this regard, both Biber's and Hyland's research on lexical bundles have provided insights into the functional differences between spoken and written texts (Biber, 2006; Hyland, 2008b).

2.4.3 Previous studies on phraseological patterns

Much corpus work focuses on quantitative data to examine phraseological patterns in academic contexts. Biber et al. (1999), for example, demonstrated their existence, be it in conversation or academic prose. According to Biber et al. (1999), lexical bundles are pervasive and have certain features, functions and meanings in academic discourse.

Biber and his colleagues' (1999) work has been extensively applied to describe how high-frequency words and phraseological patterns are used in spoken and written texts in various academic disciplines, such as published writing from history and biology journals (Cortes, 2004), RAs, doctoral dissertations and Master's theses (Hyland, 2008a, 2008b), spoken and written university registers, including both instructional and student advising/management registers (Biber & Barbieri, 2007), academic writing in arts, commerce, law, and science (Byrd & Coxhead, 2010), spoken university discourse (Hernández, 2013), TOEFL iBT writing section (Staples et al., 2013), university lectures and textbooks (Biber et al., 2004) and secondary mathematics classrooms (Herbel-Eisenmann et al., 2010). This line of research has been successfully extended to various academic texts and backgrounds of learners, for example, comparing the use of lexical bundles produced by Turkish, Chinese and American university students (Karabacak & Qin, 2013), and L1 Chinese students' L2 English and L1 English students (Chen & Baker, 2010). The knowledge of lexical bundles in RAs across different disciplines has now been extensively researched and observed, for instance, comparing lexical bundles usage in applied linguistics papers produced by professional article authors and Iranian graduate students (Jalali, Eslami Rasekh, & Tavangar Rizi, 2008), exploring lexical bundles in RAs in physics, computer engineering, and applied linguistics (Alipour & Zarea, 2013), and RA Introductions in soft and hard sciences (Cortes, 2013). Recent research in this area has

also focused on investigating collocations (Ackermann & Chen, 2013; Durrant, 2009; Durrant & Doherty, 2010), and creating academic word lists (Liu, 2012; R. Martinez & Schmitt, 2012; Simpson-Vlach & Ellis, 2010).

2.4.4 Previous studies on phraseology in published academic texts

Research into phraseology in published articles has also received significant attention from researchers in the field of Applied Linguistics and corpus linguistics over the years. Cortes (2004), for instance, compared three- and four-word bundles produced by university freshmen in writing composition and RA writers. In her study, the function of lexical bundles in academic prose of published authors in the field of history and biology and of students at three different levels in those disciplines was systematically identified. The findings revealed that lexical bundles used by these students had different functions, compared to those in published RAs. Specifically, university students used fewer target bundles in their written works than those found in the published journals. More interestingly, certain bundles used did not correspond to those employed by RA writers. In line with Swales (2004), Cortes suggested that novice writers and scholars need to acknowledge linguistic features, including lexical or grammatical and formulaic patterns commonly followed and expected in academic writing.

Hyland (2008b) investigated lexical clusters used in contrasting genres by analysing a corpus made up of 3,400,400 words taken from RAs, PhD dissertations and Master's theses, representing different academic disciplines of electrical engineering, biology, business studies, and applied linguistics. Similar to Cortes (2004), Hyland investigated forms, structures and functions of four-word bundles because he considered that they had clearer structures and functions than three-or five-word combinations. Following the conservative frequency criteria of 20 times per million words occurring in at least 10% of texts offered by Biber et al. (1999), Hyland found that *on the other hand*, *as well as the* and *in the case of* were the most frequently used bundles in academic disciplines. The study also revealed that there were more lexical bundles used by engineering academics than by those in biology, which used the smallest range of different bundles and the fewest bundles among the four disciplines. With regard to the grammatical patterns within the bundles, noun-phrase

with *of*-phrase fragment (*the temperature of the, the nature of the*) is the most common structure. This research is interesting in the fact that different subject areas have different usages of lexical bundles.

Hyland's study also offered a model of functional classification of lexical bundles because he found Biber et al.'s (2004) taxonomy to be problematic for two main reasons. First, Biber et al.'s functional classification was generated from a corpus of spoken and written registers, including texts from various sources, such as textbooks, campus conversations, course packs, etc. Second, since Hyland's study exclusively focuses on different academic written works, Biber et al.'s classification may not be effectively used to classify some specific functions of lexical bundles identified in his corpus (see Table 2-2 for detailed information on Hyland's functional taxonomy).

Jalali, Rasekh and Rizi (2008) conducted a comparative study exploring possible differences and similarities in reported usage of bundles by professional writers and graduate students in academic writing. A dataset of 1,217,963 words was compiled from two collections of academic texts. The first corpus included 201 articles from seven different journals in Applied Linguistics, while the second one comprised twenty-two Master's theses and twelve doctoral dissertations in Applied Linguistics written by Iranian postgraduate students. Focusing on four-word bundles, the bundles' structural categories proposed by Biber et al. (1999) were used as an analytical framework, while Hyland's (2008b) taxonomy was adopted to identify functional categorisation of the bundles. The findings are surprising as the frequency, structure and function of lexical bundles between students' theses and dissertations and RAs were different, even though the corpus was from the same discipline. Published academics appeared to be more dependent on phrasal rather than clausal bundles. At the functional level, research-oriented bundles were prevalent in both RAs and theses. The findings provide evidence supporting discrepancies in academic writing within the same academic discipline of Applied Linguistics.

With the assumption that formulaic expressions might be linked to Swales' (1990, 2004) move-based genre analysis, Cortes (2013) investigated the relationship between lexical bundles and rhetorical patterns captured by move-based genre analysis in RA Introductions across various disciplines. Even though a focus on disciplinary

differences in the use of lexical bundles in RA Introduction sections was not established as the main research objective, the corpus of one-million words, representing various disciplines, including soft and hard sciences (e.g. agronomy, applied linguistics, animal science, biology, business, chemistry, civil and material engineering, communication studies, computer science, economics, physics and astronomy, statistics, urban and regional planning) was subjected to the move-based genre analysis and corpus-based analysis. This corpus of 1,372 Introduction sections of RAs was selected from 56 journals available in the Published Research Article Corpus (PRAC). Cortes used a variation of the Lexical Bundle Program (LBP) that she developed in 2004 in identifying lexical bundles. The conservative cut-off point of 20 times per million words (pmw) was established for four-word bundles, and lower cut-off points were established for longer bundles: 10 times pmw for five-word bundles, eight times pmw for six and seven-word bundles, and six times pmw for any longer bundle that could be identified. In addition, the cut-off point for range (the number of texts in which a bundle has to occur) was kept at five or more texts in the corpus for all bundle lengths. Then, move-based genre analysis based on Swales' framework was conducted and the lexical bundles were identified with the moves and steps.

Cortes discovered that the RA Introductions generally followed Swales' sequence of basic move schema. Regarding the bundle functions, the analysis revealed that a group of lexical bundles was exclusively linked to one move or a step in a move, while some lexical bundles could occur across moves and steps. Cortes' study also demonstrated that matching the lexical bundles based on their functions and communicative purposes with each move type identified can give a clearer picture of some connections between linguistic features and move-schema theory.

The review of studies above provides descriptions of forms, patterns, pragmatic functions, and frequencies of multiword combinations recognised to be prevalent in published academic discourse. Some studies offer evidence of disciplinary variation that might have an influence on phraseology in texts. Furthermore, these studies demonstrate that a corpus-based approach is noteworthy for attempts to relate lexical and grammatical components to specific communicative functions of academic texts.

2.4.5 Previous studies on phraseological patterns in L2 writing

One much discussed aspect of phraseology is the differences of phraseological patterns produced by native and non-native learners, either to find the frequency of strings or to find their usage patterns (e.g. Alipour & Zarea, 2013; Chen & Baker, 2010; Karabacak & Qin, 2013; Staples et al., 2013). Chen and Baker's (2010) study, for instance, is one of the interesting works focusing on the differences of lexical bundles used in L1 and L2 academic writing. Initially, they found that Hyland's (2008a, 2008b) results might not represent all L2 students of English. Their study compared writing in one corpus of L1 Chinese learners of English, and two corpora consisting of expert authors and L1 English students. In order to categorise the lexical bundles, structural and functional comparisons were made between the three groups of different writing proficiency levels. Based on Biber et al.'s (2004) normalised frequency, the investigation revealed that published academic works had a wide range of lexical bundle use, whereas L2 student writing showed the smallest range. The bundle *in the context of* which was frequently used in written texts was used less in student corpora. As for the functional classification, referential bundles were highly used, whereas stance bundles were found to be the least frequent in each of the three corpora.

An interesting finding of Chen and Baker's study is that the use of lexical bundles in non-native and native student texts was not markedly different. Epistemic markers, particularly *be+likely to*, and discourse organizers such as Passive verb + prepositional phrase fragment (*can be regarded as*), Verb + *to*-clause fragment (*can be used to*), and Subject + verb (*this means that the*) were patterns frequently used by both groups of writers. This finding is partly in agreement with the results of Hyland's (Hyland, 2008a, 2008b) studies. Chen and Baker (2010) advocated that an editing process could possibly be of help to learner writers to achieve a more native-like style of lexical bundle use in the written academic genres.

A recent study by Staples, Egbert, Biber and McClair (2013) is somewhat different from previous studies in that they investigated the frequency, function and degree of fixedness of lexical bundles used by ESL writers across proficiency levels. To my knowledge, this is the first study comparing the use of lexical bundles and English proficiency levels. Based on their scores from the writing section of TOEFL

iBT, 480 test takers were classified into three proficiency levels: low, intermediate, and high, and then their lexical bundles usage was investigated. The corpus of this study consisted of a total of 249,417 words. Biber et al.'s (2004) functional taxonomy of lexical bundles was adopted for the functional identification. The investigation showed that the test takers with the highest proficiency level employed significantly fewer bundles than both the intermediate and the lowest level group. However, counter-intuitively, the lower proficiency level group seemed to use a greater number of bundles than other groups of writers did. It is claimed that writers with higher proficiency levels are able to use bundles more effectively than those in the lowest proficiency group who seem to use more bundles and rely on chunks of language when taking writing tests. Furthermore, a similar use of stance and discourse organizing bundles across proficiency levels was found. With respect to function of bundles, the writers used more bundles expressing the writer's stance overall. This finding does not corroborate Chen and Baker's (2010), and Hyland's (2008a, 2008b) claims reporting referential bundles are frequent in academic discourse. The findings of this body of work, thus, remain inconclusive and call for further validation of the findings.

The great discrepancy in the use of lexical bundles between native and non-native students was partially confirmed by Karabacak and Qin (2013) analysing lexical bundles in argumentative essays written by three groups of university students, namely Turkish, Chinese and American. A total of 14,569 words from each of the three student groups were analysed. The online newspapers *New York Times* and *SF Gate*, in total 29,532 articles published since 2007, were purposively selected as a reference corpus. Based on Biber et al.'s (1999) cut-off frequencies, the investigation revealed that lexical bundles found to be used most in the corpus of this study adhered to their findings. That is, the bundles, *at the same time, on the other hand, at the end of the, in the middle of the*, and others were frequently used in the corpus. However, perhaps unsurprisingly, given that the reference corpus was quite new and based on news text, the bundles, such as *this is the story of, and reproduced or reprinted without permission*, were exclusively found. The study also indicated that a small number of 78 of the bundles produced by Turkish and Chinese students were not used by their American counterparts.

However, in order to generalise Karabacak & Qin's finding, one needs to proceed with caution. Despite the corpus representing various texts from three

different groups of students, unlike other academic disciplines, newspaper language has unique characteristics with regard to its own rhetorical structures and style of writing (Conboy, 2010; Reah, 2002). This is a possible reason why the prevalence of some bundles identified differed from those in the student texts. The investigation, nevertheless, sheds some light on and partly confirms the previous findings of lexical bundle variation between native and non-native learners.

Alipour and Zarea (2013) explored and compared the frequencies of three- and four-word lexical bundles between three different disciplines: Computer Engineering, Physics, and Applied Linguistics, produced by native and non-native authors. The corpus was taken from RAs published internationally from 2005 to 2010 in prestigious journals of each discipline. The findings helped to show that substantial differences existed between native authors and non-native, Iranian authors, in employing lexical bundles in RAs. That is, the non-native authors made greater use of three and four word bundles, such as *the present study, based on the, the result of the, on the other hand*, than the native ones. Furthermore, different academic genres displayed different lexical bundles.

The aforementioned studies are representative of phraseology and description derived from textual investigations and comparisons of corpora, including specialised and available corpora, and native and non-native speaker corpora, etc. The knowledge generated from exploring phraseological patterns also extends to the creation of an academic word list useful for pedagogic purposes, which will be evident from the following section.

2.4.6 Previous studies on phraseological patterns and academic word lists

Researchers acknowledge the usefulness of phraseological studies, and they aim to use the findings for pedagogic purposes, especially by creating classroom materials to enhance student competence. Simpson-Vlach and Ellis (2010), for example, showed how to use an innovative combination of quantitative and qualitative criteria, corpus analyses, and instructor insights to find crucial formulaic expressions, arguing that frequency alone in identifying multiword combinations “does not necessarily imply either psycholinguistic salience or pedagogical relevance; common

sequences of common words, such as '*and of the*,' are expected to occur frequently" (p. 490). Their study combined measures of mutual information (MI) and frequency to investigate target corpora of academic discourse: MICASE, BNC files of academic speech, Hyland's (2004a) RA corpus, selected BNC files, and genre categories for the BNC. The study first used 10 WPMs as a cut-off criterion to identify three-, four- and five-word bundles. The MI score was then calculated to assess the degree to which the words in a phrase occurred together more frequently than would be expected by chance. Qualitatively, 20 experienced EAP instructors were invited to rate the formulas to determine whether the phases found were a formulaic expression, a phrase, or expression. This measure was used to exclude some lexical groups in their initial word lists and to determine the saliency or practicality for teaching of each lexical bundle. Correlation analysis was performed with qualitative judgement data and the quantitative statistics to reassure the reliability and validity of these instructor insights. All of the processes made it possible to identify multiword formulas and three functional categories were reached: referential expressions, stance expressions, and discourse organisers as suggested by Biber et al. (2004). The contrast and comparison category was added into the referential expressions group, and the discourse organiser category was modified. Moreover, Simpson-Vlach and Ellis collapsed the categories of desire and intention/prediction into one called volition/intention.

Simpson-Vlach and Ellis' (2010) findings are thorough and comprehensive, yielding an Academic Formulas list (AFL) which can be included and integrated in EAP instruction. The work used judgement protocals having to do with salience and pedagogical utility (Wood, 2015). This can help narrow down lists of frequency-derived word combinations. However, disciplinary boundaries should be taken into account when it comes to pedagogical practice.

Liu (2012), in parallel with Simpson-Vlach and Ellis' (2010) study, argued that some lexical bundles identified by previous research contained "structural/semantic incompleteness" (p. 27) and seemed "neither terribly functional nor pedagogically compelling" (Simpson-Vlach & Ellis, 2010, p. 493), for example, *and this is*, and *this is the*. Liu, thus, identified the most frequently-used multiword constructions (MWCs), covering a variety of fixed or semi-fixed expressions, including idioms, lexical bundles, and phrasal/prepositional verbs in general academic writing across the academic divisions of the sub-corpora in the Corpus of Contemporary American

English and British National Corpus. To determine the most common MWCs and examine their usage patterns, a cut-off value of 20 tokens PMWs was adopted. All MWCs identified that end with a/the, or any other incomplete NP (e.g. one of the) are represented in the form ending with "det+NP" (e.g. one of det+N). With this approach, Liu claimed that MWCs with "partially-filled constructions are more productive than the structurally-incomplete ones" (Liu, 2012, p. 28), facilitating the students' learning process. A list of the 228 most common MWCs in general academic written English across the academic divisions, categorised into three bands according to frequency and semantic functions, respectively, was finally created. It is argued here that the list may assist students in effectively grasping the constructions in their writing, raising their awareness of these common MWCs and encouraging them to use these in their writing. However, functions of the word list generated are not provided, and thus work remains to be done on how best to make use of this resource.

While the description of common recurrent word combinations can help us understand something of the features of academic writing, Durrant (2009) has argued that previous studies listing essential words for EAP students failed to include "positionally-variable collocations" (p. 157). Durrant attempted to identify high-frequency collocations across academic disciplines which learners need to acquire. He identified two-word collocations commonly found in RAs taken from written texts from various universities which were grouped into five faculty groupings: Life sciences, Science and Engineering, Social-Psychological, Social-Administrative, and Arts and Humanities. Using WordSmith Tools, the total frequency of all collocations found was compared with their frequency in 85 million words of the BNC corpus. To arrive at the list of collocations used, these collocations needed to meet a minimum mutual information score of at least four in all five of the subject groupings. The analysis yielded a list of distinctively academic collocations comprising the 1000 most key items. A striking point is that most of the word pairs were grammatical collocations, containing at least one non-lexical word, such as "prepositions, determiners, primary and modal verbs, conjunctions, subordinating adverbs, pronouns and numerals and ordinals other than *one* and *first*" (p. 163). In addition, key collocations were reporting pattern verbs, such as *argue, assume, conclude, confirm* and *demonstrate*, to name a few, with that-clause construction. Unfortunately, like

Liu (2012), the study looked at the grammatical forms, not at the functions of collocation, which limits the pedagogic usefulness of the list.

Similarly, R. Martinez and Schmitt (2012) recognised that most of the vocabulary lists, such as the Academic Word List (AWL) by Coxhead (2000, 2002), provide only individual words or "only the tips of phraseological icebergs" (Coxhead, 2000, p. 302), which might not be comprehensive enough for pedagogic purposes. To create a list of phraseological items serving a pedagogic goal, Martinez and Schmitt combined frequency and qualitative criteria in selecting individual words and phrasal expressions. The BNC corpus was selected as the corpus source, and Wordsmith Tools was used to search for any two- and four-word strings repeated in the corpus at least five times. Then, a series of "Core criteria" and "Auxiliary criteria" (p. 308-310) was taken into account as guidance to help justify intuitions regarding what may or may not be formulaic when selecting a multiword expression to be included in the list. A random sampling technique was applied exhaustively to the process of searching for derived multiword lexical items line-by-line to check whether these items were phraseologically polysemous. The final list called the *PHRASE List* ended up containing 505 phraseological items. The *PHRASE List* was claimed to serve a pedagogic purpose similar to other academic word lists. It also "provides the means and justification for minimizing or even eliminating any 'special treatment' of multiword items" (p. 317). However, the usefulness and benefits of applying the *PHRASE List* are still open to question because, similar to Durrant (2009) and Simpson-Vlach and Ellis (2010), the crux of the matter is that the pragmatic functions of these multiword items were not included in the list, which seems potentially limiting pedagogically, especially for lower-proficiency learners.

The studies outlined above all offered very different means to create a pedagogically useful list, enabling us to see the importance and application of corpus-based studies. It is interesting to note, however, the varying size and different types of corpora that were compiled and the different approaches adopted for investigation in these studies. These studies have not as yet made a significant impact on pedagogy.

2.5 Conclusion

In this chapter, I have offered a detailed description of my conceptual framework for understanding two main approaches of discourse analysis and corpus-based analysis used to analyse experimental data: genre analysis and phraseology. Genre in three schools, namely the New Rhetoric approach, SFL, and ESP was reviewed. Swales' move-based genre analysis, which is considered the most appropriate for the present study, was discussed. The chapter explored previous research on genre-based analysis focusing on identifying rhetorical structures of the four internal sections of RAs and a variety of texts. This chapter also presented the concept of phraseology, and reviewed previous studies investigating phraseological patterns in various text types. I have reported some of the studies applying phraseology to create lists of academic phrases for pedagogic purposes. Since the concepts and practical applications of the genre-based approach to the teaching of writing are considered most relevant to the present study, the main focus of the subsequent chapter is placed on pedagogic perspectives and the discussion of the pros and cons of the genre-based approach to teaching EAP.

CHAPTER 3

GENRE APPROACHES TO TEACHING WRITING

3.1 Overview

This chapter first discusses a founding premise of genre-based approaches to teaching writing, namely that the approach encourages students to engage in a context, to understand writing as a tool that they can utilise, and to recognise how and why linguistic conventions are used for particular rhetorical effect (Cope & Kalantzis, 2014; Lin, 2006). The subsequent section reviews research on the application of the genre-based approach in EAP writing classes. The final section is devoted to controversial issues and potential applications of the genre-based approach to practice.

3.2 The Genre-based Approach to Teaching Writing

A genre-based approach has been widely promoted and increasingly been recognised as a useful way to help teachers design and provide targeted instruction to meet the language and writing needs of students (e.g. Bawarshi, 2003; Hyland, 2003, 2007; Johns et al., 2006; Paltridge, 2002, 2014; Tardy, 2011). According to Badger and White (2000), the genre-based approach is referred to as an extension of the product approach because the macro-structure of a text is a core element of writing. In response to the major flaw in the process approach, i.e. it gives students insufficient sense of the importance to the context in which the texts are produced, the genre approach places an emphasis on the social context in which writing is produced. As Hyland (2003) emphasises, genre-based instruction is developed from the basic idea that "literacies are community resources which are realised in social relationships, rather than the property of individual writers struggling with personal expression" (p. 24). That is, social communities, cultural contexts and a set of cognitive processes have some influence on writing. These principles are intuitively appealing and appropriate for the language classroom as genre knowledge is important to students' understanding of contexts and environments. It builds on the abstract, socially-oriented and momentarily stabilised language patterns arising from different writing contexts of creation and use (Dressen-Hammouda, 2008). Johns (1997) advocates that

genre-based instruction is a means of assisting students to gain access to ways of communicating that have accrued from cultural contexts in particular professional, academic, and occupational communities. It is acknowledged that teaching genre is the most effective way to access and critique cultural and linguistic resources (Ferris & Hedgcock, 2004; Hasan, 1996; Hyland, 2007). Tardy (2011) also argues that genre-based pedagogy can be used to raise students' awareness about "the relationships between a text's form, rhetorical functions, and community of users" (p. 2).

The genre-based pedagogic approach emphasises written texts as a means to make meaning for specific audiences and contexts, with teachers playing a crucial role in providing instructional scaffolding (Badger & White, 2000; Bruce, 2008). This is congruent with Hyland (2003) who claims that the instruction based on the genre-based approach stems from Vygotsky's (1980) scaffolding theory. The role of teachers as students' sources of support is a key to success in language learning. An interactive collaboration between teachers and students, with the teachers taking an authoritative role to support students in scaffolding activities is, thus, emphasised. In contrast to the process approach, teachers can intentionally become involved in the stages of discussing, deconstructing and analysing the language and structure used in the texts. As such, meaning negotiations between teachers and students are expected to help support students in order to obtain genre knowledge of target discourses and situations. Therefore, the genre-based approach to teaching has been extensively used in EAP contexts because of benefits derived from studying a wide range of different types of written texts, enhancing students' rhetorical awareness of the types of texts they have to write (Hyland, 2016).

3.3 The Genre-based Approach and Its Application in EAP Classes

Genre-based instruction has been extensively employed in EAP classes to foster and further students' writing skills. It emphasises the teaching of particular genre(s) which meet the need for social communicative success of students (Paltridge, 2014). At the heart of the genre-based approach, Dudley-Evans (2002), for example, suggests three stages of genre approaches to writing. Firstly, teachers should introduce a particular genre to students and ask them to analyse the target language forms. Secondly, the students carry out exercises which manipulate relevant language forms.

Finally, the students themselves produce a text parallel to the model by themselves with assistance from their teachers.

Hyland (2003) offers practical guidance underlining the importance of explicit genre instruction. Teachers should show students how texts in target genres are structured and why they are written in the ways they are. A range of methods and materials, such as lectures, assignments, and discussions can be employed to facilitate students in building their knowledge of a genre implicitly and to integrate this knowledge into their own schema. The role of the teachers is to encourage the students "to manipulate the lexico-grammatical patterns typically occurring in the target genres" (p. 26).

In order to raise awareness of genre and enhance students' involvement in their learning, Dudley-Evans (2002), Bruce (2008) and Johns and Swales (2002) proposed steps involved in genre-based instruction as follows. Firstly, teachers should explore the genres that students will need to write in an academic or workplace environment. Secondly, the students are required to explore, identify and analyse the typical features of key genres in those environments. The teachers then have to ensure that the students understand the way these genres achieve a particular purpose recognised by members of a discourse community as they are addressed for a particular audience and employed in a particular culture. Meanwhile, the students should be able to relate this knowledge of the specific practices of discourse communities to their previous knowledge gathered from real-life interactions in authentic academic or professional contexts. Lastly, the students can shape their own writing skills to fit the discourse of a community in order to become participants in such a community group.

Concerning the importance of selecting genres to teach in the writing process, Johns et al. (2006) suggest that teachers should consider what sort of academic and other situations students are likely to encounter and what sorts of genres they will need to achieve their purposes in those situations. Teachers should teach their students genres they will be strongly motivated to learn, and which embody the kinds of thinking the students will need or ought to be able to do. Genres presented to the students should be diverse so as to help them develop genre awareness. They emphasise that genres should not be memorised as formats, but learned as functional strategies for achieving one's purposes in particular types of situations.

3.4 Previous Studies on Genre-based Instruction

Previous empirical research (e.g. Bae, 2012; Kongpetch, 2006; Yasuda, 2011) has generally reported on the positive effects of applying genre-based writing instruction. Bae (2012), for instance, examined the effectiveness of genre-based instruction on Korean middle school students' writing ability and their perception towards writing instruction. In Bae's study, 595 Korean students were selected to participate in the study. In an experimental group, students studied writing using a diary genre over five weeks, while no explicit writing instruction was provided to a control group. Following the experiment, both student groups were required to write a diary entry within 40 minutes as a post-test. A statistically significant difference in score was found, reflecting the effectiveness of explicit genre-based writing instruction. Data obtained from a survey and interviews revealed that most of the students had positive attitudes and perceptions towards the use of genre instruction.

Kongpetch (2006) used a genre-based approach, based on SFL theory, to teach writing at whole text, paragraph and clause levels to 45 third-year English major Thai university students for 14 weeks. The study showed that the genre-based approach used had a significant positive impact on students' factual writing, demonstrating gains in the control of generic structure and linguistic features of the exposition. That is, by the end of the course a majority of students realised that their overall experience with genre-based writing was worthwhile as the approach could help them write systematically, and produce texts appropriate to English conventions.

Assisting students to recognise the knowledge of genre in English writing, Yasuda (2011) employed genre-based tasks with 70 Japanese students studying English at a private university in Japan. A questionnaire was used to survey the experience of these students in learning writing. The majority of these students were experienced in grammar or translation techniques, but they had never written more than a paragraph in English. In order to develop their genre awareness, in the main study, genre-based tasks were provided as a scaffold for students' knowledge and eventually to challenge them to apply what they had learned to different rhetorical situations. The findings obtained from a survey, interviews, and pre- and post-tests, indicated that genre awareness and knowledge improved, including "the following

important factors: improved knowledge of genre-specific language choices and enhanced audience awareness" (Yasuda, 2011, p. 124).

Even though many scholars agreed and previous studies revealed that genre-based instruction plays beneficial roles in facilitating students to produce written works to meet the expectations of the community, the advantages and disadvantages of the pedagogic applications of the approach have been discussed. The next section discusses potentially more problematic issues regarding the approach.

3.5 Issues Raised about Genre-based Instruction

Alongside the pedagogical benefits of genre-based instruction, controversial issues and long-standing debates regarding the necessity and efficacy of genre instruction have been raised. Many scholars (e.g. Badger & White, 2000; Freedman, 1993, 1994; Freedman & Medway, 2003; Johns, 2011; Paltridge, 2014) have raised a key argument against explicit pedagogy. For example, Freedman (1993, 1994) believes that students learn genres better through being immersed in them without explicit, or production-based pedagogy. Freedman argues that "explicit teaching is unnecessary; for the most part, not even possible; and where possible, not useful" (Freedman, 1993, p. 195). Explicit teaching of genres has therefore restricted value in improving students' writing. Freedman (1994) articulates two hypotheses regarding some limitations of applying genre-based instruction: the Strong Hypothesis and the Restricted Hypothesis.

Regarding **the Strong Hypothesis**, Freedman claims that "explicit teaching is not necessary in the acquisition of genre" (Freedman, 1994, p. 195). Based on the findings from her study on the control of narrative structure in the scripts of grades 5, 8 and 12 students, these students could infer the appropriate schema for stories from what they read and heard or read aloud. Further evidence indicating that explicit teaching is not necessary for genre acquisition comes from research studies applying Krashen's hypothesis of language acquisition (Ellis, 1991; S. Krashen, 1991). These studies suggest that the more students obtain comprehensible examples of the target language, the more they acquire the target language. From this perspective, it is

believed that with no explicit instruction, students are able to learn the complex rules of the language if appropriate comprehensible input has been provided.

In addition, Freedman points out that how people acquire genres probably depends upon the level of their consciousness, and goes on to claim that "explicit teaching and conscious learning are not possible except for a limited number of features" (Freedman, 1994, p. 197). This claim supports Krashen's (1984) explication about the learning process in that three reasons are responsible for why "the rules that describe written language are simply too complex and too numerous to be explicitly taught and consciously learned" (p. 27). Firstly, the language rules described by linguists have not yet been described adequately for learning. Since the dynamic nature of most genres always varies according to the current everyday world, the rhetorical contexts are always changing. We, therefore, may never be able to "specify or articulate with assurance the rules for such genres, except possibly historically and in retrospect" (Freedman, 1994, p. 198). Secondly, language rules are too complicated to be explicitly taught in the context of writing or language instruction. Lastly, students themselves can implicitly formulate the language rules when they produce a text.

Freedman (1994) further argues that "explicit genre teaching can be harmful" (p. 199) if teachers have inaccurate knowledge of the genres to be taught. Teachers cannot possibly possess insider knowledge of all the genres which students need to learn because their instruction in particular genres might be incomplete, leading to misunderstanding when putting genre knowledge into practice. Freedman deftly explains that even trained writing specialists, working in the context of authentic discourse and with very motivated students, were not able to teach appropriately because "the resonance and the complicated interweaving network of relationships, purposes, audiences and agendas in the context were not easily understood by or made available even to sophisticated writing specialists working closely with members of the community" (p. 199).

Freedman's arguments were set forth some time ago, but they are still relevant and being discussed currently. Badger and White (2000) have argued that explicit genre instruction is still an intriguing possibility but, in general, our knowledge of both language knowledge and skills involved in different genres is limited. Different genres

require different knowledge and different sets of skills. Thus, as a key feature of explicit teaching, teachers should possess knowledge of and skills in particular genres to be taught. In agreement with Coe, Lingard, Teslenko, Williamson, and Jolliffe (2002) and Freedman (1994), explicit genre instruction can always be dangerous if the teachers are neither familiar with, nor in that community yet, and experienced teachers can convey the knowledge of genre better than inexperienced ones.

Johns (2011) also asserts that teachers might face some challenges in how to integrate genre knowledge in the classroom. Regarding classroom applications, Johns discusses four fundamental but contested activities that should be taken into consideration in introducing genre: 1) text naming, 2) genre learning and genre awareness raising, 3) pedagogic focus on language and on situation, and 4) ideological stance. In text naming, teachers should start with naming texts related to students' schema first before moving to other related styles of discourse. As for genre learning and genre awareness, teachers should make sure that students can apply old knowledge to new contexts or reproduce a genre they have acquired. With regard to language pedagogy, congruent with Freedman (1994) and J. Flowerdew (2014), Johns suggests that teaching genre can follow either the linguistic (ESP and SFL theory), or non-linguistic (the New Rhetoric theory) approaches. Textual variety and their structures should be introduced to a class so that students can apply prior knowledge of texts to a new situation or assignment. Regarding explicit or implicit ideology, the students should understand the text, its context and purposes by considering how a text from a genre might be structured and related to other texts, what writer processes might be involved, and what other contextual components might be central to understanding the nature of the text. To this end, if the students realise and consider these questions, they are in a better position to criticise the text.

In light of the discussion above, genre knowledge, similar to language knowledge, is tacit. Explicit genre teaching is deemed to be impossible and harmful. Furthermore, genre conformity may hinder students and writers' creativity. However, although explicit teaching is criticised because teachers may thereby prevent students from enacting what they know tacitly (Freedman, 1994, p. 199), teachers can play the role of a facilitator providing learning environments where students can be exposed to the target language without explication. In response to this, the output hypothesis suggested by Swain (2005), indicating that part of the process of second language

learning is to produce language, suggests that students need to be aware of their linguistic deficiencies and push themselves to say or write something which they do not yet know exactly how to produce in the target language. As a result, they will make the connection between what they want to say or write on the one hand and their struggle to say or write it on the other. Pedagogically, the students should be encouraged to produce texts or express something which they are unsure about. They may be provided with alternatives obtained from the identification of certain patterns, and feedback which shows the relationship between communicative intentions and the linguistic options in order to increase their awareness of how the language works.

As opposed to the Strong Hypothesis, drawing on Ellis's (1991) model of language acquisition, **the Restricted Hypothesis** or limited version of the Strong Hypothesis is proposed by Freedman (1994). The Restricted Hypothesis suggests that explicit teaching of certain features of a genre probably has an effect on some students' acquisition. Hyland (2007) argues that explicitness helps set clear learning goals and direct "a conscious manipulation of language and choice" (p. 151). It may raise some students' consciousness when they become sensitised to the occurrence of such linguistic features. These assumptions are based on Swain's (2005) Output Hypothesis in that language output may trigger the students to pay attention to the target linguistic features in order to express their intended meaning. Ellis (1991) hypothesises that students basically acquire two distinct kinds of knowledge: explicit knowledge (conscious and declarative) and implicit knowledge (unconscious and procedural). Explicit genre instruction, thus, can contribute to implicit knowledge, and some structures or the rules of language can be explicitly taught and learned if students are at the appropriate stage of development, the input given meets their learning styles, and they are engaged in an authentic task that calls on the use of this structure. Similarly, Johns (2011) and Elton (2010) contend that both direct teaching and tacit knowledge are needed if students' acquiring genre knowledge is the pedagogical purpose. Since genre knowledge does not develop in a linear fashion from a beginning to a final domain, Tardy (2009) recommends that certain aspects of genre knowledge be learned in certain environments, and formal knowledge be best acquired in the writing classroom.

Hyland (2003) and J. M. Williams and Colomb (1993) also argue that applying explicit instruction on the constraints and the opportunities of the genre specific

context has its benefits. Some advantages of explicit genre-based instruction lie in the fact that it provides students with direct information about linguistic choices they can appropriately exercise and use in a particular genre. Despite some limitations, Hyland (2004b) points out that genre-based instruction helps students express individual meaning by making them aware of "the choices and constraints that the genre offers" (Hyland, 2004b, p. 20). Hyland believes that this approach is "an essential foundation for critical evaluation of these genres because students will be given an efficient head start for later in situ genre acquisition" (p. 19). It would gradually assist novice writers in acquiring the abstract representations needed to write expertly and recognise the flow and structure of professional writing (Cotos, 2014; Elton, 2010).

Based on their work with a range of native speakers of English at different stages of university study, J. M. Williams and Colomb (1993) support explicit teaching of genre as it is "a necessary step in empowering students to choose how they will participate in the communities they encounter and to what degree they will let that participation define who and what they are" (p. 262). They believe that if teachers embrace only implicit teaching methods and avoid explicitly focusing students' attention on the forms they are learning, the teachers risk hiding the ideological commitments and consequences of particular generic forms from the students.

Explicit genre-focused instruction can be considered as a way to help increase students' awareness of writing conventions and enhance their proficiency in the target genres. As argued by Paltridge (2001), if students are able to understand, access and manipulate genres, they acquire "cultural capital" (p. 8). Explicit genre-based teaching, in his view, can help students participate in and challenge the cultures of power they will encounter. They will be able to gain access to discourses, texts and genres, particularly when interacting with members of the target culture. Cheng (2008) and Sengupta, Forey, and Hamp-Lyons (1999) support this idea, stating that genre knowledge can facilitate consciousness-raising and enhance academic literary. They argue that this approach can introduce students to the social dimension of writing, and stress that lexico-grammatical features are not an end in themselves in the learning-to-write process, but rather a means to an end, enabling students to make meaning for the right audience in an appropriate context. Genre is, thus, considered a promising tool to sensitise students to the purpose, audience and context of writing

and help them understand how the structure and language features of texts can contribute to meaning making.

Concerning the benefits of explicit genre instruction and its application to EAP classes, I consider that writing should be learned and organised through an understanding of the text, context and social activity. Writers must produce a text not only expressing their ideas, but also achieving social purposes in a particular context. They need to be aware, however, that their ideas and expressions need to be transformed into a text with specific rhetorical patterns and linguistic features aimed at achieving communicative purposes and communication with participants in that particular social context. As outlined in the first three chapters of this thesis, it is crucial that students have explicit knowledge of rhetorical structures, linguistic features, social context and purposes. Therefore, a genre-based approach will be adopted in the present study because it is particularly suited to the context and the objectives of this study.

3.6 Conclusion

This chapter concentrated on the genre-based approach and its potential application to teaching writing. Previous research on genre pedagogy was reviewed and discussed in terms of its benefits and ways to apply genre knowledge to a classroom setting. Whilst most of the researchers acknowledge the usefulness and advantages of introducing genre knowledge to students, I have concluded the chapter by reminding us of some pertinent issues and constructive criticisms about explicit instruction and teaching genre knowledge in the classroom. Regarding the importance of context and cultural perspectives in the genre-based approach, the approach nicely fits the objectives of the current study which highlights the role of the research community and linguistic conventions, and both rhetorical and linguistic levels of research articles. The genre-based approach to teaching also provides a series of systematic steps from a particular situation to a text, with "teacher facilitating learner's progress by enabling appropriate input of knowledge and skills." (Badger & White, 2000, p. 160). The approach is considered effective for teaching students to engage with and create a text independently. I thus support the approach and adopt it in the pedagogic dimension of the present study.

CHAPTER 4

METHODOLOGY OF DESCRIPTIVE PHASE

4.1 Overview

The goal of this chapter is to describe the corpus and procedures of analysis carried out in the current study, which involves two parts—move-based genre analysis and lexical group research. The chapter begins with a description of corpus compilation in the study. The selection process for RAs in Applied Linguistics is discussed. Subsequently, the potential purposes of a preliminary study as a baseline for establishing the genre framework for conducting a move-based genre analysis in the main study are presented. The chapter then presents a description of the methods used in a corpus-based investigation into the identification of phraseological patterns. An overview of the data analyses which were conducted in the descriptive phase is also given.

4.2 Corpus Compilation

4.2.1 Selection of academic journals representing Applied Linguistics in Thailand

Since this study aims to assist Thai graduate students and faculty members in the field of Applied Linguistics as it is understood in Thailand (see Section 1.2.3) in order for their research works to be published in English in refereed journals (especially those indexed in the TCI database), the selection of the Applied Linguistics RAs was collected from a range of specialised journals indexed in the TCI database.

To build a corpus of articles in Applied Linguistics published in journals in this database, I first began to consult the list of journals to find the names of those related to the field of Applied Linguistics. However, I found that very few were specialised in Applied Linguistics. I then consulted the websites of the journals whose titles might be related to Applied Linguistics to identify the contents and compositions of the journal. The journal titles and contents that were obviously unrelated to Applied Linguistics were excluded from the analysis (see Section 1.2.2 for the scope of

research in Applied Linguistics in the Thai context). I also excluded the journals which published reviews and reflective articles rather than RAs. Furthermore, since the TCI database features criteria to categorise the academic journals into three different groups based on the results from journal quality evaluation, the journals classified in Tier 1 were selected, representing the best quality journals and publications (see Section 1.2.2 for more detailed information regarding how journals are categorised in the TCI database). These selected journals are currently indexed in the ASEAN Citation Index which includes Thai and ASEAN journals, confirming the quality and evaluation standards of the journals. The sampling of these journals was restricted to the years 2013 and 2014 only to control for potential changes within the discipline and across time and to enhance the coherence and validity of the results of the study. By this process of journal selection, I arrived at nine journals publishing RAs in the discipline to form an RA corpus (see Appendix A for the list of selected journals and RAs studied in move-based genre analysis in this study).

4.2.2 Selection of the research articles

From the nine academic journals, RAs were systematically selected. It is commonly known that academic journals may contain not only RAs but also state-of the-art reviews, short articles and reviews of scholarly books on topics of interest to the profession in each issue. Such texts were not included in the corpus. Also excluded were a small number of articles which did not fit the IMRD pattern (Introduction, Methods, Results, Discussion). It is interesting to note that the unique editorial policy imposed in any one journal, i.e. some special issues, the numbers of articles published in an issue, and the numbers of issues published in each year can account for the differences between the journals selected.

Since these selected articles were presumed to have undergone a proof-reading, peer review, and copy-editing process, relatively high standards of language usage were expected. However, as I selected these articles and read them, it became clear that some of them did not necessarily follow international academic norms of language at the clause level.

From the perspective of English as a Lingua Franca in Academic Settings (ELFA) suggested by Mauranen (2012) and Jenkins (2013), English has become a global lingua franca 'owned' by all its users, including native and non-native speakers of English. Jenkins (2013) claimed that ELFA's users are mainly non-native speakers of English. This raises some questions regarding variability and regularity of the English language, and the relationship of ELF to norms or Standard English. Even though the RAs selected for this study may not fit the native 'standard', the research community in which they appear values them and thus, they have successfully achieved publication. Therefore, non-standard English or ELF-type language is not a barrier to publication in the context which I am researching.

Even though non-canonical English was something that I had not anticipated addressing before embarking on genre-based analysis, I did not consider this a sufficient reason to reject these texts. Non-canonical language can be useful for pedagogic examples in two ways. Firstly, it helps learners to be aware of the varieties of English that can exist in research publications in the TCI database. Secondly, it provides learners with an opportunity to reflect on the appropriacy of such language. Therefore, I decided to analyse these texts because the phenomenon of this type of language could be used to explain in the teaching phase, the predominance of expert non-native writers which might be found in the journals in the TCI database.

As regards the size of the corpus, Bowker and Pearson (2002) stressed that "there are no hard and fast rules that can be followed to determine the ideal size of a corpus" (p. 45). Moreover, no previous research has suggested a finite number of articles or texts to be analysed in a study. Neither is it possible to establish a scientifically representative sample. I therefore initially decided to analyse 50 Applied Linguistics RAs as this corpus size is manageable and relatively suitable for the type of analysis and objectives of the study. With this corpus size, it is possible to collect a great amount of useful data and in-depth information.

To systematically select the 50 articles, all of the articles from the nine journals were carefully checked for their content and organisation. Given the focus of this study on the investigation of the four internal sections of RAs, the articles using an IMRD format were selected. Acknowledgements, references, abstracts and appendices were not included in the analyses. These systematic procedures resulted in a corpus of

approximately 214,543 running words. All of the 50 RAs were then assigned numbers from 1 to 50, together with an abbreviation representing the name of the journal (e.g. **[**JES1**]** to **[**MNY 50**]**) for ease of reference (see Appendix A).

4.3 Prototypical Format

Most academic RAs are prepared by dividing them into Introduction, Methods, Results, and Discussion, known as the IMRD prototypical format (Bruce, 2008). Wu (2011) claims that the IMRD structure is the predominant format for scientific writing. The four sections express their clear purposes and information. The Introduction section explains the justification and motivation, and gives the background the reader needs to understand the article by describing the extent of the problems investigated, the relevant research to provide the context, and states the objectives of the investigation (Murray, 2012).

The Methods section presents a detailed account of methodological procedures in a simple and direct manner (Nair & Nair, 2014). The section provides readers with a description of materials and procedures mostly presented in chronological order or by experiment, with as much precision and detail as necessary.

The Results section is regarded as the core of the paper, reporting main findings supported by selected data. This section can be further divided into subsections, corresponding to a series of procedures employed depending on the complexity of the study (Murray, 2012). Normally, this section is easiest to follow if the results are reported in the same order as the objectives presented in the Introduction section (Nair & Nair, 2014).

The Discussion section is the area where the authors explain the meanings and implications of the results. This section provides any agreement, contradictions, or exceptions, and suggests the theoretical implications of the findings (Pérez-Llantada, 2012). Based on the content of the Discussion and Conclusion sections, some journals integrate the Conclusion section into the Discussion section, resulting in different headings labelled, such as “Discussion and Conclusion”, “Discussion and Recommendations” or “Discussion and Implications”.

The modular structure of IMRD helps the authors to organise ideas, whereas readers can browse in each section of the article when looking for specific information (Pérez-Llantada, 2012). The format makes it easier for journal editors and reviewers to evaluate manuscripts. It helps potential readers to find specific information without going through the entire paper. Notwithstanding its benefits, the format may not be applied to all RAs, depending on kinds of research, disciplinary variation and journals. Cotos (2014), however, argues that the format is considered crucial for research writing instruction. It allows article writers to present relevant information clearly and logically, by summarising the research process in an ideal sequence.

4.4 Role of the Preliminary Study

Prior to the main study, a preliminary study was undertaken with two objectives: 1) to develop and establish the baseline and the intended model of the move-and-step schema occurring in the RAs' four sections; and 2) to ensure that the selection procedures for academic journals and RAs could feasibly be accomplished in the main study. To achieve these objectives, the preliminary study results were analysed, allowing relevant modifications to be made to the analytical framework of the genre analysis and procedures prior to commencing the main study.

The preliminary study was conducted in March, 2014 with five RAs. Following the criteria outlined in Section 4.2.2, these RAs indexed in the TCI database were purposively selected. These articles conform to the IMRD organisational structure. They were also checked for their content to ensure that it is related to the field of Applied Linguistics. They were published in the year 2012. Despite certain differences (i.e. number of issues and year of publication) between the RAs in the preliminary and in the main study, they shared some common characteristics concerning the discipline of the journals, IMRD format, and selection criteria for the corpus.

The five RAs were analysed by applying a move-based genre analysis approach (see Chapter 5 for more details). Inspired by Swales' (1990, 2004) framework, steps of the typical move analysis process, as outlined by Connor, Upton and Kanoksilapatham (2007) were undertaken when conducting a move analysis in

the preliminary study (see Section 5.3 for details). After the task of move identification, a model of the rhetorical structure and linguistic features could be proposed as a draft framework for the main study. Overall, the results gained from the preliminary study provided a useful and direct guideline, benefiting the development of the move-based genre analysis in the main study. The analysis of phraseological patterns was not included in the preliminary study because, according to Biber et al. (2004), lexical bundles are decided based on frequency alone, depending on the amount of data. Due to the limited number of RAs analysed in the preliminary study, it was not appropriate to investigate phraseological patterns. The lessons learned from this preliminary study are presented in Chapter 5.

4.5 Main Study: Overview of the Data Analysis of Descriptive Phase

The procedure for the move-based genre analysis and phraseological patterns are described in Section 4.5.1 and 4.5.2, respectively. As a contribution of the descriptive phase, the procedures used for the investigation into organisational patterns and phraseological patterns in RA writing are summarised, for possible use by other researchers, in Section 4.5.2.

4.5.1 Move-based genre analysis

The part of the study involved only 50 texts. Inspired by Swales' (1990, 2004) analytical framework, the core sections of IMRD for the selected 50 RAs were inductively analysed (see Table 5-1 in Section 5.3 for more details). The coding scheme obtained from the preliminary study was used as a framework for analysing the selected RAs in the main study. This scheme, as discussed in Chapter 5, posits 16 rhetorical moves (4 in the Introduction, 5 in the Methods, 4 in the Results, and 3 in the Discussion sections). However, to improve the genre framework by looking at more articles for the main study's data, I combined a top-down and bottom-up approach in which I was willing to change, adapt, add, or remove the moves according to the data. In other words, not only was the coding scheme deployed as per the results of the preliminary study, I also re-evaluated and changed the analytical model in response to my experience after applying it to the analysis in the main study. In this study, the

move- based genre analysis was conducted from three perspectives, namely the frequency of moves, pattern of moves, and repetition of moves.

1) *Frequency of moves*: The frequency of occurrence of each move and step identified in these 50 RAs was recorded and calculated as a percentage to determine the status of individual moves and steps. Even though Swales (1990, 2004) made the distinction between the two classifications of a move status, obligatory and optional, no specific criteria were offered. In this thesis, I decided to classify a move into one of the three categories: obligatory, usual, and optional if found in 100%, more than 60%, and in less than 60% of the corpus, respectively. For the data studied, the simple distinction between obligatory and optional seemed inadequate – it was also necessary to capture the fact that some non-obligatory moves appeared much more frequently than others. The number of RAs featuring each move and step in the corpus, both raw frequencies and percentage of their occurrence, was also observed.
2) *Pattern of moves*: The move patterns were analysed to determine the distinct move patterns within individual sections of the RAs. This is because the occurrence of moves can vary due to the length of the article. The move patterns, however, can be used as an indicator to see how the writers use the move when writing the article.
3) *Repetition of moves*: The number of distinct repeated moves found in the texts was identified to determine which section of the corpus has more repetition of moves and to provide a clear picture of how move types repeatedly occur in each section in articles.

Through the identification of moves and steps found in the RAs, a model of the overall rhetorical structures for this sub-genre of Applied Linguistics RAs could be proposed.

4.5.2 Corpus-based approach: Phraseological patterns

An important issue in corpus linguistics in general lies in the size of a corpus. It is acknowledged that the data from a restricted corpus size might not be suitable for lexical analysis. A bigger corpus is therefore considered to be better as the validity and

reliability of the findings increase. The corpus used in this phase was expanded to 110 RAs in order to provide insight into phraseological patterns used in RAs. The data included articles published over three years (2013 to 2015). The additional articles were collected based on the same inclusion criteria as the original 50. That is, these articles had to conform to the four conventional sections of IMRD and have their contents focusing on Applied Linguistics topics. The articles had to be indexed in the TCI database and placed in Tier 1 for the purpose of controlling the quality of the texts and the journals studied (see Section 1.2.2 for detailed information about the classification of journals indexed in the TCI database).

To investigate phraseological patterns in the RAs, further analysis was conducted, using the corpus-based approach to identify n-grams[3] frequently occurring in the corpus to decide the length of n-grams or multiword items to focus on in the analysis. All the n-grams generated were separated out into two lists: content-based strings and functional strings. Qualitatively, concordance listings were employed to ascertain the pragmatic functions of the frequent multiword items to discern a relationship between the pragmatic functions of some of the functional strings and communicative functions of the move types in each of the section of RAs. To achieve this purpose, computer software was involved in the analysis. Certain modifications were, thus, necessarily made to the texts before conducting a corpus-based analysis. The following sections describe some necessary amendments in the preparation of the entire corpus of the study.

4.5.2.1 Corpus preparation

The corpus of 110 RAs, originally in the format of PDF files, was first converted to and saved in Microsoft Doc format, using the ‘convert to’ option in the Adobe ExportPDf program. All of the converted files were then rechecked for accuracy and correctness in terms of spelling and formatting because some articles contained certain specific fonts (e.g. Thai and phonetic alphabets) which could not be precisely converted by the program available. To promote consistency in the word

[3] An n-gram is a sequence of words or a recurrent string of uninterrupted word-forms extracted from a text or corpus by means of computer software (Stubbs, 2007). It is used to mean either the word sequence itself or the predictive model that reflects the surrounding items in the n-gram.

counts and to analyse wordlist and n-grams, several modifications were made to the saved texts.

Firstly, since the present study centres on the IMRD structure, consistent with the genre analysis, only the four internal sections of each article were selected. The abstract in English and/or Thai, affiliation, author's name, and keywords were deleted. The list of references, acknowledgements and appendices, if any, were removed from the files.

Secondly, to neutralise the differences across journals, parenthetical citations or non-integral citations, such as *Look, 2011, Nation, 2008, p. 163-171*, the names of researchers, and year of publication cited in texts were replaced by *(Ref)*, normalising references and their length. Similarly, this was applied to the numbers indicating citations in journals that use a numerical system for citations. These adjustments were necessary so that long lists of names as parenthetical references in some texts would not artificially inflate the word counts in those texts in the corpus analysis process.

Thirdly, all tables, figures and their headings were removed from the saved files as the corpus software cannot analyse them. In addition, all manifestations of pointers, which often function to structure a discourse by guiding readers through a text (e.g. *results of the analysis shown in Table 1, as shown in Figure 2*), were left as such in the saved files because I considered that they were incorporated into the texts and were analysed in the process of move analysis. Other parenthetical texts which indicate where the information is in the text (e.g. *see 3.1, see Appendix*), were included in the saved files because they seem to be useful for those who need to know how to cross-reference. Moreover, due to the low proportion of these phrases in the texts, they could be left in the corpus without artificially inflating any counts.

Lastly, acronyms, with their corresponding full forms, were left as such and counted as individual proper nouns in deference to their capitalised forms. After editing the entire corpus as above, the texts yielded 429,438 words or 506,529 tokens (every word, punctuation mark and number in a corpus). This corpus size included the Introduction sections (76,340 words or 17.78% of the corpus), the Methods sections (83,707 words or 19.49% of the corpus), the Results sections (170,610 words or 39.73% of the corpus), and the Discussion sections (104,965 words or 24.44% of the

corpus). The following table summarises the number of words and tokens of the corpus after the corpus preparation process.

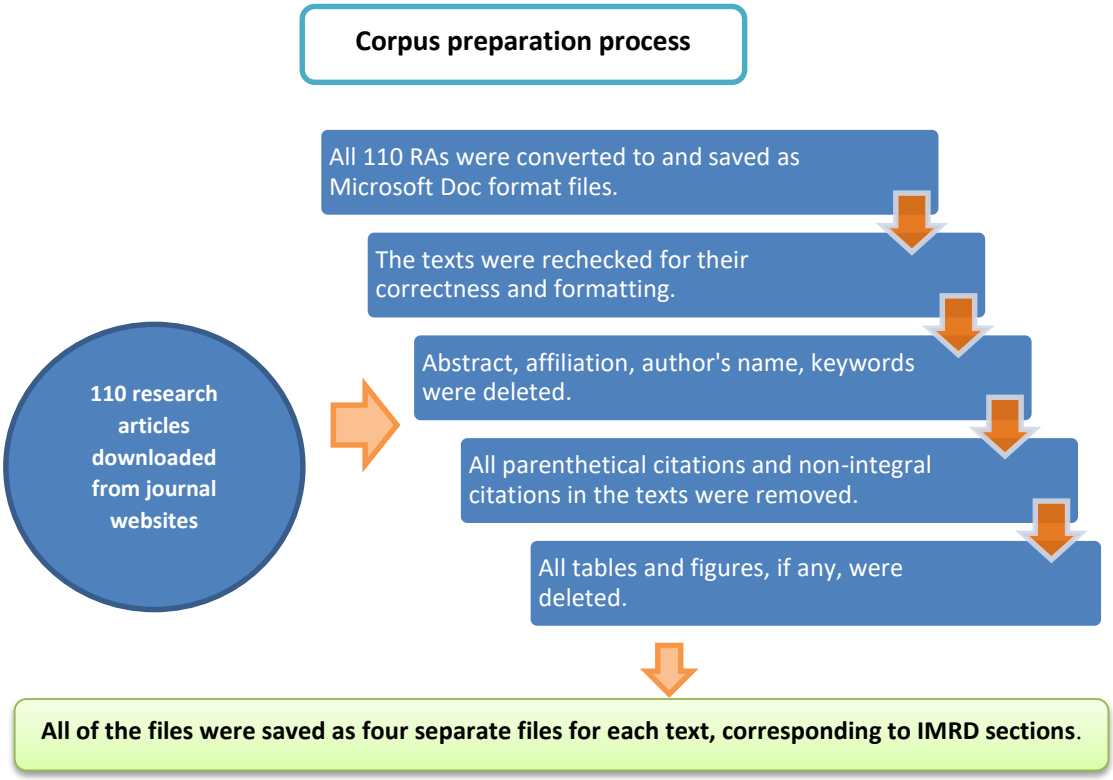
Table 4-1 Summary of word counts and tokens of research article corpus

Sections	Research articles (N = 110)	
	No. of words before editing (tokens)	***No. of words after editing (tokens)***
Introduction	79,651 (95,925)	76,340 (88,056)
Methods	84,508 (99,906)	83,707 (99,712)
Results	191,124 (247,399)	170,610 (208,121)
Discussion	117,154 (200,133)	104,965 (118,632)
Total	**472,437 (643,363)**	**429,438 (506,529)**

Although the entire corpus might seem small in size compared to that of previous studies in the literature, I would argue that "smaller corpora are more suitable than large multi-million corpora to identify the connections between linguistic patterning and specialised contexts of language use" (Koester, 2006, p. 67). The worth of a small yet specialised corpus is that it is easily manageable. I could explore the dataset and obtain in-depth information from the point of view of quantitative and qualitative methods, particularly the occurrence of frequent lexical patterns and linguistic items in context. Due to the speciality of the texts, the size of the corpus in this study could yield detail about language use, which is suitable for the objectives of the present study.

All of the edited texts were then saved as four separate files for each text corresponding to the IMRD format, respectively, resulting in the creation of four sub-corpora. This sectioned sub-corpus contains 440 texts in total (4 sections from each article x 110 articles = 440 texts). The following figure illustrates the whole process of corpus preparation for the 110 RAs.

Figure 4-1 Corpus preparation process before conducting a corpus analysis



All of these files served as input for corpus-driven analysis conducted with the help of computer software. To facilitate the task of corpus analysis, for which all the resulting files could be combined in various different ways, a labelling system was applied to all the files when uploading them to the computer program. With this labelling system, the entire corpus could be divided into sub-corpora by IMRD sections, appropriate for the search options in the analysis, corresponding to the established objectives of the present study. The following figures present the uploaded files, and the labelling system applied to the corpus.

Figure 4-2 Saved files loaded into the Sketch Engine

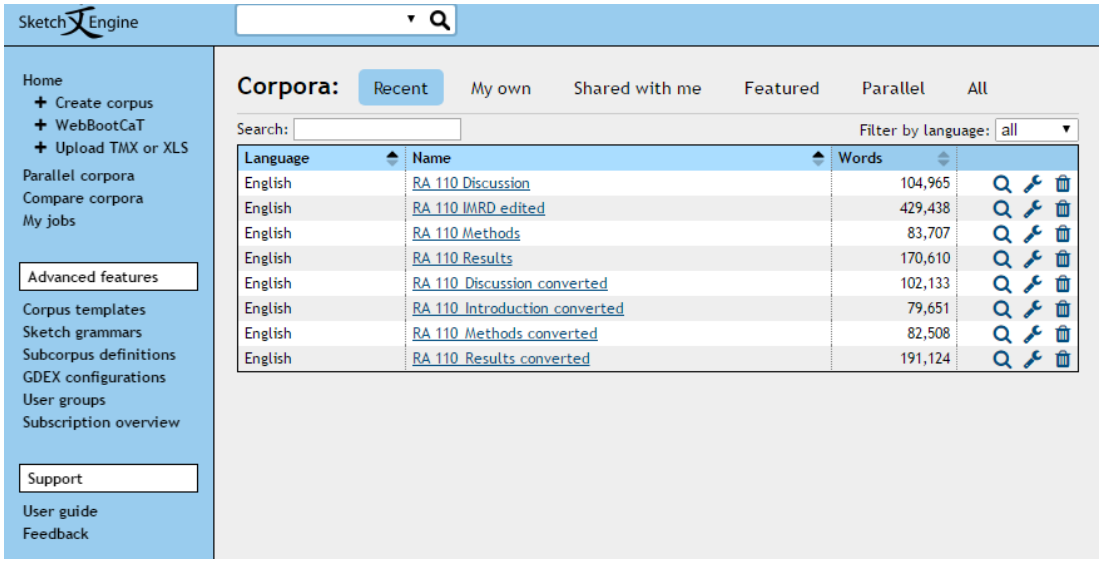
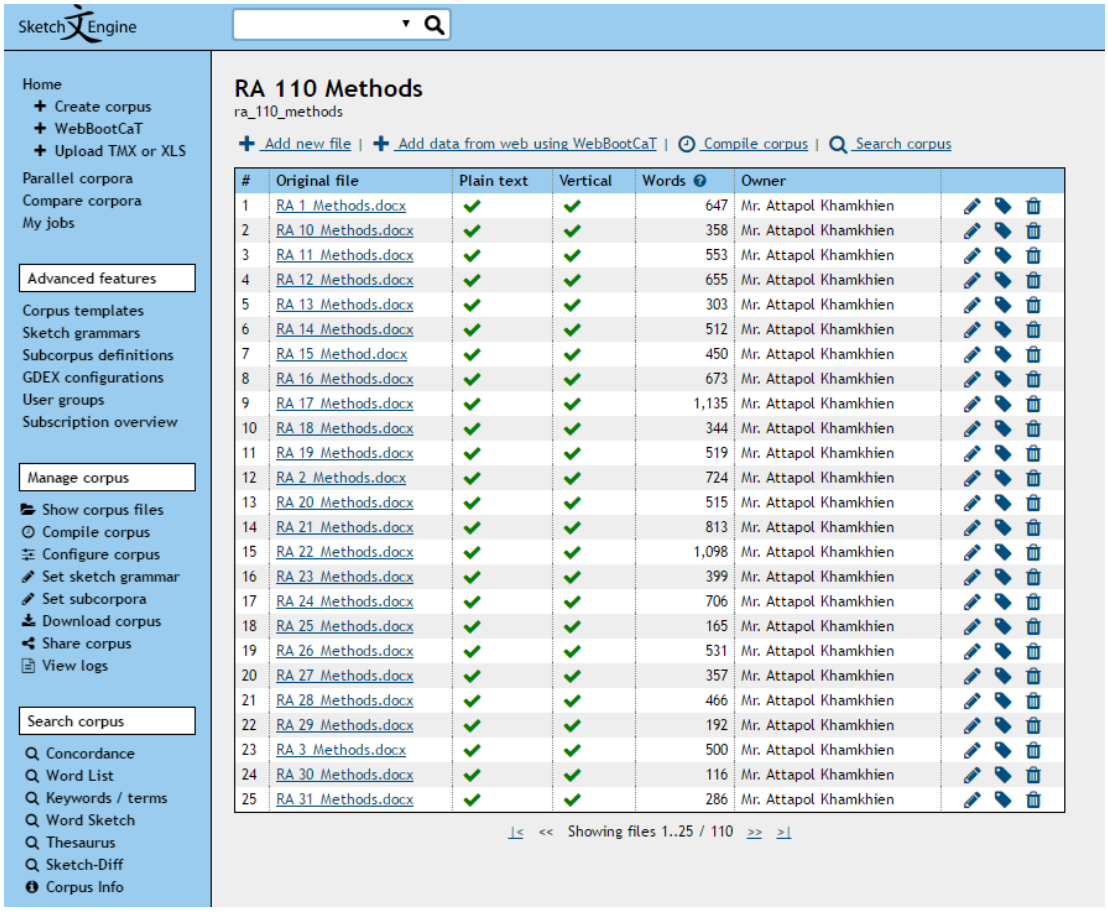


Figure 4-3 Labelling system applied to the corpus



4.5.2.2 Sketch Engine

To be able to investigate word frequency distributions, n-grams or phraseological patterns, and their functional patterns used in the context of the data, the corpus query tool, Sketch Engine (hereafter, SkE) program developed by Adam Kilgarriff (Kilgarriff, Rychly, Smrz, & Tugwell, 2004) was employed. The SkE was selected in the present study because of its diverse and useful features (c.f., Baroni, Bernardini, Ferraresi, & Zanchetta, 2009; Kilgarriff et al., 2014; Kilgarriff et al., 2004; Stoykova & Simkova, 2015; Thomas, 2014), namely, concordance search, word list retrieval, collocation extraction, word sketches, corpus building and management, keyword extraction, distributional thesaurus, corpus comparison, and parallel corpus facilities. Importantly, the software allows users to easily build their own corpus, which, when uploading a personal corpus to the SkE, goes through grammatical tagging, identifying the word sketch function for each word, for example, the word's grammatical and collocation behaviour.

The SkE, therefore, not only facilitates the quantitative perspective of the analysis, providing a frequency list, but also qualitative interpretation of the results which shows in-depth information about the corpora: the description of functional types of n-grams. In this study, the SkE was utilised to conduct a sophisticated analysis of the frequent n-grams occurring in each of the four core sections of the texts, and to examine the use of these n-grams in contextual environments for the purpose of the construction of the list of functional multiword items which has pedagogical usefulness (see Chapter 7 for more details).

To determine a recurrent word combination, Simpson (2004) argues that there is not enough research to provide any independent confirmation of a minimum frequency level at which recurring strings of words become formulaic or perceptually salient. As discussed in Chapter 2, based on the corpus size, different researchers used different cut-off levels in the literature (e.g. Coxhead (2000) uses the frequency threshold of 100 times in the 3.5 million-word corpus, which is 28.57 times per million words, Cortes (2004) and Simpson (2004) use 20 occurrences per million words, Hyland (2008a, 2008b) uses 40 times per million words, Biber et al. (1999), Durrant (2017) and Simpson-Vlach and Ellis (2010) use 10 times per million words). In this study, the phraseological patterns were identified based on a cut-off point of eight

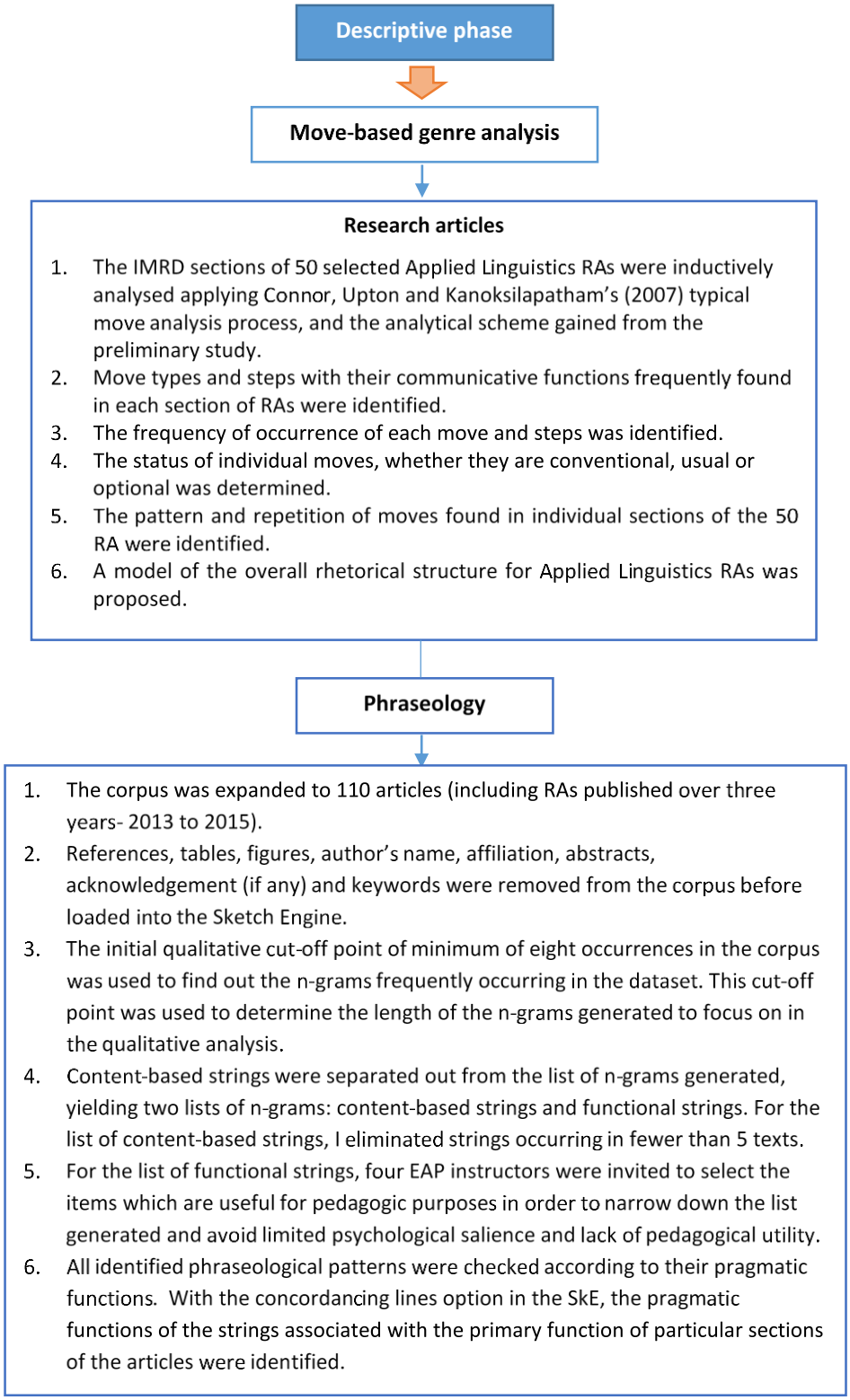
occurrences per thousand words due to the size of the corpus studied (for more details, see Section 7.2).

Simpson-Vlach and Ellis (2010) argue that the use of frequency-based analysis might not give any information about the psycholinguistic validity of the strings. For instance, *in order to* is quite salient as a unit by itself, whereas others, such as *is one of* is rather problematic due to its structural incompleteness. As the goal of the present study is pedagogical utility, the strings identified need to have a unitary meaning or function. Additional steps are, therefore, required to eliminate meaningless combinations of words. To help narrow down the list of frequency-derived phraseological patterns and to avoid limited psychological salience and lack of pedagogical utility, EAP instructors were invited to select the items which are useful for teaching purposes (see Chapter 7 for more details).

Cortes (2013) argues that lexical bundles are regarded as "lexico-grammatical building blocks associated with basic functions used to bind the text together, whilst rhetorical moves are seen as segments of discourse, providing the building blocks of texts" (p. 36). The analysis of rhetorical moves and phraseological patterns, thus, can be seen as complementary, enhancing our understanding the organisational and lexico-grammatical patterns to effectively write an RA. Thus, after the results of the analysis of move-based genre analysis and phraseological patterns were obtained in the descriptive phase, together with assistance from university instructors as experts in the field in the selection of the strings identified, and the use of concordance lines to check their occurrence in texts, I integrated all of the results from investigating the macro- and micro-level structures of the texts, using quantitative and qualitative approaches by matching communicative purposes with the pragmatic functions of phraseological units found in each of the internal sections of the articles.

The procedures of the descriptive phase are summarised in the following figure.

Figure 4-4 Procedures of descriptive phase in the main study



4.6 Conclusion

In this chapter, I have attempted to describe the process of corpus compilation, the corpus and methodology of the present study. I have presented how the discipline, journals and RAs were systematically selected. The role of the preliminary study was also explained. In the descriptive phase, using the general steps to conduct a move analysis suggested by Connor et al. (2007) and the rhetorical scheme obtained from the preliminary study, 50 RAs were analysed to identify rhetorical moves and steps used in the internal sections of the selected RAs. Subsequently, the frequency, pattern and repetition of moves of the texts were identified. Next, the corpus was expanded to 110 RAs, and phraseological patterns of the texts were investigated, using the SkE. Two lists of content-based and functional strings were created. Four EAP instructors were required to help narrow down the functional n-grams list in order to avoid lack of pedagogic utility. Concordance lines were checked to explore the pragmatic functions of the identified n-grams and whether they are associated with the communicative functions of particular sections of the articles, as identified in the move analysis. As a result, a pedagogically useful list of functional multiword combinations was generated to be used in the pedagogic phase.

CHAPTER 5

PRELIMINARY STUDY

5.1 Overview

In order to successfully construct a methodological framework of genre analysis in this study, conducting a preliminary study prior to the main study was crucial. This chapter presents the main purposes, conceptual framework and role of the preliminary study. The chapter begins with a brief description of the theoretical background and the principal objectives in conducting the preliminary study. Subsequently, it describes the methodological approaches used in conducting the preliminary study to ensure that the structural organisation or moves and steps yielded would be useful for the analysis in the main study, allowing for a possible modification process of the genre framework. In addition, the chapter presents the process of inter-coder reliability to confirm the reliability and validity of the draft framework obtained from the analysis. Lastly, the chapter proposes the draft genre framework model or coding scheme which is deployed in this research.

5.2 Conceptual Framework of the Preliminary Study

Previous literature provides useful information on how writers construct RAs and use discourse rhetorical patterns to achieve their generic objectives. The organisational structures suggested, however, seem to be distinctive probably due to different data sources. It should not be assumed that a move model previously identified for an RA genre will be suitable for the particular RAs which are under study here. A preliminary study was, therefore, conducted prior to the main study as an initial step towards creating a draft genre framework for the descriptive analysis to increase the validity of the research findings in the genre. Empirically, the preliminary study serves two main purposes: 1) to identify and develop the analytical genre framework baseline and proposed model of moves and steps which commonly occur in each internal section of five articles in this particular discipline; and 2) to ensure that the procedures for selecting academic journals and RAs are feasible for application in the main study.

The draft genre framework initially generated from the preliminary results is taken in the main study as a coding scheme, and is in turn re-evaluated in response to the results of analysing data taken from 50 RAs in the main study so that relevant adaptations can be made to the analytical framework of genre analysis. The following figure presents the roles of the preliminary study in creating the genre framework, influencing the main study in the descriptive phase.

Figure 5-1 Role of the preliminary study and its influence on framework construction

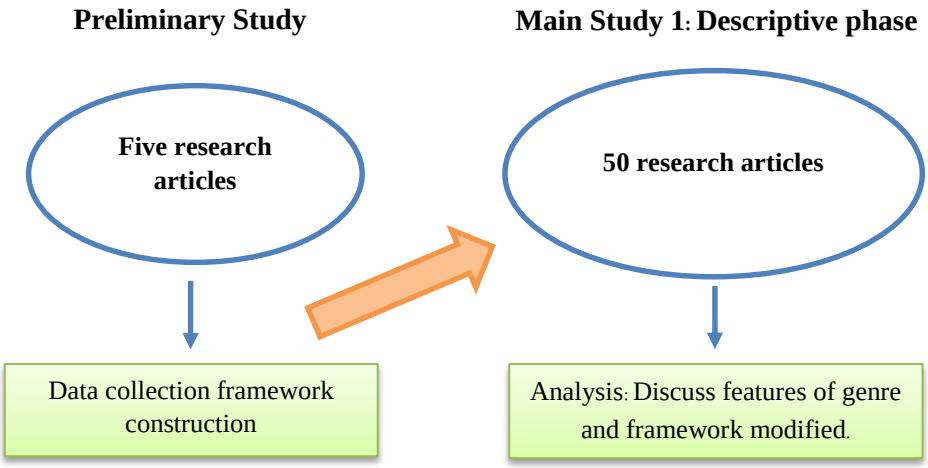


Figure 5-1 demonstrates the role of the preliminary study and its influence on the genre framework construction in the descriptive phase. The goal of the construction of the genre framework is achieved through two phases: bottom up in the preliminary study, and a combination of top down and bottom up in the main study. The integration of top down and bottom up analyses makes it possible to develop an analytical framework for extending analyses of five RAs in the preliminary study to a larger-scale corpus of 50 RAs in the main study. In the first phase, a bottom-up approach was adopted in the preliminary study to develop the analytical genre framework at the outset. I went through a cycle of data collection, analysis and framework construction by analysing five RAs. The draft framework obtained from the preliminary analysis was then applied in a top-down manner for the descriptive analysis of 50 systematically selected RAs in the main study (see Chapter 4 for the selection of these RAs). At this stage, the bottom-up dimension was also to some extent included in the descriptive phase again as I was open to the possibility of framework modification. That is, while applying the draft framework to the analysis

of 50 RAs, I was open to modifying the framework as needed in response to the addition of more data from these articles.

5.3 Methods for the Preliminary Study

The preliminary study was conducted in March 2014 with five Applied Linguistics RAs. With respect to the selection criteria outlined in Section 4.2.2, the procedures for the selection of the articles were as follows: I first consulted the journal list indexed in the TCI database, and accessed the website of the journals to select the journals related to the discipline of Applied Linguistics. Three journals were selected: 1) *Journal of Humanities Naresuan University*, 2) *MANUTSAT PARITAT: Journal of Humanities*, and 3) *Humanities & Social Sciences Journal*. I then selected five articles from these journals, and downloaded them. The analysis was conducted on each of the IMRD sections. Inspired by Swales' (1990, 2004) framework, the typical move-based genre analysis process outlined by Connor et al. (2007) was undertaken when doing a move analysis in the preliminary study.

Table 5-1 General steps used to conduct a corpus-based move analysis (Connor et al., 2007, p. 34)

Step 1:	Determine rhetorical purposes of the genre.
Step 2:	Determine rhetorical function of each text segment in its local context; identify the possible move types of the genre.
Step 3:	Group functional and/or semantic themes that are either in relative proximity to each other or often occur in similar locations in representative texts. These reflect the specific *steps* that can be used to realize a broader *move*.
Step 4:	Conduct pilot-coding to test and fine-tune definitions of move purposes.
Step 5:	Develop coding protocol with clear definitions and examples of *move types* and *steps*.
Step 6:	Code full set of text, with inter-rater reliability check to confirm that there is clear understanding of move definitions and how *moves/steps* are realized in texts.
Step 7:	Add any additional *steps* and/or *moves* that are revealed in the full analysis.
Step 8:	Revise coding protocol to resolve any discrepancies revealed by the inter-rater reliability check or by newly 'discovered' *moves/steps*, and re-code problematic areas.
Step 9:	Conduct linguistic analysis of move features and/or other corpus-facilitated analyses.
Step 10:	Describe corpus of texts in terms of typical and alternative move structures and linguistic characteristics.

After analysing the classification of moves, a draft framework was obtained and used as a coding scheme for operational criteria for identifying moves and steps

in RAs in the main study. Upon completion of the preliminary study, a list of 16 distinct move types, including the constituent elements (steps) making up each move was set up.

Figure 5-2 Proposed model and genre framework obtained from the preliminary study

Move Types	No. of Occurrences
Introduction	
Move 1: Presenting statement of problems/needs	**5**
Move 2: Establishing the topic being studied	**5**
Step 1: Announcing the importance of the field	5
Step 2: Reviewing related literature	5
Move 3: Indicating a research gap	**5**
Move 4: Introducing the present study	**5**
Step 1: Stating objective(s)	5
Step 2: Summarising research procedures	4
Step 3: Presenting implications	3
Step 4: Indicating research questions	2
Methods	
Move 5: Summarising research design and methods	**1**
Move 6: Describing participants	**5**
Step 1: Giving the description of the participants	3
Step 2: Justifying selection criteria	3
Move 7: Stating research instruments	**5**
Step 1: Detailing research tools	5
Step 2: Justifying research instruments	2
Move 8: Detailing research/data collection procedures	**5**
Move 9: Describing data analyses	**5**
Results	
Move 10: Restating research questions and/or methodology	**2**
Move 11: Reporting results	**5**
Move 12: Commenting on results	**5**
Step 1: Interpreting/ Generalising results	5
Step 2: Comparing with previous studies	2
Move 13: Summarising results	3
Discussion	
Move 14: Reviewing the present study	**4**
Move 15: Strengthening results	**5**
Step 1: Reporting selected results	5
Step 2: Comparing results	5
Step 3: Explaining results	5
Step 4: Extrapolating results	5
Move 16: Evaluating the study	**5**
Step 1: Stating value of the study	3
Step 2: Offering pedagogical implications	5
Step 3: Indicating limitations	4
Step 4: Suggesting further research	4

Figure 5-2 demonstrates that applying Connor et al.'s (2007) typical procedures in conducting an inductive move-based genre analysis, the move structures of every section of the five RAs could be successfully identified. Each move expresses a distinct communicative function, contributing to the overall rhetorical organisation of entire texts.

Moves 2, 3 and 4 in the Introduction section generally conform to the CARS model for RA Introductions proposed by Swales (1990, 2004). The section almost always begins with a section that functions to provide a context for the study being introduced. However, Move 1 found in the preliminary study is not included in Swales' model. The analysis also found Move 4: *Introducing the present study*, which consists of four strategies: stating objective(s), summarising research procedures, presenting implications, and indicating research questions.

Five distinctive moves with distinct functions could be recognised in the Methods section: Move 5: *Summarising research design and methods*, Move 6: *Describing participants*, Move 7: *Stating research instruments*, Move 8: *Detailing research/data collection procedures*, and Move 9: *Describing data analyses*.

The Results section usually comes after the Methods section. The primary function of this section is to announce the results of the study being reported. The section usually begins by providing some background information on the research question(s) and/or methodology related to the study (Move 10), followed by reporting the results obtained (Move 11), and commenting on particular results (Move 12) by using different strategies, e.g. interpreting the results and/or comparing the results with previous research. Move 13 is used to conclude the section.

The Discussion section provides an overview of the entire study being reported. Move 14 allows readers to have a snapshot of the entire study being reported. However, the most crucial move is Move 15 as it was found in all of the five articles. Its functions are to substantiate the results through diverse strategies, including reporting, comparing, explaining, and extrapolating results. The section concludes with Move 16, which states the value of the study, offers pedagogical implications, indicates some limitations, and suggests further studies.

In the above sections, I have presented readers with the framework obtained from the preliminary study, but have not explained it in depth. The detailed features

and characteristics of each move identified are not described here because the draft framework was obtained from analysing five RAs, which may not be comprehensive enough, perhaps reflecting idiosyncrasies of the writers. It is, in fact, a starting point which can be modified in response to the results of the analysis of 50 RAs in the main study. The detailed explanation regarding the framework, including the features and linguistic characteristics of the genre is, therefore, presented in Chapter 6 which discusses the move analysis element of the main study.

5.4 Inter-coder Reliability Analysis

As claimed by Bhatia (2014), Kanoksilapatham (2005, 2015) and Paltridge (1994), the stage of textual analysis can be criticised for a certain degree of subjectivity of judgement due to its dependence upon the semantic component of the texts. Different individuals may differ in identifying each move type. Each move occurring in one unit of text may also serve more than one purpose. To enhance the reliability and empirical validity of move identification in the draft framework, it is necessary to have the texts analysed not only by the researcher, but also by experts in the discourse community (Bhatia, 1993). The assessment of inter-coder reliability has become a desirable goal as it is an important concern to demonstrate consistency among observational ratings provided by coders (Gamaroff, 2000). It was, thus, performed to ensure that the identification of move could be conducted consistently by different individuals, and that the draft framework could be applied in the main study reliably. The assessment was conducted according to the following steps.

5.4.1 Selection of coders

According to Kanoksilapatham (2007a), a number of factors have been reported to contribute to disagreement in coding: background of the coders, training of the coders, and the coding scheme itself, which needs to be taken into account when conducting text analysis. Bhatia (1993) suggests three characteristics of a qualified coder for genre-based studies. Firstly, the coder should be a competent and trained specialist of the discourse community in which the genre is used. Secondly, the coder should have keen sensitivity to the specialist language. Lastly, the coder must be in a

position to explain clearly what she/he believes an expert member of the discourse community does when they exploit language in order to accomplish their generic goals (Bhatia, 1993, pp. 35-36).

To ensure that the draft framework was reliable and feasible for use in the main study, two university faculty members holding a PhD in Education from an English-speaking country, and also a PhD holder in English as an International Language (EIL) from a Thai university were invited to be potential coders. They have worked as English lecturers in tertiary education for almost 10 years. Although they are not native speakers, they possess extensive knowledge and experience in reading RAs written in English, keeping abreast with the advancement and discoveries in the field of ELT and Applied Linguistics. They have also conducted research and have some publications in English in local and international journals. With their well-developed experience and expertise, they are considered to be qualified coders for this study.

5.4.2 Training and independent coding

The coders were trained in how to analyse the texts using the draft framework to carry out a move-based genre analysis. Following Kanoksilapatham (2005, 2007b), I conducted a two-hour training session. This session included coding practice of a section in an RA, and independent coding of the four sections to ensure that the coders clearly understood the coding procedure.

At the training session, I initially explained the concept and purposes of textual analysis, together with instructions in relation to analysing the texts. I then provided the coders with the draft framework as a coding scheme. Next, I went through all the moves and steps in the coding scheme illustrated by the text sample taken from one of the five RAs used in the preliminary study. The coders were asked to analyse only one section of an RA. During this process, they were allowed to raise any questions in case they felt that certain explanations of some of the moves identified were ambiguous.

Following training, brainstorming, questioning, and a discussion in relation to the moves and steps in the coding scheme in the training session, to ensure that the coders clearly understood the identification task, they were given an hour to

independently code four sections of the selected RA. After completing the task of coding for each section, they were asked to show the coding they had assigned to each text segment. Then, the coders and I went through the texts to check the results and to identify any coding disagreements. The majority of discrepancies between the coders lay in where one move ended and the next started, not the presence of a particular move. For example, coders differed in their interpretation of Move 10 (Restating research questions and/or methodology) and Move 11 (Reporting results). They disagreed with the identification of the move types as they considered that the moves could be combined. These discrepancies led to discussion, negotiation, and clarification of the criteria for coding assignments until all of the moves were agreed upon.

5.4.3 Analysis of inter-coder reliability

The two coders were given two weeks to complete independent coding of the five articles which were the ones that I had analysed in the preliminary study. In this regard, when requesting assistance from these extra coders, I wanted to avoid burdening them in terms of the time they would spend on the task. Finally, I made a decision not to ask them to code the texts at the level of steps because it would be time-consuming for them, and more training would be required, making the time required for the coding task longer.

To compare the coding carried out independently by the coders, the results of move identification were checked and measured in terms of their agreement. Much research chose to report a percentage agreement figure in terms of inter-coder reliability assessment as it is the most popular method (Kanoksilapatham, 2005; Stemler, 2010), and I felt that it was the simplest measurement to understand. To this end, percentage agreement for each section of the text was computed by summing all agreements in the coding between the coders, multiplied by 100 and divided by the total number of units coded. For example, if the total number of coded units is 40, and the coders agree upon 36 units, the percentage agreement is 90%.

5.4.5 Results of inter-coder reliability

To interpret the results, a high degree of agreement in identifying moves between the researcher and the two coders would indicate that two coders both conceptualise the move identification and apply the coding scheme in relatively similar ways. This ensures that the rhetorical moves possess some stability and empirical validity. In sharp contrast, a low level of agreement on move coding demonstrates that the move identification lacks reliability as the coders may have different notions and/or understandings with regard to the concept of moves and their operational definitions. Table 5-2 displays the total number of units coded, the number of units on which the two coders agreed and disagreed for each move in each section, and the percentage of agreement.

Table 5-2 Inter-coder reliability of move identification for the four sections

Section	Coder 1 (researcher)	Coder 2	Coder 3	Identical	% Agreement
Introduction					
Move 1	7	7	7	6	85.71
Move 2	27	24	26	22	81.48
Move 3	6	6	6	6	100.00
Move 4	10	9	10	9	90.00
Subtotal	**50**	**46**	**49**	**43**	**89.30**
Methods					
Move 5	2	2	2	2	100.00
Move 6	7	7	6	6	85.71
Move 7	8	7	8	6	75.00
Move 8	8	8	8	8	100.00
Move 9	5	5	5	5	100.00
Subtotal	**30**	**29**	**29**	**27**	**92.14**
Results					
Move 10	2	2	2	2	100.00
Move 11	31	27	30	26	83.87
Move 12	20	19	17	16	80.00
Subtotal	**53**	**48**	**49**	**41**	**87.96**
Discussion					
Move 13	9	9	8	8	88.89
Move 14	33	30	31	28	84.85
Move 15	14	11	12	10	71.43
Subtotal	**56**	**50**	**51**	**45**	**81.72**
Total	**189**	**173**	**178**	**156**	**87.78**

Despite some disagreement on move identification, relatively high overall inter-coder reliability in identifying rhetorical moves between the researcher and the two coders across the four sections of the articles analysed was attained, with the highest average rate being for the Methods section (92.14%), followed by the Introduction (89.30%), Results (87.96%), and Discussion (81.72%). The overall percentage of the assessment was 87.78%, indicating that, despite some divergence in move coding, move boundaries framed in the coding scheme were reliably identified by the researcher and two expert coders. Indeed, in some moves, the coders totally agreed upon the coded units of move boundaries, reaching 100.00% agreement. I therefore concluded that, although this assessment was conducted only at the move level, the relatively high rate of agreement indicated that the draft framework was robust enough to be used in the main study.

5.5 Conclusion

This chapter discussed the theoretical framework and the role of the preliminary study in the main study. As part of a cyclical-framework analysis, the preliminary study, as the first cycle, was conducted with five RAs in the Applied Linguistics field, selected from three journals indexed in the TCI database. The second cycle deals with the descriptive phase in the main study in which I analyse the macro-structure organisation of 50 RAs. The draft framework is taken into the main study and modified as appropriate in response to the data in the main study, contributing to the final framework of the genre.

CHAPTER 6

MAIN STUDY I: ESTABLISHING THE GENRE FRAMEWORK

6.1 Overview

After the preliminary study was conducted, yielding a draft genre framework, the framework was applied to a further 50 RAs. I began with the assumption that the framework was likely to hold for the entire dataset; however, I was also open to modifying it if the data from the 50 RAs suggested that this was needed. Thus, after analysing these 50 RAs, using the draft framework as a coding scheme, the final framework for the genre was attained.

This chapter presents the detailed results of the genre analysis carried out according to the IMRD format of the 50 RAs. Subsequently, their communicative or functional purposes and typical linguistic characteristics realised in each move and step identified are described and illustrated with text examples from the corpus. Next, the frequency of occurrences of the moves identified is discussed in order to determine their status (obligatory, usual, or optional). Lastly, the draft genre framework is carefully re-evaluated in response to the findings of analysing data from these 50 RAs, and thus an overall model of rhetorical structure for Applied Linguistics RAs in the TCI database is proposed.

6.2 Locating the Introduction Section

Before applying the draft framework to the analysis of all 50 RA Introductions, I needed to reliably locate this part of the article. As stated by Yang and Allison (2003), the RA section headings can be classified into two main groups: “conventional section headings” and “unconventional section headings” (pp. 270-271). The former were immediately recognised by their functionality of text organisation, whereas the latter were less so and their identification realised by the pragmatic or discourse function performed in the texts. Since the texts under different headings might present different information written using different styles and structures, in order to control the reliability of the textual analysis, only individual sections clearly marked as

introduction, methods, results, and discussion and/or conclusion were examined in this study.

In the presentation of the texts below, parenthetical citations appearing in the original texts are replaced by (*Ref*) for space-saving purposes. Second, distinct lexico-grammatical features in text segments which seem to indicate communicative functions are highlighted in boldface, because they offer semantically-driven clues on how moves are identified. However, the original division of paragraphs has been preserved. Lastly, the names of journals identified are abbreviated. This presentation was applied to every text excerpt in this thesis.

With respect to the Introduction sections, the coding scheme turned out to be largely appropriate for the 50 RA Introductions. However, based on the functional/ communicative distinctions that moves can serve in these texts, the analysis revealed that there was some need to make changes to the draft framework regarding a difference of move type order. The four moves identified in the Introduction sections of the 50 RAs are:

Move 1: Establishing the topic being studied
Move 2: Presenting statement of problems / needs
Move 3: Indicating research gaps
Move 4: Introducing the present study

Move 1 generally presents the topic which is the main focus of the article, background knowledge of the topic, and theoretical concepts or relevant information of the topic being. Move 1 is used to justify why such studies being reported are important as part of a lively, significant or well-established research area. This move is also used to highlight the importance of the field as indicated by referring to previous works. The following example illustrates Move 1:

[1] *It is acknowledged that among all languages in the world, the English language* ***plays an increasingly vital role*** *in our daily life, particularly in business, education, entertainment, communication, and work.*

JES 2

Move 2 provides a brief statement of problems and the need for conducting the study being reported. This move type is usually employed to offer a description of the issues that need to be addressed in the study. Move 2 can occur after Move 1, or somewhere else in the Introduction section. This move is illustrated by the text sample below:

[2] *Therefore, many a time, because of language problems, they* ***cannot*** *perform the assigned task successfully. Moreover, they* ***are not*** *familiar with working on a task in a group. They seem* ***not have adequate*** *communication skills to make group work run smoothly.*

NET 3

Move 3 of the Introduction section generally occurs once in the section. This move not only demonstrates certain gaps or limitations found in previous research, but also makes the study contextualised. This move is used to convince potential readers that either the gaps or problems already stated in Move 2, or found in the literature are worth investigating. Move 3 seems to be relatively short compared with other moves in this particular section. An example of Move 3 is shown as follows:

[3] ***However****,* ***none of the previous SLA studies*** *have explored avoidance of the structure among learners who first language (L1) is Thai.*

LEA 9

After presenting the research gap(s), most authors employ Move 4 to introduce their present study addressing the gap(s) or question(s) raised in Move 3. This move provides information concerning the purpose(s), methodological features, and value of the study. Obviously, Move 4 always occurs as a final move to end the Introduction section. An example of Move 4 is presented below:

[4] *To investigate possible ways to encourage the development of Thai learners' speaking skills,* ***this study aims to research*** *their attitudes and motivation in learning to speak English.*

LEA 3

Given the fact that the analysis of the rhetorical organisation of textual units consists of "move"' and "step" (Swales, 1990, 2004), both of these aspects were investigated in the analysis. In the following section, I will first report the results of the analysis of the stretch of the texts of this particular section, compared with that of the framework derived from the preliminary study. I will discuss in detail the

characteristics of each move type and constituent step with regard to linguistic features reflecting the specific communicative functions that they have, contributing to the generic structure of the section.

6.2.1 Features of moves and steps and their frequency in the Introduction section

The following sections present a detailed description of the features of identified moves, including the frequency of occurrence of each move and step, and discussion of possible steps identified by a set of "linguistic features or lexical signals, with each move/step having its own functional-semantic contribution to the overall rhetorical purpose of the text" (Biber, Connor, & Upton, 2007, p. 33). Table 6-1 presents the occurrence of each move and step identified in the 50 RA Introductions.

Table 6-1 Frequency of occurrence of moves and steps in the RA Introductions

Move/Step	RA (N = 50)	
	Frequency	Percent (of total no. of RAs)
Move 1: Establishing the topic being studied	**50**	**100%***
Step 1: Announcing the importance of the field	34	68%
Step 2: Making topic generalisation	41	82%
Step 3: Reviewing previous studies	46	92%
Move 2: Presenting statement of problems/needs	**16**	**32%*** **
Move 3: Establishing a niche	**42**	**84%** **
Step 1: Indicating research gaps	27	54%
Step 2: Presenting positive justification	17	34%
Move 4: Introducing the present study	**50**	**100%***
Step 1: Stating objective(s)	44	88%
Step 2: Summarising research methods	8	16%
Step 3: Claiming research values	13	26%
Step 4: Indicating research questions	10	20%
***=Obligatory, **=Usual, ***=Optional**		

The table shows that at the move level, no extra possible moves were found by investigating the 50 RA Introductions in the main study, compared to the four moves found in the preliminary study (see Figure 6-1). Fundamentally, the frequency of occurrence of Move 1, Move 2, Move 3, and Move 4 was at 100%, 32%, 84%, and 100%, respectively in the corpus. Moves 1, 3 and 4 occurred relatively often or

always. Moves 1 and 4 were always present (100%) in the Introduction section, whilst Move 3 occurred less frequently (42 out of 50 Introductions or 84%). Move 2 was rarely found (16 Introductions or 32%). With the exception of Moves 2 and 3, all moves identified appeared in all 50 Introductions, resulting in a high frequency of occurrence ranging from 84% to 100%, and thus, based on the criterion to classify the status of each move regarding the occurrence rate of the move (see Section 4.5.1), Moves 1 and 4 were considered obligatory, while Move 3 was considered usual and Move 2 was optional.

Focusing on the step level, the analysis showed that Move 3 contained two constituents, whereas no distinct steps were found in this move in the draft framework. To clarify the communicative functions of the steps, I slightly changed the label of this move from '*Indicating a research gap*' in the draft framework to '*Establishing a niche*' in the main study because I realised that this move was not only to do with stating an obvious research gap but also to indicate the more specific areas of the broader subject that the research will deal with by raising a question about it, or extending previous knowledge in some way.

In order to describe the characteristics and the communicative functions of each rhetorical move and step realised in the RA Introduction sections, the following sections report in detail the features of each move and step identified in the analysis.

Move 1: Establishing the topic being studied

Move 1 is the first move which occurred in all of the 50 Introductions. Move 1 was principally at the initial position of the section. As such, its ordering has therefore been changed from being labelled as Move 2 in the preliminary study to Move 1 in the main study. As suggested by its label, this move is used to ensure that readers can determine if the research is of relevance to them and so worth reading, and to claim the significance of further exploration in the field. As shown in Table 6-1, Move 1 in Applied Linguistics RAs consists of three possible steps as follows:

Move 1, Step 1: Announcing the importance of the field

As indicated by its name, Move 1, Step 1 is used to present the importance of the research topic being studied. Move 1, Step 1 was usually found to open the Introduction section, introducing the topic of the study. This move/step is about how the topic is situated, providing evidence to support why the topic of the study is important to explore. Move 1, Step 1 was employed in 34 Introductions or 68%. The following are some of the instances of this move/step found in the analysis:

[5] *Reading* ***has long been valued*** *as a tool to acquire knowledge; however it* ***is regarded*** *as a difficult task for a large number of EFL students.*

SPJ 1

[6] *Reading entirely in English* ***is particularly important*** *for Thai university EFL students because of the large number of course texts, references and internet materials appearing in that language.*

JLA 1

[7] *Language learning strategies* ***have been considered*** *as* ***a key factor*** *for successful language learning for the last few decades.*

SCOJ 2

The authors can introduce the topic of the study and claim that it is a significant area of research through the use of emphatic lexical items, or predicative adjectives, such as *key factor* as in [7], and amplifiers (*particularly important*) as in [6]. The current state of the topic is signalled by verbs in the present tense in active or passive construction (*is, is regarded*). The use of the present perfect tense, as in [5] and [7] (*has long been valued, has been considered*) shows that the topic under investigation is still of potential interest to the readers. These linguistic features and lexical items help contribute to highlighting the importance of the topic and on-going interest to investigate a particular concept or study area. This finding is congruent with Samraj's (2002) study which suggests that that centrality claims seem to be made in two ways: either by assertions about the importance of the topic being discussed or by assertion regarding active research activity in the field concerned.

Move 1, Step 2: Making topic generalisation

This move is invariably present and usually opens the section, though it can occur elsewhere in the Introduction section. Similar to Swales (2004), this move/step can take a variety of forms, but it generally falls into one of two categories: statement about knowledge that is known in the field or practice and statement about phenomena. Specifically, the author used this move/step to define the key concept and present a clear statement of the problem or topic to be investigated. Move 1, Step 2 was found in 41 RA Introductions (or 82%) of the corpus. The following examples illuminate the use of Move 1, Step 2 in the RA Introductions:

[8] *Reading **involves** a number of cognitive processes; therefore, awareness and understanding of these processes **help** readers perform their reading better.*

SPJ 1

[9] *The English language is **complicated by the fact that** one word **can carry** more than one meaning and various meanings **can be associated** with a word.*

JLA 2

As shown above, the use of verbs in the present tense, be they active or passive, (*involves, is complicated, can carry, can be associated*) is the dominant linguistic feature used to accomplish Move 1, Step 2; expressing a statement which is assumed to be known to, or agreed by, discourse members, including potential readers and those who are interested in the topic. Given that the statement which denotes this move is brief and/or uncontroversial, the function of this move is similar to Wharton's (2006) study investigating how journal writers make claims and present information in their research texts. She asserted that by stating initial information in a brief form, writers are signalling that they believe this information to be shared knowledge in the community.

Move 1, Step 3: Reviewing previous research

The role of Move 1, Step 3 is to review related studies and/or criticise previous claims of knowledge to help establish the claims that the authors want to make. This move/step is usually recognised through clusters of citations intermingled throughout the text. Step 3 of Move 1 was frequent in the RA corpus. Among the steps identified in Move 1, this move/step was almost always present in the Introduction section (92%

or in 46 RA Introductions). The finding seems to correspond to the literature recognising that this move/step is often an obligatory component in RAs written in English (Samraj, 2002; Swales, 2004). The features of Move 1 Step 3 drawn from the corpus are shown by the following examples:

[10] ***A number of studies*** *on modified interaction or negotiation for meaning* ***(Ref) suggested*** *that the process of negotiating for meaning is facilitative of L2 acquisition.*

NET 2

[11] ***(Ref) confirmed*** *this notion by saying, "In learning another language, it is evident that we have to learn both grammatical correctness and idiomatic preference", otherwise the production of lexical errors and improper use of words could result.*

LEA 8

[12] ***A significant amount of research has been conducted*** *on teaching English as an additional language in various national contexts* ***(Ref)****.*

NET 5

The excerpts above reveal that a unique feature of this step is the presence of citations or reference as realised by (*Ref*). Compared with Step 2 of Move 1 (Making topic generalisation), Move 1, Step 3 is relatively specific, as all realisations of the move refer to previous studies (e.g. *a number of studies*, *a significant amount of research*). These lexical items are employed to contextualise the study being reported, demonstrating its connections to previous studies. This move/step is widely found in the Introduction section because assessing previous research in the literature can possibly enhance the authors' credentials as possessors of knowledge.

The instances above also show the distinct use of the present perfect tense (*has been conducted*) as in [12], and the past tense (*suggested, confirmed*) as in [10] and [11]. With respect to the use of tense, Shaw (1991, p. 303) proposes some intriguing and perceptive views on the use of tenses by claiming that the present perfect tense is used when the author needs to continue a discussion based on previous literature or to point out that the results of previous studies are acceptable in general. In contrast, the simple past tense is used when previous results are not generally accepted, and thus do not support an author's claim. Moreover, the present tense and quotation may be used with previous studies to refer to those that the authors think are very relevant and important to the study being presented.

With regard to the significance of the reference feature in this move/step, Swales (2004) asserts that citations or references are frequently used in Move 1 in the CARS model. The stances which a writer can take with respect to these citations and references can be understood through Martin and White's (2003) Appraisal theory, particularly the Engagement system (p. 92) which is concerned with the resources of "dialogistic positioning". That is, the resources "by which speakers/writers adopt a stance towards the value positions being referenced by a text and with respect to those they address" (Martin & White, 2003, p. 92). Engagement is one of the systems covering all the resources that the language offers for speakers to express their interpersonal positioning in the texts. The system of engagement can be divided into two dialogic orientations: hetorogloss and monogloss, which have several subtypes. For the texts studied, the specific reporting verbs used by writers, such as *suggested, have been suggested* may shed some light on the way the writers choose to take a stance vis à vis the literature cited. Specifically, the types of heteroglossic engagement involved here are ***endorse, acknowledgement,*** and ***distance***. Through ***endorse***, authors make reference to external sources, which are presented as unquestionable, valid or correct as realised by verbal processes, such as *have shown, demonstrated, found, revealed*, etc. With ***Acknowledgement***, the authorial voice is positional in relation to the external source introduced, typically through the wide use of attitudinally neutral reporting devices (e.g. *say, state, report, suggest*), or by establishing a ***distance*** from it through some reporting verbs, especially through the use of *claim*, and *alleged to*. Thus, when analysing how writers review previous studies, the system of engagement, particularly focusing on heteroglossic resources, can be used to describe how lexical signals which associate the proposition with the subjectivity of the authorial voice have been selected in the RAs.

To summarise, the occurrence of Move 1 is regarded as obligatory, and it is used to build a framework of knowledge with research evidence from topic generality to specificity. Three steps of Move 1 found in Applied Linguistics RAs include: Step 1: *Announcing the importance of the field*, Step 2: *Making topic generalisation*; and Step 3: *Reviewing previous research*. A majority of the RA Introduction sections typically begin with the common starter of making a topic generalisation (Step 2). The section can open with announcing the importance of the topic (Step 1), which usually provides readers with a broad topic. However, the length of the Introduction section

of these 50 RAs demonstrates the interaction of the three steps and the cyclical nature of Move 1. The finding is congruent with Swales (2004) who confirms that this move usually begins with topic generalisations and ends with topic specificities. It is important to note that, even though Swales' 2004 model does not delineate steps of Move 1, the three steps identified in this study are in congruence with Swales' model, indicating that steps of Move 1 are of increasing specificity.

Move 2: Presenting statement of problems/needs

In this move, the author tries to attract the readers' attention by mentioning some problematic issues, leading to the necessity and/or need to conduct the study in question. This is in agreement with Swales and Feak's (2012) view indicating that research problems are organised from general to specific. Words, phrases and negation patterns conveying negative connotation are usually employed in this move in order to present key characteristics of a particular problem. Move 2 could be described as optional, occurring in 16 RA Introductions (32%) of the corpus. This move can occur once in the Introduction section or can be interspersed with another move type. The ordering of this move was changed from Move 1 in the preliminary study into Move 2 in the main study in response to its position in the texts. The following excerpts, taken from Move 2 found in the corpus, illustrate some of the key language features which help identify the move:

[13] ***Although the importance of reading is well-recognized, many Thai university EFL students' English reading comprehension skill is still poor****. This* ***indicates difficulties in fulfilling the demands of their studies****.*

JLA 1

[14] *I argue problems stem from the grammar translation approach rather than the Communicative Language Teaching (CLT) approach. Due to these* ***problems****,* ***most Thai students not only cannot speak English properly and naturally, but they also lack motivation to learn and communicate in the language in their daily lives*** *(Ref).*

LEA 3

[15] ***Despite*** *a regular use of the English language both inside and outside the classroom setting,* ***the students still encounter problems in their learning and they generally see unknown words as the first problem to overcome****.*

SJSH 1

In the instances above, the authors try to convince the readers that the problem(s) being stated in the paper is quite serious, by pointing out how the situation or problem arises. The use of verbs in the present tense (*is, indicates, lack, encounter, see*) is prominent in Move 2, highlighting the existence of the current problems, which are, thus, worth investigating. The distinct use of negation *(cannot*) as in [14] and words that have negative meanings (*difficulties, problems*) as in [13] and [15], is the main strategy used to accomplish this purpose. Meanwhile, contradiction connectors (*although, despite*) are used to connect the ideal situation previously mentioned to the current situation that falls short of the goal, whilst the use of citations or reference *(Ref)* as in [14] is also found to refer to previous works, supporting the statement of the problem and claim, which leads to the needs and the necessity of finding solutions to the problem(s). There are no constituent steps found, however, in Move 2.

Move 3: Establishing a niche

Move 3 is used in the Introduction section of Applied Linguistics RAs to draw attention to a weakness or gap in the literature. This third move found represents a common strategy used to prepare readers by addressing or identifying gaps in previous studies, pinpointing how inadequate and problematic they are. Move 3 was a usual move as it was frequently found (42 out of the 50 RA Introductions or 84%). The other two Introductions demonstrated no clear and identifiable Move 3. The label of this move in the preliminary study was changed in response to additional communicative functions discovered at the step level in the 50 RAs. Move 3 is typically realised through two steps. This finding is congruent with Swales' 2004 model which asserts that this move can be accomplished via one of the three steps identified in his CARS model.

Move 3, Step 1: Indicating research gaps

Move 3, Step 1 serves to express critical comments addressing a current gap in existing research. This move/step is mostly used to pinpoint some limitations or

weaknesses in the existing literature. The analysis showed that 27 Introductions or 54% had Move 3, Step 1. The existence of this move/step is not in line with the study by Hirano (2009) suggesting that Brazilian writers have a tendency to not criticise others' work openly. Examples to illustrate Move 3, Step 1 are:

[16] *Generally, many of the two-way communication task studies were conducted in experimental setting where NS-NNS were involved, and* ***few studies have explored EFL learners' negotiating in classroom****.*

NET 2

[17] ***No study has been reported about the type of processing approach of English language by learners of non-romance languages*** *in general and Persian in particular.*

LEA 6

[18] ***Otherwise****, learners can inevitably form their cultural bias that would have a negative impact on their attitudes toward other 'non-Anglophone' countries including their own.* ***Yet, cultural aspects in English language textbooks used in Thai schools are under-explored****.*

VEJ 2

As can be seen, Move 3, Step 1 is employed as a strategy to mention that previous research studies suffer from some limitations. To accomplish this function, a number of lexical items are involved, including negative quantifiers and evaluation, such as indefinite adjectives or pronouns, negation devices (*no, few, little*) as in [16] and [17], evaluative adjectives (*under-explored*), and adversative connectors (*yet*) as in [18]. The use of adversative connector (*yet*) indicates that existing knowledge is limited, and thus remains to be substantiated. This finding is in accordance with Swales' (1990) work suggesting that this step involves claims that previous studies have been limited in some way.

Move 3, Step 2: Presenting positive justification

Move 3, Step 2 serves to support the need for the existence of the study, specifying the expected benefits obtained from the work being reported. This move/step is used to explain why the gap has to be filled or why the expansion of previous research is necessary. This move/step occurred in 17 RA Introductions (34%). The examples of Move 3, Step 2 are presented as follows:

[19] *Considering these studies,* ***examining*** *the components of student engagement* ***is essential to successfully engage students*** *even if following the school curriculum is required in some schools.*

NET 1

[20] ***There is****, consequently,* ***a need*** *to improve this aspect of their service to the customer. One area of possible improvement would be the recognition of the more practical training of 'small talk'. This particular approach to facilitating a more interactional form of conversation* ***would have potentially several benefits*** *apart from greater social interaction with the customers developing confidence in terms of language for the cabin crew.*

NET 4

As shown above, the verbs in the present tense (*is*) and lexical items indicating that research should be conducted (*need* as a noun, *examining* as a gerund) are commonly used. Moreover, the authors used positive evaluative adjectives in reporting the study (*essential, potentially several benefits*), to assist them in reinforcing the case for the research topic which they intend to investigate.

In summary, similar to Move 1, Move 3: *Establishing a niche* is recognised as a usual move. The authors commonly use Move 3 to show the research gap found in previous research in order to provide a transition for the authors to convince readers to appreciate the importance of the study. The authors generally indicate gaps in previous research through adversative connectors, and words conveying negative connotations. It should be noted that the two steps of Move 3 found in this study are not similar to Swales' (2004) model.

Move 4: Introducing the present study

Move 4 is the last move present in the RA Introductions. Move 4 is a means to introduce the work which will fill in the gap indicated in Move 3. Therefore, Move 4 is closely connected to Move 3. Regarding the position of this move, as predicted by Swales' CARS model, it usually ends the Introduction section. The analysis revealed all of the RA texts exhibited Move 4 (100%). Move 4 could be realised by one of the four steps as follows:

Move 4, Step 1: Stating objectives

Move 4, Step 1 explicitly indicates the purpose of the research being reported. This move/step was frequently used among RA authors (88%). The presence of this step is equivalent to the idea of 'occupying the niche' in the CARS model. It is in line with Samraj's (2002) study showing that research goals are generally presented and elaborated in all the Introductions to articles on wildlife behaviour that she studied. Therefore, it can be said that Move 4, Step 1 is preferred in writing an RA. The following examples represent excerpts that demonstrate how the authors announce the purposes of their studies:

[21] *Therefore,* ***the study aims at investigating*** *the problematic areas of sentence structures common to students so that further training on these could be provided to facilitate their reading comprehension.*

JES 4

[22] ***The aim of this study is thus to explore*** *how the English language is commodified in the private sector by looking at promotional materials of a popular language school namely the Wall Street Institute of English (WSI).*

NET 5

[23] *With this in mind,* ***the researchers*** *were encouraged* ***to examine*** *a range of LLS by employing a case study of a group of undergraduate students majoring in English in Cambodia.*

LEA 1

As shown above, Move 4, Step 1 is rather short and is usually found in one sentence. The most frequent signal in this step to state the objectives is the use of deictic references to the present texts, including demonstrative adjective (*this*), and specific determiners (*the*) followed mainly by the common nouns referring to the article (*study, research, paper*). Impersonal stereotypical phrases referring to the objective of the study (*the aim of this study* or *this study aimed to*) were also used. In [23], the noun (*researchers*) is used to express identity and inform readers of their involvement of the research. It is worth noting that the verbs *is* and *aimed* are used in the form of the simple present tense or past tense in order that the authors can state explicitly the objective(s) of the research. The use of the noun (*aim*) as in [22] and semantically suitable infinitives (*to study, to explore, to examine*) to go with it in this move/step is congruent with Swales' (2004) study stating that proposing the purpose of the study is usually categorised into two forms: the descriptive form, focusing on

the features of the study, or the purposive form, which is marked by an expression, such as *the aim* or *the goal*.

In this respect, the first person pronoun (*I*) is also used to stress that the study being presented was conducted by the author him/herself as shown in the following instance:

[24] *In this study,* ***I examined*** *the effective instructional strategies that help students who study a foreign language understand reading and writing in the target language.* ***I*** *also* ***examined*** *in what ways teachers can encourage and motivate students to learn a foreign language, how the strategies that teachers in the United States use compared with my experience teaching in Japan and with that of Japanese students* ***I*** *interviewed, and how teachers manage time to involve students while teaching a huge amount of content, which might take up most of the class period.*

NET 1

The use of the first person pronoun *I* signals the presence of a researcher in the research paper, serving to claim ownership. This explanation supports Hyland (2009) and Hyland and Tse (2012) who indicate that by referring to themselves in the first person, the writers want to stress their contribution and their presence in the article where the author interacts with other scholars and audience. They also leave readers in no doubt of their stance by claiming credit for what they are saying.

Move 4, Step 2: Listing research procedures

Step 2 of Move 4 had a lower number of occurrences (8 Introductions or 16*%* out of 50 RAs), compared to Move 4, Step 1. This move/step serves to briefly describe methodological procedures and/or experimental framework adopted by the studies. The following examples illustrate Move 4, Step 2:

[25] *However, in this study* ***three different two-way communication tasks were selected****;* ***problem-solving tasks****,* ***information gap tasks*** *and* ***story-telling task****.*

NET 2

[26] ***Using Lee's working definition of coherence and students' voices*** *as the conceptual framework, we ventured into a writing class to explore how a group of EFL university students viewed coherence and the extent to which teaching and students' views on coherence might be related.*

LEA 4

The above examples elaborate specific features of the procedures involved in the study being reported. Compared to Move 4, Step 1, Step 2 of Move 4 normally exceeds mere one-sentence announcements. This move/step is used to describe selectively only major procedural features depending on what the authors consider to be the main features of the study.

Lexical signals used to express Move 4, Step 2 include expressions related to research procedures and research tools (*problem-solving tasks, information gap tasks, story-telling task*) as in [25]. Activity verbs describing research activities (*were selected*) and underlying theoretical framework used (*Using Lee's working definition of coherence and students' voices*) in [26] are used to present methodological procedures. The choice of simple past tense (*were selected*) also indicates completion of the methodological procedures. The occurrence of this move/step substantiates Kanoksilapatham (2012a) who claims that civil engineering RA Introduction sections also use this step to provide an account of the experimental procedures of the research.

Move 4, Step 3: Claiming research value

Move 4, Step 3 serves to inform readers of the value of the research being presented. Functionally, in this move/step, the research findings are discussed from several perspectives, including implications, significance, interpretations or contributions of the study being reported. This move/step occurred in 13 out of 50 RA Introductions (26%). The characteristics of this move/step are shown in the following examples:

[27] ***The results of this study contribute some empirical evidence*** *in an attempt* ***to raise awareness*** *of a test bias which has been overlooked in many ESL/EFL contexts.*

JES 1

[28] *It is hoped that* ***the results of this study will provide*** *EFL learners with* ***some helpful guidance*** *in order to minimize the number of collocational errors in second language production.*

LEA 8

[28] indicates that the simple future tense (*will provide*) is used to show that the results of the study are of value. Some key linguistic features used to accomplish

this move/step include cognitive nouns (*awareness*) and predicative and possibility modals (*will, may*) as in [28]. Deictic elements, including specific determiners or demonstrative adjectives (*this*) followed by common nouns (*study*) and formulaic structures (*the results of this study*) are frequently used in this text segment. Move 4, step 3 is regarded as a strategy to state the value of the research before the authors make strong claims for the validity of their research and implications in the Discussion section.

Move 4, Step 4: Indicating research questions

Move 4, Step 4 did not appear frequently in the study. This move/step, if present, may be the last move to end the Introductions. The aim or goal of a study can be explicitly stated in the form of research questions in this move/step. Move 4, Step 4 occurred in 10 RA Introductions or 20% of the corpus. How the authors use Move 4, Step 4 is illustrated in the following examples:

[29] *In order to explore the question of the commodification of English,* ***this study sets out to answer the following research questions****:*

1. What languages, symbols and images can be found in the promotional materials of WSI? And,

2. What language ideologies are implicit in those materials?

NET 5

As shown here, the research questions found in Introduction sections are stated directly (*to answer the following questions*) and are generally listed. Since this move/step is used infrequently in the corpus, this finding is consistent with Swales' (2004) CARS model, indicating at Step 2 in Move 3: Presenting RQs or hypotheses is regarded not only as optional but that it is less fixed in its occurrence of order than the other steps.

In conclusion, Move 4 seems to be a premise of the authors to introduce the research being reported and to confirm that the research work has real value and practical application. Move 4 usually ends the Introduction section, consisting of four constituent steps. The frequency of steps identified in Move 4 in this study is in accordance with Move 3 in Swales' 2004 model indicating that some steps are optional and others are obligatory; some are found in certain academic disciplines only. In

comparison between the results of the analysis in the main study and the draft framework, it is interesting to note that, even though more RAs were analysed in the main study, the number of steps found in Move 4 remains similar.

6.2.2 Move patterns in the Introduction section

I now move on to discuss the move patterns identified in the Introduction section. As mentioned earlier, the move patterns can be described in terms of the opening move and closing move. The findings regarding the move patterns in the Introduction section can be seen in Table 6-2 as follows:

Table 6-2 Move patterns in the Introduction section

No.	Move sequences	Research articles (N = 50)	
		No. of RAs found	*Percent (of total no. of RAs)*
1	M 1-2-1-2-4-3	1	2%
2	M 1-2-1-3-4	6	12%
3	M 1-2-1-4	2	4%
4	M 1-2-3-2-4	1	2%
5	M 1-2-3-4	3	6%
6	M 1-3	1	2%
7	M 1-3-1-4	3	6%
8	M 1-3-1-4-2-4	1	2%
9	M 1-3-2-4	2	4%
10	**M 1-3-4**	**22**	**44%**
11	M 1-4	6	12%
12	M 1-4-3	1	2%
13	M 1-4-3-4	1	2%
	Total	**50**	**100%**

Regardless of the variation in length of individual moves identified in this section, Table 6-2 shows that all of the 50 Introduction sections basically begin with Move 1: *Establishing the topic being studied*. This finding is in agreement with previous studies in various academic disciplines; for instance, Fakhri (2004) in humanities; Loi (2010) in educational psychology; Kanoksilapatham (2007b) in

biochemistry and microbiology; Ozturk (2007) in applied linguistics; and Samraj (2002, 2005) in wildlife behaviour and conservation biology.

The table also displays that a number of move patterns were found (e.g. M 1-2-3-4, M 1-2-1-4, M 1-3-1-4, etc.). These minimal variations indicate possible idiosyncrasy of individual writers or groups of writers. The analysis indicates that all Introduction sections appeared to use Move 4: *Introducing the present study* to conclude this particular section, except for three Introductions. This finding suggests that the authors in the Applied Linguistics field consider the introduction of the study being reported and inclusion of a purposive statement as a crucial part in presenting an RA.

Since Move 2: *Presenting statement of problems/needs* was found in 22 or 44% of the corpus, the most preferred move pattern of the Introduction section is M 1-3-4. Move 2 was omitted in some texts as it seems to be specific to a particular context and might not be required in this section. Taking this into account, Moves 1, 3 and 4 identified in this study perform similar communicative functions as the archetypal Moves 1, 2, 3 suggested in Swales' CARS model. Therefore, the finding supports Swales' model, and is congruent with previous studies focusing on this particular section (e.g. Kanoksilapatham, 2007a; Loi, 2010; Nwogu, 1997; Samraj, 2002, 2005), indicating that the move pattern of M 1-2-3, as delineated in the Swales' CARs model, is the most common move structure found in the RA Introduction.

6.2.3 Repetition of moves in the Introduction section

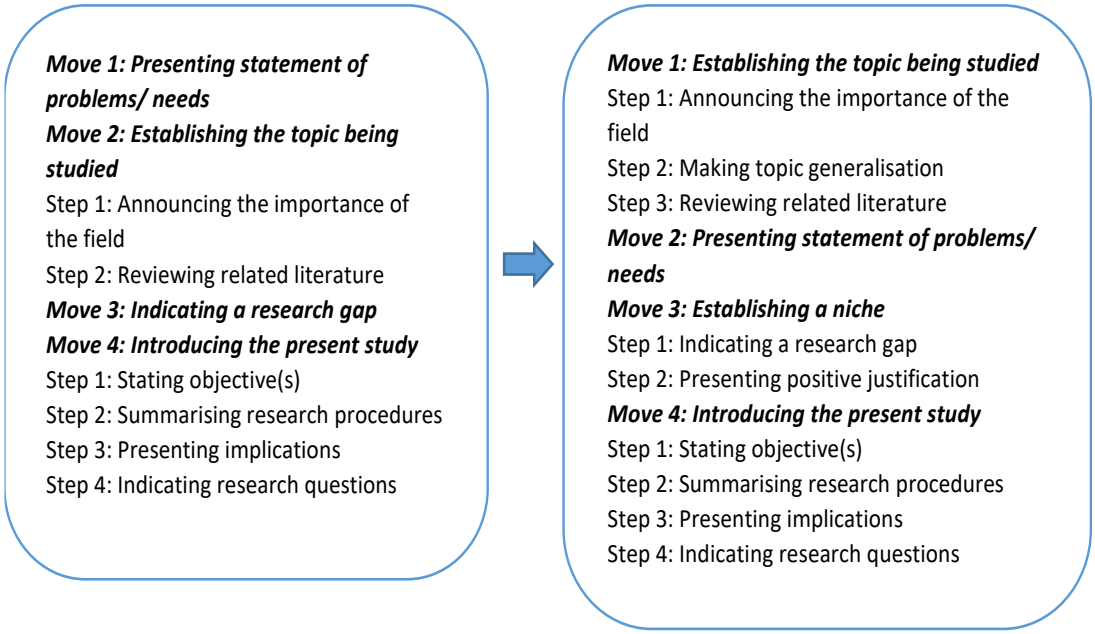
The repetition of moves in the 50 Introduction sections was also investigated in order to pinpoint the most repeated move. The analysis demonstrates that the dataset revealed a cyclical nature, which was in the form of one or two moves which appeared repeatedly in the move patterns, for example, in the patterns of M 1-2-1-3-4, M 1-2-1-2-4, M 1-2-1-4, and M 1-3-1-4-2-4. Among the move patterns shown in Table 6-2, the pattern of M 1-3-4 is the most frequent pattern. Move 2 and Move 3 occurred repeatedly, though to a lesser extent, compared with Move 1 which was quite prominent, and was found to be the most repeated move. Its repetition occurred in 13 out of the 50 RA Introductions. Based upon the high volume of repetition of Move 1,

it can be said that the inclusion of the repeated occurrence of Move 1 might stem from the authors' awareness of the significance of the topic and the authors' intention that the additional information would facilitate the readers' comprehension.

6.2.4 Summary of the Introduction section

Using the draft framework, the analysis reveals that the rhetorical structure of the Introduction section of the 50 Applied Linguistics RAs, similar to the preliminary study, consists of four distinct moves. The steps comprising each move can be identified. Based on the identification of rhetorical moves and their features advocated by the main study, however, some alterations to the genre framework were made. The following figure illustrates how the draft genre framework was modified.

Figure 6-1 Changes in rhetorical patterns identified in Introductions from preliminary study to main study



As can be seen in Figure 6-1, the modification of the framework lies in the ordering of certain moves and the number of steps recognised. That is, I did a swap regarding the ordering of Moves 1 and 2, and the functions identified in the constituents of Move 3 suggested changing its label. In general, similar to the draft framework, the model of RA Introductions generated by this study consists of four

moves. These consist of: Move 1: *Establishing the topic being studies*, Move 2: *Presenting statement of problems/needs*, Move 3: *Establishing a niche*, and Move 4: *Introducing the present study*. Each move consists of a number of steps, except for Move 2. It is critical to note that, nonetheless, there is no prescribed order in which the steps listed should occur in this particular section.

6.3 Locating the Methods Section

Following the same procedure of how genre analysis was conducted in terms of identifying the rhetorical purpose of a stretch of text, in the following sections, I will first describe the results of the analysis of the 50 RA Methods, and then discuss the nature and communicative functions of each move identified. Finally, I will present how the draft framework was scrupulously modified based on the results of the data of the 50 RA Methods.

The analysis enables us to identify five different moves prevalent in this section. As indicated by the section headings, the Methods section is usually divided into subsections. Some article authors labelled this section as either 'the study' or 'the present study'. The section headings are explicitly labelled either in boldface or italics, depending on the journal format. However, these headings were not included in the analysis. The five major moves identified for the 50 RA Methods sections are:

Move 5: Summarising research objectives and methods
Move 6: Describing participants/ sources of data
Move 7: Stating research instruments
Move 8: Detailing research/ data collection procedures
Move 9: Describing data analyses

Compared with the draft genre framework, the typical communicative functions and characteristics of Moves 5 and 6 suggest an amendment to the move labels, namely, Move 5 is labelled '*Summarising research design and methods*', and Move 6 is labelled '*Describing participants*', in the preliminary study. To illustrate, besides focusing on research designs, Move 5 was used to present a brief description of the research objectives and research methodologies of the study being reported. This move provides the global picture of methodology in the study, including research

questions, methods, and instruments. If found, it normally occurs at the beginning of the section. This move occurs infrequently (in 20 out of the 50 RA Methods). Move 5 is illustrated by the following excerpt:

[30] ***To answer the research questions, a pre-test-two-post-tests experimental study was conducted.*** *It involved* ***three experimental groups based on the three types of written corrective feedback treatment,*** *which were* ***direct corrective feedback (DCF), indirect corrective feedback (ICF), and coded corrective feedback (CCF), and a control group that received no written corrective feedback.***

NET 8

Move 6: *Describing participants/ sources of data* usually describes the participants who took part in the study, and any source of data used to carry out a research project. Since the 50 RAs were taken from journals focusing on the Applied Linguistics discipline, they might cover a wide range of studies in the field, including language instruction, discourse analysis, testing and evaluation, etc. (see Section 1.2.3). Hence, a slight change was, of necessity, made to the name of Move 6 in response to the diverse sources of data analysed. Move 6 is more extensive, involving a number of sentences because it generally provides readers with background information of the research participants. The criteria used to carefully select and recruit the participants are sometimes described. Move 6 was found in all Methods sections (100%) in the corpus. The following example is to illustrate Move 6:

[31] *Among 695 teacher populations from 172 Islamic private schools in five southern border provinces of Thailand,* ***314 teachers teaching English in 155 Islamic private schools were randomly selected with balanced proportion of school sizes—extra large, large, medium and small, and school locations—town and suburb****.*

LEA 12

The description of the research instruments can be accomplished in Move 7. In this move, a description of how the instruments are designed or carefully selected to serve the purpose of the study is provided. This move sometimes offers justifications for selecting the instruments used in the study being reported. Move 7 occurs in all 50 RA Methods (100%). The following example represents how Move 7 is used in the texts:

[32] ***The instrument employed in this study was a LLS questionnaire. It focused on two sections: background information and SILL. SILL is the most well-known LLS scale and has been used extensively all over the world in the last 20 years (Ref). The SILL version 7.0 (50 items), designed for native English speaking learners who use English as a second or foreign language, was adopted in this study.*** *The questionnaire was presented in both English and Khmer.*

LEA 1

Move 8: *Detailing research/ data collection procedures* deals with the information on research procedures or data collection carried out in the study. This move was found in 47 RA Methods (94%). As a shortcut, the authors sometimes use numbers to facilitate understanding of each procedure carried out to achieve the process of data collection, whereas, at other times, it is described in statements. The following example shows the use of Move 8:

[33] *One of the researchers started* ***observing the class from the first class to their last class, i.e. in one semester (beginning of November-end of February). The researcher attended the class for 28 sessions and each session lasted 1 hour and a half. The role of the researcher was a nonparticipant observer (Ref). That is, the researcher did not participate in any of the students' learning activities. The observation followed guidelines including topics of teaching, teaching materials, types of activities, time allocated or each activity, features of coherence, questions from the teacher and the students as well as responses***.

LEA 4

The author proceeds to present the procedure of data analysis in Move 9. This move obviously occurs at the very end of the Methods section. Normally, statistical devices used in the study to analyse the data are described, whilst some of the Methods are to do with content analysis and coding analysis, depending on research areas. Moreover, similar to Move 8, Move 9 is sometimes explicitly presented by using the technique of a numbered list. Move 9 was found in 41 RA Methods (82%). The following example involves the use of Move 9 to describe statistical analysis used in the study:

[34] *The following* ***statistical methods were used*** *to address the objectives of the study.*

For Objective 1, ***descriptive statistics*** *were used to identify the language learning strategies used by Thai students studying Korean as a Foreign Language at the Mattayom Wat Makutkasat Secondary School.*

For Objective 2, ***the Pearson product Moment Correlation Coefficient*** *was used to determine if there was any significant relationship between the use of language learning strategies and student achievement.*

SCOJ 2

6.3.1 Features of moves and steps and their frequency in the Methods section

As noted in the previous section, the Methods section of the 50 RAs consists of a set of five distinctive moves which have clearly different communicative functions. As determined by linguistic features and lexical signals, the steps that help characterise each of the moves can be identified. The frequency of occurrence of rhetorical moves and steps of the 50 RA Methods sections are presented in the following table.

Table 6-3 Frequency of occurrence of moves and steps in the RA Methods

Move/Step	RA (N = 50)	
	Frequency	Percent (of total no. of RAs)
Move 5: Summarising research objectives and methods	**20**	**40%*** **
Step 1: Announcing research objectives/ questions	10	20%
Step 2: Presenting research designs	13	26%
Move 6: Describing participants/ sources of data	**50**	**100%***
Step 1: Providing the description of the participants/data	50	100%
Step 2: Justifying selection criteria	17	34%
Step 3: Defining variables	3	6%
Move 7: Stating research instruments	**50**	**100%***
Step 1: Detailing research instruments	50	100%
Step 2: Presenting the development/ justification of research instruments	20	40%
Move 8: Detailing research/ data collection procedures	**47**	**94%** **
Move 9: Describing data analysis	**41**	**82%** **
***=Obligatory, **=Usual, ***=Optional**		

Table 6-3 demonstrates that, at the move level, the number of move types identified in the analysis is equivalent to those found in the draft framework. Moves 6 and 7 were discovered in all of the 50 RAs (100%), while Moves 8 and 9 were relatively frequent (47 and 41 out of 50 or 94% and 82% of occurrence, respectively). Move 5 was found to be the least frequent move type (40%). Moves 6 and 7 are considered obligatory in performing their communicative functions in this particular section, while Moves 8 and 9 are usual moves. Move 5 is regarded as optional. Therefore, it can be said that Moves 6, 7, 8, and 9 play an integral role in the Methods section of the RAs analysed. In contrast, the relatively low percentage of Move 5 indicates that summarising research objectives and research methods may play a much smaller role than other move types in the Methods section.

At the level of steps, the result is intriguing, revealing three additional steps: Steps 1 and 2 of Move 5, and Step 3 of Move 6, which are not included in the draft framework. Although these extra steps are infrequent, the presence of these steps appears to fit the descriptions of the moves identified, emphasising the additional

communicative functions of the move type and the section. This finding contributes to a minor adjustment to the draft framework which will be presented in Section 6.3.4.

As shown, all moves in RA Methods, except for Moves 8 and 9, entail a number of steps. The following sections discuss in detail the features and prominent lexico-grammatical features of these moves and steps.

Move 5: Summarising research objectives and methods

The main communicative function of Move 5 is to present general information of the research method of a given study. In some cases, it is used to state or restate the research objectives of the study being reported. If used, it occurs at the beginning segment of the Methods section. Move 5 was optional, with the occurrence rate of 40% (20 out of 50 RA Methods). In the preliminary study data, this move is used to summarise research design and methods and does not have any constituents. However, in the main study data, Move 5 can be accomplished by two possible steps which are presented as follows:

Move 5, Step 1: Announcing research objectives/ questions

Step 1 of Move 5 is the segment in which the authors address the objectives of their research, or the question(s) to be answered in the study. This move/step occurred in 10 RA Methods (or 20%) of the corpus. This move/step, if used, usually occurs at the very beginning of the section. The presence of this move/step is congruent with Arsyad's (2013) study investigating discursive structures and linguistic features of RA Methods sections of several disciplines: religious studies, education, economies and management, language and literature, psychology, and social sciences, written by Indonesian researchers. The realisations of Move 5, Step 1 are shown in the following text examples:

[35] ***This study sets out to investigate*** *Thai students' attitudes towards the native-speaker and other ASEAN models in English pronunciation learning that highlight intelligibility with reference to the ideologies of ELF and EIL. Corresponding to the objective stipulated,* ***the research question addressed in this study is: What are the Thai English learners' attitudes towards native-like pronunciation or the pronunciation of other varieties of English advocated by the notions of EIL, ELF, and WEs?***

JES 2

[36] ***My research questions*** *are as follows:* ***What instructional strategies most help students who study a foreign language understand reading and writing in the target language?*** *Sub-questions:* ***In what ways can teachers encourage and motivate students to learn a foreign language? How do the strategies that teach in the US use compare with my experience teaching in Japan and interviews with Japanese students?***

NET 1

The above focuses on the research objectives and research questions to be addressed in the study which the example is quoted from. The linguistic features of this move/step are rather formulaic, consisting mostly of the use of *to* or *in order to*, followed by infinitive verb form (*investigate*) to announce the research objectives of the study. The research questions can be listed in the form of an interrogative sentence. Interestingly, in [36], sub-research questions are provided after the main research question of the study is presented.

Move 5, Step 2: Presenting research designs

Step 2 of Move 5 spells out an overview of the research design and/or approaches used to collect the research data. In other words, the authors announce the research design of the study being reported before providing more details of the data collection process later in the Methods section. The position of this move/step is not fixed as it can be found anywhere in the section. Move 5, Step 2 was found in 13 out of 50 RA Methods (26%) of the corpus. The following examples illustrate Move 5, Step 2 found in the Methods section:

[37] *This study* ***employed four qualitative research methods****:* ***in-depth interview, focus-group interview, documents and questionnaires****.*

LEA 3

[38] *The methodology* ***used*** *in this study was a* ***Research and Development type (R&D) which was a mixed-method including qualitative and quantitative research studies****.*

VEJ 3

The predominant linguistic features used to identify and guide readers to the research design include the nature of the research (*qualitative*, *quantitative research*) as in [38], and research methods or data collection techniques employed in the study (*in-depth interview*, *focus-group interview*, *documents and questionnaires*, *mixed-method*). Linguistically, the use of verbs in the past tense, be they active or passive constructions (*employed, was employed*), indicates the completion of the research activities in the study. It is possible that a brief research characterisation is described in this move/step to convince readers to keep reading the details of data collection procedures; therefore, the pertaining details of these research activities are not provided in this step.

Noticeably, this move is relatively infrequently used compared to other moves in the Methods section. The presence of Move 5 in this study is, however, interesting for several reasons. Firstly, the occurrence of this move was not reported by Lim (2006) and Nwogu (1997), who also examined Methods sections. However, it was found in Arsyad's (2013) study. Secondly, almost all of the research activities to be executed in the study are introduced, which facilitates readers' understanding of the picture of the study and research procedures before reading the subsequent sections of the article. The use of verbs in the past tense suggests that the research activities were completed, and thus informs the success of the study. Moreover, the use of lexical items with research-oriented meaning denote the specification and characteristics of the study being reported.

Move 6: Describing participants/sources of data

Compared with the draft framework, I have changed the label of Move 6, by adding '*sources of data'* in response to the wide range of data used in the main study. Obviously, as found in some RA Methods sections, research participants could be differently described as 'study participants', 'subjects', or 'samples'. Move 6 is to ostensibly describe the size of the sample of participants and their characteristics. Occasionally, the population, description of sampling technique, and representativeness of the sample are provided. Move 6 was obligatory as it was found in all 50 RA Methods (100%). This move can be realised by three possible steps which can be characterised as follows:

Move 6, Step 1: Providing the description of the participants/ data

Move 6, Step 1 precisely reports the number of participants who took part in the research study being reported. Demographic information of the participants, including gender, ages, occupation, and the setting in which the research was carried out, is also provided in this move/step. Move 6, Step 1 occurred in all of the 50 RA Methods (100%). Move 6, Step 1 is illustrated by the following instances:

[39] ***The research population was the air hostesses and air steward*** *in: first class, business class or economy class.* ***The participants totalled 20 crew, both male and female****.* ***Their education background ranged from high school, to that of a Bachelor of Arts degree****.*

NET 4

[40] ***The participants were 30 first year English major students (male 10, female 20) in Listening and Speaking I Course at Mae Fah Luang University****, an autonomous university in Thailand in 2010.* ***Each participant had completed a minimum of eight years English study prior to entering the university****.* ***Their ages ranged from 17 to 19****.*

NET 2

The presence of the word *participants* serves to specify the information regarding the people selected in the study being reported. The description of the participants is precise and specific, providing their number, gender, and other characteristics (*20 crew, both male and female, 39 first year English major students*). The specific name of geographical locations (*Mae Fah Luang University*) and specific

information of the participants, e.g. age range and educational background (*Their education background ranged from high school, to that of a Bachelor of Arts degree, Each participant had completed a minimum of eight years English study prior to entering the university. Their ages ranged from 17 to 19*), is also reported in this move/ step.

In addition, some other data source information regarding the focus or area of studies in the Applied Linguistics field could be found in the analysis. Here is an example taken from an RA focusing on discourse analysis:

[41] ***The data*** *that are collected for this study are* ***media discourses, i.e., promotional materials produced by WSI.***

NET 5

Move 6, Step 2: Justifying selection criteria

Move 6, Step 2 draws attention to the rationale and/or criteria used in the selection of participants/data in the study. This move/step is used to assure readers that the potential participants or samples taking part in the study satisfactorily fulfil the requirements, serving appropriately the objective(s) of the study. Out of the 50 RA Methods, 17 Methods (34%) contained this move/step, as in the following examples:

[42] ***This target group was chosen for the following reasons***. ***Firstly****, they were the students of one researcher's friend; therefore,* ***it was convenient to gather data***. ***Secondly****, with exposure English during lower and higher secondary school,* ***it was assumed that they would have their own opinions on and effective ways of English learning***. ***Also***, ***because*** *they were freshman English majors,* ***they were useful for investigating and reflecting their possible formulated strategies to learn English at early undergraduate degree***.

LEA 1

[43] ***After administering a standard language proficiency test, the Oxford Placement Test (OPT) (Ref)****, 126 upper-intermediate learners out of a pile of 270 English as a Foreign Language (EFL) learners* ***were chosen*** *for this study.*

LEA 5

The above texts demonstrate some explicit reasons why the participants were selected to participate in the study. Linguistically, the subordinating conjunction

(*because*) is used to imply a justification for selecting these participants, assuring that they were carefully selected, representative of sufficient size and suitable for the research objectives. The use of verbs in the simple past tense, especially in a passive construction, is rather dominant in this move/step (*was chosen, were chosen, were selected*). Other linguistic features which indicate that the participants were selected wisely and systematically, serving the purpose of the study, are lexical items, such as the adjectives *convenient* and *useful*, and the enumeration of the various reasons through the use of *firstly, secondly,* and *also* as in [42].

Likewise, **[**42**]** is an example of how the co-occurrence of Step 1 and Step 2 of Move 6 can be found in this move. That is, once the information of the participants is described, the authors might present reasons or justify the selection process of the participants in the study being reported.

Move 6, Step 3: Defining variables

Move 6, Step 3 provides information about research variables. It is used especially with the experimental study investigating what research variables could affect the outcome. This move/step was not found in the draft framework. However, it occurred in three Methods sections of the corpus (6%). Move 6, Step 3 is illustrated in the following example:

[44] ***Independent variables*** *were* ***the variable of person factor, the variable of family factor, and the variable of institution factor****.*

Dependent variable *was* ***the characteristics of self-directed learning of the students*** *from Faculty of Education, Silpakorn University.*

VEJ 1

As can be seen from [44], the author can explicitly state research variables in Move 6, Step 3 by using words such as *independent variable,* and *dependent variable.* This move/step is used because the author needs to guide and inform readers of the factors to be investigated in the study. This move/step can be realised by using verbs in the simple past tense (*was, were*).

In conclusion, Move 6 provides background information regarding data sources or participants taking part in the study being reported. This move can be manifested by describing the participants (Move 6, Step 1). The authors may opt to

provide additional information regarding how to recruit or select participants or data for the study (Move 6, Step 2). Occasionally, the authors can present research variables to be examined (Move 6, Step 3). A grammatical feature widely used in these moves/steps is past tense verbs, indicating the completion and achievement of the research study.

Move 7: Stating research instruments

Move 7 centres on the features of research instruments used in the study being presented. The presence of this move was similar to that of the draft genre framework. In the main study, Move 6 was obligatory, as it was found in all of the 50 RA Methods (100%), indicating the significance of this move. This move consists of two steps, which is not in agreement with previous studies investigating RA Methods in management (Lim, 2006), and in medicine (Nwogu, 1997), which reported three steps. The two possible steps identified in Move 7 are presented as follows:

Move 7, Step 1: Detailing research instruments

This move/step describes how research instruments are obtained, adapted, or created, pertaining to the particular objective(s) of the study. In Move 7, Step 1, the detailed description and/or characteristics of the instruments are also provided, and are sometimes presented with citation (*Ref*) if the study adopts or adapts the instruments from previous studies. Move 7, Step 1 was frequently adopted to follow Move 6. This move/step occurred in all of the 50 or 100% of the RA Methods, reflecting its importance in this particular section. The realisation of Move 7, Step 1 is illustrated in the below examples:

[45] ***The Metacognitive Awareness of Reading Strategies Inventory (MARSI) designed by (Ref) was used*** *to assess students' awareness and the use of reading strategies while they read.* ***It consists of 30 items of metacognitive reading strategies***.

SPPJ 1

[46] *To investigate the commodification of English through media discourses in* **this study**, ***I will adopt a critical approach***. *For* ***this research***, ***Critical Discourse Analysis (CDA) was adopted as a theoretical framework and Content Analysis was performed to examine the data collected***.

NET 5

The authors explain methods for measuring variables, using lexical items related to research techniques for the collection of data in the study (*questionnaire*) as in [45], or approaches to data analysis (*critical approach, Critical Discourse Analysis, Content Analysis*) in [46]. In order to describe a methodological procedure, verbs in passive past-tense constructions (*was used, was adopted*) are employed, entailing some information regarding how the instruments are constructed, used, or developed in the study. Specific details of research tools used can also be elaborated by using verbs like *consists of.* The deictic centre lexical item (*this*) with a noun (*study, research*) is used to state that the instruments used specifically pertain to this particular study.

Move 7, Step 2: Presenting the development/ justification of research instruments

This move/step describes the process of implementing research instruments and/or provides justification for their choice, demonstrating in what way they are appropriate for the study being reported. It is possible that this move/step is used as researchers might wish to protect themselves from possible inquiries by convincing readers that the instruments used were carefully and appropriately selected, adapted or developed. As suggested by the results, I have added '*Presenting the development'* to the label of this move/step. However, Move 7, Step 2 was found in 20 RA Methods or 40% (out of 50 RAs Methods). The use of this move/step is shown below:

[47] *The purpose of this* ***piloting*** *was* ***to ensure that the language used in the questions was understood by the respondents, and the questions successfully elicited what they were supposed to***. *Based on the comments and feedback from the respondents,* ***the questionnaire was revised accordingly***. ***Some question items were rewritten, and others were elaborated to make sure that confusion was eradicated, and clarity enhanced***.

JES 2

[48] ***The content validity of the questionnaire was checked by expert judgments***. *Four experts in the field of service learning and education* ***were consulted to establish the content validity of these instruments***. *After* ***thorough checking, the experts suggested certain changes, based on these suggestions; the questionnaire items would be revised accordingly before distribution***.

SCOJ 3

The above examples reveal that the authors purposely tried to convince readers that the choice of research instruments used appropriately serves the purpose(s) of the study. Specifically, some lexical signals, such as *piloting, to ensure, was revised, were rewritten, were elaborated, was eradicated, clarity enhanced* in [47] and *was checked, were consulted, thorough checking* and *revised* in [48] can help explain the development of the instruments being used in the study. Some lexical items are also used together with infinitive verbs (*to ensure, to establish*), demonstrating the objective of the development of research instruments, which aids the authors to clarify the effectiveness and reliability of the instruments after some modifications were wisely and appropriately made. In so doing, possible doubts can be eliminated, strengthening the reliability and credibility of research findings.

In summary, Move 7 of the Methods section consists of two steps: 1) *Detailing research instruments*, and 2) *Presenting the development/justification of research instruments.* The former could be found in all of the 50 RA Methods, while the latter step is infrequently used as it was found in 20 out of 50 articles. Hence, it can be assumed that the details of research instruments play an important role in presenting a study in the discipline of Applied Linguistics. The description of research instruments employed is provided together with the information regarding how they are chosen in order to appropriately serve the particular objective(s) of the study.

Move 7, as found in the present study, is not congruent with Lim (2006) and Nwogu (1997) in terms of its position and the number of possible steps contained, especially Move 2 Step 1: *Presenting an overview of the design* found in Lim's study. It should be noted that this move was found as Move 5 in the present study. Thus, this confirms that not only the occurrence, but the position of each move might be potentially related to disciplinary difference.

Move 8: Demonstrating research/data collection procedures

Move 8 aims to selectively present data collection procedures in detail. This move is used to convince readers that research activities in the study were systematically implemented in order to obtain reliable data for the analysis. Consistent with the draft genre framework, in this move, the authors sometimes outline the procedures in numbered lists, and sometimes describe it in statements. Move 8 was usual as it occurred in 47 RA Methods sections (94% of 50 Methods). The following examples are to elucidate the use of Move 8 in the RA Methods:

[49] ***The research procedure for the present study was carried out in two phases***. ***First, students were asked to do the English version of the reading comprehension test in the final week of the semester in reading comprehension by means of grammar-translation instruction. Then in the consecutive session in the same week, the participants were required to take the Thai version***. *Each test session was 45 minutes long.*

JES 1

[50] ***Semi-structured interview was used to gather data related to students' voices on coherence, their writing, and their experience as writing students. The interviews questions were piloted with 15 English major students*** *at another public university in a different region.* ***Twelve students were individually interviewed*** *in the final week of the course.* ***The interview was audio recorded. Immediately after the interviews, the data were transcribed and then translated into English***.

MP 1

In each of the above examples, Move 8 is used to describe the research procedures. It is always used with verbs in the past tense, especially in passive voice (*was carried out, were asked, was used, were interviewed, was recorded, was piloted, was transcribed*) to present activities that have already been completed. It is possible that the authors use this form to indicate that the study accomplished its task of addressing the objectives/purposes established by following the step-by-step approach the research activities mentioned. This finding substantiates de Waard and Maat's (2012) work on Biology RAs. That is, the interpretation of the Method propositions can be clearly recognised by the co-occurrence of research activity verbs and passive constructions. Besides, variation in the verb choice can be observed, depending on the research instruments used and type of data, highlighting the features or details of

the research procedures being reported. Additionally, the use of subordinate conjunctions *first* and *then* explains the time frame for the research procedures of the study.

Move 8: *Demonstrating research/data collection procedures* is an important element as the entire corpus of Methods RAs contains the details of research procedures. In agreement with Branson (2004) and Kanoksilapatham (2005), the analysis indicates that details of the procedures are written in a clear and well-organised manner and fully described to facilitate readers' understanding and/or to allow replication in future studies to be possible for validation purposes.

Move 9: Describing data analyses

Similar to the findings of the preliminary study, Move 9 is the last move of the Methods section in which the authors present the methods used to analyse the data obtained from the data collection process. To be precise, in quantitative research, authors describe statistical devices used in the analysis and also justify analysis procedures. In qualitative studies, qualitative procedures may sometimes be described in this move. Move 9 was sometimes presented in a numbered list, but sometimes not. The analysis showed that Move 9 concluded the Methods section, with no distinct steps being found. Out of the 50 RA Methods sections, 41 Methods (82%) had Move 9, and thus, this move is usual. Move 9 can be illustrated by the following textual examples:

[51] ***The data which were gathered from students' memo notes and interview were analyzed to see how the students collaborated within their group. All the data were analyzed by employing the stage of development of group work from (Ref)*** *which shows the stage of doing group work, namely: forming-forming a group work; storming-sharing ideas to test others' opinion; norming-separating the responsibility; performing-the performance stage; and adjourning-evaluating their group task.* ***Thematic content analysis was employed to capture the nature of their group work and identify the pattern of their collaboration.***

NET 3

[52] ***The data gathered from the questionnaires were analyzed using statistical package software for descriptive statistics as well as for inferential statistics***. *The following* ***statistical methods were used*** *to address the objectives of the study.*

For objective, 1, descriptive statistics were used to identify the language learning strategies *used by Thai students studying Korean as a Foreign Language at the Mattayom Wat Makutkasat Secondary School.*

For objective 2, the Pearson product Moment Correlation Coefficient was used to determine if there was any significant relationship *between the use of language learning strategies and student achievement.*

SCOJ 2

As shown in the preceding text examples, this move emphasises approaches to analysing the data collected for the study, detailing statistics and associated tests (*descriptive statistics, inferential statistics, Pearson product Moment Correlation Coefficient*). Qualitative procedures are described as signified by terms such as *thematic content analysis* as in [51]. Specific purposes for using statistical analysis are identified by the use of *to*, followed by a verb in the infinitive (*capture, address, see, identify, determine*). Similar to the characteristics of Move 8, to describe how the data is analysed in the study, verbs in passive past-tense constructions (*were analyzed, was used, was employed*) are commonly found. However, the analysis did not reveal the step of previewing results in data analysis move as suggested in Lim's (2006) work. This contradictory finding might be explained by the role of disciplinary variation in the rhetorical organisation of RAs.

To conclude, Move 9 ends the Methods section, demonstrating the description of how the data are analysed in the study by specifying statistical devices and approaches to analysing the data. No constituent steps are found in this move. Linguistically, verbs in passive past-tense constructions are considered the main lexico-grammatical feature of this move.

6.3.2 Move patterns in the Methods section

Looking through the move patterns of the 50 RA Methods, I found that variations occur because not all of the moves occur with equal frequency. Table 6-4 displays the move patterns found in the Methods sections of the dataset.

Table 6-4 Move patterns in the Methods section

No.	Move sequences	Research articles (N = 50)	
		No. of RAs found	***Percent (of total no. of RAs)***
1	M 5-6-7-8	1	2%
2	M 5-6-7-8-7-8-9	2	4%
3	M 5-6-7-8-9	6	12%
4	M 5-6-8-7	1	2%
5	M 5-6-8-9	1	2%
6	M 5-7-8-6-9	1	2%
7	M 5-7-8-7-8	1	2%
8	M 6-5-6-7-8-9	1	2%
9	M 6-5-7-6-8-9	1	2%
10	M 6-5-7-8	1	2%
11	M 6-7-5-8	1	2%
12	M 6-7-5-8-9	2	4%
13	M 6-7-8	1	2%
14	M 6-7-8-5-9	1	2%
15	M 6-7-8-6-7-9-7	1	2%
16	M 6-7-8-7-8	2	4%
17	**M 6-7-8-9**	**20**	**40%**
18	M 6-7-9	2	4%
19	M 6-8-9-7	1	2%
20	M 7-6-7-8-9	2	4%
21	M 7-8-6-9	1	2%
	Total	**50**	**100%**

As demonstrated in Table 6-4, 21 move patterns can be observed in the Methods sections. Specifically, Move 5 can occur in any position of the Methods section, and Moves 6 and 7 tend to occur repeatedly, yielding a multiplicity of move patterns identified in this particular section. However, among the 21 move patterns identified, the typical move pattern of M 6-7-8-9 is the distinct pattern apparent in the Methods sections of the RAs (40%). Move 6: *Describing participants/sources of data* usually begins the section (as found in 22 out of the 50 Methods), followed by Move 5: *Summarising research objectives and methods* (as found in 13 out of the 50 Methods), and Move 7: *Stating research instruments* (three Methods). This finding is

in line with Lim (2006) and Peacock (2011), indicating that the order for the move patterns of the Methods section is normally describing the data or participants, research instruments, recounting steps in data collection, and the data analysis procedure.

As for the closing move, the analysis revealed that Move 9: *Describing data analyses* usually concluded the Methods section as it was used in 42 of the 50 Methods sections. An example of this finding is illustrated as follows:

[53] ***I am particularly interested in using CDA as a theoretical approach*** *as it focuses on how language mediates relationships of power and privilege in social interactions, institutions, and bodies of knowledge (Ref). Furthermore,* ***CDA suits my inquiry into the commodification of English as it is highly inter-disciplinary. In keeping with the orientation of CDA, my research will explore how discourse of English as a global language is shaped by relations of power and its effects on the construction of social identities (e.g., learners and teachers) and of value of English in Thai society***.

RA 10

This article author first described the CDA approach used in data analysis (Move 7), and then justified why this approach nicely fits the purposes of the study (Move 7, Step 2). Even though most of the Methods sections in the corpus are more likely to close with describing data analysis (Move 9), in this instance, the author decided to end this section with stating research instruments (CDA) and how the approach is applied to achieve the purpose of data analysis.

6.3.3 Repetition of moves in the Methods section

Table 6-4 indicates that repetition of moves could be found in the Methods section, particularly the occurrence of Move 7 and Move 8. In point of fact, Move 7 and Move 8 are likely to be interwoven and recursive. The repeated occurrence of these two moves is possibly caused by the number of research instruments used in the study. The analysis reveals that five RA Methods have data collection procedures integrated into research instruments for each step of the procedure. An example of how the instruments are presented concurrently with the data collection procedure is shown as follows:

[54] ***To determine the EI profiles of the participants, the Bar-On EQ-i (Ref) was administered to the same participants***. *As a self-report measure of emotional and social intelligence (Ref),* ***the Bar-On EQ-i comprises 133 items in the form of short sentences assessed on a five-point Likert scale***. ***Taking nearly 40 minutes to complete****, as mentioned above,* ***this inventory measures five broad areas of skills ad 15 factorial components***. *In the current study, the Persian adaptation of Bar-On EQ-i (ref) being reduced into 90 items was used.*

In order to gather the required data regarding metaphorical competence level of the L2 learners, a metaphor test was designed by the present researchers *to appraise the participants' metaphorical knowledge.* ***Initially, 10 L2 learners resembling those in the main enquiry participated in a pilot study*** *to detect the appropriacy of the metaphorical competence items. ...* ***The test was consisted of 148 multiple-choice items which should be answered in about 120 minutes***. *At last,* ***the metaphor test was administered to the participants from the aforementioned universities to select the meaning of 148 metaphorical statements from some given options during the 2011-2012 academic year***.

LEA 5

Due to the fact that the Methods section is content-driven, reflecting a variety of experimental procedures used in the study, several research instruments employed in the study may be described in detail. As shown in the above example, the relationship between Moves 7 and 8 can be established. That is, the author simultaneously provides the instrument description integrated with the data collection description in response to the research objectives established in the study being presented. A possible explanation of the repeating nature of these two move types is that the author might need to facilitate readers' understanding in accomplishing each objective of the study. The author deliberately informs readers of the research instrument together with details of the data collection procedures step-by-step at the same time. This technique is useful in helping the readers to make research replication possible in the future.

6.3.4 Summary of the Methods section

The results obtained from analysing the 50 RA Methods revealed that this particular section contains five distinct move types similar to the draft framework. Each move identified has its own communicative function which can be recognised

by a set of lexico-grammatical features. Despite the similarity regarding the number of moves identified, the characteristics of the moves and steps generated from the 50 RA Methods enable us to make some alterations to the genre framework. Figure 6-2 illustrates the modification of the genre framework of the Methods section.

Figure 6-2 Changes in rhetorical patterns identified in Methods from preliminary study to main study

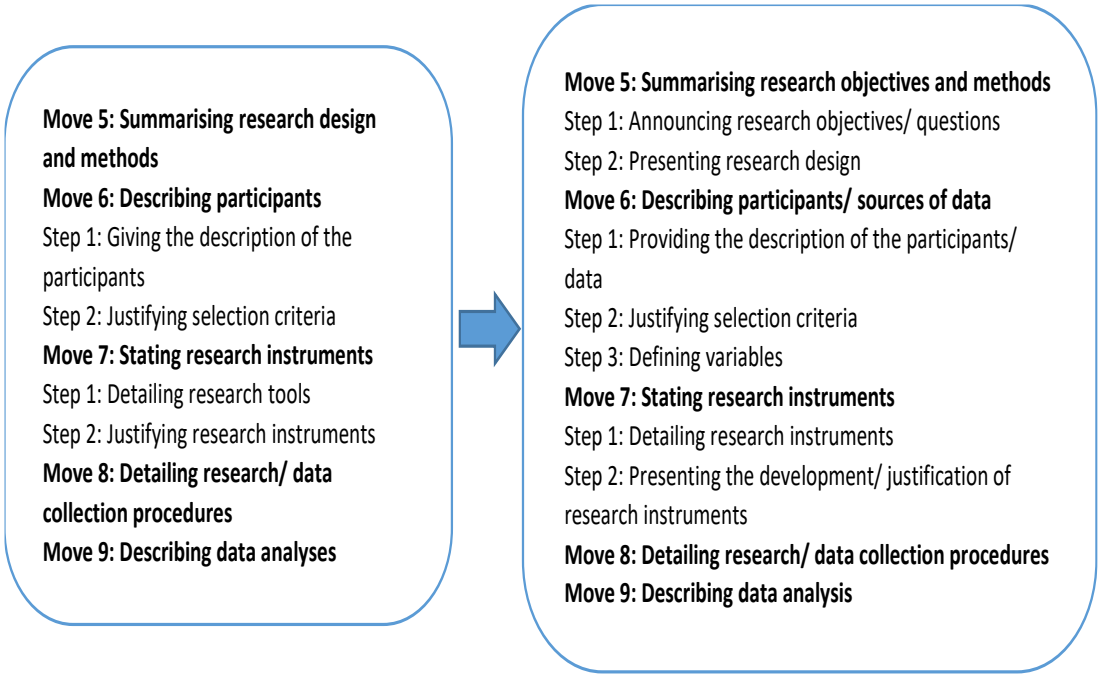


Figure 6-2 demonstrates that the structural pattern of the Methods section comprises of five distinctive moves: Move 5: *Summarising research objectives and methods*, Move 6: *Describing participants/sources of data*, Move 7: *Stating research instruments*, Move 8: *Detailing research/data collection procedures*, and Move 9: *Describing data analyses*. Compared to the draft framework, at the move level, I have made minor changes to the label of Move 5 and Move 6, by adding some key words essentially reflecting typical communicative functions of the moves as suggested by their constituent steps and linguistic features found.

With respect to the step level, three potential steps which do not appear in the draft framework were observed in the main study, namely, *Announcing research objectives/questions* (Step 1), and *Presenting research designs* (Step 2) in Move 5, and the presence of *Defining variables* (Step 3 of Move 6). Furthermore, the analysis of the 50 RA Methods also suggested a relatively minor change in its label of Step 2 of Move 7: *Presenting the development/justification of research instruments* in the

modified framework. This slight modification can help clarify and highlight the characteristics of the rhetorical moves and provide more explicit functions of moves and steps found in the Methods section.

6.4 Locating the Results Section

Since the Results section is commonly assumed to objectively describe the key results of the research being reported, its section heading is sometimes labelled as 'Findings'. Similar to the Methods section, the Results section is normally divided into subsections with or without explicit section headings appearing either in boldface or italics. Occasionally, research questions are used to serve as headings of subsections. Each subsection typically aims at presenting at least one result.

Taking the same approach of analysing stretches of text serving a certain rhetorical purpose, in the following sections, I will first present the results of conducting genre analysis on the Results section of the 50 RAs, and then discuss the nature of each move type identified. Lastly, I will present the genre framework from the data of the 50 RAs, showing certain modifications being made to the draft framework.

The analysis suggests that five rhetorical moves can be identified in this particular section as follows:

Move 10: Indicating the section structure
Move 11: Restating research questions and/or methodology
Move 12: Reporting results
Move 13: Discussing/Commenting on results
Move 14: Summarising results

As is clear from the above, certain modifications and refinements have been made to the draft framework, particularly with regard to the number of possible move types in the Results section. That is, Move 10: *Indicating the section structure*, which was not included in the draft framework, was identified in the main study. This move, if found, appears to be the first move of the Results section. This move is usually a statement explaining the structure of the section, and how the researcher presents the findings in a particular order. Of the 50 RA Results sections, this move occurs in 6

texts or 12% of the corpus. Move 10 can be realised as shown in the following example:

[55] ***This section presents and discusses the main findings by presenting the extracts from the written text stated in the textbooks, which can be categorized into products, practices, persons, perspectives, and places*** *as follows*.

VEJ 2

Move 11 restates research questions or research procedures used in the study. This move can be explicitly expressed as a statement of purpose(s) or objective(s) of the study followed by research procedures, either in brief or in full. A brief description of the participants of the study is sometimes provided. Move 11 was found in 9 (or 18%) of the RA Results. Move 11 can be elucidated by the following example.

[56] ***Research question One: What Communication Strategies are Used by Undergraduate Students in Thailand?***

In response to research question one, ***descriptive statistics from the participant's responses to OCSI (Thai translation) were examined***.

LEA 7

Subsequently, Move 12 is considered the largest section of a whole article. This move typically features the results generated by the study. Move 12 is unique because a lot of visual presentations, such as tables, figures, graphs and/or quotations from the interviews, can be employed in concert, depending on the methodology used in the study. This move, as anticipated, occurred in all of the 50 RA Results (100%). The example involves a Move 12 describing the results presented in this section of the author's study:

[57] ***The results of MARSI in Tables 1, 2, and 3 show that*** *metacognitive awareness in reading of both good and poor readers increased after the strategy instruction.* ***The mean scores of both groups significantly increased in global reading strategies (Table 1) and in support reading strategies (Table 3) while the mean scores in problem-solving reading strategies (Table 2) increased slightly***.

SPPJ 1

When authors wish to comment upon the results of the study, Move 13 is employed. I have added a word '*discussing*' to the move label as I noticed that this move potentially functions as both discussing and commenting on the findings in several aspects. When commenting on a finding, the authors generally pick out the main points of a finding and express their opinion, reinforcing their point of view using logic and reference to relevant evidence from previous works. In the meantime, the authors could discuss the finding when it goes beyond their expectations, using their skill at reasoning, backed up by selected evidence to make a case for and against an argument, pointing out the advantages and disadvantages of a given context, or comparing to previous research (*Ref*) in order to highlight certain resemblances or discrepancies between the results of the study and those of previous studies. In addition, they leave some room for readers to question, further discuss and interpret the finding with caution. Move 13 is interesting if an article presents more than one result. It is often interspersed by Move 12. Move 13 was relatively frequent in the corpus as found in 34 Results sections (68%). The following example illustrates Move 13:

[58] ***These findings corroborate (Ref) findings but contrast that of (Ref)*** *which claimed that many students did not pay attention to the corrective feedback they had received.*

LEA 2

Move 14 concerns a brief summary of the results of the study being reported. This move is not frequent, as it was found in only 7 out of the 50 Results sections (14%). If used, Move 14 concludes the section. The example below is taken from the last paragraph of the Results section to demonstrate how the Results section closes with Move 14:

[59] ***In summary**, **negotiations for meaning strategies help students develop their oral proficiency in two-way communication tasks**. In all groups of proficiency, **it was found that** the substantial number of students who employed those strategies while they were performing two-way communication tasks could gain higher oral proficiency scores in the following tasks. **These findings suggest that** negotiation for meaning strategies facilitated oral proficiency development among EFL learners.*

NET 2

6.4.1 Features of moves and steps and their frequency in the Results section

The frequency of occurrence of rhetorical moves and steps of the 50 RA Results sections are presented in Table 6-5.

Table 6-5 Frequency of occurrence of moves and steps in the RA Results

Move/Step	RA (N = 50)	
	Frequency	Percent (of total no. of RAs)
Move 10: Indicating the section structure	**6**	**12%*** **
Move 11: Restating research questions and/or methodology	**9**	**18%*** **
Move 12: Reporting results	**50**	**100%***
Move 13: Discussing/Commenting on results	**34**	**68%****
Step 1: Interpreting/Evaluating results	28	56%
Step 2: Comparing results with previous studies	19	38%
Step 3: Accounting for results	17	34%
Move 14: Summarising results	**7**	**14%*** **
***=Obligatory, **=Usual, ***=Optional**		

The analysis revealed that the Results section contains five move types, which is more than those identified in the preliminary study. Move 10 was newly found in the 50 RA Results, as it was not included in the draft framework. At the move level, the five move types are not equally well represented in these RAs with regard to their frequency of occurrence. Move 12 is the most frequently used in the 50 RA Results, or 100% occurrence. Move 13 is relatively frequently used, occurring in 34 out 50 RAs (68%). Meanwhile, Moves 11 and 14 are very different, compared with Moves 12 and 13 in regards to their frequency of occurrence. That is, Move 11 was found

only in nine and Move 14 was found in only seven Results sections (or 18% and 14%, respectatively). Among the five moves identified, Move 10 is used least (six Results or 12% out of the 50 Results sections). Thus, Move 12 is deemed to be an obligatory move, whereas Move 13 is usual. Moves 10, 11 and 14 are optional and rare. Move 12 is the central move of this section as it is always used to report research findings.

At the level of steps, most of the moves identified in the Results section do not have constituent steps, except for Move 13. Step 1 and Step 2 of Move 13 are similar to those described in the draft framework. However, Step 3 of Move 13 is an extra step newly found from the 50 Results sections. This leads to a possible modification of the genre framework of this particular section which will be presented in Figure 6-3 in Section 6.4.4.

In the following sections, I will discuss the features of the five moves identified in the Results section, including a discussion of possible constituent steps which have their own functional-semantic contribution to the overall rhetorical purpose of the text.

Move 10: Indicating the section structure

Move 10 is a statement that explains the structure of the Results section. It functions as a connector between sections: from the Methods to the Results section. The authors use this move to help instruct readers about the structure of the results reported, facilitating the reading task. Move 10 is rather succinct, compared with other moves identified in this section. This move occurred in only six out of the total of 50 Results (12% of occurrence), and thus was considered optional. Yet this move is not included in the draft framework. The following examples represent Move 10 identified in the RA Results:

[60] ***The findings were categorized into four groups****: teaching materials, teaching strategies, student engagement, and time management.* ***I describe the findings from those four categories considering the survey results and the class observations****.* ***I also compare the situation that the foreign language teachers talked about with the situation in Japan using the interviews and my own self-reflection****.*

NET 1

[61] ***This section presents the analysis results generated by the three-part questionnaire, each of which is presented individually as follows:***

JES 2

As shown here, verbs in the present tense, either active or passive are common in this move (*presents, is presented, were categorized, describe, compare*). Specific information reported is ordered, using reporting verbs indicating steps in the present simple tense, rather than simple past tense. As in [61], some key words used to realise this move include the noun *section* often collocating with the preceding deictic expression *this* in the introductory sentence. The expression *the findings were categorized into four groups* as in [60] is also used to signal the presentation of the results of the study that the readers can easily follow in the section. Furthermore, *the findings from those four categories considering the survey results and the class observations* in [60], and *the analysis results generated by the three-part questionaire* in [61] show that the author reported the findings based upon the methodologies applied to gather information. These features are helpful for readers to anticipate what data are described and how they are reported and arranged in the section.

Move 11: Restating research questions and/or methodology

Move 11 is used as a reminder to readers of what is mentioned in the Methods section. Its function is to restate the purpose(s), research question(s) and procedural information of the study before presenting the results. This move is seen as a way of organising the presentation of the results according to the research questions established. Move 11 was found in nine Results (18%) of the corpus, and thus was optional. This move, if present, can occur at the beginning of the section. Move 11 usually combines references to objectives with references to procedures. This phenomenon is in agreement with Winter's (1994) and Hoey's (2001) clause relational approach: a semantic relation is established between two clauses when each of them is understood in the light of the other. In Move 11, it can be said that the semantic relation is expressed through an achievement-instrument relation. Possible combinations found in the present study include objectives and procedures, research questions, etc. The following excerpts illustrate the flexibility of the methodology belonging to this move with respect to their combination:

[62] *Research* ***question Three****: What are the differences in the Types of CSs Used by high and low proficiency learners?*

To respond to research question three, the differences in OCSI responses between participants with high and low levels of oral fluency in English were explored through inferential statistics*. Scores from the oral fluency assessment were used to assign participants to high, medium or low proficiency groups. …* ***In order to investigate any significant differences in means of the two groups, independent samples t-tests were performed for each of the factors****.*

LEA 7

[63] ***Research Question 1:*** *The production of negotiation for meaning strategies by EFL learners with different language proficiency in two-way communication tasks.*

The question was directed to ***an examination of the occurrence of the negotiation for meaning strategies used by the students among different language proficiency****:* ***two-way communication tasks; problem-solving tasks, information gap tasks, and story-telling tasks****.*

NET 2

As shown above, a research question is explicitly stated before the authors assert the methodology used to address the research question(s), and present the results obtained from the analysis. [62] is a good example of a combination of objectives of the study (*to investigate*), research questions (*What are the differences in the Types of CSs Used by high and low proficiency learners?*), and procedures or methodological techniques employed in addressing the research question(s) (*the differences in OCSI responses between participants with high and low levels of oral fluency in English were explored through inferential statistics*). It is worth mentioning that the research questions are explicitly expressed and listed as a complete question. They seem to function as a subheading of subsections, facilitating an understanding of what the results are about in response to the research questions addressed. Furthermore, Move 11 is used to offer a succinct explanation of the methodology used (*two-way communication tasks; problem-solving tasks, information gap tasks, and story-telling tasks*) as in [63], in which the results are presented in subsequent separate subsections. Sometimes, this move provides a brief description and justification of statistical tests used (*independent samples t-tests were preformed*) as in [62] before moving on to present the findings of the study.

Although Move 11 is not always present in the current corpus, Move 11 has been reported by previous studies on this particular section in sociology (Brett, 1994) and Applied Linguistics (Amnuai, 2012; Yang & Allison, 2003). However, some differences concerning the order and label of this move have been found. That is, this move was ordered as the second move in Brett's (1994) model, labelled as '*Presentation categories'*, whereas it is the first move of the Results section in Amnuai (2012) and Yang and Allison (2003) who labelled this move as '*Preparatory information*'. This congruent finding provides adequate evidence of the importance of this move in reporting the results of the study in the Results section.

Move 12: Reporting results

The principal purpose of Move 12 is to report objectively and highlight the major results in a format accessible to readers in an orderly and logical sequence, using both text and illustrative materials (e.g. *tables, graphs and figures*) which recount a condensed version of the study. This move is typically presented with relevant evidence, such as statistical results and examples, and data quotes either from interviews or field notes. Not surprisingly, Move 12 is considered the core element of the section because it is the largest part of the section, occurring in all of the 50 RA Results (100%), and thus regarded as an obligatory move. Consistent with Atai and Falah (2005), Brett (1994), Kanoksilapatham (2005) and Sayfouri (2010), pointers to the location of results (e.g. *see Table, as shown in Table*) are frequently used anywhere in this move. The realisation of this reporting results move is demonstrated in the excerpts below:

[64] ***The analysed interview data revealed that*** *three students played a reader role in different way. Kanon stated that he revised his own writing assignment after he finished writing by looking at his* ***"ideas, content, and quality of language." He further said, "When I read my friends' drafts, I did the same thing*** *[focusing on the three aspects]* ***to make sure their writing was coherent."***

LEA 4

[65] ***As summarized in Table 2****, the paired t-tests* ***showed*** *an insignificant difference between the English version and the Thai version for the high-score group at* ***p>0.05 (t=1.44, p=0.200)****. Their mean scores for the English and the Thai versions are almost the same, with the gained score of* ***0.43 points or only 0.06%.***

JES 1

[66] ***Although Figure 4 illustrates that the three experimental groups performed better than the control group from the pre-test to post-tests 1 and 2****, the interaction between time and group was found to be not statistically significant* ***(F (6,128) = 1.234, p = 0.293)****.*

NET 8

Lexical indicators used to identify this move are inanimate nouns or pointers (*table, figure*) together with reporting verbs (*show, present, illustrate, reveal*), which mostly occur prior to or directly after the findings of the study are presented. Direct quotes from the informants are also offered as in [64] in order to support the authors' claim and interpretation of the results. Verbs in the past tense (*revealed, showed*) and present tense, be they active voice (*Figure 4 illustrates that*) as in [66], or passive voice construction as signified by the phrase (*as summarized in Table 2*) as in [65], are commonly found. Statistical results are usually reported as relevant evidence supporting the findings such as *p>0.05 (t=1.44, p=0.200)*, and *(F (6,128) = 1.234, p = 0.293).* It can be said that using texts and tables can facilitate and guide readers through the results, stressing the key results which provide a better understanding of the answers to the question(s) the study investigated. The presence of this move is in accordance with previous studies on the Results section in computer science (Posteguillo, 1999) and Applied Linguistics (Yang & Allison, 2003). These studies have congruently revealed that the results reported in this move are normally presented with relevant evidence, such as statistical results, examples, and interview results, depending on the different methodological procedures used in the study.

Where citations (e.g. *Posteguillo, 1999*) and references to tables or figures (*as summarized in Table 2*) are used, as described by Brett (1994), they are called "pointers" which are usually in parenthesis (pp. 52-54). Brett's model for the Results section proposed these pointers as a potential move called "the Pointer Move". In Brett's (1994) study, the Pointer Move usually does not present information, but directs the reader's focus on a particular result or aspect of the finding being presented.

However, in the present study, I would argue that pointers which are incorporated into the text should be considered and analysed as an integral part of the text, and thus they are attached to a rhetorical move. Owing to the independent nature of the pointers observed in the corpus, they are not considered as one of the possible moves in the Results section. The analysis, thus, differs from Brett's (1994) model.

In summary, in Move 12, the authors report the results by using a text-based presentation, together with references to tables, figures, and/or excerpts from the interviews. This move is regarded as a crucial move of the section as it is the largest part of the section, and was found in all 50 Results sections of the corpus. This move is typically, but not always, accompanied by pointers to facilitate readers to follow the results reported.

Move 13: Discussing/Commenting on results

Although the Results section is commonly agreed to objectively present the key results of the study in an orderly and logical sequence, leaving all subjective evaluations and comments to the Discussion section (American Psychological Association, 2010), the analysis demonstrates that such a boundary does not rigidly exist in the 50 Results sections. Instead, the majority of these sections not only report findings, but also discuss and comment on the importance of the results. In fact, Move 13 is optional as 34 out of the 50 RA Results (68%) contain this move. Move 12: *Reporting results* usually co-occurred with Move 13: *Discussing/Commenting on results*; the results being presented were likely to be commented upon. That is, if the researchers report the results separated into more than one subsection, the Comment Move is often interspersed, in effect following the report of each result. In Move 13, three constituent steps can be found. Note that Move 13, Step 3 is newly found in the main study, so it was not included in the draft framework.

Move 13, Step 1: Interpreting/Evaluating results

Move 13, Step 1 allows the authors to interpret the results and/or to give their personal judgement of the findings of the study being reported, using attitudinal statements. According to Yang and Allison (2003), this move/step includes information and interpretations that can go beyond the objective results. Move 13,

Step 1 has a higher degree of occurrence than other steps found in Move 12 as it was found in 28 (56%) out of 50 Results of the corpus. The following excerpts illustrate the use of Move 13, Step 1:

[67] *On the contrary, the high-score group did not receive any benefit from the Thai version in any multiple choice question item* ***which likely indicates*** *that they had sufficient knowledge of L2 to help them understand both the L2 text and the L2 questions,* ***therefore****, the presence of the L1 question section was of no use to them in providing better answers.*

JES 1

[68] *As shown, the respondents' rating of their language skills related to oral communication was quite low,* ***indicating*** *their low satisfaction with the two skills of listening and speaking.* ***This finding also suggested*** *that the respondents* ***seemed to be aware of the need to improve their communication skills****.*

JES 2

[69] *The number of the students in one class in my high school was usually from 30 to 40.* ***Therefore, it seemed to promote*** *"teacher-centered" lessons instead of promoting students' participation.* ***It can be challenging to encourage students' active participation in Japanese schools*** *because some students might be shy to speak up in front of a large audience.*

NET 1

[70] *As for *intensive coffee and *concentrated coffee in (5),* ***it is obvious that*** *the participants* ***may have been unaware of*** *the target collocation* ***and unable to*** *find the English semantic equivalent of /gaa-fae kêm kôn/ 'strong coffee'.*

LEA 8

The use of adjectives (*likely*), modal verbs describing possibilities (*can* and *may*) and lexical signals (*indicate*, *seem* and *suggest*) was usually found in this move/step. Hyland (2009) argues that these communication verbs or so-called reporting verbs refer to writing activities, such as discussion and suggestion. These linguistic features involve the expression of arguments, allowing authors to discursively explore an issue while carrying a more evaluative element in reporting other authors' work.

In [70], extraposed 'it' with *that* complement clause controlled by predicative adjectives (*it is obvious that*), as well as a *to* complement clause controlled by adjectives (e.g. *it seemed to, it can be challenging to*) in [69] are also used to express

the authors' opinion regarding the results reported. Herriman (2000) points out that these linguistic features are beneficial to writers because the structure makes available the means to present attitudinal meanings at the beginning of the clause while concealing the sources of this attitude with an impersonal subject or so-called dummy subject *'it'*. This concealment is a means of varying evaluation as an explicit and negotiable proposition. In addition, in [68] and [69], a result presented is probably accompanied by Move 13, Step 1 (Interpretation), reflecting the interspersing of Reporting Move (Move 12) and Discussing/Commenting Move (Move 13), creating a cyclical organisation between these two moves (for more details, see Section 6.4.3). The finding is generally in agreement with Brett (1994), Lim (2010) and Posteguillo (1999) who discovered that, in the Results section, the authors not only report results but also make insightful comments on them.

Move 13, Step 2: Comparing results with previous studies

The objective of this move/ step is to present how the findings can contribute to the field and research communities by comparing the results of the study with previous research. The authors sometimes use Move 13, Step 2 to evaluate their findings. In Yang and Allison's (2003) work, this move/step was greater than that of other steps in their corpus. In the current study, however, Move 13, Step 2 was found only in 19 (out of 50 Results), or 38% of the corpus. The realisation of Move 13, step 2 is presented in the following examples:

[71] *The number of the beginning students in this group appears to be the highest compared to the other two groups.* ***This is in line with (Ref)*** *arguing that L1 use can be used to lower affective filters* ***and with (Ref)*** *which proposed that students use L1 because they do not want to make mistakes that could lead to embarrassment.*

JLA 3

[72] ***This finding corroborates (Ref) findings*** *in which students reportedly tried to incorporate most of their teacher's comments, and that most students used written corrective feedback in the immediate revision of their compositions.*

LEA 2

As evidenced by [71], the researcher evaluates the finding reported in a preceding sentence, by comparing the finding with two provious works (*This is line with, and with*). Likewise, in [72], citations or references (*Ref*) and lexical items, such

as *corroborate, in contrast with, agree with, confirm, support, similar to* are employed to compare the findings of the study to the outcomes of previous research. These instances also illustrate how two elements: Move 13, Step 1: *Interpreting/Evaluating results* which is earlier stated by the deictic feature (*this finding*) and Move 13, Step 2: *Comparing results with previous studies* are used in the Results section. The interspersing, thus, again exists in these two steps of Move 13 (please refer to the section 6.4.3 for further details). Therefore, Yang and Allison's (2003) finding that the characteristic of cyclical organisation exists in the Results section of Applied Linguistics RAs across four journals is supported.

Move 13, Step 3: Accounting for results

Move 13, Step 3 is to explain or offer readers possible justification for unexpected findings. This move/step enables the authors to stray into the explanation of the results already presented by offering plausible reasons, and thus citations or references are usually used to support their claim. Even though this move was not included in the draft framework, it was found in 17 out of 50 (34% of occurrence) Results sections of the corpus. Examples of Move 13, Step 3 are as follows:

[73] *In reference to Q1, Q2, Q3, Q4, Q5, and Q9,* ***the most likely reason*** *why a greater and more statistically significant number of students in the low-score and mid-score groups chose the correct answer in the Thai version* ***may be due to*** *one quality these items have in common, that is, the multiple choice options are lengthy and, thus, complicated or many of these L2 students.*

JES 1

[74] *Students in this study* ***probably believed that****, since WCF focused on certain grammatical structures, the practice of giving such feedback was helping them deal with their concern for grammatical accuracy.*

Another reason why *students view WCF in a positive way is the experiences of the students about the positive effects of corrective feedback and grammatical awareness* ***(Ref)****. Students in this study* ***could have felt*** *that their language skills, especially in writing and grammar, had improved. ...****It is possible that*** *they could have attributed their improvement partly to the WCF they had received.*

LEA 2

Lexical items used to justify or explain the distinctive results of a study are particularly characterised by likelihood adjectives (e.g. *likely, possible, probably*), or expressions describing probabilities (e.g. *may be due to, could be explained, it is possible that*). This observation is in line with Khamkhien's (2014) study indicating that these features index the author's expression of their agreement, opposition, evaluation, and interpretation of propositions. Hyland (2009) also describes that these devices known as hedges function to withhold complete commitment to a proposition, implying that a claim is based on plausible reasoning rather than certain knowledge. These linguistic devices can indicate the degree of confidence the author thinks it might be wise to give a claim, while opening a discursive space for the readers to discuss, interpret or negotiate their thoughts on the findings. Referring to previous studies (*Ref*) as in [74] is usually used to support the authors' claims when using this move/step.

In conclusion, Move 13 concerns the authors' comments upon the results of the study. It usually follows the report of a set of results, creating a typical cyclical pattern of the move.

Move 14: Summarising results

The central function of Move 14 is to provide a summary of the major results of the study to remind readers of what has been reported in the section. Similar to the draft framework, no constituent steps were found in this move. Move 14 was optional, occurring in only seven out of the 50 RA Results (14%). These RA Results suggest that Move 14 is likely to end the Results section. The following excerpts are taken from the last paragraph of the section, presenting how Move 14 is used to summarise the findings presented in this particular section:

[75] ***In conclusion**, the data show that most of the groups collaborated to complete the group task and their performance reflected their collaborative learning i.e. they were discussing with friends, planning, and editing the work together.*

NET 3

[76] ***To summarize**, both analyses yielded similar results. In high as well as low frequent groups, even in all sub-groups, participants' reaction time was significantly shorter for non-word than word reaction times.*

LEA 6

As shown above, concluding or summarising expressions, such as *in conclusion* and *to summarize*, are employed to indicate the realisation of Move 14. Specifically, the authors generally present multiple results previously reported together in a paragraph. This finding is congruent with Yang and Allison (2003) who state that this move/step presents integrated results on the basis of a number of specific results.

6.4.2 Move patterns in the Results section

The move patterns in the Results section were further investigated. The results are intriguing because the pattern of the five moves identified was not rigidly fixed; some possible deviations among the moves were found. Due to variation in length of the section and a series of the findings reported, a number of the move patterns have been shown to have a recursive nature, e.g. M 11-12-13-11-12-13, M 11-12-13-12-13-11-12-13-12-13-12-13-14, M 10-12-13-12-13-12-13-12-13-14, etc. Concerning the move patterns identified, I consider that several moves found usually share similar move patterning as some moves were interwoven or interspersed. It is worth mentioning that most of the move patterns in the Results section display their pattern in a linear order. In the presentation of the move patterns found in this section below, the moves occurring in a cyclical pattern will be replaced and marked by an asterisk (*); for instance, M 11-12-13-11-12-13 is regarded as M 11-12-13*. The following table demonstrates the move patterns found in the Results sections.

Table 6-6 Move patterns in the Results section

No.	Move sequences	Research articles (N = 50)	
		No. of RAs found	*Percent (of total no. of RAs)*
1	M 10-12	1	2%
2	M 10-12-13*	1	2%
3	M 10-12-13-14*	2	4%
4	M 11-12	1	2%
5	M 11-12-11-12	1	2%
6	M 11-12-11-12-13***	1	2%
7	M 11-12-13**	2	4%
8	M 11-12-13***	1	2%
9	M 11-12-13-12-14	1	2%
10	M 11-12-13-14***	1	2%
11	M 12	10	20%
12	**M 12-13**	**17**	**34%**
13	M 12-13*	7	14%
14	M 12-13-12	2	4%
15	M 12-13-14*	1	2%
16	M 12-14	1	2%
	Total	**50**	**100%**

* *M 12-13 are repeated.*
** *M 11-12-13 are repeated.*
****M 11-12-13-12-13 are repeated in the pattern.*

Table 6-6 shows that from the data of the 50 RAs, 16 move patterns can be identified in the Results section. Although five distinct moves are identified, as marked by asterisk (*), Moves 12 and 13 re-occur as a consequence of a series of the findings reported and commentaries on them. These moves are closely connected and usually repeated in reporting findings. This finding reflects the fact that, when a series of results is presented, a comment or a series of comments are likely to follow these results. Even though its percentage of occurrence is not particularly high, the occurrence of this recursiveness contributes to a typical pattern of M 12-13 identified in 17 out of 50 or 34% in the RA Results sections.

Concerning the opening move, Move 12: *Reporting results* was considered an opening move of the Results section as found in more than half of the corpus or 37

(74%) out of 50 RA Results. Meanwhile, some of the RA authors employ Move 11: *Restating research questions and/or methodology* to open the section (8 out of 50 RA Results or 16%).

Move 13: *Commenting on results* was usually used to conclude the section as it was found in 13 RA Results. Taking the preferred move pattern of M 12-13, it is reasonable to say that since the Results section focuses on reporting the main findings, Move 12 tends to be placed at the beginning of this core move pattern, and it ends with Move 13 which usually follows the report of individual results. It is noteworthy that some of the authors use only Move 12 in this section as they plausibly reserve their comments for the Discussion section.

6.4.3 Repetition of moves in the Results section

As can be seen from Table 6-6, a pattern of M 11-12-13 occurred repeatedly in some of the 50 Results sections. This is because when reporting findings, some authors might separate the presentation of these findings into subsections, using Move 11: *Restating a research question(s) and/or methodology* as an introduction, accompanied by Move 12: *Reporting results*, and Move 13: *Discussing/Commenting on results*. However, this move pattern is not frequent, compared with the interspersing of Moves 12 and 13.

Given the nature of the Results section, since the authors report a series of results, and then make some comments which are likely to follow these results, the repeating pattern of Moves 12 and 13 is common. The following example illustrates how Move 12 is presented concomitantly with Move 13:

[77]	***Reporting results***	*In response to Q2 (the respondents' exposure to the other ASEAN English varieties), 226 respondents (or 58.39%) gave a positive answer, and 161 respondents (or 41.60%) claimed they had not exposure.*
	Commenting on results	***This finding substantiates the interpretation of Q1 that even though 75% of the respondents had no experience living in or traveling to ASEAN countries, again, thanks to technology, exposure to other language varieties is possible even without having physically been abroad. Also, recently, the Thai government has made tremendous efforts to mobilize partnerships among the ASEAN nations, resulting in diverse means of communication available including TV programs and commercials focusing on different ASEAN countries. In so doing, awareness of the aspects related to ASEAN (including English varieties in ASEAN) has been fostered among Thai people. To a large extent, technology has made the English world we live in smaller.***
	Reporting results	*The extent to which respondents understood other ASEAN English varieties that they had been exposed to was elicited in Q3. Only 1 respondent (or 0.44%) claimed to understand other ASEAN English varieties very well, whereas 73 respondents (or 32.20%) claimed that they could understand the some varieties most of the time, 128 respondents (or 56.64%) could moderately understand the same varieties, 18 respondents (or 7.96%) understood very little, and 6 of the respondents (or 2.65%) claimed that the ASEAN varieties were not intelligible to them.*
	Commenting on results	***The mean score of 3.20 suggests that, on the whole, the respondents could understand other ASEAN varieties to a certain extent. Similarly, the respondents' moderate understanding of the other ASEAN Englishes can be attributed to the lack of knowledge about ASEAN countries made available by the Thai government to Thai nationals to help prepare them for the ASEAN integration in 2015***.

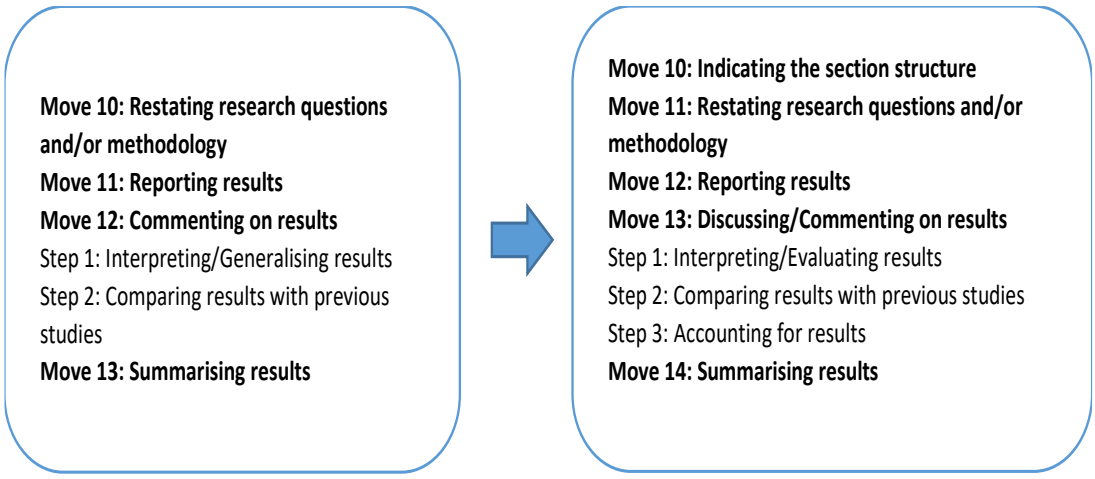
The above example shows a typical sequence of Move 12 followed by Move 13. This interspersing of reporting and commenting on results creates a repeating pattern between these two moves. Specifically, the more the findings and comments are presented, the more the recursiveness of these two moves is found. In the first instance, the author reported the results regarding the attitudes towards English

pronunciation and its varieties gained from the respondents in detail. The author, then, as marked in boldface, offered subjective comments on the results, going beyond the actual findings (as indicated by *suggest* and *can be attributed to*). The repeating pattern of these two moves can be found throughout the section according to the number of findings presented and the length of this particular section.

6.4.4 Summary of the Results section

Using the draft framework to analyse the data of the 50 RA Results sections, the results of the analysis suggest certain modifications needed to be made to the model for this particular section in the draft framework. This refinement has increased the accuracy of the genre framework according to the features of structural level of moves and steps identified, in the light of their communicative functions in the texts. Figure 6-3 illustrates how some alterations were made to the draft framework based on the data suggested by these RA Results, yielding the final framework of the genre.

Figure 6-3 Changes in rhetorical patterns identified in Results from preliminary study to main study



At the move level, despite some resemblances regarding the functions of the moves identified, one extra move, Move 10: *Indicating the section structure*, was added to the framework, resulting in five distinctive moves prevalent in the data of the 50 RA Results. The label of Move 13, *Discussing/commenting on results* in the modified framework or Move 12, *Commenting on results* in the draft one was slightly changed in response to its functions and additional step found in the move. I consider that the new label of this move can cover all the functions of the rhetorical moves

identified in performing its communicative functions in the Results section as described earlier in Section 6.4.1.

Figure 6-3 also demonstrates that, at the level of steps, an additional constituent step (Move 13, Step 3: *Accounting for results*) was added to the modified framework. A slight modification was also made to the label of Step 1 of Move 13 as the data of the 50 RA Results did not suggest that the authors presented generalisations of the findings. Conversely, they evaluated the findings after presenting them. Taken together, in some contexts, I have realised that generalisations can be possibly seen within the realm of quantitative research when the researchers interpret the results of the study at large. As opposed to the preliminary framework, the modified framework can be, thus, considered relatively complete and exhaustive enough in capturing the function of each move displaying in the Applied Linguistics RAs.

6.5 Locating the Discussion Section

Bitchener and Basturkmen (2006) state that the Discussion section is primarily to interpret and describe the significance of the results in light of what was already known about the research problem being investigated, and to explain new insights about the problem after the authors reported the results in the Results section. Some of the Discussion sections taken from the 50 RAs are stand-alone sections, others are blended Discussion/Conclusion sections. All of the Discussion sections generally have section headings appearing in boldface type or in italics. They are sometimes labelled as ‘discussion and implication’, ‘discussion and conclusion’, and ‘summary and conclusion’. The subsection headings of the Discussion section vary, including explicit labels, such as ‘implication of the findings’, ‘limitation’, ‘limitation of the study’ and ‘conclusion’. These section headings are of interest because they tell us how the authors see the structure and feature of their text; however, if any are present in the corpus, they are not subject to analysis in this study.

Similar to other sections in the RA, the draft framework was applied to the analysis of the 50 RA Discussions. On the basis of this data, the analysis revealed that, at the move level, no additional pragmatic function or extra move was observed.

Similar to the draft framework, these RA Discussions contain three distinctive move types. The three moves identified are as follows:

Move 15: Reviewing the present study

Move 16: Analysing and extending from results

Move 17: Evaluating the study

Move 15 provides the brief procedures and the objectives of the research being reported as a reminder to readers of what has been reported earlier in the article. This move can be found at the beginning of the section. While occurring quite frequently in the preliminary study, Move 15, in contrast, appeared to be infrequent (28% out of the 50 RA Discussions) in the main study. An example of Move 15 is shown as follows:

[78] ***This current study aimed at*** *examining the LLS use of Cambodian EFL students and investigating a possible relationship between LLS utilization and gender.* ***This study investigated*** *the strategy usage of 149 Cambodian university students through administering (Ref) SILL.*

LEA 1

The second move, Move 16 typically presents particular findings of the reported study to be further discussed. The label of Move 16 was changed from "*Strengthening results*" in the preliminary study into "*Analysing and extending from results*" in the main study as I realise that this section is considered an extension section in which the results of the study presented in the Results section will be analysed and explained in detail in the Discussion section. In this move, the RA authors also compare the results of the study with the previous literature as realised by citations or references (*Ref*), and some explanations regarding the results generated from the analysis may be provided. These characteristics help create a number of constituent steps of the move, which will be discussed in Section 6.5.1. If Move 15 is not used, Move 16 is found at the beginning of the section. Out of the 50 RA Discussions, 48 Discussions (96%) contain this move. A representative example of Move 16 is illustrated as follows:

[79] ***The positive correlation*** *between L2 metaphorical competence level and independence being revealed in this study* ***helps out the bulk of studies about learner independence and L2 learning (Ref)*** *and* ***depicts the status of helping L2 learners to make their learning process more independent (Ref)****.*

LEA 5

The Discussion section typically ends with evaluating the study or Move 17. This move concludes the major findings and offers practical implications drawn from the study being reported. The authors may present some limitations of research scope, and then suggest possible future studies for other researchers to consider. This move can be found under the section heading labelled as 'conclusion'. Move 17 was found in 46 Discussions or 92%. The following example represents Move 17 found in the corpus of the 50 RA Discussions:

[80] *Although the findings of this study have shed some light on the role of the training,* ***some limitations yield suggestions for future research. Similar studies can be done with more various types of texts with unknown words in different levels of difficulty.***

JLA 2

6.5.1 Features of moves and steps and their frequency in the Discussion section

The analysis revealed that each move identified in the Discussion section is not equally represented. Some moves contain a number of steps, while others do not. Table 6-7 provides summary information regarding the moves and steps constituting the textual organisation of the 50 Discussion sections, including the frequency of each move type and step, and the number of articles where it is found.

Table 6-7 Frequency of occurrence of moves and steps in the RA Discussions

Move/Step	RA (N = 50)	
	Frequency	Percent (of total no. of RAs)
Move 15: Reviewing the present study	**14**	**28%*** **
Move 16: Analysing and extending from results	**48**	**96%** **
Step 1: Reporting selected results	48	96%
Step 2: Comparing results	32	64%
Step 3: Explaining results	21	42%
Step 4: Presenting arguments/positions	26	52%
Move 17: Evaluating results	**46**	**92%** **
Step 1: Stating value of the study	16	32%
Step 2: Offering research implication	36	72%
Step 3: Indicating limitation	15	30%
Step 4: Suggesting further research	32	64%
***=Obligatory, **=Usual, ***=Optional**		

Overall, the list of three moves identified is similar to that of the preliminary study. Not surprisingly, the most frequently used move is Move 16. It is considered the central move of this particular section as it was found in 48 RA Discussions (96%), whereas Move 17 is the second most common move, occurring in 46 RA Discussions or 92%. Move 15 was 28%, occurring in only 14 out of the 50 RA Discussions. According to my criterion to classify the status of the move, Move 16 and Move 17 are usual moves. Move 15 is an optional move that RA authors could draw upon when desired but do not do so very frequently in the corpus.

As far as the steps are concerned, Move 15 has no identified steps. Move 16 can be realised by a set of four steps, which is on a par with Move 17. Step 1 of Move 16 is central for the move (96%), providing the basis for other steps in analysing and extending from results, followed by Move 16, Step 2 which was found at a high percentage of 64%. The other two steps of Move 16 were less frequent but not trivial, with the frequencies of occurrence of 42% and 52% in Steps 3 and 4, respectively. Move 17, Step 2 was also frequently used (72%), followed by Step 4 of Move 17 which was found less frequently in about 64% of the RA Discussions. Move 17, Steps 1 and 3 were also important, as employed in 32% and 30% of the RAs, respectively. It should be noted that the presence of all of the moves and steps identified is similar to that of the preliminary study: no additional pragmatic function was found, which

confirms the draft framework and seems to display homogeneity with regard to the employment of the moves and steps of this section.

In the following sections, I will present the typical nature and characteristics of each move and step recognised in the Discussion section in detail. I will attempt to highlight the lexico-grammatical features realised in the moves and steps identified which help shape and constrain a particular communicative function, by giving representative examples taken from the Discussion sections of the 50 RA corpus.

Move 15: Reviewing the present study

Move 15, if used, is regarded as the opening move of the Discussion section. This move serves as a reminder to potential readers of information related to the study being presented, including the purpose(s), and major methodological features of the study. Although this information has been already established in the Methods section, the RA authors use Move 15 as an introductory part, obviating the need for readers to refer back to the Methods section before moving on to discussing the results of the study. Move 15 was an optional move as found in 14 Discussions (28%) of the corpus. The following are examples taken from the beginning of the Discussion section, representing the realisation of Move 15:

[81] ***The main purpose of the present study was to investigate how KKU students deal with vocabulary learning problems***.

SJSH 1

[82] ***The objective of this study was to find the average scores of Students Evaluation on Effective Teaching in Science Field of Assumption University***.

SCOJ 4

The above excerpts illustrate that Move 15 is accomplished through restating research questions and research purposes (*to investigate, to find*), before presenting the results, and making comments upon them. The use of verbs in the past tense (*was*) indicates the accomplishment of the research studies. Also commonly found are cognitive nouns (*purpose, objective*), field-associated common nouns (*research, study*), and deictic references to the present texts, either specific determiners (*the*) or

demonstrative adjectives (*this*). The combination of these grammatical and lexical features forms a typical formulaic expression delineated as *the main purpose of this study, the objective of this study*. With the benefit of these strategies, the readers do not need to revisit the Introduction and the Methods sections.

The analysis showed that Move 15: *Reviewing the present study*, contains no constituent steps, but recaps the objectives, research questions, and/or main procedures of the study. This finding confirms the presence of *Move 1 Background Information* found by Yang and Allison (2003) who examine the results and conclusion sections of RAs in the Applied Linguistics field. However, it is not consistent with Nwogu's (1997) study focusing on the rhetorical organisation of medical RAs Discussions written in English. That study indicated that *Move 9 Highlighting overall research outcome* only substantiated the success of the research objectives, but not the objectives and methodological procedures.

Move 16: Analysing and extending from results

In general, Move 16 may be viewed as a reiteration of the function of Move 14: *Summarising the results* as established in the Results section. Move 16 goes beyond reporting the results, as its primary communicative purpose is to strengthen the results of the study together with commenting on them and comparing them with previous studies, or using related studies to support a claim, if appropriate. Move 16 seems to be a core move in the Discussion section and is found in 48 RA Discussions (96%) of the corpus. Taking these aspects of the move into account, this is the major reason why I have changed the label of this move from "*Strengthening the results*" in the preliminary study to "*Analysing and extending from the results*" in the main study. Move 16 can be realised by one or more of the four steps as follows:

Move 16, Step 1: Reporting selected findings

Move 16, Step 1 is deemed the most central of this move, providing a basis for the other steps of Move 16. Unlike other steps of Move 16, an emphasis of Move 16, Step 1 is placed on content and facts. This move/step is crucial so that a finding can be introduced in order for it to be subsequently discussed in the Discussion section.

Move 16, Step 1 was used regularly in RA Discussions (96% of texts). A number of instances to indicate this move/step are illustrated below:

[83] ***The study has pointed out*** *while students with high proficiency in L2 are not much likely to be affected, those with low proficiency suffer greatly. In other words, the less proficient a student is, the more they suffered.*

JES 1

[84] ***The study indicates that*** *after the strategy instruction, participants were more aware of the metacognitive reading strategies. The mean scores before and after strategy instructions were significantly different at the level of 0.01; the mean scores increased from 2.99 to 3.55* ***(Table 4)****.*

SPPJ 1

[85] ***The results of this study show that*** *International Culture was considered by the teachers as, within the same range, the least important cultural content to teach in their English courses and they felt least confident to teach it when compared with other cultural sources.*

LEA 12

To indicate Move 16, Step 1, some linguistic signals associated with numerical values derived from statistical analysis and reporting verbs, either in the simple past or present perfect tense (*point out, indicate, show*), are employed. In addition, in order to facilitate the readers' following the results being reported, referring to the information shown in tables (*Table 4*) as in [84], is one of the features used in Move 16, Step 1.

Move 16, Step 2: Comparing results

After a result is presented in Step 1 of Move 16, one of the most frequent strategies used by RA authors is to highlight the results being presented by comparing them with those of previous studies. Reporting the particular results of the presented study in Move 16, Step 1 usually co-occurred with Step 2 of Move 16: *Comparing results*, that is, the findings being presented are likely to be commented upon simultaneously. Step 2 of Move 16 was found in 32 out of the 50 Discussions (or 64% of texts). Instances of how the authors compare the findings of the study being presented to the literature are presented as follows:

[86] ***The result was consistent with a previous study*** *which reported a high frequency use of overall LLS* ***(Ref)****. On the other hand,* ***these findings did not coincide with other earlier findings (Ref)****, which revealed that overall LLS were used in a medium level.*

LEA 1

[87] ***This is in contrast with studies*** *which believe that high frequent words are recognized via holistic route* ***(Ref)*** *and* ***it is more consistent with and support those studies*** *that suggest words are recognized through analytical or lexical route* ***(Ref)****.*

LEA 6

From the above examples, this move/step can be identified by the use of references (*Ref*) in order to compare and contrast the finding of the reported study with previous literature. Citations from previous studies (*Ref*) can assist the readers to connect the idea of research activities to significant work in the field, highlighting the novelty of what is found in the study, and what knowledge can be accepted or needs to be explored further in the discipline. This is in line with Hyland (2002a) who points out that "its importance in academic discourse lies in providing an appropriate context of persuasion, demonstrating how the current work builds on and reworks past utterances to establish intertextual links to the wider discipline" (p. 115).

Some linguistic features used to realise Move 16, Step 2 include the verb 'be' and adjectives of comparison (e.g. *was consistent with, is more consistent with*), and certain phrases such as *in contrast with*. The use of the simple present tense (*is, support*) in [87] and past simple tense (*was, did not coincide with*) in [86], is also found to be prominent in comparison and contrast with previous research. As mentioned earlier, this phenomenon tends to co-occur with Step 1 of Move 16: *Reporting results*. This aspect will be further discussed in detail in Section 7.5.3 as it creates the cyclical pattern of the section.

Move 16, Step 3: Explaining results

The purpose of Move 16, Step 3 is to inform potential readers of the possible reasons for claiming the results discussed in the Discussion section. Congruent with Yang and Allison's (2003) and Amnuai and Wannaruk's (2013) work, this move/step provides the readers with further explanations or gives reasons for the observed differences in findings or unexpected outcomes. In the present study, out of 50, 21

RA Discussions (42%) were found to have Move 16, Step 3. Examples of this move/step are as follows:

[88] *Learners need to be more accommodating to variations of ASEAN English* ***because it is likely that*** *no one language or code is appropriate in all cases.* ***It is also possible that*** *many students****, due to*** *insufficient exposure to the varieties of English****, might*** *hold a monolithic view that native like pronunciation is the only norm for international communication.*

JES 2

[89] *The tendency to choose the dominant meaning of a word* ***can possibly result from the fact that*** *most students in Thailand have been traditionally taught vocabulary in a passive way. ... However, after the training, the problem involving vocabulary skill shifted from ambiguous words to technical terms.* ***It may be assumed that*** *after the training, they* ***might*** *gain much more knowledge in parts of speech and dictionary use and became skilful to handle the problem of dominant meanings but technical terms are still another linguistic difficulty for them.*

JLA 2

[90] *They used the word collector instead for the person who collected the work and ran the group work for each step.* ***This can be explained thus****: since they were working with close friends in a small group, it was more comfortable to work without appointing a leader.*

NET 3

Some possible explanations of the results being discussed can be given through expressions, i.e. *it is likely that, it is possible that, due to, can possibly result from the fact that, it may be assumed that,* and *this can be explained*. Specifically, the simple present tense, be it active (*is likely that* and *is possible that*) or passive construction (*may be assumed, can be explained*), and the modals indicating possibility and ability (*can* and *may*) can be commonly used to accomplish this move/step. More importantly, *Reporting selected findings* (Step 1) and *Explaining results* (Step 3) can be embedded in one sentence, revealing a palpable connection of these two moves when a possible explanation is mooted (see Section 6.5.3 for further details).

It can be also seen that the authors prefer to use modals of possibility, such as *might, can* and *may* to express a hypothetical or conditional possibility. As Hyland (2002a), Nunan (2004) and Gee (2014) argue, modality is the dimension of an utterance which allows the speakers or authors to reveal their attitude towards 1) the

propositional content, or 2) the illocutionary force of an utterance. This epistemic modality has a central role to play in determining the degree of confidence the authors have in a proposition they are expressing. The authors, thus, may use modality to reveal their evaluative stance, representing their assessment of the truth value or credibility of their statement. Using modal auxiliaries can also be interpreted via Appraisal theory proposed by Martin and White (2003) in academic writing, particularly 'entertain' options in heterogloss, which emphasise "wordings by which the authorial voice indicates that its position is but one of a number of possible positions and thereby, to greater or lesser degrees, makes dialogic space for those possibilities" (Martin & White, 2003, p. 104). This finding corroborates Chang and Schleppegrell's (2011) work indicating that RA authors use linguistic resources, including 'expanding options' and 'contracting options' in a heterogloss framework for constructing their texts as more or less personal and subjective.

Move 16, Step 4: Presenting arguments/positions

The authors use Move 16, Step 4 as a presentation of arguments to provide subjective judgements about the results and/or interpreting the findings being reported. According to Yang and Allison (2003), this move/step includes information and interpretations that go beyond the objective results. Move 16, Step 4 was found in 26 RA Discussions (or 52% of texts) of the corpus. The following instances exemplify the use of Move 16, Step 4:

[91] ***As the findings from the present study suggest****, multiple choice questions and their coinciding choice options in L2 reading comprehension tests* ***should be presented*** *in L1.*

JES 1

[92] ***This result implies that*** *Cambodian EFL students may be conscious of the English language learning process that is related to planning, monitoring, and evaluation. Depending on this strategy, learners are able to control their emotions and motivation through self-monitoring* ***(Ref)****.*

LEA 1

[93] *When refusing, Filipinos employed direct strategies more frequently than Thais.* ***This might indicate that*** *Filipinos were more straightforward in saying no or expressing their negative willingness while Thais tried to soften their refusals with indirect strategies.*

MNY 1

In the given examples, the authors interpret the results and express their positions towards the results of the study. In [91] and [93], the authors not only present the results, but also expound their idea about them by making certain claims through expressions, such as *should be* and *might indicate that*, to indicate either certainty or tentativeness of their interpretation. In [91], the communication verb (*suggest*) in the present tense is used for the purpose of admitting to a greater role for personal interpretation in knowledge. In [92], the authors can use the verb *imply* for the purpose of communicating an idea emerging from the findings of the study without saying it directly. This finding again accentuates the role of reporting verbs in academic discourses to express the position of the reporting author (Hyland, 2002a), and projecting an authoritative stance as in the 'Engagement system' of Appraisal theory. The Engagement system is "directed towards identifying the particular dialogic positioning associated with given meaning and towards describing what is at stake when one meaning rather than another is employed" (Martin & White, 2003, p. 97). It provides the means for sourcing attitudes and positioning the author's voice with respect to a range of possible propositions conveyed by a text. For example, the author can express an alignment with results being discussed through the use of a reporting device (*suggest*) as in [91], or present possible positions by means of the modal of probability (*might*) as in [93].

In summary, Move 16 usually occurs after Move 15 which usually begins the Discussion section. This move can be characterised by four components. Among the four steps, Step 1 is the core step of the move because various steps can be used to accompany reporting the results. Move 16 can be regarded as the core move of this particular section because it allows researchers to express their subjective points of view, comments, and/or value judgements on the results of the reported study.

Move 17: Evaluating the study

The communicative purpose of Move 17 is to evaluate the study by stating both the strengths and weaknesses of the results. According to Yang and Allison (2003), this move was used least in the Discussion section of Applied Linguistics RAs, and no steps were found. In sharp contrast, analysis in the present study revealed that Move 17 was a usual move, occurring in almost all the RA Discussions (46 or about 92% of texts). Move 17 is made up of four steps, including stating value of the study, offering implications, indicating limitations, and suggesting further research. This finding confirms the presence of this move in the draft framework as this move was found in all of the five RAs together with these four steps also identified.

Move 17, Step 1: Stating value of the study

The main function of Step 1 of Move 17 is to highlight the strength or significance of the study. The authors evaluate and present the underlying meaning of their study, which may be able to contribute to and/or fill existing gaps in the field. This move/step was found in 16 out of the 50 RA Discussions (32%). The occurrence of the move reflects that the authors have tried to point out the contribution of the study. The following instances illustrate how authors reflect on how the study has advanced an understanding of its subject matter:

[94] *In short,* ***knowing more about Thai learners' attitudes is illuminating and beneficial to all sectors concerned****. While* ***learners' aspiration can be made explicit****, they should be more aware of other English varieties prevalent in the region.*

JES 2

[95] *In relation to this point, I hope that* ***this study might present the useful information and understanding about the relationship between the three features****, especially the learners' motivation and the CLT approach, which is claimed to be an alternative teaching method for speaking in the L2 classroom.*

LEA 3

[96] ***This study hopes to shed some new lights on cross-cultural elements in the development of English language textbooks*** *that can potentially offer a cultural space where teachers and leaners at a secondary school level can share and learn from one another for a better understanding of our multicultural society.*

VEJ 2

The above instances show that the authors explicitly highlight the value, applications and advantage of the results of the study. That is, [94] states the value of investigating students' attitudes towards directions for learning development, whilst [95] pinpoints the relationship between students' motivation and the CLT approach. In [96], the author claims that the results of the study are worth investigating with regard to the insight into cross-cultural aspects in English textbook development. Regarding the linguistic components, statements in simple present tense (*is illuminating, hopes*) relating to the significance of the study, such as *is beneficial, is useful* and *shed new light on* were by far the most common lexical features in this move/step. Deictic elements (*this, the*) followed by common nouns (*finding, study*) are also frequently employed to emphasise certain useful discoveries from the current study.

Move 17 Step 2: Offering implications

Move 17, Step 2 allows the authors to state the implications of the study. The authors may offer the theoretical or practical implications of the results. It is observed that since the corpus studied in the present research was taken from 50 RAs in the field of Applied Linguistics which is an applied discipline, covering diverse research areas and interests, most of the implications offered in the 50 Discussions are related to educational and pedagogical perspectives. The occurrence of Move 17, Step 2 is the most frequent, compared with the other steps in this section as it was found in 36 out of the 50 Discussions (72%). The instances below demonstrate this move/step:

[97] *Firstly, speech samples, including audio and video examples of ASEAN English varieties from various speech communities,* ***should be collected and distributed*** *for learners to explore at their own pace. These materials* ***may also be used*** *in classrooms as supplementary materials.*

JES 2

[98] *Therefore, in practical teaching, we teachers* ***should give attention to particular words and "formulaic language (Ref)****,* ***use various types of direct vocabulary****—enhancing activities or tasks in class, and give repeated attention to frequent, related words during class.*

LEA 11

The above excerpts indicate that most researchers usually refer to selected results, followed by stating possible pedagogical implications. Linguistically, the modals of obligation/suggestion and possibility, such as *should, may* are frequently used in order to express authors' recommendation or to state explicit ways of using research outcomes in teaching practices. Sometimes, some citations as indicated by (*Ref*) as in [98], were provided when presenting the research implications to convince the readers of their claims. It is, thus, a central means to rhetorically construct a community consensus, and at the same time, to ensure that the implications suggested stay within accepted bounds in the field (Hyland, 2002a). With respect to the presence of this move/step, the finding is consistent with Yang and Allison's (2003) study in that this move/step is observed and labelled as '*Drawing pedagogical implications*'. Otherwise, it may be present in the Conclusion or Pedagogic Implications sections.

Move 17, Step 3: Indicating limitations

Although an RA highlights the value of study, contributing some reflections of knowledge, implications, and generalisations for the research communities to a certain extent, the authors do not claim their studies to be without flaws. Move 17, Step 3 is to explicitly express the researchers' views of some possible limitations regarding methodology, selected participants, scope and scale of the research being reported. In this move/step, the authors usually inform the readers that the reported study was limited, and thus, subsequent interpretation and generalisation of the findings should be interpreted with caution. This move/step is of importance, showing that the authors have "the capacity to critically analyse it in an objective, unbiased manner" (Murray, 2012, p. 194). However, Move 17, Step 3 was only found in 15 RA Discussions or 30% of texts in the corpus, perhaps because an explicit description of limitations is likely to undermine the reliability of the findings. The following examples illustrate Move 17, Step 3 as identified in the corpus:

[99] *The above data presented in this study* ***is in no way a representation of all university students in Thailand****. Therefore, tentative conclusions based on this study* ***remain to be substantiated by additional future research****. …Due to* ***the rather restricted pool of students and consequently restricted opinions****,* ***generalization of the findings to suit Thailand as a whole is limited****.*

JES 2

[100] ***As this study was undertaken at two universities*** *in Banteay Meanchey Province, Cambodia****, generalizations can be made if more universities from other setting are included in future studies****.*

LEA 1

As shown above, opinions regarding the limitations inherent in these studies are presented using various words and expressions, e.g. *remain to be substantiated, rather restricted, is limited* in conjunction with reasons why the results should be interpreted with care (e.g. *The above data presented in this study is in no way a representation of all university students in Thailand* and *Due to the rather restricted pool of students and consequently restricted opinions*). Furthermore, the authors may implicitly inform the readers and future researchers of the limitations of the results by introducing a possible improvement to the methodology to provide more reliable and complete results in future studies (*generalizations can be made if more universities from other setting are included in future studies*). Modal verbs of possibility (*can*) are also used in this move/step. The occurrence of Move 17, Step 3 is in line with Nwogu's (1997) study in that the limitations of outcomes were clearly illustrated in *Move 10: Explaining specific research outcomes*. However, this move/step does not appear in studies of computer studies RAs conducted by Posteguillo (1999). Again, this is possibly due to disciplinary variation playing a greater role in writing for publication, and even the expectations of particular journals.

Move 17, Step 4: Suggesting further research

Step 4 is the last step of Move 17 which the authors use to state some possible avenues, directions and areas for future research. Those suggestions may involve "ways of extending the study in some respect or investigating a related area in a way that builds upon the findings of the study" (Murray, 2012, p. 195). Move 17, Step 4 is rather self-explanatory and does not require much elaboration. This move/step, if found, closes the Discussion section. This move/step usually follows Step 3 of Move 17: *Indicating limitations*. This finding is congruent with many previous studies (e.g.

Basturkmen, 2009; Kanoksilapatham, 2005). In the present study, Step 4 of Move 17 is quite favoured by the RA authors as it occurred in 32 (64%) out of the 50 RA Discussions. The examples below illustrate the features of Move 17, Step 4:

[101] *Given these facts and the research findings,* ***the future research should continue to be pursued in three points****. First,* ***it is more reliable*** *to ask both teachers and students to find out what strategies are effective and how students as well as teachers feel about student engagement. If possible, asking more teachers and students from many subject areas* ***should be recommended in terms of reliability****.*

NET 1

[102] ***For further investigation, research should be conducted*** *on learners in other university for greater understanding of vocabulary learning strategies. In addition,* ***more research instruments such as observation, journal writing, etc. should be included in future studies*** *in order to get in-depth information about learners' use of vocabulary learning strategies.*

LEA 4

[103] ***Future studies need to include more learners with different vocabulary levels to verify this assumption****.*

LEA 11

The above instances indicate that, to signal and accomplish the purpose of this move/step, the authors make frequent use of expressions, such as *further research, further studies, further investigation* and *future studies*. The need for further research suggested is reinforced through the use of the modals of obligation/suggestion (*should*) to point out that, in order to move the field forward, additional studies on the particular topic being discussed need to be substantiated.

In summary, Move 17: *Evaluating the study* usually occurs as the last move of the Discussion sections. This move comprises four constituent steps performing distinctive functions. Suggesting future research in Step 4 of Move 17 was generally found in the last paragraph of the Discussion section to end the section.

6.5.2 Move patterns in the Discussion section

Swales and Feak (2004) reported that the move pattern in the Discussion section is quite difficult to detect, partially due to a number of subsections included in the section (as mentioned in Section 4.3 and 6.5) However, based on the move and step analysis, a dominant pattern of the section could be determined. Moves 16 and 17 seem to be regularly repeated on account of the variation of the length of the section and a series of results discussed. Moreover, the constituent steps of these moves are interspersed and tightly interwoven as the authors analysed the results, then commented upon them and discussed the practical implications of the research (for more details, please refer to Section 6.5.1). As such, similar to the Results section, an asterisk (*) is used to indicate a repeating pattern and added to the presentation of the move patterns below to demonstrate a close relationship of Moves 16 and 17 found in the Discussion section. A summary of the move patterns, discovered from the Discussion section, is shown in Table 6-8.

Table 6-8 Move patterns in the Discussion section

No.	Move sequences	Research articles (N = 50)	
		No. of RAs found	*Percent (of total no. of RAs)*
1	M 15-16	1	2%
2	M 15-16-15-16-17	1	2%
3	M 15-16-15-17	1	2%
4	M 15-16-17	4	8%
5	M 16	2	4%
6	M 16-15-16-17*	3	6%
7	M 16-15-17	1	2%
8	**M 16-17**	**22**	**44%**
9	M 16-17*	8	16%
10	M 16-17-15*	1	2%
11	M 16-17-15-16-17	1	2%
12	M 16-17-16	1	2%
13	M 17	2	4%
14	M 17-15-17	1	2%
15	M 17-16-17-16-17	1	2%
	Total	**50**	**100%**

**Moves 16-17 are repeated.*

The textual analysis revealed that, among the occurrence of 15 move patterns, the three moves identified were most likely to occur in an M 16-17 pattern, which is, thus, considered the dominant move pattern regardless of the distinctive length of the section. This pattern was found in 22 or 44% of the Discussion sections. Similar to the Results section, the linearity of text sequencing in the Discussion section (M 15-16, M 15-16-17, M 16-17) was also observed. That is, article authors are likely to organise the section by reviewing the study, reporting key findings and commenting on them, and evaluating the study by suggesting limitations, implications and further research.

The pattern of M 16-17*, indicating that these two moves are tightly interwoven and interspersed, was found at the rather high rate of occurrence (16%). This move pattern contributes to a cyclical structure of this particular section, sequenced in various recursive ways (see Section 6.5.1 for more details). In addition,

analysis of the 50 RA Discussions indicated that Move 15, if present, could be found at the beginning of the section, or preceding Moves 16 or 17. This was probably due to the integrated nature of discussion, implications, and conclusions in the section, allowing the authors to restate or summarise the study under the subsection headings, either 'Implication' or 'Conclusion', before discussing the research implications, stating limitations, and/or suggesting future research, respectively.

With respect to the opening move of this section, slightly fewer articles begin with Moves 15 or 17 (7 and 4 RA Discussions, respectively). Move 16 is likely to open this particular section as it occurred in most of the Discussion sections (39 Discussions or 78%). Meanwhile, 45 Discussions (or 90%) close the section with Move 17. The high rate of occurrence of these two moves, thus, confirms the importance of these moves as being the central moves of the Discussion section.

6.5.3 Repetition of moves in the Discussion section

Concerning the repetition of moves in the Discussion section, I found that the move cycles usually involve Move 16: *Analysing and extending from results* and Move 17: *Evaluating results*, particularly when a number of results are presented serially. As previously mentioned, the repetition typically opens by reporting selected or major results (Move 16), and proceeds through discussion or consolidation of the results (Move 17). Consequently, the repetition begins with a statement of findings, and then the authors evaluate and comment on them. The next cycle then begins with another statement of findings, and the pattern repeats itself until all of the findings are discussed. The repetition may add complexity by including several steps of the move. An example of this phenomenon is provided below:

[104] *It should be noted that* ***the subject students in this present study did not pass the national entrance examination which includes an English proficiency test*** *and which screens better learning ability students for state universities. Consequently,* ***it might be possible to make a generalisation*** *that the students in the Thai private universities are of less academic capability when compared to their counterparts in the state universities; therefore, their low language skills and learning abilities are pointed out.*

(Move 16, Step 1)

(Move 16, Step 3)

(Move 17, Step 2) ***An implication*** *is firstly on boosting students' self-confidence to learn autonomously. Their English language skills and ability, which affect learning confidence, reflect a causal relationship between cognitive ability and affective dimension, another important learner factor that influences students' effective learning. Students feel unconfident about their learning because they lack cognitive skills. Their English knowledge foundation is not strong enough, and this is considered as an obstacle for autonomous learning.* ***This supports the view of (Ref)*** *that learner confidence possibly deriving from their previous learning experience correlates with a belief in study, which has an effect on learning outcome. …*

(Move 16, Step 1)

(Move 17, Step 2) ***The traditional Thai educational system that is claimed to emphasise memorisation and rote learning as well as the authority of the teachers is believed by many teachers that it hinders a development of learner autonomy****. …*

The implication is therefore drawn for *teacher professional development.* ***(Ref)*** *argues that learner autonomy development will be successful if teachers are aware of their vital role in the autonomous learning process.*

MS 8

The above instance shows that the author uses Move 16: *Analysing and extending from results* via Step 1 of the move (Reporting selected results) to present the results as an issue encountered. The discussed results are followed by some explanations (Move 16, Step 3). The author gets on to evaluate the results (Move 17: *Evaluating results*) by suggesting some possible pedagogic implications (Move 17, Step 2) supported by sound methodology or generalisation based on previous studies

(*Ref*). The author continues to report another finding (Move 16, Step 1), followed by its implications (Move 17, Step 2). Explanations by the writers are provided (Move 16, Step 1) together with a justification for the finding (Move 16, Step 3). These phenomena evidently demonstrate how the two moves commonly co-occur via the use of steps when several results are presented and discussed serially.

A common repetition is also found with regard to the step level in Move 16. Since several major results are to be reported and discussed in the section, instead of reporting a set of results and then analysing and extending from them, the authors facilitate their readers' reading task in the way that a statement of comment usually follows individual results, as witnessed in the following example:

[105]

Reporting selected results *Comparing results* *Explaining results*	*'Watching an English-speaking film' and 'listening to English songs' were other reported strategies by a few students to remember newly learnt words.* ***The use of films and songs in this study is consistent with*** *the results of the study conducted by* ***(Ref)*** *which showed that using the English-language media such as songs, movies, TV programs, etc. were reported to be used frequently by Malaysian students.* ***(Ref)*** *point out that authentic materials are good in terms of learning new words in their context. Moreover,* ***a possible explanation of this finding may relate to*** *the convenient accessibility of the new technology. That is to say, students may be able to maximize their English learning practice opportunities through media.*
Reporting selected results *Comparing results* *Explaining results*	*Regarding 'reading novels, newspapers, short stories, magazines, or something from internet, etc'****, this finding is in agreement with*** *the findings of a number of studies which have shown that second language learners acquire vocabulary through reading* ***(Ref)****....* ***A possible explanation for this finding may relate to*** *the traditional Thai educational system whereby in English language classroom, teachers have usually used English newspapers as a teaching method to improve and assist the learning and acquisition of vocabulary.*

RA 21

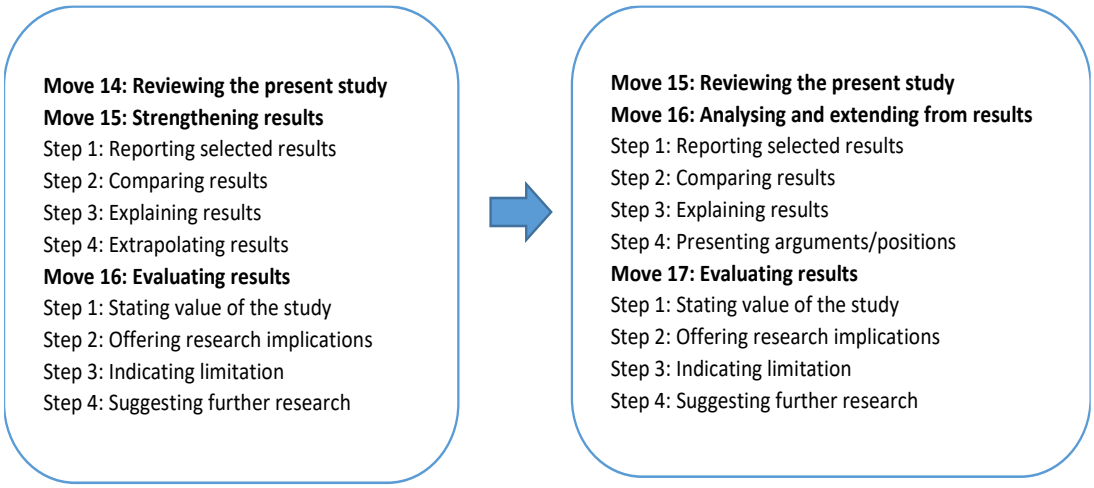
The first paragraph of the above text segment begins with a statement of the finding, accompanied by comparing it with previous studies. The paragraph ends with a possible explanation for the finding. This paragraph clearly represents the use of

Move 16 containing three constituent steps (Steps 1, 2, and 3 of Move 16, respectively). Since a number of findings need to be discussed, subsequently, the author further reports another finding (Step 1) with reference to the findings of previous researchers (Step 2), embedded in the second paragraph. A discussion concerning results is also provided. As a consequence, the comments pertaining to the findings appear in a repeating pattern through Steps of Move 16. The repetition occurs until reporting and discussion of the data are exhausted.

6.5.4 Summary of the Discussion section

Using the draft framework to analyse the 50 RA Discussions enables us to identify three move categories, performing distinctive communicative purposes in the section. Some identified moves contain steps which are infrequently found, whereas some steps are frequently present. Regarding the number of moves and steps identified, the framework of the genre generated from the main study is similar to that of the preliminary study as a whole. However, I have made some changes to the draft framework, particularly to the label of Move 16 and Step 4 of Move 16. In order to see to what extent some alterations were made to the framework of the genre, Figure 6-4 shows the move types and their constituent steps found in the main study, compared with those of the preliminary study.

Figure 6-4 Changes in rhetorical patterns identified in Discussions from preliminary study to main study



As shown in Figure 6-4, there was no additional move and step identified from analysing the stretch of the 50 RA Discussions. However, there is a more subtle point to be made here, namely Move 15: *Strengthening results* in the preliminary study or Move 16: *Analysing and extending from results* in the main study, can be quickly discerned as the text segment which repeats what was reported in the Results section. As discussed in Section 6.4.1, reporting results in the Results section can be concise and objective (Move 12: *Reporting results*), and the authors can then stray into interpretation by offering comments on the results already presented (Move 13: *Discussing/Commenting on results*). Given the primary function of the Discussion section, the authors strengthen the research results through extensive commentaries on the results in the larger context in order to reach an evaluation and draw conclusions from the study (Move 17: *Evaluating result*s). Bearing these in mind, to differentiate the function of these two related moves in the two distinctive sections, I have changed the move label from '*Strengthening results*' to '*Analysing and extending from results*' because it can facilitate readers to better understand the distinct communicative function of the move. This modification can strengthen the distinction regarding the main functions of these two moves in the different sections, which is also pedagogically useful when identifying the rhetorical patterns, and then applying it to the teaching in the pedagogic phase of the present study (see Chapter 8 for more information). This slight modification to the framework can reflect the development of the framework from the preliminary study to the main study, enhancing our understanding of the function of the Results and Discussion sections.

At the level of steps, an amendment to the label of Move 15, Step 4: *Extrapolating results* was also made to the draft framework. The move/step label was slightly changed to '*Presenting arguments/positions*' in Move 16, Step 4 in the main study as the corpus of the 50 RA Discussions suggests that the authors not only assume, estimate or guess about what might happen using information from the results reported, but also express their point of view or attitudes towards the results of the study, helped by citations, usually marked by (*Ref*), which support and persuade readers of their claims, ideas, and positions. This modification is, I believe, important for readers to clearly recognise the communicative purpose of this move/step and what should be included in this move/step.

The Discussion section is distinct, making connections between new knowledge or understanding reported in the Results section and previous studies in the field. The analysis showed that in order to succeed in writing this particular section, authors need to have not only novel, original, exciting results but also the skills and expertise to develop, evaluate, communicate and argue persuasively to support the claim offered to maintain credibility.

6.6 Overall Modified Framework of the Research Article Genre

This section presents the overall results of the modification of the genre framework generated from the RA corpus. The modified genre framework includes the 17 rhetorical moves. Some move types contain the constituent elements making up each move. The status of the move (obligatory, usual, or optional) is determined based on its frequency of occurrence in the corpus. Table 6-5 summarises the framework of the genre, comprising move types, steps and their occurrence identified in each section of the 50 RAs.

Table 6-9 Summary of the genre framework and its distributions of moves and steps

Section	Move	Rhetorical and move-step structure of RAs	Percentage
Introduction	1	**Establishing the topic being studied**	**100%***
		Step 1: Announcing the importance of the field	68%
		Step 2: Making topic generalisation	82%
		Step 3: Reviewing previous studies	92%
	2	**Presenting statement of problems/needs**	**32%*** **
	3	**Establishing a niche**	**84%** **
		Step 1: Indicating research gaps	54%
		Step 2: Presenting positive justification	34%
	4	**Introducing the present study**	**100%***
		Step 1: Stating objective(s)	88%
		Step 2: Summarising research methods	16%
		Step 3: Claiming research values	26%
		Step 4: Indicating research questions	20%
Methods	5	**Summarising research objectives and methods**	**40%*** **
		Step 1: Announcing research objectives/questions	20%
		Step 2: Presenting research designs	26%
	6	**Describing participants/sources of data**	**100%***
		Step 1: Providing the description of the participants/data	100%
		Step 2: Justifying selection criteria	34%
		Step 3: Defining variables	6%
	7	**Stating research instruments**	**100%***
		Step 1: Detailing research instruments	100%
		Step 2: Presenting the development/justification of research instruments	40%
	8	**Detailing research/ data collection procedures**	**94%** **
	9	**Describing data analysis**	**82%** **
Results	10	**Indicating the section structure**	**12%*** **
	11	**Restating research questions and/or methodology**	**18%*** **
	12	**Reporting results**	**100%***
	13	**Discussing/Commenting on results**	**68%***
		Step 1: Interpreting/Evaluating results	56%
		Step 2: Comparing results with previous studies	38%
		Step 3: Accounting for results	34%
	14	**Summarising results**	**14%*** **
Discussion	15	**Reviewing the present study**	**28%*** **
	16	**Analysing and extending from results**	**96%** **
		Step 1: Reporting selected results	96%
		Step 2: Comparing results	64%
		Step 3: Explaining results	42%
		Step 4: Presenting arguments/positions	52%
	17	**Evaluating results**	**92%** **
		Step 1: Stating value of the study	32%
		Step 2: Offering research implication	72%
		Step 3: Indicating limitation	30%
		Step 4: Suggesting further research	64%

***=Obligatory, **=Usual, ***=Optional**

The knowledge gained from this final genre framework contributes to a better understanding of the Applied Linguistics RA genre in TCI journals and reinforces the effectiveness of genre analysis in providing an in-depth perspective on the information contained in each section of such an RA. As Swales and Feak (2004) and J. Flowerdew (2014) have claimed, the underlying premise of most academic discourse analysis and the models of generic structure developed can be of value to language pedagogy, specifically the basis for the development of pedagogic materials. The final genre framework, thus, will be employed in the pedagogic phase of the present study in order to investigate its effectiveness and raise the awareness of Thai graduate students and faculty members regarding the existence of this subject matter, which might assist those using the genre knowledge and framework to reflect on and make choices about their writing for scholarly publications.

6.7 Conclusion

In this chapter, I have reported on the application of the draft framework to the analysis of the 50 RAs to identify their rhetorical moves and possible constituents. The status of each move identified in these RAs was also classified based on the frequencies of occurrence. The analysis revealed that some modifications should be made to the draft framework. I have illustrated the communicative functions and features of each move type and possible step of each section of the typical IMRD-type articles respectively.

The move patterns and repetition of moves have been presented in this chapter. In terms of the move patterns, the linearity of text sequencing was found. The analysis revealed one particular pattern as being the most common in each section of the text. The most preferred move patterns of each section in the dataset were: M 1-3-4 in Introduction, M 6-7-8-9 in Methods, M 12-13 in Results, and M 16-17 in Discussion.

The typical cyclical patterning of the moves observed in each section of the RAs largely resulted from the variation of the length of the section. The most frequently repeated moves in Introductions were Moves 1 and 3, whilst this was Moves 7 and 8 in Methods. Moves 12 and 13 were tightly interspersed in Results,

whereas Moves 16 and 17 were also interwoven in Discussions due to a number of results needing to be discussed serially.

The modification made to the framework could provide a proposed model for rhetorical organisation in the Applied Linguistics RAs as well as an explanation for the characteristics of rhetorical and lexico-grammatical features of each coded move and step. However, I am not claiming that the list of series of moves and steps presented in this chapter is exhaustive even though, after the modification, it is regarded as a comprehensive description of observable schematic patterns and their communicative purposes, marshalling ideas into an appropriately ordered text and exerting control or constraints of information to be included in each section of the Applied Linguistics RAs.

CHAPTER 7

MAIN STUDY II: PHRASEOLOGICAL PATTERNS OF RESEARCH ARTICLES

7.1 Overview

The next step of the analysis focused on investigating phraseological patterns in the corpus of 110 articles (the original group of 50 plus an additional 60). To achieve this goal, a corpus-based approach was adopted, using Sketch Engine software, a corpus query tool. This chapter begins with the results of the quantitative analyses: frequency distributions of phraseological patterns or n-grams in the corpus. It then focuses in more detail on the three-word n-grams which were found to have pedagogic potential because they are syntactically complete units, expressing grammatical and/or semantic relations. These n-grams found in each section of the corpus were functionally classified according to their contextual meanings.

7.2 Corpus-driven Frequency Search

To investigate frequency statistics for sequences of words in the corpus of 110 texts, n-grams were generated with the use of Sketch Engine (hereafter SkE) software (see Chapter 4 for further information on the corpus used in this process and the features of SkE). Since the SkE requires plain text, the procedure began with first cleaning all of the texts in the corpus by removing non-textual content. All the resulting files were then uploaded to the SkE (for further details on corpus preparation and the file structure of the corpus, see Section 4.5.2.1).

I decided to identify short lexical groups as, from my initial observation, most of the long word strings contain short lexical ones in their structure: for example, '*on the other*' which frequently expands into long lexical groups '*on the other hand the…*'. I felt that albeit short, these short lexical groups did facilitate students with their writing at a subject-specific level. I therefore used the wordlist option to investigate two-, three- and four-word n-grams, which I refer to as high frequency formulaic expressions in the corpus, in order to decide which length of n-gram to focus on.

7.2.1 Frequently-used n-grams within the corpus: Establishing length of the n-grams to focus on

The first decision to take was what length of n-gram it was appropriate to focus on. In this section, I will report the results on the frequent two-, three- and four-word n-grams in the corpus, respectively.

Table 7-1 presents the 30 most frequent two-word n-grams identified in the corpus.

Table 7-1 The top 30 two-word n-grams in the RAs by frequency

Rank	Two-word n-grams	Freq.	Freq./ 1000
1	of the	3,778	50.665
2	in the	2,828	37.925
3	to the	1,313	17.608
4	that the	1,048	14.054
5	on the	930	12.472
6	and the	873	11.707
7	from the	721	9.669
8	to be	720	9.656
9	**the students**	716	9.602
10	for the	700	9.387
11	**this study**	667	8.945
12	**use of**	662	8.878
13	with the	648	8.690
14	by the	551	7.389
15	of English	544	7.295
16	**can be**	530	7.108
17	as a	490	6.571
18	in a	472	6.330
19	**such as**	456	6.115
20	in this	445	5.968
21	**the participants**	428	5.740
22	**in English**	419	5.619
23	**it is**	408	5.472
24	as the	390	5.230
25	in their	371	4.975
26	**English language**	371	4.975
27	**the use**	370	4.962
28	at the	354	4.747
29	**foreign language**	342	4.586
30	that they	336	4.506

Analysis of two-word n-grams revealed that a total of 5,485 two-word n-grams were found in the corpus using default word list settings. As Table 7-1 demonstrates, *of the* was by far the most frequent n-gram in the corpus of 110 Applied Linguistics RAs. Some n-grams are emboldened because they are grammatically and/or functionally complete which might be of pedagogical value. The five-most frequent two-word n-grams found in the corpus were *of the, in the, to the, that the,* and *on the*. However, most of the two-word n-grams identified do not offer much insight into language use when considered on their own, because they are syntactically incomplete units (e.g. *of the, in the, to the, that the*, etc.). Specific contexts are required when one interprets these n-grams identified, especially the n-grams ending with articles (*the, a*), which require nouns or noun phrases to understand the specific meaning of these n-grams.

Next, three-word n-grams were investigated. The analysis revealed that a total of 1,998 three-word n-grams were generated from the corpus. Table 7-2 shows the 30 most frequently used three-word n-grams in the corpus in order of frequency.

Table 7-2 The top 30 three-word n-grams in the RAs by frequency

Rank	Three-word n-grams	Freq.	Freq./ 1000
1	**the use of**	362	4.855
2	**in this study**	251	3.366
3	**in order to**	231	3.098
4	**as well as**	216	2.897
5	**in terms of**	214	2.870
6	the present study	163	2.186
7	**of this study**	159	2.132
8	**of the study**	137	1.837
9	**based on the**	131	1.757
10	**one of the**	122	1.636
11	vocabulary learning strategies	117	1.569
12	**results of the**	110	1.475
13	of the students	107	1.435
14	**the results of**	101	1.354
15	**the meaning of**	101	1.354
16	foreign language anxiety	100	1.341
17	**In other words**	100	1.341
18	**the number of**	97	1.301
19	**was found that**	95	1.274
20	**the frequency of**	95	1.274
21	**part of the**	93	1.247
22	**use of the**	92	1.234
23	of the participants	92	1.234
24	used in the	91	1.220
25	the relationship between	91	1.220
26	**the other hand**	90	1.207
27	English language learning	89	1.194
28	children with autism	86	1.153
29	that the students	85	1.140
30	of vocabulary knowledge	84	1.126

As Table 7-2 depicts, the string *the use of* was the most frequent n-gram found in the corpus. Clearly, a number of three-word n-grams identified are grammatical or functional n-grams, often expressing semantic relations between ideas (e.g. *in order to, as well as, in terms of, based on the*) rather than content-based strings (e.g. *vocabulary learning strategies, foreign language anxiety, English language learning, children with autism*). Some of them are syntactically complete units or idiomatically complete, such as *the use of, in this study, in order to, as well as* and *in terms of*. These n-grams appear psycholinguistically unproblematic in that they can be completely

understood as a chunk. They are useful and meaningful as they have some salience in the language as formulaic units.

As four-word strings seem to be most often studied in the literature, perhaps because they offer a wider variety of structures and functions for analysis (Hyland, 2008a, 2008b), I then searched the ranked four-word n-grams in the corpus by frequency. The analysis showed that 470 four-word n-grams could be identified in the corpus. Table 7-3 presents the results of the most 30 frequent four-word n-grams.

Table 7-3 The top 30 four-word n-grams in the RAs by frequency

Rank	Four-word n-grams	Freq.	Freq./ 1000
1	**the results of the**	69	0.925
2	**in the present study**	68	0.912
3	**On the other hand**	68	0.912
4	**it was found that**	61	0.818
5	**in the use of**	54	0.724
6	simple past tense form	46	0.617
7	**as well as the**	46	0.617
8	**in the form of**	45	0.603
9	**the meaning of the**	43	0.577
10	for pleasure in English	43	0.577
11	depth of vocabulary knowledge	42	0.563
12	**should be noted that**	37	0.496
13	**of the use of**	37	0.496
14	**of the present study**	37	0.496
15	**the use of the**	35	0.469
16	the end of the	34	0.456
17	foreign language classroom anxiety	34	0.456
18	as a foreign language	33	0.443
19	**The results of the**	33	0.443
20	suprasegmental features of English	32	0.429
21	**is one of the**	32	0.429
22	**at the end of**	32	0.429
23	**used in this study**	31	0.416
24	reading for pleasure in	31	0.416
25	motivation for English learning	31	0.416
26	intrinsic motivation for English	31	0.416
27	**findings of this study**	31	0.416
28	**It was found that**	31	0.416
29	was a significant difference	30	0.402
30	the low proficiency group	30	0.402

It can be seen in Table 7-3 that, compared with the list of three-word n-grams shown in Table 7-2, the top 30 four-word n-grams do not reveal many remarkable grammatical n-grams. Most of them apparently involve content-based expressions relevant to the subject-matter of particular research papers being presented (e.g. *simple past tense form, depth of vocabulary knowledge, foreign language classroom anxiety, suprasegmentral features of English,* etc.). Many of the four-word n-grams contained or subsumed in them shorter three-word n-grams; for example, *the results of* vs. *the results of the*, and *as the use of* vs. *in the use of* to name a few. This finding corroborates studies by Cortes (2004) and Hyland (2008a, 2008b, 2012).

The above tables demonstrate that a number of two-word n-grams appear grammatically incomplete (e.g. *of the, in the, to the*). According to Simpson-Vlach and Ellis (2010), incomplete bundles are "neither terribly functional nor pedagogically compelling" (p. 493). The list of three-word and four-word n-grams generated contains both functional and content-based items. Most of the functional n-grams are semantically and grammatically complete, meaning that they have psychological saliency and pedagogical utility. Meanwhile, the content-based lexical items (e.g. *simple past tense form, depth of vocabulary knowledge*) are seen to be in relation to a particular subject-matter, and are therefore an artefact of what the writers were writing about. Those n-grams are best regarded as single vocabulary items, or as noun groups which are highly field-dependent. With reference to a pedagogic implication, if people do not know them, it is probably useful for them to learn them.

It can be seen that most the four-word n-grams, such as *the end of the* and *on the other hand*, would anyway be found by three-word n-grams (*the end of* and *on the other*). Moreover, according to Wood (2015) and Liu (2012), when two four-word n-grams contained identical three-word n-grams, the three-word string common to both sequences was used as the 'base' structure. For instance, *at the end of* and *the end of the*, result from the condensed string (at) the end of (the).

Having generated lists of two-, three- and four-word n-grams as described above, I concluded that the three-word n-grams identified are more interesting than the others because many of them constitute complete syntactic units as independent meaningful phrases. An additional reason for concentrating on the three-word n-grams is that these include a number of grammatical items expressing semantic

relations (e.g. *in order to* and *as well as*), which are not simply content-based items. Even if most of them do not represent structurally complete units (e.g. *the use of*, *the results of*), they are still seen as "important building blocks in discourse" (Biber & Barbieri, 2007, p. 270), and as the "main building blocks" of a register (Biber et al., 2007) if nouns are provided. Hence, they might produce "psycholinguistically salient sequences" for pedagogic purposes (Simpson-Vlach & Ellis, 2010, p. 490).

Since the notion of formulaic language is strictly defined within three parameters: frequency, range, and function (Wood, 2015), I then re-ran the list of three-word n-grams with frequency cut-off points of 5, 6, 7, 8 and 9 occurrences, searching for the highest cut-off which would not exclude potentially useful items. The lists generated from applying these cut-off points revealed that it seemed appropriate to set a frequency with each frequent n-gram reported occurring a minimum of eight times in the entire corpus (see Section 4.5.2 for details) according to the number of n-grams generated and the corpus size. This frequency cut-off point is determined by the total number of words to ensure that the n-grams identified were not simply artificial artefacts, but that they were strings of items that are frequent and highly likely to occur together. Regarding the range or dispersion criteria, the general consensus is that the n-grams must appear in at least three to five texts (Biber & Barbieri, 2007) to guard against subjectivity and idiosyncratic expressions introduced by individual writers. Qualitatively, I thus carefully checked all the n-grams generated to ensure that they occurred in at least five files in the corpus, representing the occurrence of such n-grams in at least five articles.

Using these procedures, I reduced the length of the list of three-word n-grams from 1998 to 1800. The list of three-word n-grams generated from the corpus includes phraseological units that are structurally complete and incomplete. Some of them are grammatical items, but others are content-based items. Both grammatical items and content-based items are potentially useful for pedagogic purposes, though in different ways. In the sections below, I explain how I treated content-based and functional strings differently, and continued to narrow down the list of three-word n-grams to find the most useful items.

7.3 Selecting N-grams to be Included in a Pedagogic List of Content-based Strings

Although content-based strings do not provide any functional meanings and characteristics, they can be useful to potential learners and writers in terms of their specific work in the Applied Linguistics field. I decided to create a list of content-based strings as a basis for future pedagogic activity, for example, focusing on complex noun groups (see Chapter 10 for more details).

As explained above, for my list of three-word n-grams generated with a dataset of 110 texts with a frequency cut-off point of 8 occurrences,[4] the original list obtained was 1,800 n-grams. I therefore carefully checked the list and selected only the content-based n-grams. This process allowed me to obtain a list of 236 content-based n-grams, which was quite long. Some items were essentially repeated more than once in the list, differing only in the use of upper or lower case letters and singular and plural case (*reading for pleasure* vs. *Reading for pleasure* and *past tense form* vs. *past tense forms*).

In order to continue to narrow down the list, additional qualitative procedures were employed. Firstly, proper nouns (e.g. *Faculty of Arts* and *Faculty of Education*) were removed. Secondly, the n-grams that were the same according to the criteria of upper or lower case letters and singular and plural case were combined. In addition, the n-grams which appeared to be parts of longer phrases (e.g. *reading for pleasure* and *pleasure in English*) were combined, contributing to longer lengths of n-grams, such as *reading for pleasure in English*.

This process narrowed down the list to 163 content-based three-word n-grams. Examining this list for pedagogic usefulness, I observed that a number of strings were in the form of complex noun groups. Research on academic writing (e.g. Biber & Gray, 2015; Klimova, 2012) suggests that most academic texts and research writing contain a high percentage of complex noun groups; however, most learners find them quite difficult to use. I therefore decided to highlight, for pedagogic purposes, those

[4] Cortes (2013) noted that studies have been more conservative and established higher cut-off points to ensure that lexical clusters are really frequent in a particular register. Nevertheless, those studies dealt with a huge corpus, usually more than a million words, whereas my corpus is ten thousand words in the present study. I therefore argue that, compared to Cortes' statement, a cut-off of eight occurrences in this size of the corpus of about 20 thousand words by sections, which is a much smaller corpus, is actually very high. This would help to shorten the potential list because if I went below eight, the length of the list would be even longer, and not useful for the pedagogic phase.

n-grams which were complex noun groups, such as *academic listening comprehension, written corrective feedback, foreign language anxiety,* etc. This gave me a final list of 49 content-based strings which would be most likely to be useful for pedagogic purposes (see Appendix E for the complete list of content-based strings).

7.4 Selecting N-grams to be Included in a Pedagogic List of Functional Strings

As previously discussed, quantitative selection was based on the identification of three word n-grams which are noticeably frequent (which appear a minimum of eight times in the given sections). This procedure yielded a total of 1,800 three-word n-grams. Of these, 236 were content-based and have been discussed above. This left 1,564 n-grams potentially available for inclusion on a functional n-gram list. As some of them appear multiple times on the list due to the software's sensitivity to upper or lower case letters, singular and plural case, articles and pronoun references, I combined these overlaps in the same way as for the list of content-based n-grams (e.g. *According to the, according to the, according to their, based on the, and based on a*). By this process, I arrived at an initial list of 699 potential n-grams.

Since the initial list is still very long for pedagogic practice, I then applied a further set of selection criteria. I went down the n-grams list item-by-item, looking for 'plausibly formulaic' multiword strings (Wray, 2009, p. 41) which realise meanings or pragmatic functions. To avoid over-reliance on my own judgement, I asked four experienced Thai English instructors who have taught English for academic purposes (EAP) at university level for more than five years to do the same thing. Even though these instructors are not native speakers of English, at the time of study, they held at least a Master's degree in English or a related field of study, and were pursuing their PhDs at different universities in the United Kingdom. They were informed that the purpose of the exercise was the construction of a list of phraseological patterns worth learning and teaching when writing an RA. From the instructor insights, each of the potential three-word n-grams that three of the instructors were in agreement about was included in the final list of the functional phraseological units. This approach helped narrow down and refine the list, reducing significant overlap among identified sequences. The list would then be applied in the pedagogic phase.

The final list consisted of a total of 228 functional multiword combinations (see Appendix F for the resulting list of functional phraseological patterns in its entirety). The list of 228 functional strings is a more manageable number than 699 items for pedagogic purposes. Using Biber et al.'s (2004) and Hyland's (2008b) functional classification as a guideline, all the phraseological patterns found pedagogically interesting featured pragmatic functions as follows:

1) *Research-oriented functions* help writers structure their research activities and experiences. This group includes those referring to research location or place, procedure, quantification, description and topic of the research, and intangible framing attributes which indicate an abstract property of something.
2) *Text-oriented functions* deal with meaning of the text and its organisation. Transition signals, resultative signals and framing signals of the text are included in this category.
3) *Stance-oriented and engagement functions* express epistemic judgements, attitudes, evaluations and degrees of commitment to the claims made.
4) *Other functions* refer to those where their meanings vary widely according to use in a particular context, depending upon interpretation, socio-cultural factors, social conventions, etc.

In the subsequent sections, I explore different dimensions through which such groupings could usefully take place: a functional classification based on IMRD sections.

7.5 Functional Characteristics of the Phraseological Patterns by Sections

From a pedagogical perspective, the functional analysis of the word combinations is essential to their value as teaching items. This section particularly focuses on the functional characteristics of the recurrent words on the list. I of course acknowledge that there is no context-free correspondence between structural patterns and pragmatic functions because the meaning of an utterance in a language can vary widely according to its use in a particular context, interpretation, socio-cultural factors, social conventions, etc. (see e.g. Erk, McCarthy, & Gaylord, 2013; Gennari,

MacDonald, Postle, & Seidenberg, 2007). Each phraseological unit included in the list can, thus, express more than one pragmatic function in the text. However, it is interesting to ascertain if their predominant pragmatic functions are strongly associated with the primary function of each internal section identified. This is because each section is marked for its distinct communicative purposes as shown by the function identified in move-based genre analysis presented in Chapter 6.

To investigate this, I looked at whether certain n-grams appeared more frequently in a particular section, while others did not, being more evenly distributed over several sections. The distribution of the phraseological patterns suggests that some of them can perform multiple functions according to the contextual environments in which they are used. However, 92 three-word n-grams seemed to be highly associated with the distinctive communicative purposes of a particular section of the articles. There were 37 different phraseological units (or 40.22%) which seem related to the Results section. Meanwhile, 21 strings (or 22.83%) and 22 strings (or 23.91%) were noticeably related to the Discussion and Methods sections, respectively. Only 12 multiword items or 13.04% were strongly associated with the function of the Introduction section (see Appendix G for the entire list of the phraseological patterns which frequently occurred in each section).

In the following, I will focus on a small selection of lexical phrases, using concordance lines in order to further elucidate the way these multiword units are used in the text in terms of salient pragmatic functions related to the primary purpose of the section identified.

7.5.1 Introduction section

The Introduction section provides background information on the topic and a writer's evaluation of existing research. It helps readers get a contextual fix on the article. The section establishes a niche in previous research by either indicating a gap or raising a question to justify the need for the current study being reported. The use of *the importance of*, *is one of*, *the purpose of* and *study aims to*, seemed to be associated with the function of this section. The text examples below illustrate the use of these strings in the text:

the importance of / is one of

[106] *Great attention is paid to grammatical aspects, whereas* ***the importance of*** *collocations is overlooked; likewise, lexical choices in a second language structure are often arbitrarily and improperly produced. As a result, certain combinations of words may become awkward although they are grammatically accurate.*

LEA 8

[107] *Additionally, mastering vocabulary* ***is one of*** *the most challenging tasks that any learner faces while acquiring another language (Ref). Thus, in the case of language learning, students need to be educated with the strategies which can help the learners acquiring the meaning of words.*

NET 12

The above instances indicate that the multiword items *the importance of* and *is one of*, are used as a lexical unit to highlight the importance of the topic, alerting readers to see the need for conducting the study. These strings are usually used with verbs in the present tense. As stated by Swales (1990), the use of present tense in a professional genre has two major pragmatic functions: 1) to situate a particular event in the present tense, and 2) to mark a particular proposition as a generalisation. In the latter case, the use of present tense indicates that the propositional information is valid regardless of time, reflecting the fact that the topic being discussed is still of interest in the field. The use and function of *the importance of* and *is one of* in this context are, therefore, strongly associated with Move 1: *Establishing the topic being studied* and Move 2: *Presenting statement of problems/needs*, which provides a much more specific description, particularly with regard to the need for conducting the research study being reported.

the purpose of / study aims to

[108] *Given the importance now placed upon the development of lifelong learning skills, inclusive of self-regulatory efficacy for learning, as well as the ever increasing use of the Internet as a learning resource,* ***the purpose of*** *this small-scale research study was to assess the validity, in the context of an international English-medium Thai university… .*

SCOJ 1

[109] *The present* ***study aims to*** *investigate whether or not and to what extent using L2 (L2 here refers to second language and foreign language) to formulate the test questions may inaccurately measure students' comprehension of a reading text in the target language.*

NET 8

The strings *the purpose of* and *study aims to* allow the writers to prepare readers for the study being reported after introducing the topic of the study and pointing out the importance of, and/or commenting on some problematic issues needing to be addressed. Reader preparation is achieved by highlighting the significance of the topic and identifying the research gap(s) addressed by the study reported in the article. Shortly afterwards, the lexical clusters *the purpose of* and *study aims to* are used to explicitly foreground the purpose(s) of the study, which is seemingly associated with the communicative function of Move 4: *Introducing the present study*, the last move of the Introduction section.

The pragmatic functions of these phraseological units are quite similar to those of description bundles in the research-oriented function category proposed by Hyland (2008a, 2008b), and those so-called descriptive bundles in the referential bundles category in Biber et al.'s (2004) taxonomy. The finding is also consistent with Hyland's (2008a) assumption that the structure 'noun phrase + of' is prominent in research-oriented functions.

7.5.2 Methods section

The Methods section basically provides a description of and detailed information regarding the research methodology, including participants, research instruments, data collection and analysis used in the study being reported.

Phraseological items salient in this section include, for instance, *this study was, the participants were/the questionnaire was, to determine the,* and *was used to/were used to/were asked to*. The examples below drawn from some Methods sections of the corpus illustrate the use of these strings in this particular section.

in this study / this study was

[110] *Thirty six undergraduate English language students at the University of Tabriz participated* ***in this study****.*

LEA 6

[111] *The instrument employed in* ***this study was*** *a LLS questionnaire. It focused on two sections: background information and SILL.*

LEA 1

From the above examples, the strings *in this study* and (in) *this study was*, were commonly used when authors give information about the research samples and instruments used in the study. The use of the demonstrative (*this*) allows the authors to frame and pinpoint specific information on the research methodology of the study, featuring how the methodology of the study being reported is different from previous research with regard to setting, participants or instruments to serve the specific objective of the study. According to Biber et al. (2004) and Hyland (2008a, 2008b), these strings were classified as a location marker. The function of these strings, therefore, seems to be related to the function of Move 6: *Describing participants/ sources of data*, and Move 7: *Stating research instruments*.

the participants were / the questionnaire was

[112] *In this study, there were three information gap tasks in which* ***the participants were*** *required to complete portions of incomplete passages, or they were given a person's picture and they had to describe the person as well by asking for information of their friend's picture.*

NET 2

[113] *Upon the final revision and improvement of the piloted questionnaire (see 3.3),* ***the questionnaire was*** *administered to the participants for a period of one week, in the middle of the second semester of the 2012 academic year.*

JES 2

It is interesting, though not surprising, based on the semantic relations of *the participants were* and *the questionnaire was*, that these two phraseological units serve the functions of describing samples of the study, giving the information of the process of implementing research instruments, and presenting data collection procedures. Hence, the pragmatic functions of the strings *the participants were* and *the questionnaire was*, coincide with Move 6: *Describing participants/sources of data*, Move 7: *Stating research instruments*, and Move 8: *Demonstrating research/data collection procedures*. Although the case of singular and plural verbs (*was, were*) was found in the analysis, the verb cases and forms here are not noteworthy as they depend on the number of research tools used in the study referred to and mentioned in the text.

to determine the / to find out

[114] *Descriptive statistics, such as means and standard deviations, were calculated from the SILL's scores* ***to determine the*** *LLS patterns used by Cambodian EFL students when learning English.*

LEA 1

[115] *The first questionnaire consisting of 20 statements was designed* ***to find out*** *what factors the students perceived as affecting their ability to select appropriate meanings of homonyms and homographs.*

JLA 2

As observed, *to determine the* can occur either at the beginning or in the middle of the sentence. In relation to their form, the strings *to determine the* and *to find out* are regarded as infinitives or procedural words through which propositional content is conveyed. As Biber (1991) points out, infinitives can be used with four specific functions: 1) to frame points in a discussion when *to*-clauses are used as predicates, 2) to introduce an aim, objective, plan, goal, purpose, strategy, task, or idea, 3) to introduce a methodology, and 4) to introduce a complement and as an adverbial purpose clause. These observations closely correspond to the instances above, demonstrating that *to determine the* and *to find out* are used to express the specific and definite purpose of using research tools to accomplish the stage of analysis of the study and to explain the research methodology. The pragmatic function of these two phraseological items can be seen to be in congruity with the communicative function of Move 7: *Stating research instruments* and Move 9: *Describing data analyses* in the Methods section.

was used to / were used to / were asked to

[116] *Chi-Square* ***was used to*** *analyze for fitted correspondence between the model and the empirical data.*

VEJ 1

[117] *The questions (Adapted from (Ref))* ***were used to*** *find out how the use of the metacognitive approach before, during, and after reading and how the reading strategies help students improve their comprehension and their performance.*

SPPJ 1

[118] *The two tests were administered to the two groups of participants after the regular class. They* ***were asked to*** *complete the multiple-choice test and the translation test without any interaction with their classmates.*

LEA 8

The strings *was used to, were used* to and *were asked to,* are used to express the purposes of the use of statistics for data analysis as in [116], and of the methodology used in the study as in [117] and [118]. The above instances also evidence the importance of verbs in passive past-tense constructions in the Methods section. It can be said that these linguistic elements are essential when authors give the description of research methodology. The form of '*be+verb+to* infinitive' is a typical and effective feature used when the emphasis is put on the action, the description of research instruments used and procedures performed. The function of the co-occurrence of passives and verbs in the past tense (e.g. *was/were used to* and *were asked to)* is thus associated with rhetorical moves that deal with the research instruments and data analyses or Move 7: *Stating research instruments*, and Move 9: *Describing data analyses*.

Hyland (2008a) states that bundles in the procedure sub-category clearly put the authors "under some pressure to showcase their ability to handle research methods appropriately and to demonstrate the familiarity with the subject content of the discipline" (p. 55). As presented above, I would argue that a certain set of phraseological patterns (e.g. *the participants were, the questionnaire was, to determine the, to find out, was used to, were asked to*) strongly associated with the function of the Methods section is parallel with what according to Hyland (2008a, 2008b) could be called procedure bundles in the research-oriented function category

because they have the main function of describing the ways that research is conducted, and explaining why something is done in the study.

7.5.3 Results section

Major findings are reported in the Results section. As discussed in Chapter 6, most researchers not only report, but also comment on the results and compare them with those of previous studies when presenting the findings. The following text examples illustrate the use of some recurrent multiword units in their context in the Results section.

above table showed / below illustrates the / as shown in

[119] *The **above table showed** the gender of sample ABAC students by their nationality. The majority of them were Thai Male 73.3% (178) and 4.9% (12) was from other country.*

SCOJ 4

[120] *Table 2.1 **below illustrates the** results of the oral proficiency score (out of 25) of low-proficiency students performed in three information gap tasks.*

NET 2

[121] ***As shown in** Table 2, the participants had a medium level of intrinsic motivation for English learning with an average score of 3.36 (SD = .75).*

JLA 2

The phraseological units *above table showed*, *below illustrates the* and *as shown in*, are used to report findings, instructing the reader to perform an action in relation to the text being read. These strings, based upon Hyland's (2008a, 2008b) classification, can be classed as structuring signals in the text-oriented bundle category, and as deixis bundles according to Biber et al. (2004). The main function of these strings is to help organise stretches of discourse, pointing to data presented in tables in the text.

The text segments above reveal that these strings usually tend to co-occur with verbs in either present tense or past tense, with pointers (*Table 2.1, Table 2*) as in [120] and [121], respectively. As mentioned in Section 6.3.1, pointers or visual representations of data can be an efficient way of presenting information clearly and

concisely, allowing readers to get an at-a-glance picture or sense of data before examining the visuals more closely. The authors, therefore, use pointers together with prepositions such as *above* and *below* to facilitate the readers to find the location where the information is being presented in the text. The related function of these two phraseological patterns is that of presenting the results of the study being reported, similar to the major function of Move 12: *Reporting results*.

revealed that the / showed that the

[122] *The triangulation of the data* ***revealed that the*** *students' perceptions of coherence and the teaching were, to a large extent, related. Interestingly, the term `coherence' was mentioned neither in the class nor in the documents, but the activities and the exercises addressed four main components of coherence.*

LEA 4

[123] *Mean differences* ***showed that the*** *participants spent longer time to recognize words than non-words (See figure 1 for the details of mean differences).*

LEA 6

The above instances demonstrate that evidential reporting verbs or actual verbs (*reveal, show*) were commonly used when the findings are reported in the Results section. The strings *revealed that the* and *showed that the* can denote an integration of reporting verbs and past tense when the research findings of the study are objectively presented. Definite articles (*the*) in the text indicate that shared knowledge between the authors and the readers is established based on the preceding context (Biber et al., 1999). These formulaic sequences are sometimes used with pointers as in [123]. Based on semantic relations of the verbs of these strings, the pragmatic function of these strings is closely related to that of Move 12: *Reporting results*.

results of the / it was found

[124] *The* ***results of the*** *analysis show significant differences in five out of nine speaking factors and one out of six listening factors (see Table 6).*

LEA 7

[125] *In all groups of proficiency,* ***it was found*** *that the substantial number of students who employed those strategies while they were performing two-way communication tasks could gain higher oral proficiency scores in the following tasks.*

JLA 3

The strings *results of the* and *it was found* (that), were commonly used when the researcher reports empirical investigations of the study. They are used to refer to or specifically focus on a particular finding from the analysis, when their function explicitly corresponds to the function of Move 12: *Reporting results*. This string can co-occur with the verbs *illustrate* and *show* when they are used to report the results of the study, especially the results presented by means of some kind of visual reference.

The strings *revealed that the, showed that the, results of the* and *it was found* (that), could be categorised as resultative signals in the text-oriented function of Hyland's (2008a, 2008b) functional classification. These phraseological units are always used in the rhetorical presentation of research findings. As expected, these strings show authors' interpretation and understanding or research process and findings, which coincides with the primary function of the Results section.

the findings from / the results from

[126] *The class observation and conversational interviews supported* ***the findings from*** *student' reading responses.*

SPPJ 1

[127] ***The results from*** *the interview were consistent with the subjects' questionnaire responses which reported the high and low vocabulary subjects frequently employed these 3 vocabulary learning strategies: "look up words in an English-Thai dictionary", "listen to English songs", and "use English websites".*

LEA 6

As can be seen from these instances, the strings *the findings from* and *the results from* are used to present and/or compare the results of the study with previous studies. In [126] and [127], these strings allow the authors to frame claims based on the findings of the study when used in the context of '*support the findings from*' or '*were consistent with the subjects' questionnaire responses*'. This co-occurring feature illustrates one of the functions of the Results section, as shown in the move-

based analysis, in that, in Move 13: *Discussing/Commenting on results*, the authors can make constructive comments on the basis of data. This typical practice can be found in this particular section before they go beyond the results to situate the findings again in the Discussion section.

as a result

[128] *This was explained later in the interviews in which he acknowledged that the strategy instruction helped him know what strategies to use and how to use them;* ***as a result****, it improved his reading comprehension.*

SPPJ 1

[129] *The causes of these limitations appear to be due to linguistic and processing differences, unsupportive L2 learning environments (covering individual and experiential differences, and socio-cultural institutional differences), and poor reading skills* ***as a result*** *of not reading enough (Ref).*

JES 1

The fixed-form or grammatical phrase *as a result* is often used and functions as a conjunctive adverbial phrase to indicate cause-and-effect relationship. As in [128], this string is considered to be a 'transition signal', which links a logical idea with the preceding sentence. It supports explanations of research procedures and outcomes. However, [129] demonstrates that this string is originally from *as a result of* which grammatically must be followed by a noun or noun phrase. The authors actually use these two forms of phraseological units simply to indicate that the subsequent text describes a finding of the study, and thus reflecting that the authors can objectively present the findings, and then interpret them based on the further details from the results obtained as in [128], or by using references or citations (*Ref*) as in [129] to support their claim. The use of this string may be seen as a convincing approach to support the findings presented in the Results section.

seemed to be / seems to be

[130] *The findings related to the specific motivation of participants shows that the extrinsic motivation-identified regulation* ***seemed to be*** *the most predominant motivation of all participants in learning to speak English in CLT classroom.*

LEA 3

[131] *The outcome of strategies report could lead to the assumption that the use of email writing strategies was somewhat ineffective. The ineffectiveness* ***seems to be*** *affected from factors involving linguistic and background knowledge.*

NET 6

Likelihood verbs (*seem*), either in the present tense or past tense, ascribe probability and interpretation of the findings of the study. Looking more closely at [130], the string *seemed to be* is associated with attitudinal adjectives (*the most predominant*) expressing evaluation. The meaning of this string can show the authors' expression of degree of certainty or commitment when the research results or activities are reported. Consequently, this string can be employed to convey the level of their agreement, opposition, evaluation, and interpretation of particular entities when interpreting the results. The authors use these markers to "mitigate opinions in relation to the truth value of propositions" (Pérez-Llantada, 2012, p. 66). According to Hyland (2008a), verbs expressing probability and modality are called 'downtoners' which help qualify the status of knowledge as speculative and help mitigate the author's commitment to the statement. Through the use of downtoners, the author's counter-argument is expressed and modulated. Therefore, the string underlines the communicative function of the Results section, which not only presents the findings or discoveries, but sometimes includes an evaluation of the findings, as reflected in the occurrence of Move 13: *Discussing/commenting on results*.

related to the / due to the

[131] *Noticeably, although the participants' perceptions of achievement were highly* ***related to the*** *social context, the participants did not reveal any positive attitudes towards the English community or the local people.*

LEA 3

[132] *However, it didn't score well in the reading rubric was that most of them didn't connect their personal experience in their reading responses. In their conversational interviews, they revealed that it was* ***due to the*** *time constraint given in class.*

SPPJ 1

The function of the phraseological patterns *related to the* and *due to the* in context is highly associated with the communicative purpose of Move 13:

Discussing/Commenting on results in the Results section. Similar to the functions of *as a result, seems to be, seemed to be*, the authors use these strings when they not only wish to present the results of the study, but also comment upon them. The string *related to the* is usually used when the authors interpret or evaluate the results by mentioning related results found in the study, while syntactically, 'due to' is a prepositional phrase used to give a supporting reason for why something is true. Regarding Hyland's (2008a, 2008b) taxonomy, I would argue that the functions of the strings *as a result, seems to be, related to the,* and *due to the*, could be considered stance features in the participant-oriented function category because they refer to the writer-focused bundles that the authors convey epistemic judgement, attitudes, evaluation and degrees of commitment to their claims.

7.5.4 Discussion section

In the Discussion section, authors can express their own evaluation of the study, acknowledging that their own study is not perfect. Future studies are also suggested as they might be worth further investigation. The following text examples illustrate the use of phraseological units (*of the present/of the study/of this study, the findings of, for further research,* and *in the future*) in context, performing the pragmatic functions associated with the purposes and functions of the section.

of the present / of the study / of this study / in this study

[133] *Second, and more importantly, the results* ***of the present*** *study elucidated understanding of coherence and, at the same time, causes of incoherence from the students' points of view.*

LEA 4

[134] *Regarding assertiveness, the results* ***of the study*** *confirm (Ref) and (Ref) explorations on the expediency of assertiveness in successful SLA.*

LEA 5

[135] *The findings* ***of this study*** *support the evidence from previous research that showed students wanted to do more service learning activity.*

SCOJ 3

[136] *In terms of reading performance, participants* ***in this study*** *showed evidence of substantial improvement resulting from the use of metacognitive approach before, during and after reading-as well as a host of reading strategies.*

SPPJ 1

These strings *of the present/ of the study/ of this study/ in this study*, are considered as resultative signals which are frequently used, especially when the results of the study are being discussed. Considering the above instances, given the grammatical function of articles (*the*) and demonstrative adjectives (*this*), the authors used these phraseological patterns as prepositional phrases to emphasise that they are discussing the results generated by the study to draw readers' attention to the issue discussed. In written academic discourse, demonstrative adjectives mark referential cohesion directly referring to the immediately preceding text or the immediate textual context as a referent (Biber et al., 1999). This linguistic device allows shared knowledge between readers and authors to be established as referring to the study being reported. The function of these strings is in line with what Hyland (2008a, 2008b) would call the research oriented function of location, while they are called referential bundles in Biber et al.'s (2004) functional taxonomy.

This group of phraseological patterns often tend to co-occur with the past tense in this particular section because the past tense is principally used to report completed actions in a particular time frame, and to express newly achieved evidentiality or knowledge in the field, reflecting a limited degree of certainty and reliability of the new information as in [133] and [136].

the findings of

[137] *To wrap up the discussion, on the whole,* ***the findings of*** *the current study demonstrated L2 upper-intermediate learners with higher levels of L2 metaphorical competence possessed more assertiveness, intrapersonal, self-actualization, and independence and contrariwise.*

LEA 5

[138] *This finding is also in agreement with* ***the findings of*** *(Ref) which showed the common use of electronic dictionary strategy among Taiwanese students.*

SJSH1

[139] *Although* ***the findings of*** *this study have shed some light on the role of the training, some limitations yield suggestions for future research.*

JLA 2

The string *the findings of* is also commonly used in the Discussion section. In [137] and [139], this lexical cluster can co-occur with common nouns (*study*), hence contributing to the longer strings *the findings of the current study* or *the findings of this study*, which were usually used in the initial position of the clause as in [139]. The string can occur when the authors summarise the study as in [137], and indicate some limitations of the study as in [139]. This feature is quite similar to the pragmatic function of the string *in this study* as previously discussed. *The findings of* is also used to evaluate the research reported when the writer compares the results of the present study with those of previous research (*Ref*) as in [138]. In short, the use of this string closely corresponds to the occurrence of Move 17: *Evaluating the study*.

for further research / in the future

[140] *The recommendations* ***for further research*** *are presented as follows: 1. As this study was undertaken at two universities in Banteay Meanchey Province, Cambodia, generalizations can be made if more universities from other settings are included in future studies.*

LEA 1

[141] *In order to gain more precise information regarding gender differences especially, a larger number of male students should participate* ***in the future*** *research. The researcher also recommends that further research use a mixed approach involving qualitative methods, such as structured interviews and classroom observations.*

LEA 2

The above examples represent the existence of Move 17, Step 4: *Suggesting further research* which commonly occurs at the very end of the Discussion section. The texts share the same communicative function in suggesting a study that might solve the problem or some limitations of the study being reported. The strings *for further research* and *in the future (research)* may be used as a 'framing signal' (Hyland, 2008b) after some of the limitations of the study are expressed in the section, indicating that the statements of findings remain to be substantiated or validated by future studies. The pragmatic function of this string, thus, seems to be associated with the rhetorical move that offers a series of recommendations for future research or

Move 17, Step 4: *Suggesting further research*. Based on Hyland's (2008a, 2008b) functional classification, this string performs as a text framing signal in the text-oriented function category.

7.6 Conclusion and Implications

This chapter has dealt with the analysis of phraseological patterns by applying a corpus-based approach. The analysis began with selecting three word n-grams as being the most useful to focus on. Two academic word lists were created: content-based strings and functional ones. The list of content-based strings was arrived at via the procedures detailed in 7.3. This list contained 236 content-based items. Of these, 49 items were in the form of complex noun groups and so highlighted as particularly useful pedagogically.

The list of functional n-grams was arrived at using the more complex procedures detailed in 7.4. To summarise here: I excluded the three-word n-grams which were content-based strings, leaving those appearing to be grammatically complete, and possessing their functional semantic relations useful for pedagogic practices included in the list. The list, then, was successfully narrowed down with the assistance of four English instructors who have taught EAP classes at university level. The phraseological three-word n-grams selected by at least three instructors were included in the list, yielding the resulting list containing 228 functional phraseological patterns which were found to be pedagogically interesting.

The resulting list of functional strings was categorised in terms of their functional types. Bearing the pedagogic goal in mind, I determined the pragmatic functions of phraseological patterns on the list by looking at the strings frequently occurring in each section of the corpus. A set of 92 phraseological patterns was found to perform their functional characteristics associated with certain sections of the articles. As a qualitative approach, I used concordance lines to check the context of use for each string to discuss their pragmatic function. Based on context dependency, some strings appeared to have multi-functionality because a section of an article contained several move types performing different communicative purposes. However, a set of phraseological patterns could be identified, as their pragmatic

functions were closely associated with communicative functions of certain sections of the articles. This bottom-up perspective allowed me to identify and match up the functional types of phraseological units in context.

Through this long and detailed process, the list of 228 functional lexical items was created from a very rigorous approach, first, in terms of deciding which strings were worth focusing on and secondly, working out some commonalities which could help explain how they are used in context and help with their presentation. This process provided important insights into the ways the phraseological patterns included in the list were used to accomplish their pragmatic function in certain sections in research papers. Keeping in mind the goal of this research to facilitate novice article writers and Thai graduate students to successfully publish their research work, I then used the list as a basis for instructional materials in the pedagogic phase which will be a major focus of the subsequent chapter.

CHAPTER 8

METHODOLOGY OF PEDAGOGIC PHASE

8.1 Overview

This study has an ultimate goal of raising novice writers' and Thai graduate students' awareness of RA genre structure and phraseology, and thereby facilitating them to be successful in RA publication. In order to move towards this goal, as part of this thesis, I conducted two initial workshops in Thailand and interviewed relevant parties in order to inform myself about how the descriptive findings of the study could usefully be articulated into pedagogic practices. This chapter illustrates methodology related to workshops, and activities and instructional materials used in the workshops, accompanied by explanations and commentary.

8.2 Selecting Workshop Venue and Workshop Preparation

In December 2015, I was able to organise two workshops informed by the knowledge developed and obtained from the descriptive phase of this study (Chapters 6 and 7). Kasetsart University was selected to be the site of the intervention because it is my workplace where I could easily approach people and ask for assistance in the execution of the workshops.

The target participants for the workshops[5] were two different groups of RA writers— Thai graduate students and faculty members. Thai graduate students refer to those studying their masters or doctoral programme in English and related fields, and they do not have any experience of writing for scholarly publication. Faculty members here denote those who have worked as English instructors at tertiary institutes. This group includes those who might or might not have experience of publishing their research work in academic journals, and are still active in research publication.

These particular cohorts were chosen to participate in the pedagogic phase because they are currently under pressure to publish their research papers in peer-

[5] Several terms are suggested in the literature such as participants, subjects, respondents, informants, etc. To differentiate those involved in the workshop and interview procedures, in this study, the term *participants* will be reserved for those attending the workshops, whereas *informants* refer to those who were selected for the pre- and post-workshop interviews.

reviewed journals. Research publications are crucial for the university's quality assurance regulations and career promotion of Thai university lecturers. Successful publication can lead to an enhanced reputation, research grants and recognition in the field (Kanoksilapatham, 2007b). As for Thai graduate students, having their academic paper(s) published is one of the main requirements for graduation (see Section 1.2.1 for more details).

Prior to the workshop delivery, I first requested official permission from the Faculty of Liberal Arts and Science, Kasetsart University. As I am an insider, I had no problem obtaining consent from the institution and the faculty. After receiving permission from the University and Dean, I consulted with the department head to arrange appropriate dates and times for the workshops. In the middle of November 2015, I asked a technician to construct a registration webpage to announce the dates and times of the workshops and invite attendance. Two workshops were organised in December 2015 for two different groups of participants— one for faculty members, and another for graduate students. Those interested in attending the workshops were asked to register on the webpage and to answer a series of questions as follows:

a) Why do you think research publication is important to you?
b) Do you have any publication experiences? If yes, which journals? Please specify.
c) What aspect of the article writing process do you find easiest?
d) What aspect of the article writing do you find the most difficult?
e) What does genre mean to you?
f) What does phraseology mean to you?

These questions could be responded to either in Thai or English, as preferred. The answers to these questions allowed me to obtain the background information on the participants; for example, some of them are journal reviewers, while graduate students have not had any article publication experience. Most of them did not know much about the concept of phraseology. The information regarding their thoughts about the importance of RA writing, experiences in scholarly publication, and knowledge regarding genre and phraseology was then used as baseline information for the selection of the interview informants.

8.3 Piloting: Preliminary Workshop and Interview

In the last week of November 2015, prior to the full workshop, I ran a preliminary workshop with three Thai teachers of English who are my colleagues at the English department, Kasetsart University, as a pilot. This workshop followed the same practice as the main workshops.

The interview questions were pilot-tested on one of these instructors to ensure that they led to an appropriate interaction, and to train myself when using them in the main interviews. The interview was conducted in Thai and video recorded. It was then transcribed, translated and analysed to help me determine whether the questioning strategy was helpful to elicit relevant information for my research aim. Based on the interviewee's useful feedback, revisions were made to the original drafts of the questions. The answers, however, were not considered part of the data for the research.

8.4 Workshops based on Organisational Patterns and Phraseological Items

Two two-day workshops designed and taught by myself were run in December 2015. Eight faculty members participated in the first workshop and 15 graduate students in the second workshop. Each workshop lasted for two days, for six hours a day. The genre analysis and rhetorical patterns found in the descriptive phase of this study were emphasised on day one, whereas some phraseological patterns were emphasised on day two. In the workshops, I acted as both teacher and observer (participant observation role). The workshops were conducted entirely in English, and were video recorded in order to avoid problems related to self-reported data, to obtain more accurate and thorough data, and to lessen reporting biases (Bernard, 2011).

As discussed in Chapter 2, RAs are considered as a genre, and each of the sections can be regarded as a sub-genre of the article. It is acknowledged that both implicit and explicit genre instruction is important and advantageous to develop from being exposed to the target genre (Belcher, 2013; Cheng, 2008; Negretti & Kuteeva, 2011; Yasuda, 2011). It was therefore appropriate to follow the concept of genre-based teaching when conducting the workshops because the approach focuses on increasing learners' awareness of different types of structural organisation in writing, by

considering distinctive features of different purposeful texts (Hyland, 2007; Paltridge, 2001, 2014). Its central belief is that "we do not just write, we write something to achieve some purpose" (Hyland, 2002b, p. 18). The learners would then systematically acquire a meta-linguistic awareness of the language, empowering them to manipulate information and accomplish different purposes through writing (Ahn, 2012).

Existing genre-based studies discuss the benefits of the teaching and learning cycle associated with systemic classroom applications (Burns & de Silva Joyce, 2005; Martin, 2009). The genre teaching and learning cycle particularly aims to provide support for learners as they move from building up the content of a text, through the presentation and discussion of a model of the target text. These connections between language and types of texts and between forms and functions are similar to the micro- and macro-levels of genre analysis (Hyland, 2007, 2016). Through the cycle, learners' attention is drawn to the content, structure, and characteristic linguistic features of the text. Hammond, Burns, Joyce, and Brosnan (1992), for example, proposed a wheel model for a teaching learning cycle consisting of three phases: 1) modelling; 2) joint negotiation of text by learners and teachers; and 3) the independent construction of text by learners. The activities start with discussion about the social function of the genre and analysis of the text structure and language. The final stage is to produce texts individually through activities, e.g. choosing a topic, researching, and writing.

Another model developed to help learners master language through different text types and genres was suggested by Butt and his colleagues (Butt et al., 2000). This model consists of a fixed sequence of stages which is claimed to be essential for developing control of a genre. They are: 1) context exploration; 2) text exploration based on model texts; 3) joint construction of a text; and 4) individual application. The activities used in each stage aim to gear students to become aware of the social purpose of the chosen genre and other contextual factors affecting the production of the texts at the end of the cycle.

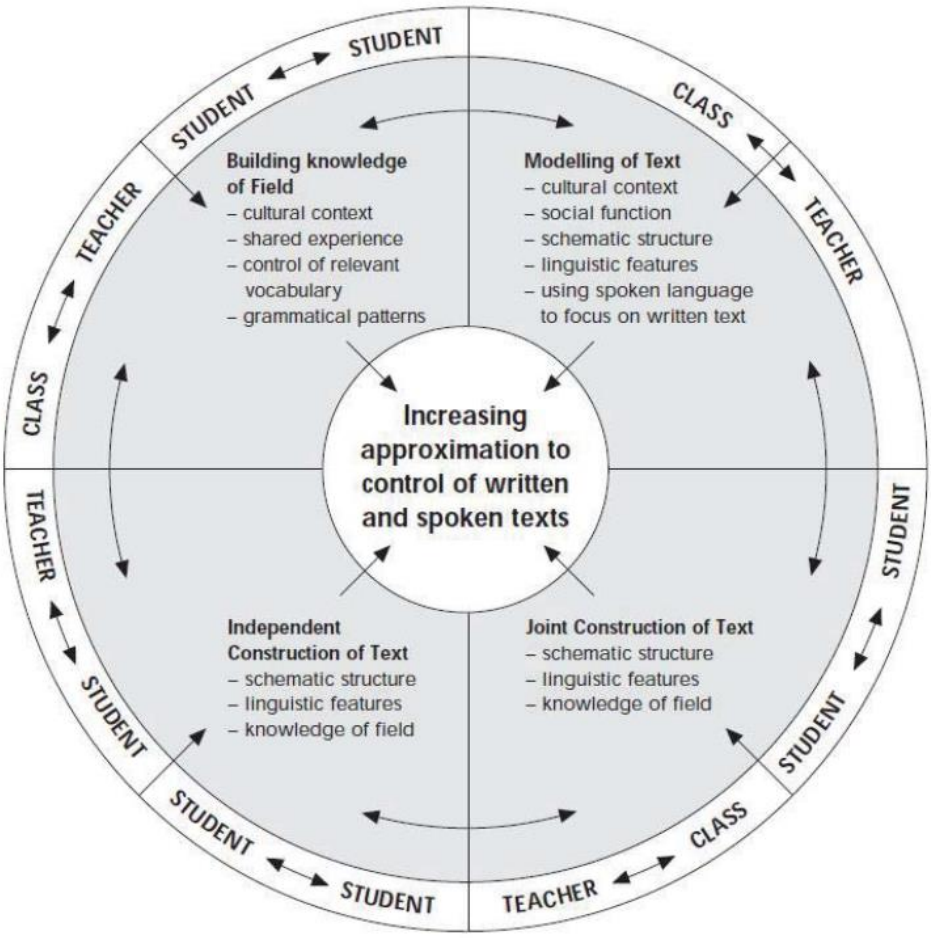
Feez and Joyce (1998) also developed a teaching and learning cycle comprising five phases of writing instruction: 1) building the context; 2) modelling and deconstructing the text; 3) joint construction of the text; 4) independent construction of the text; and 5) linking related texts. Their model has been claimed to

suit students' needs, and has been widely applied to second language writing (see Chapter 2 for more details).

All the cycles discussed above were developed in SFL approaches to teaching students to engage with and create texts (Tribble & Wingate, 2013). Each pedagogic stage requires a range of distinct resources. The methodology can be applied to a wide range of educational and real-world genres (Tribble, 2010). However, these approaches might not directly serve the objectives of the workshops, and it might not be possible to apply them to the workshops within a short period of time. For instance, I consider that building the context which helps students in understanding the context for writing should be prioritised; nonetheless, Hammond et al.'s (1992) model begins with focusing on a model of the target text. Likewise, the workshop participants might not have the opportunity to recycle what they have learned in other contexts of use as suggested in the final stage covered in Feez and Joyce's (1998) model. I therefore adopted and adapted the teaching and learning cycle proposed by Burns and de Silva Joyce (2005) because the cycle describes a clear set of processes and is easy to apply to teaching writing. Their cycle is similar to that of Butt et al. (2000) as it draws on genre-informed approaches to writing instruction (Tribble, 2010; Tribble & Wingate, 2013). However, Burns and de Silva Joyce's (2005) model is more comprehensive and operational because a distinct set of teaching practices are also clearly suggested; these allowed me to work with the participants to develop knowledge and understanding about writing RAs. These activities allow the participants to move towards increasing independence in using an RA genre as support is gradually removed. Due to time constraints, this model was thus considered more suitable, compared to other proposed teaching and learning cycles, to the context and purposes of the workshops. I also believed that, with the application of this teaching and learning cycle, the participants would understand the importance of the skills necessarily involved in writing RAs. They would recognise that writing typically takes place in a social situation, and is a reflection of a particular purpose, and understand that learning can happen consciously through imitation, analysis, and sharing knowledge with regard to RA publication. Badger and White (2000) affirm that the cycle will work well if it begins with text models, a description of the key linguistic features, discussion of the social situation in which it occurs, and analysis of

the rhetorical patterns of each genre (p. 157). Burns and de Silva Joyce's teaching and learning cycle is presented in the following figure.

Figure 8-1 The systemic teaching and learning cycle (Burns & de Silva Joyce, 2005, p. 31)



There is a consensus that the teaching approach in genre-based studies is intended to be used flexibly as the teacher may choose to start at any step or even omit a step if the students do not need it (Feez, 2002; Hyon, 1996). That is, because students may have different needs and characteristics, the model can be suitably modified to meet the different students' needs. The students can enter at any stage of the cycle, or skip any stages if they do not find them helpful (Johns, 1997). Moreover, Munby (1981) emphasises that ESP teaching has always been very needs-focused. The teaching content, thus, should be designed to meet students' communicative needs and sustain their learning motivation. On account of time constraints, I decided to apply only the first three stages of the teaching and learning cycle in the workshops. Each

stage has a different purpose, hence leading to different classroom activities. The activities and tasks in the present study were also adapted in that they are specific to the RA genre and the workshop participants' backgrounds. All the teaching procedures were implemented flexibly to ensure that the tasks and activities in which the participants were expected to be engaged were appropriate and relevant. What follows are the steps which featured in the two workshops in this study.

8.4.1 Building the knowledge of text

The first stage of the workshops was to build knowledge of text. This stage emphasised the importance of exploring the social and cultural context of language use in a piece of writing. For warm-up activities, the participants were expected to share experience relevant to the topic or text. Specifically, this phase dealt with an introduction to the article, and the development of background knowledge of the participants. I asked the participants to discuss and share their attitudes towards research writing, focusing on an organisational format of RAs, the process of RA writing, and the overall context of language used in RAs. They were encouraged to discuss the possible challenges and difficulties they might face when writing an article.

Since the two groups of participants had different purposes for and experience of research publication, their background knowledge and attitudes about RAs were somewhat different. For the graduate students, they were asked what they observed and experienced when reading articles, e.g. sections they found difficult to read and write, and what they knew about writing for publication. For the faculty members, they were told to express their thoughts and experiences of RA publication with a focus on the manuscript preparation process. Structural patterns of articles were also discussed in both groups.

To this end, the participants had the opportunity to ask anything that they wanted to know about the target genre. Then, they were provided with an article, and I asked them to generally discuss the elements of the article and textual organisation of each section of the text. Focusing on the overall structural patterns and the purposes of each section of the article, they were required to read the article carefully so that they would have a chance to explore the characteristics and features of the RA genre

they were tackling in the workshops. These activities were aimed at helping to boost their understanding about the importance of organisational patterns and knowledge of the RA genre.

8.4.2 Modelling of text

The modelling phase was executed after the participants had read the article provided. This phase used extracts from published articles in the TCI database to argue that the element under examination contains certain purposes(s), and that certain ways of achieving these are prevalent. At this stage, the IMRD format of the article was introduced, which helped familiarise the participants with forms and organisational formats of the article. Paltridge (2001) suggests the notion of a balanced process approach, in that learners "pay attention to form, content and reader expectations along with focusing on the individual writer" (p. 23). The participants were, thus, given four different published articles,[6] and asked to explore, read and extract information from them on the characteristics and functions of each of the sections of the articles. The goal was to arrive at an overall structure of the text in terms of language and text features (Hyon, 1996).

Tasks and activities then moved on to enabling the participants to develop a better understanding of the communicative functions of the four internal sections of the text. I introduced the participants to and explained the concept of genre and the discourse structure of an article, including the possible functional labels of the moves in the text. The participants were expected to realise how authors have gone about expressing the communicative move in each section. With my assistance, the participants had to read and were encouraged to scrutinise the textual features to realise

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[6] Four research articles published in different journals indexed in the TCI database were used in the workshops. They were randomly taken from those analysed in the descriptive phase. They are:
Kanoksilapatham, B. (2013). Thai university students' voices heard: Aspired pronunciation model. *Journal of English Studies*, 8, 124-149.
Metcalfe, J., & Noom-Ura, S. (2013). Communication strategy use of high and low proficiency learners of English at a Thai university. *LEARN Journal: Language Education and Acquisition Research Network*, *6*(1), 68-89.
Laongphol, J., & Chatupote, M. (2013). Developing ability to translate homonyms and homographs via training in part of speech identification and dictionary use. *Journal of Liberal Arts, Prince of Songkla University*, *5*(2), 1-17.
Chanprasert, V. (2013). Metacognitive reading strategies to improve reading comprehension and performance. *Sripatum Review of Humanities and Social Sciences*, *13*(2), 94-105.

the structure and language in the text given. Swales and Feak (2004) recommend that students be encouraged to consider key linguistic features and functional differences between moves. Through a lead-in discussion and a few questions about the structural patterns of the texts, the participants themselves analysed the text, focusing on how it was rhetorically structured. I encouraged them to consider how each section of the article usually starts and finishes. That is, the linguistic conventions with regard to lexico-grammatical features, organisation, and content that the article needs to follow, in order to be successfully accepted by its readership or discourse community, were emphasised (Muncie, 2002; Zhou, 2009). The participants were given a chance to share their ideas with peers and the class.

Given the differences in the knowledge and publication experience of the workshop participants, I decided to adopt a top-down approach to teaching the graduate students, whereas a bottom-up approach seemed to be effective for the faculty members. Clear explanations about the concept of genre, identified move types and their communicative functions needed to be explicitly highlighted for the graduate students. In contrast, teaching the faculty members was more challenging as they had some different perspectives and opinions related to move types found in the text. Discussion pertaining to possible linguistic features ensued.

The focus of this phase was also on the characteristics of the language, and typical lexico-grammatical features frequently used in the text. I asked the participants to explore the organisation and language features, such as typical vocabulary and grammatical choices usually used in each section of the texts. The participants were encouraged to think about the possible communicative purposes of some of the linguistic features commonly found in a particular section. Then, they were asked to investigate any similarities and differences of the prototypical elements of structure and language features that might be found in other RAs. After they were able to draw out the communicative functions, informational elements, and significant language features of the text, we discussed how the text was constructed and how its organisation was developed to accomplish its purpose through language features. Then, the task moved on to a more practical step. That is, I assisted them to categorise related words and match key linguistic features to a particular RA section. These processes would help reinforce participants' knowledge of the RA genre.

8.4.3 Joint construction of text

To unpack the function of language in use, the participants were required to re-read the articles provided using the structural patterns and the list provided to help them identify rhetorical moves, salient linguistic features of text associated with a particular section of the article, and particular contextual characteristics. They discussed the results of the identification in groups so that they agreed upon the communicative moves identified. As for the micro-structure of the text, here, the focus was placed on lexical clusters frequently found in each of the text sections. The participants were trained to gain more control of the particular lexico-grammatical or phraseological features used in each of the four sections. I tried to encourage them to find out the meanings and/or pragmatic implications of the phraseological units found, as realised in texts within this genre. This process, in fact, aims to raise awareness of genre, and to make readers sensitive to the characteristics of the RA genre, rhetorical effects and connect phraseological patterns with the contextual meaning. They were ideally expected to relate this knowledge to their own texts or research manuscripts, if possible. Activities where the participants were asked to use strings in the context of their own texts were employed. This task, thus, sensitised them to making use of the knowledge presented and relating it to their own RA writing task.

Even though the concept of phraseology was discussed in both participant groups, some differences in the teaching approach and activities emerged. For teaching the graduate students, I first asked them to search for phraseological patterns frequently used in the texts given, and discussed their pragmatic functions. They were then asked to try to use some of the strings found in their texts, and compared their functions in the context. Meanwhile, some of the faculty members who brought their manuscript drafts could compare the phraseological units and their functions with those used in their texts. Concordance lines in the Sketch Engine were shown in the workshops when participants suggested some phraseological units which they thought were interesting and useful in writing RAs.

As a follow-up method, the participants made sure they had a chance to show, review and share their ideas about what they had learned with the class. To make the task more realistic and to provide some assistance for the RA writing task, I encouraged them to reflect on the materials, by comparing how they could improve

their research draft, and the crucial points they wished to improve in their manuscript draft. It was not possible for all participants to engage fully in this stage because not all of them attending the workshop had their research manuscript ready before coming to the workshop. However, some of them did compare what they had learned with their publication experience. Finally, the participants were asked to express their attitudes towards the activities, instruction, and teaching materials presented in the workshops.

8.5 Approach to Instructional Materials Development

This section discusses ideas and essential elements associated with the approach for and design of learning materials for these workshops. In terms of the issue of language authenticity, in designing materials, according to Harwood (2010), material developers need to consider their purposes and priorities carefully when choosing texts and balancing the authentic against the inauthentic (Harwood, 2010, p. 6). Since the goal of organising workshops is to raise graduate students' and faculty members' consciousness of rhetorical and phraseological patterns in research writing, all the materials presented in this chapter were created as a result of the findings of the move-based and corpus-based analysis carried out in the descriptive phase (see Chapters 6 and 7). It was believed that the value of the rhetorical purposes identified and the proposed model of RAs illustrated in the descriptive phase (see Table 6-9 in Chapter 6) could represent and provide useful insights into the discourse structure of RAs.

With regard to specific texts to be used as learning materials, I was conscious of Tomlinson's (2010) suggestion that learners should find texts interesting and accessible. I selected texts from RAs analysed in the descriptive phase as they represent studies in the Applied Linguistics field which meet the workshop participants' interests in general. In addition, the research topics covered in these RAs seemed to be familiar and fit nicely with the participants' background. However, in developing the instructional materials, some of the texts used in the tasks were modified in order to make them more comprehensible (e.g. removing headings, tables, some citations) and appropriate to the time constraints of the workshops, with regard to the length of each worksheet. This minor adjustment to the texts did not involve

lexical and syntactic choices, or content in the original texts. The examples of authentic texts taken from the RAs analysed could, thus, provide the workshop participants with a sense of language style and specific linguistic features frequently used in RAs, serving the principal aim of the workshops.

I considered that the learning materials created should meet the specific objectives of each of the workshop sessions. As indicated in the procedure for organising workshops (see Chapter 8), I gave two two-day workshops, one for graduate students, and another for faculty members. Each workshop consisted of four three-hour sessions. The outline of these four interrelated sessions, as well as the learning objectives and focus is as follows:

Table 8-1 Learning objectives and content covered in the workshops

Sessions	Objectives	Content/Learning focus
Day one		
Session 1 **(3 hours)**	• To develop the participants' conceptual understanding of research articles and genre. • To become familiar with the generic features of some of the linguistic features frequently found in the Introduction and Methods sections	• Organisation of an RA • IMRD format • Primary purposes of the Introduction and Methods sections • Linguistic features frequently found in the given sections • Tenses
Session 2 **(3 hours)**	• To become familiar with the communicative purposes and generic structures of some of the language features found in the Results and Discussion sections.	• Primary purposes of the Results and Discussion sections • Linguistic features frequently found in the given sections • Reporting verbs
Day two		
Session 3 **(3 hours)**	• To raise the participants' awareness of the importance of phraseology and the characteristics of the language typically used in research writing.	• Corpus-based approach and phraseology • Characteristics of multiword combinations
Session 4 **(3 hours)**	• To realise how the organisation of RA texts is developed to accomplish its purposes through linguistic features. • To identify possible functions of key lexical strings.	• Linking move-based genre analysis and a corpus-based approach to support research writing tasks

8.6 Activities and Materials Used in the Workshops

The initial stages of materials preparation involved the background information which I had asked for from those who were interested in participating in the workshops. Their answers were incorporated into the process of creating and designing tasks and instructional materials, for example, their research topics of interest, publication concerns, etc.

As inspired by Feak and Swales (2010) and Swales and Feak (2012), the format of the learning materials created for each section was identical, consisting of two parts: an extract from a particular section (IMRD) taken from selected research articles analysed in this study, and questions to be discussed with a partner. The essence of the worksheets created, therefore, focused on the rhetorical functions and the value of the phraseological patterns typically used in each of the four sections of the RAs.

Another factor to be taken into consideration while devising instructional materials is time constraints. Since the workshops in the present study lasted two days, a long series of activities and worksheets might not have been appropriate. A one-page task sheet was appropriate and practical for each session.

All of the instructional materials were presented in colourful worksheets. A hard copy of the materials was distributed to the workshop participants on the day of the class.

8.6.1 Session one

As I was unsure of the participants' level of rhetorical awareness and research writing skills, an opening activity called 'orientation' was a worthwhile activity as it gave the workshop participants opportunities to talk about their publication experience. In Task 1, as an introduction before the actual teaching phase, I designed a task which would allow the participants to reflect on their research publication experience. The task was aimed at encouraging the participants to share their opinions about and the challenges of the article writing process, if any, with peers. Some of the questions were intended to generate the participants' prediction of what would be covered in the workshops and to draw their attention to the different functions of the four sections of the RAs. Figure 8-2 illustrates the design of Task 1.

Figure 8-2 Before the workshop

Task 1

BEFORE THE WORKSHOP

Before we start the workshop, let's explore some opinions about research writing and what you think about when working on reading and writing research articles. Discuss the following questions about typical research articles and academic writing in English with a partner.

1. What are the major characteristics of research articles written in English?

   ---

2. What is your biggest concern or challenge when you draft a research manuscript?

   ---

3. How are the four sections (Introduction, Methods, Results, and Discussion) different?

   ---

4. What is the main purpose of each of these sections?

   ---

5. Which section is the most difficult to write? Why?

   ---

6. What do you think about "academic style"?

Commentary

This task was introductory, and placed at the beginning of the workshops. As might be expected, this task was not difficult, especially if the participants had some experience in preparing research manuscripts for publication in refereed journals. Basically, Task 1 was created with the ultimate goal of providing the workshop participants with an opportunity to discuss with their peers and to reflect on their

writing and publication experience and the experience of working on drafting research manuscripts. This task focused on three key aspects: 1) the characteristics of research articles; 2) the IMRD structure; and 3) the language and features of research texts. The first question was to check their understanding of and concerns about some of the characteristics of research articles, for example, language style, vocabulary, research topics in which they were interested, etc. Likewise, Questions 3 and 4 allowed the participants to discuss the IMRD format and the communicative purposes and functions of each section. In order to determine which particular section I had to focus on in the workshop, Question 2 was found to be useful. In the meantime, for the last question, the participants had an opportunity to exchange their opinions with their peers regarding the role of academic language and style, or how the language is typically used in RAs. The task outcome was quite open because there was no single answer.

The main focus of interest in Session 1 was in Task 2 and Task 3, which involved the elements and primary purposes of the Introduction and Methods sections, respectively. Each of these sections needs different content for the description. In Task 2, the participants had a chance to study how the information was presented in the Introduction section and how the authors used citations to support their claim. It was my aim that the participants should recognise how the authors sequenced the information in order to move the potential reader logically from reviewing some of the previous studies to the purpose of their study. Below is a Task 2 learning worksheet I prepared.

Figure 8-3 Learning about the Introduction section

Task 2

KNOWING THE INTRODUCTION SECTION

A research article normally includes a description of background, purpose, methods, results and discussion of the study. Each section has its own clear purpose and organisation. Read the following excerpt taken from the Introduction of an article that discusses reasons for conducting research on learners' ability to communicate in English. Notice the possible functions of each sentence. After reading it, answer the following questions with a partner.

❶ Historically, the teaching of English language in Thailand dates back to the time of King Rama III (1824-1851), with English becoming a compulsory subject in schools from l92l (Foley,2005). ❷ And yet, despite this long history and recent increases in government funding to education (Kirkpatrick, 2012), many educators in Thailand continue to raise concerns about the standards of English language education (Methithan & Chamcharatsri, 2011; Draper, 2012, Kirkpatrick, 2012), claiming that Thai students lack both linguistic and communicative competence (Foley, 2005). ❸ As Thailand moves towards entry into the ASEAN community in 2015, the importance of improving students' ability to communicate in English has become a focus of media attention, suggesting that a lack of English skills across the country will leave Thai people disadvantaged compared with other ASEAN members (Marukatat, 20ll).

❹ The reasons behind this lack of linguistic and communicative competence are wide ranging and complex. ❺ A number of factors including lack of teaching resources, negative wash back from the testing system (Foley, 2005) and lack of opportunity to practice spoken English both in and out of the classroom (Kirkpatrick, 2012) all seem to contribute to the problem. ❻ However, regardless of the cause it is clear that, as English teachers in Thailand, we need to find additional ways to help and encourage Thai learners to develop their communicative competence. ❼ As communication strategies represent a useful way in which to do this, this study aims to investigate the CS use of Thai undergraduate students and identify any relationship between English proficiency and CS use in order to identify useful strategic behaviours that may enable Thai learners to increase their communicative competence.

Discussion questions

1) What do you think is the purpose of each sentence in this Introduction?
2) How well has the author revealed his/her understanding of the problem?
3) What does the author think of the solution?
4) Which sentence indicates the author's topic of the study?
5) Do you think that citations are necessary in the Introduction section? If yes, why?

Commentary

The first question did not aim to discover any specific information from the text; however, the participants found that it was not that simple to answer. This question was actually more relevant to the rhetorical organisation of the section because the author establishes a context or frame of reference to help readers understand the reason(s) for and importance of the study. It was a reading activity which helped the participants to see how such a text is organised, and provided them with an understanding of discourse structure which would enable them to write their own introduction in an appropriate manner. Questions 2 and 3 were about reading for information. In essence, I wanted the participants to recognise that there are various moves involved in going from providing the reader with the background of the motive or rationale of the study to stating the problem needing to be solved. The author then moves to presenting the purpose of the study, which was emphasised in Question 4. This also reflects that, in the majority of articles, the authors typically conclude the Introduction section by describing the present research. Meanwhile, in the last question, I wanted to highlight that citations can occur anywhere in an Introduction. They are used to support the author's statements to convince the reader that the study is essential and worth conducting. Moreover, reviewing items of previous research in the Introduction section is an accepted technique and important as it shows that a number of researchers have been interested in the research relevant to the topic (Samraj, 2002; Swales & Feak, 2013).

After the Introduction section, Task 3 and Task 4 deal with the Methods section. Two aspects were the major focus at this point: information to be included and tense choice. In Task 3, the text used was taken from two sub-sections of the Methods—participants of the study and instruments. This task asked the workshop participants to investigate the information commonly included in the section.

Figure 8-4 Organisation of the Methods section

Task 3

ORGANISATION OF THE METHODS SECTION
Read the first two paragraphs of a Methods section of an article published in *Journal of English Language Studies*. Notice language conventions, e.g. the choice of verb tense and language style. Then discuss with your partner the kind of information that has been included in this section and answer the questions.

❶ The participants of this study consist of first and second year students at the Faculty of Arts of a public university in Thailand. ❷ At the time of the study, the participants had not yet selected their majors or minors. ❸ This particular population pool was selected for a number of reasons. ❹ First, the participants were considered to be future users of English who would be confronted with many English varieties and be judged in their professional life, not on competence, intellect, and character alone, but also on their English accent. ❺ Therefore, their attitudes towards wider varieties of English are considered important and likely to provide some empirical insights into the field of EIL, ELF, and WEs. ❻ Second, as opposed to high school students, these tertiary education students were free from the heavy pressure of learning English in order to pass national entrance examinations for higher educational institutions. ❼ Consequently, students would have more autonomy to decide on their investment in learning English. ❽ Finally, the influence of academics might have on their role as respondents. ❾ At the time of study, the participants were not influenced by the content of English phonetics courses, which are normally offered in their third and fourth years of students majoring or minoring in English. ❿ Since these phonetics courses typically focus on American English or British English accents, as reflected from a number of textbooks available, the course content might create a bias in their attitudes towards pronunciation. ⓫ Therefore, it was ideal and crucial that the study be conducted on first and second year university students only.

⓬ The instrument used in this study is a questionnaire. ⓭ To assure that the participants of this study had no difficulty understanding and responding to the questions asked, the questionnaire was written in Thai. ⓮ The initial version of the questionnaire was piloted before use with 30 first and second year students at the Faculty of Liberal Arts and Science of a public university in the second semester of the 2012 academic year. ⓯ The purpose of this piloting was to ensure that the language used in the questions was understood by the respondents, and the questions successfully elicited what they were supposed to. ⓰ Based on the comments and feedback from the respondents, the questionnaire was revised accordingly. ⓱ Some question items were rewritten, and others were elaborated to make sure that confusion was eradicated, and clarity enhanced.

Discussion questions

1) How is the text organised?
2) What type of information is included in the second paragraph?
3) What tenses and voices are usually used in the text? Why?

Commentary

Similarly to Task 2, the first question essentially involved the organisational pattern of the Methods section. The participants found this question quite easy if they fully understood how to describe the procedural steps and the materials used in the study. However, at this point, the workshop participants were asked to take note of the way the author chose to order the elements included. In the second question, the aim was for the participants to learn a good deal about describing the development of the author's own materials for the study. The focus in Question 3 was on one aspect of the writing style for the Methods section, namely, the extensive use of past tense verbs in the passive construction which is frequently found in this section. It seemed possible to predict that the participants could answer the question easily after reading the text, and, having tried it out, I hoped they would be able to take on board the concept of the appropriate style of language and find it useful when writing the Methods section.

I closed the first session with the following exercise (Task 4), which was about the typical language use and the simple past tense, which is commonly used in the section of the research article concerning procedural descriptions. Another objective of Task 4 was the order in which the information is presented. To address these issues, a worksheet was prepared as below:

Figure 8-5 Writing the Methods section

Task 4

WRITING THE METHODS SECTION
Here are the excerpts from the rest of the Methods section presented previously in Task 3. Read them and write each verb given in parentheses in the tense you have chosen in the blank space provided. Then rearrange and number the sentences in order as you think the author originally wrote them in the space provided.

❶ The revised questionnaire used in this study (consist) _____ of three major parts.

(____) Part three (consist) _____ of a series of nine statements to collect information on the respondents' attitudes towards English pronunciation models of native-like and a variety of other models based on the concepts of WEs, EIL, and ELF.

(____) The participants (be) _____ first and second year university students of the Faculty of Arts.

(____) Part two (consist) _____ of five questions which aim to elicit the respondents' experience with native-like pronunciation and other ASEAN English varieties.

(____) Part one collects the participants' personal information regarding gender, age, the year of study, the onset period of time English (study) _____, and the Likert scale self-assessment of their English language skills.

(____) The activity (take place) _____ on campus and (conduct) _____ entirely on a voluntary basis.

(____) The Likert scale data analyzed by descriptive statistics (provide) _____ a summary of data that not only (identify) _____ the most popular answer for each question but also a group average.

(____) Upon the final revision and improvement of the piloted questionnaire, the questionnaire (administer) _____ to the participants for a period of one week, in the middle of the second semester of the 2012 academic year.

(____) All of the returned questionnaires (N = 387) (analyse) _____ quantitatively by using the SPSS Statistics (SPSS) program for descriptive statistics in order to calculate mean ratings and percentages, and to highlight any trends and significant commonalities, anomalies, etc.

Commentary

This task was a useful follow-up to work on the Methods section, requiring the participants to get an idea and sense of a range of techniques available for writing the section. This is important, because a description of the procedural steps in conducting a study should be written clearly so that a reader who is really interested in the same research topic can replicate the research procedure. Task 4 was, therefore, designed so that the workshop participants had a good understanding that a procedure description should be explicitly stated step-by-step, logically or chronologically. As a result, they should be able to recognise that various signal words (e.g. *three major parts, Upon the final revision and improvement of the piloted questionnaire*), sentence connectors, cohesive devices and linking phrases could be employed. Another concern of writing the Methods section is to choose the correct verb tense and verb voice. It became clear from this task that the *simple past tense* is usually used to refer to the procedures carried out in the study being reported. This demonstrated to the workshop participants how some grammatical conventions could contribute to describing the materials clearly in the Methods section.

8.6.2 Session two

The Results and Discussion sections were the main focus in this session. In the Results section, the author presents the findings of the study in both figures (graphs and tables) and briefly comments on them. I opened Session 2 with Task 5, which was designed in order for the workshop participants to learn how the findings of the study are presented, and how the accompanying text helps the reader to focus on the most important aspects of the results and to interpret them. Task 5, involving the information elements included in the Results section, is shown below.

Figure 8-6 Writing the Results section

Task 5

WRTING THE RESULTS SECTION

Below is the excerpt from a Results section (Metcalfe, J., & Noom-Ura, S. 2013. Communication strategy use of high and low proficiency learners of English at a Thai university. *LEARN Journal: Language Education and Acquisition Research Network, 6*(1), 68-89). Read the text and discuss with your partner the following four questions.

❶ To respond to research question two, the relationship between strategy use and English proficiency was investigated through using Pearson product moment correlation coefficient. ❷ Two separate measures of English proficiency were obtained for each participant. ❸ The general English score (obtained from academic grades on the English II course) for the participants in the study ranges from 148 to 260.25 with a mean of 210.45 and SD of 22.124 (maximum score for the course is 280). ❹ The oral fluency score for each participant ranged from 3 to 7.75 with a mean of 5.2 and SD of 1.066 (with a maximum score of 9).

❺ The results show fairly low levels of correlation between general English proficiency scores and OCSI responses (see Table 5). ❻ A significant positive correlation was obtained for fluency-oriented strategies (.229) and significant negative correlations were obtained for message abandonment (-.200) and less active listener (-.209), all significant at 0.05 level.

❼ In comparison to general English proficiency, oral fluency scores correlate with OCSI responses use more strongly (see Table 5). ❽ Significant positive correlations were obtained for four factors: social-affective (.290), fluency-oriented (.400), negotiation for meaning whilst speaking (.259) and circumlocution (.230). ❾ Additionally, significant negative correlations were obtained for two factors: message abandonment (-.363) and less active listener (-.260).

❿ This seems to suggest that oral fluency is a stronger predictor of participants' CS use than general academic English abilities. ⓫ However, the significant correlations found between oral fluency and reported CS use were not particularly strong, ranging from .230 to .400. ⓬ This may suggest that oral fluency is not necessarily the strongest indicator of CS use and that other factors may be more influential. ⓭ It seems likely that strategy use is influenced by a range of different factors. ⓮ Huang (2010), for example, concluded that motivation and frequency of English use outside the classroom were better predictors of CS use than general English proficiency. ⓯ In an empirical review of CS studies, Jidong (2011) identifies numerous factors such as proficiency, learning and communicating contexts, task type, personality, gender differences and first language, which have all been identified as influential on strategy choice.

Discussion questions

1) How are the results of the study described in this section? How is the information in each paragraph different?
2) In your opinion, why did the authors restate the method used in analysis of the data before presenting the findings?
3) What are the reporting verbs the authors used in the text?
4) Which sentence locates the figure where results can be found?

Commentary

The first question was a device to provide the participants with opportunities to explore the information elements to be included in the section. This question was designed to raise their awareness about the rhetorical purposes that can lead to different information being presented in each paragraph. Question 3 moved away from structural patterns towards language conventions, especially the use of reporting verbs which become a means of reporting the findings. The participants, in pairs, had to underline or highlight any reporting verbs in the text which they felt helpful to present the research findings. The last question was not difficult; however, my main intention was to direct the participants' attention to some writing strategies used to highlight information presented in a figure or table in the text.

In dealing with this task, the participants would have noticed that, in the Results section, the author not only reports the findings of the study, but also comments on them. I used the text to explain that, when the author comments on the findings, it is conventional to use the present tense, tentative verbs (*seems*, *seems likely*) or modal auxiliaries (*may*) to generalise from and give a possible explanation for the findings being discussed. Notwithstanding, this issue was highlighted in the subsequent task.

The last section of IMRD is the Discussion section, which is covered in Task 6. This task was undertaken before the end of day one of the workshops. Task 6 focused on interpreting or giving meaning to the findings, which is the core element of the Discussion section. In designing the task, I wanted the participants to see the difference between these two sections by pointing out that the Discussion section normally directs the readers back from the specific information reported in the Results section to a more general and, perhaps, critical view of how the findings should be interpreted. Bearing this in mind, the emphasis of Task 6 was on commenting on and interpreting the results in a variety of ways. The following figure presents the design of Task 6.

Figure 8-7 Writing the Discussion section

Task 6

WRITING THE DISCUSSION SECTION

The excerpt is taken from the Discussion section of an article. Discuss with a partner what information the author included in the text. Decide how the author discussed and/or commented on the result of the study. Then answer the questions.

❶ As for the second research question, it is interesting to note that both before and after the training, vocabulary skill was regarded as the most influential factor affecting their ability to select suitable meaning of the words, followed by grammatical ability and background knowledge. ❷ The same point was indicated by Wilkins (1972 cited in Thornbury, 2002, p. 13), "Without grammar very little can be conveyed, without vocabulary nothing can be conveyed." ❸ The finding is also congruent with Çelik and Toptaş's finding (2010, p.62) that, "Vocabulary is generally considered as the basic communication tool, and often labeled as the most problematic area by language learners". ❹ *It may be* a good indicator that the students gradually realized the importance of these factors on their reading comprehension, decision in selecting word meanings and also efficiency in translating although their perception on the tendency to choose the dominant meaning ($t = 1.829$, $p = .078$) and on the sufficient background knowledge in making inferences ($t = 1.934$, $p = .063$) before and after the training were not statistically different.

❺ The tendency to choose the dominant meaning of a word *can possibly result from* the fact that most students in Thailand have been traditionally taught vocabulary in a passive way. ❻ Most teachers of English in Thailand have taught students to memorize one word with one meaning instead of making them aware of possible meanings the word can have in other contexts. ❼ However, after the training, the problem involving vocabulary skill shifted from ambiguous words to technical terms. ❽ *It may be assumed that* after the training, they might gain much more knowledge in parts of speech and dictionary use and became skillful to handle the problem of dominant meanings but technical terms are still another linguistic difficulty for them. ❾ Though they could identify and select proper meanings of the target words in their exercises, they still could not totally understand the meaning of the whole sentences or paragraphs because of other surrounding technical terms in the sentences. ❿ They knew the meanings of these unfamiliar words from their dictionaries but they could not efficiently activate their prior knowledge to comprehend the precise meanings. ⓫ Hence, the problem of technical terms became more prominent.

Discussion questions

1) What is the primary function of the Discussion section?
2) How many strategies did the author use to comment on the results?
3) Which element of information is represented by each sentence in the excerpt?
4) What are possible functions of words or phrases underlined in the text?

Commentary

It was useful to simply begin the task with a reading activity to analyse and discuss possible communicative functions of the Discussion section and/or possible types of content presented in the text, so that the participants had a sense of the generic purposes of the section. The second question could be done in pairs or a group to discuss possible answers and write about what they were in order to compare them with other groups. This was intended to develop awareness of how authors discuss their research findings. Working on the elements of information in each sentence in detail, in the third question, the participants needed to think about possible content and the information conveyed by each sentence. It can be seen from the task that some sentences present elements of information, whereas others give a point of view about that information. As it seemed possible that the fourth question would be difficult to answer, I played a support role by helping the participants to identify possible pragmatic functions of comments about each result, including the underlined phrases (e.g. *it can be, can possibly result from, It may be assumed that*, etc.), by explaining them that these phrases can be used when the writer would like to discuss or comment on the findings of the study. This activity was seen as an effective and valuable part in raising awareness of the rhetorical purposes of the Discussion section.

8.6.3 Session three

In the descriptive part of my study, a corpus-based approach was applied to identify phraseological patterns frequently occurring in the text. In this session, I wanted the participants to think about and realise the importance of the effective use of phraseological patterns to improve their article writing in English. The session attempted to demonstrate some benefits from using a corpus-based approach, a computer program to analyse texts, and the characteristics of phraseological patterns. Therefore, in this session, I used an activity which focused on using a computer program to support writing and, perhaps, improving language use in research manuscripts. Activity 7 in this session is presented in the following figure.

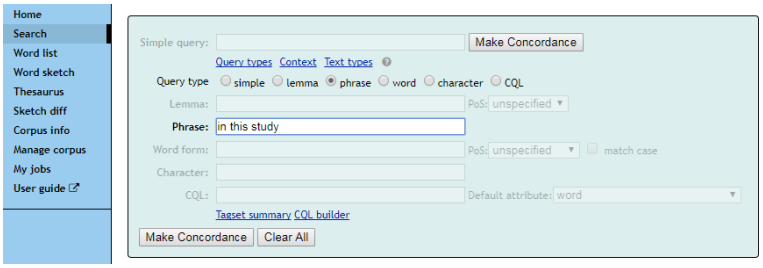
Figure 8-8 Learning about corpus and phraseology

Task 7

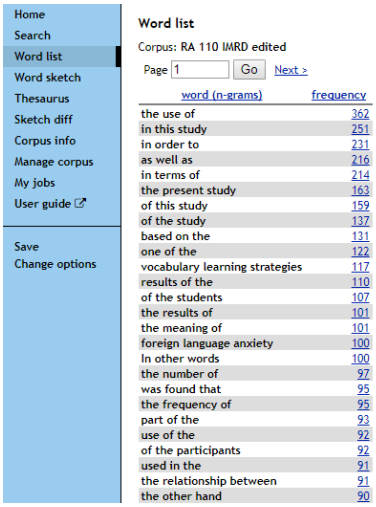
KNOWING CORPUS AND PHRASEOLOGY

In this session, you will learn about a corpus-based approach and a program, Sketch Engine, which is a tool to explore how language works. The first screenshot is the actual features of the Sketch Engine, and the second one is some of the n-grams generated from my RA corpus.

Corpus-based research uses corpus data to analyse the linguistic features and the systematic patterns of language. (Biber, 2009; Tognini-Bonelli, 2001). The screenshot below shows how to work with a language dataset through the Sketch Engine.



N-grams are a type of word combinations frequently recurring in a text. They are determined by frequency and cut-off criteria, performing particular discourse functions (Cortes, 2004), and helping to shape meanings and contributing to a sense of coherence in a text (Hyland, 2008). Here are some of the n-grams identified in my corpus.



Discussion questions

1) What are the merits and drawbacks of a corpus-based approach? Discuss with a peer.
2) Which features of language do you want to explore? Why?
3) What are some of the benefits of n-grams? Discuss how they can help you prepare a research manuscript.
4) Are you thinking about n-grams when drafting a manuscript? Why (not)?

Commentary

A significant benefit of this task was for participants to see how to operate the Sketch Engine, a computer tool, while I introduced a corpus-based approach. Fortunately, during the workshops, I was able to show the program on screen, and the participants could interact with it. In this task, the first screenshot from the Sketch Engine shows how the program works and several important functions that users can use to search in a corpus. Thanks to the availability of a desktop with a video projector in the workshop venue, the participants were able to see the major characteristics of program features, including concordance lines, word list, n-grams, etc., which are the main tools to retrieve information from corpora. Having found that a majority of the participants were interested in n-grams, I showed some of the functional n-grams identified from my corpus. Frequencies of each n-gram from different article sections were shown in order that the participants could compare and contrast the functions of the n-grams identified in each internal section of RAs, qualitatively and quantitatively, with their intuitions. These activities led to the goal of the next session, which mainly focused on multiword combinations and their pragmatic functions.

8.6.4 Session four

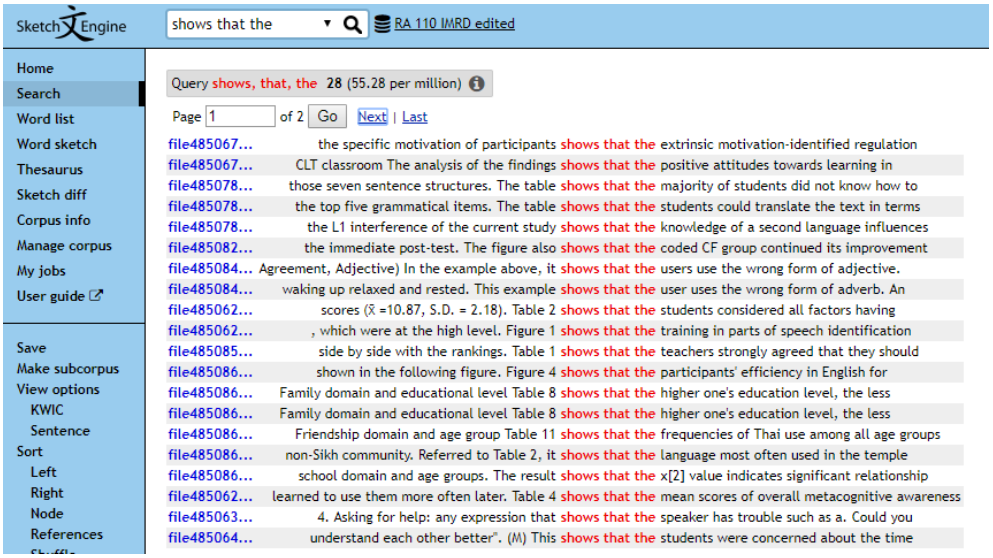
As language use is determined and interpreted in relation to its context of use, the last session of the workshops emphasised the importance of formulaic sequences and the pragmatic functions associated with the communicative purposes identified in the move-based genre analysis. The session stressed the value of the corpus-based approach to support vocabulary awareness and how language corpora facilitate article writers in the task of writing for publication. In doing so, most of the activities in this session involved concordance lines, n-grams and the identification of possible functions of the use of n-grams in context. Task 8 in this session was thus designed to show the participants concordance lines taken from some n-grams generated from the corpus and asked them to discuss which pragmatic functions they perform in context.

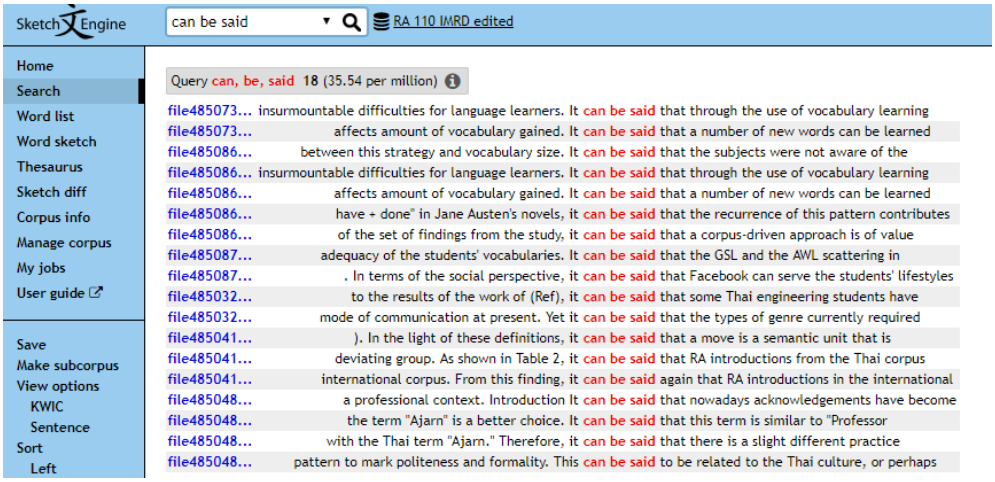
Figure 8-9 Understanding functional n-grams

Task 8

UNDERSTANDING FUNCTIONAL N-GRAMS

Below are sample concordance lines of the n-grams '*shows that the*' and '*can be said*' from the results of some research. Scan the lines and do the tasks that follow. Discuss possible functions of these n-grams used in context and compare your answers with other groups.





1) What are the possible functions of *shows that the* and *can be said* from the screenshots?
2) In which section do you think these n-grams can be found in the article? Why?
3) Now look at the n-grams again. Think about their pragmatic functions. Do you think their functions are associated with the communicative purposes identified in the proposed model?

Commentary

Task 7 showed the participants how to explore some program functions and introduced the n-grams identified in the dataset of my research. It showed how the n-grams play an important role in writing RAs according to their frequency of occurrence. In the first question, the participants had a chance to see and analyse the functions of the n-grams in greater depth by working with concordance lines. It became clear that some participants might need help in identifying the functions of n-grams at this stage, but that others may not, especially those who were already experienced writers. In the session, this worksheet was used together with the proposed model of RAs in Applied Linguistics created in the move-based genre analysis. I presented the participants with a number of examples of the n-grams generated from the corpus and asked them to note the words or phrases that came before and after the n-grams. The last question took the participants back to the issue of whether the functions of the n-grams are associated with the functions of the given sections. The question encouraged the participants to think about the relationship between language and context. It also afforded insights into the importance of using vocabulary and phrases that are appropriate to writing in the RA genre.

8.7 Conclusion

This chapter presented an in-depth discussion and justification of the designed tasks and methodology employed in the pedagogic phase of this study. I have explained the processes of conducting the workshops and the application of the teaching-learning cycle to present the genre findings to the workshop participants. The development of instructional materials and activities with commentary used in the workshops was clearly delineated. In the subsequent chapter, I will present the evaluation of the workshops through interviews.

CHAPTER 9

EVALUATING THE WORKSHOPS THROUGH INTERVIEWS

9.1 Overview

Having conducted two-day workshops, I was interested in getting some feedback, through interviews. The aim of this chapter is to present interview procedures conducted to execute the pedagogical phase of the present research and results of the interviews. I first present a description of recruiting interview informants and a discussion about conducting interviews as a main method for data collection. I discuss interview approaches that have to be taken into account when conducting the interviews. I then go on to show the results of the interviews, focusing on interviewees' main concerns in RA writing and what they thought about the workshops. The chapter concludes by discussing a meta-comment on conducting interviews and interpreting interview results.

9.2 Selecting the Interview Informants

Based on the answers to the questions on the registration webpage, a convenience sampling method was employed to collect prospective participants. Eight workshop attendees— two Thai graduate students and six faculty members who had different levels of writing and experience of publication, were contacted to participate in pre- and post-workshop interviews (See Appendix I for a detailed account of these interview informants' profiles). These informants were selected because they were interested in, but had different motivation for and different levels of experience of RA publication. For the Thai graduate students, publishing research work is required for their graduation, and they do not have any experience of RA publication. In contrast, faculty members are required to have their research findings published in journals for rewards, promotion, and academic title promotion. Moreover, they might have experiences dealing with submitting their manuscript drafts to particular journals, and reviewers' comments. The responses from these informants, therefore, would be helpful for the objectives of the study, providing insights and perspectives on RA writing and publication.

As for the two graduate students, at the time of the study, they were full-time students studying PhDs in English as an International Language (EIL), and curriculum and instruction at Kasetsart University and Chulalongkorn University, respectively. They had no experience of RA publication.

The second group of informants were six full-time faculty members of state-run universities. Four of them from Kasetsart University had little experience of RA publication in journals or conference proceedings at the national level, whereas two participants served as university lecturers at Silpakorn University and had more experience of research publication in local and international journals. They were also reviewers for several refereed journals. All of the informants in this group were mainly involved in the field of Applied Linguistics for English language teaching (ELT).

I contacted all the informants to arrange a meeting and interviews with them in order to get as much information as possible, and to hear about their experiences of scholarly publication and their thoughts about and interest in RA writing. Regarding ethical issues, informants were assured that they would not be put in a situation where they might be at risk of harm as a result of their participation in the interviews. They were informed of the purposes of the research and the interviews, and were asked to participate voluntarily. They were allowed to ask any question or express any concerns during the interviews. In addition, they were made aware of their rights to withdraw from participating or decline to answer particular questions at any time without penalty and without affecting their research activities. They were informed that they had the right to privacy, anonymity and confidentiality, and their interview results would be kept completely confidential and used for research purposes only. These informants were given a Participant Information Sheet and were asked to sign a Consent Form in accordance with University of Warwick regulations (see Appendix H). The number of interviewees was small, but given the detailed accounts this research attempted to produce, the limitations in terms of time and the fact that this was a sole research project, it was not feasible to include more informants.

9.3 Conducting Interviews

To capture the participants' awareness of knowledge of rhetorical organisation and phraseological patterns used for RA writing, pre- and post-workshop interviews were carried out. Many scholars (e.g. Brinkmann & Kvale, 2014; DiCicco-Bloom & Crabtree, 2006; Dörnyei, 2007; Mann, 2011; K. Richards, 2003) agree that interviews are one of the most common methods of data collection used in qualitative research, which are applied in a variety of contexts for various purposes. Interviews provide an effective way to elicit in-depth personal information, and encourage the interviewees to elaborate on certain issues (Dörnyei, 2007). Despite the different characteristics of interviews in the fields of qualitative sociology, anthropology, discursive psychology, and ethnomethodology, "all interviews are sites of social interaction, where ideas, facts, details, and stories are collaboratively produced by interviewee and interviewer" (Mann, 2011, p. 7). Interviews can be used to investigate views, experiences, motivation, attitudes, and the personal perspectives of individuals on specific matters, which might be difficult to achieve through other kinds of research methods such as surveys, or observation. Interviews are, therefore, most appropriate where little is known about the study phenomenon or where detailed insights are required from individual participants (Gray, 2013).

It is widely acknowledged that interviews are not neutral tools for the collection of data. Data can be influenced by how much the interviewer controls the direction of the interview and the subjects discussed (K. Richards, 2003). Mann (2011) reminds us that the relationships between the interviewer and interviewee might affect the interviewee's responses, especially if there is an asymmetrical power relationship. The interviewer should be open in "accounting for how membership, roles and relationship can affect the way talk develops" (p. 16). Caution is required in interview talk as a co-construction between the interviewer and interviewee is inevitable. The power relationships, especially an asymmetrical power relationship between the interviewer and interviewee, can also influence the presentation of the interviewee. The interviewer should consider issues of co-construction, interviewer contribution and reflexivity, and interactional context when conducting interviews (Mann, 2011, pp. 17-19). To cope with these concerns, supplementing interviews with follow-up interviews, and with other data sources, including observation and visual methods is

useful, enabling the researcher to develop a more reflective approach to carrying out, analysing, and reporting on qualitative interviews.

Interviews can be broadly classified into several different types, such as structured, semi-structured, unstructured, informal, and focus-group interviews, depending on data collection methods and their focus. However, semi-structured interviews were chosen for this research for a number of reasons. Firstly, they offer the interviewer flexibility to ascertain the respondents' perspectives and probe for more detailed information (Gilham, 2005; Mackey & Gass, 2015). Secondly, semi-structured interviews are especially useful for understanding how interventions work, allowing the informants to discuss and raise issues that the interviewer may not have considered (DiCicco-Bloom & Crabtree, 2006). Thirdly, regarding the semi-structured interview processes, both the interviewer and interviewee are seen to have an active, reflexive, and constructive role in the process of knowledge construction (Given, 2008). Lastly, they are most commonly associated with qualitative research combining a pre-determined set of open-ended questions with the opportunity for the interviewer to further explore other relevant questions relating to the objectives of the research, particular themes and responses. Based on the interview guides which are a schematic presentation of questions, the interviewer can explore the informants' views more systematically and comprehensively as well as keeping the interview focused on the desired line of action (Silverman, 2013). However, it should be noted that not all questions are planned and sequenced prior to the interview. A majority of questions emerge during the interview, allowing both the interviewer and informant the flexibility to discuss the issues. Given the semi-structured format, I was able to ask the informants about issues connected with their article writing and was free to probe and prompt where I felt further clarification was needed during the interviews. For these reasons, with a set of pre-determined open-ended questions and with other questions emerging from the dialogue during the interviews, I was able to gain rich data and insights into RA writing and publication experience. A series of questions was not strictly followed, however, as they were altered in relation to each interview. For guideline interview schedules, please see Appendix J.

Interviews may be conducted in various modes, including individual, face-to-face, and face-to-face group interviewing, by telephone, videophone and the Internet. As Ritchie, Lewis, Nicholls, and Ormston (2013) indicate, all interviews in whatever

format may be appropriate where the research is primarily focused on gaining insight and understanding. In the present study, I decided to conduct individual interviews because the informants could provide valuable and in-depth information from potential contexts. All the interviews were conducted in Thai, the mother tongue of both the informants and the researcher to ensure that informants would be able to communicate exactly what they were thinking without linguistic barriers. They lasted about 30-40 minutes and were administered in an informal setting on site, mostly at the participants' offices in order that they felt comfortable and willing to share their experiences and thoughts.

To record the interview data, Rubin and Rubin (2011) have indicated that audio recorder, note taking, or video cameras are the most common methods used. I considered that hand written notes during the interviews may be relatively unreliable, and that some key points might be missed. All the interview sessions were thus video recorded so that I could focus on the interview content and be free from the distraction of note taking and concentrate on interacting with the informants. This approach allows for an accurate and verbatim transcription of the interviews (Whiting, 2008). To open up the data for inspection, Mann (2011) mentions that researchers should provide a data-led and reflexive account of how the interviewee worked with the interviewer. To this end, I wrote down my thoughts, ideas, and feelings during and after the interviews. My reflective notes could be beneficial in providing some perspectives when analysing the data. Responses from the interviews were then transcribed verbatim, and translated into English by myself. I decided not to include too much detailed information in the transcription as K. Richards (2003) suggests that "If you include too much detail the transcription will be very difficult to read, but if you settle for just the words you hear this may fail to capture important aspects of the interaction" (p. 182). However, I used some of the transcription conventions, e.g. period (marking the end of a sentence), comma (showing the informants wish to go on with their speaking), question mark (indicating questioning intonation) and periods in brackets (indicating pauses in interactions). Moreover, the word (laughs) indicating individual laughing was used when a laugh was heard in the recordings.

In order to check the correctness of translation, a Thai English instructor who has expertise in translation was asked to look at my translations. In addition, as sharing the transcripts is "the most critical technique for establishing credibility" (Creswell,

2013, p. 314) of the use of triangulation, the translated transcripts were sent to all interview informants to check and validate their correctness and quality, and to make sure that they did not feel that the transcripts misrepresented their ideas, thoughts or words.

The procedures for the interviews of the graduate students and faculty members consisted of two stages: the pre-workshop interviews and the post-workshop interviews.

9.4 Pre-workshop Interviews

Before the pre-workshop interviews, I arranged to have a first meeting with selected interview informants to find out a convenient time and location for the interviews. The pre-workshop interviews were conducted a week prior to the workshop each informant attended. The main purpose of the pre-workshop interviews was to get to know the informants better in terms of some personal information, and to elicit their initial beliefs, attitudes and ideas regarding what they saw as the challenges of writing an article, their research and publishing aspirations, and difficulties they might face in writing an RA.

During the interviews, I was very open and gave the informants the opportunity to talk freely about RA writing and article publication or anything else related to research publication. I kept the questions open-ended so that they could reflect on and identify their genuine feelings (Whiting, 2008). I also encouraged them to provide more details regarding what they knew about the phenomenon of research publication and their concerns when writing RAs. Data obtained can, thus, be seen to be derived from the interaction between interviewer and interviewee, and it is that interaction, rather than simply the answers given by the interviewee, that needs to be considered when analysing the data (Brinkmann & Kvale, 2014; Mann, 2011).

The pre-workshop interview results were found to be useful and were taken into consideration when I conducted the workshops. This is important as they could establish the participants' needs in the workshops, providing information on each participant's background, which could then be used to modify plans, activities and contents as appropriate in the workshops. For example, the selection of text examples

to be used in the workshops, which should be related to their research interests, and the sections they mentioned they had difficulty with when drafting an article, on which I could focus more in my teaching.

9.5 Post-workshop Interviews

The post-workshop interviews were conducted a week after the completion of the workshop each informant attended. The goals of the interviews were to elicit the participants' ideas after attending the workshop, to investigate their thoughts about whether the knowledge of rhetorical structures and phraseological patterns provided in the workshop could help them in RA writing, and to get them to talk about whether they needed to know more about RA writing and the workshops. These interviews were more open-ended to find out the informants' awareness and perceptions of RA writing.

The interviews mainly involved eliciting narratives from the informants. They were asked to express their feelings about the workshops, instructional materials and the knowledge concerning rhetorical structures and phraseological patterns they gained from the workshop. They were also asked to share their experiences of publication, if applicable, and their perceptions of RA writing, comparing prior to and after the workshops (see Appendix J for an interview schedule in its entirety, together with a list of interview questions). Throughout the interviews, I tried to interpret what I was hearing, as well as seeking to clarify and obtain a deeper understanding from the respondents.

9.6 Approach to Interview Data Coding

The approach taken for presenting the interview results is qualitative content analysis which is a widely used method of analysing and eliciting meaning from interview transcripts to reveal people's behaviours and thoughts (Elo & Kyngäs, 2008; Priest, Roberts, & Woods, 2002). With an emphasis on an integrated view of texts and their specific contexts, Hsieh and Shannon (2005) define qualitative content analysis as "a research method for the subjective interpretation of the content of text data

through the systematic classification process of coding and identifying themes or patterns" (p. 1278). Wildemuth and Zhang (2009) state that it "goes beyond merely counting words or extracting objective content from texts to examine meanings, themes and patterns that may be manifest or latent in a particular text" (p. 308), and go on to explain that the approach "produces descriptions of typologies, along with expressions from subjects reflecting how they view the social world" (p. 309).

In this study, a combination of inductive and deductive content analysis was used. According to Wildemuth and Zhang (2009), in deductive content analysis, "initial coding starts with theory or relevant research findings". I had a predetermined theme which was to explore the interview informants' perceptions and attitudes towards knowledge of rhetorical structures and phraseology emphasised in the workshops. From this perspective, key concepts in my interview questions would form the master codes, and thus it is appropriate to label this phase of analysis as deductive content analysis. However, given the very nature of the interviews themselves, some unanticipated themes emerged from the interview data. I did not want to disregard these ideas and themes, but wanted to include them in order to derive coding categories from the data. Therefore, from this perspective, coding was inductive.

As mentioned earlier, the coding followed a combination of predetermined codes related to the article writing process and perceptions of learning through the workshops, and data-driven codes. Regarding the coding process, based on the questions used in the interviews, predetermined key concepts contributing to preconceived possible codes were initially established under these two categories. These predetermined codes allowed me to focus on the aims of the interviews. In contrast, emerging data driven coding allowed me to explore related areas and information that might not have been my primary concern in the interviews (K. Richards, 2003). However, I acknowledged that this combination of the data coding needed to be balanced with keeping the research open to new directions and interpretations as both the predetermined and emergent codes could occur in the interim, requiring revision as the research progressed (Saldaña, 2015).

Once the interview transcripts had been completely translated by myself, I familiarised myself with the transcripts by reading them. The coding began with a

focus on difficulties in preparing manuscripts for publication and perceptions of learning through the workshops. I first read through the transcripts and highlighted all the sections of the texts that, on first impression, appeared to represent the target questions about the predetermined categories. Any major differences between the interview informants were noted. The possible codes were revised according to the interview data. In addition, this process allowed me to identify two other categories of codes which were distinctive from but related to the manuscript preparation for publication and perceptions of learning through the workshop codes. They were attitudes towards the peer-review process and suggestions for disseminating the rhetorical patterns and phraseological patterns. These codes emerged from the informants' responses. These new codes offer interesting insights into some concerns about RA writing, contributing to understanding the interview data in the first coding cycle.

Rubin and Rubin (2011) and Miles, Huberman, and Saldana (2013) suggest refining the contents of each category code from the data before comparing them with each other. I then read through the interview transcripts again, and tried to refine all the codes identified. Saldaña (2015) points out that the coding process consists of two levels—First Cycle and Second Cycle coding. That is, some of the predetermined codes in the former stage may be later subsumed by other codes, relabelled, or dropped all together, then some rearrangement and reclassification of coded data into different and even new categories can be made for the latter. After re-reading the transcripts, I observed that more than one code could be applied to some of the same data. Multiple coding was therefore carried out. As a result, all the codes identified were revised and re-grouped as I found that their contents showed relationships. The identified codes were then re-organised as sub-categories of larger overarching codes. The process of repeatedly examining the data or recoding and recategorising the codes to arrive at the refined coding categories resulted in detailed analysis of the transcripts. As some of the issues and relationships in accordance with the interview data might have been apparent, this process is in need of qualitative analysis. The process helped increase the consistency of the codes in relation to the definitions of each code identified. Furthermore, the codes facilitated a task of identification of patterns in the interview data (Miles et al., 2013).

Throughout the coding process, the number of codes arriving from the interview transcripts analysis was reduced because some of them overlapped, whereas some were obviously irrelevant to the current study. Codes and definitions were refined and renamed as necessary to truly reflect the informants'comments more precisely. Through a process of applying qualitative content analysis and constantly rechecking concept labels, then where possible linking groups of concepts together, I arrived at 36 individual codes, comprising 28 codes which arose from the questions in the interview schedule and 8 emergent codes (see Appendix K for the final model of coding categories, codes and their definitions). An example of a coded interview transcript can be found in Appendix L.

9.7 Interview Results

The following sections present the results of the interviews with six faculty members and two graduate students. I start with the informants' perceptions of and major concerns about writing RAs for publication. I then continue by presenting their perceptions of learning through the workshops regarding the rhetorical structures and organisational format required by journals. Perceived limitations of the proposed model and some phraseological patterns from the list of functional n-grams presented in the workshops are considered.

In the presentation below, the interview results will be discussed based on the interview questions which became coding categories, and then the codes identified which were developed more inductively according to how the interview informants answered the questions. I will discuss the interview results thematically, and illustrate the themes which emerged from the interview transcriptions with quotations from the informants. Pseudonyms were used to refer to these informants (PG 1-2 in the case of the graduate students and FM 1-6 in the case of faculty members). Repetitions and hesitations have been removed from the transcripts.

9.7.1 Concerns about writing research manuscripts

The first category captures the informants' major concerns regarding manuscript preparation for publication. The interview responses revealed that most of the informants had some worries about the writing process, including how to use words to engage potential readers and how to accomplish the goal of a particular section. The daunting task of dealing with writing to the required length of article, journal selection for publication, and formatting of the article structure were also mentioned.

9.7.1.1 Difficulties related to the article writing process

Among the eight informants, five faculty members and one graduate student agreed that they found the Introduction section the most challenging to write. As might be expected, when I asked them, "*Which section of the article is the most difficult to write? And why?*", they felt that it was somewhat hard to articulate the background of and rationale for conducting the study. They indicated that convincing potential readers and indicating benefits of the study and justifications about why it is worth conducting were challenging. The following extracts from two faculty members reflect these opinions:

> *I think it is the Introduction section, because we have to write it to demonstrate that our paper is interesting and convince readers to read it by indicating the benefits of the study and the reasons why it is necessary. Generally, if this section is well-written, it will help readers, or even professors, to recognise the necessity of the study, consider that the article is interesting to read and that it is addressing a serious issue. If not, the paper might seem to be unpromising, showing nothing different from previous studies.*
>
> *FM 1*

> *It would be the Introduction section which reviews the background of the study and problem statements leading to the present study. This section must be well-written and controlled, which gives potential readers in-depth information about the rationale for conducting the study.*
>
> *FM 5*

The responses quoted above indicate an accurate understanding of the function of the Introduction section, providing readers with the rationale for conducting the study. Particularly, informants were aware of the salient functions and informational elements presented in the Introduction section. One of the major difficulties particularly lies in how to convince the readers and get their attention sufficiently to read the whole article.

One graduate student felt differently, arguing that the Discussion section was the most difficult to write when drafting an RA. She emphasised her worries about using lexico-grammatical features to achieve the purposes of the Discussion section. Her responses to the question about the hardest section to write are shown as follows:

> *I think the Discussion section [is difficult to write], because, after reporting the results, we have to comment on and compare them with previous works. Identifying issues to discuss and make comments on is quite hard when writing in English. This is because we have to consider the words, sentences and linguistic features, e.g. active or passive construction, that need to be employed to suit the context of the study.*
>
> *PG 1*

Although graduate students might generally be unfamiliar with writing for publication, compared to faculty members who may have some publication experiences, her response seems to reflect the informant's knowledge of the communicative purposes of the Discussion section, and linguistic features used to express a communicative function as presented in the workshops. Her view corresponds to Cho (2010) and Kanoksilapatham's (2012b) statement in that, in this section, authors need to be proficient in not only their own research content but also in linguistic skills to persuasively and convincingly frame their claims made while making links with previous research. It can be seen that the main worry of this informant is using linguistic features to accomplish the goal of the section, which is somewhat different from that of the faculty members' responses shown earlier, focusing on writing to engage the readers' interest in reading a particular section.

Another faculty member, who was an experienced writer, also indicated that the Discussion section might be daunting to write. She provided some rationale for her unease, pointing out that this section requires knowledge both of the context of the study and related knowledge existing in the literature when commenting on the results

of the present study. She explained that writing a good discussion must come from crystallising ideas and knowledge reviewed in the literature. The following excerpt expressed this opinion:

> *From the first day up until now, the Discussion section is still very difficult for me to write because we have to understand the context of the study well. When discussing a particular result in this section, we need to have good knowledge, meaning that we have to go back and study previous works and underlying theory which can be used to support our claim. We then should draw implications and contributions of the study, which most reviewers and readers expect to see from your research paper.*
>
> *FM 6*

As FM 6 had experience in reviewing research manuscripts for many prestigious journals, I further asked her "*If the Discussion section is difficult, which section, as a reviewer, do you think remains the most problematic?"* Her response to this question was regarded as one of the unanticipated areas because she remarked that for her, she would give priority to a well-written Methods section, rather than the Discussion section, in a peer-review process, as the following comment suggests:

> *In general, I will not touch upon or comment on the Discussion section. It is quite weird because, if I do comment on this particular section, it sounds like a presentation of the previous sections may be problematic. To illustrate, if the manuscript is well-written in terms of the Introduction, Methods and Results sections, and the Discussion is mostly well-designed and reasonable, I will hardly comment on it. I will generally only offer practical suggestions to improve the study, if necessary.*
>
> *In the case of rejection, the methodology used is usually seriously problematic, especially the research design. If this is the case, the study is not worth being conducted, and it affects the truthfulness of the study as a whole. I will, therefore, give suggestions about the Discussion section, but pay attention to and comment on the methodology used.*
>
> *FM 6*

From her response, it seems that she believes that a good RA must feature a systematic and reliable methodology. Consequently, the presentation of the whole article should be well-organised, demonstrating that the research procedures were

well-designed, developed and performed. It is possible that, as a reviewer, besides needing to be assured that the research topic is current and is likely to appeal to a wider audience, she needs to be satisfied that the author has consulted relevant literature, used appropriate instruments to serve the research objectives, and followed systematic research methods.

9.7.1.2 Dealing with linguistic difficulties

When asked about concern over preparing a manuscript for publication in English, most of the informants, except for three faculty members, expressed their worries regarding using English, especially choosing appropriate words in a particular context. I did not really anticipate that, of the eight informants, two faculty members and one graduate student, had sought language help from a proof-reader or a Thai-English instructor to help with language problems and facilitate the task of writing RAs. The following extract from the interview with a faculty member, for example, clearly reflects such difficulties:

> *I think language can be a serious problem because a word can carry several meanings depending on the context and its occurrence. When preparing a manuscript, I have no problem with the use of terminologies because I know how to use them from my study. But, for general words, I will ask for help from English instructors. Another concern is academic language, because writing an RA is different from academic writing.*
>
> *FM 5*

This informant stated that, even though he knew how to use specific terminology when preparing a research manuscript, he had trouble with writing academic papers in English because other aspects of language were still difficult for him. This response seemed to exhibit a lack of confidence in his written English proficiency. This is a possible reason why he needed assistance from English instructors when writing an article.

One graduate student brought up the issue of genre transfer from theses to academic articles with regard to language use and style of writing. When I asked her, "*What is your concern when preparing an article for publication in English?*", she said that she had no worries about the content and methodology used in her study

because the research project had been approved by her supervisors during her years of study. Length and word limits of the article, nonetheless, were of concern. She also mentioned specific points like lexico-grammatical items that should be taken into account when drafting a research manuscript. The following extract illustrates this point:

> *Because my research work was approved by supervisors, the thesis committee, the content could, therefore, be reliable to a certain extent. I have no worries about that. However, language matters concern me greatly regarding how to write it in English, because my thesis is written in Thai and I have to select the major findings to present and discuss within a space limit for publication (10-15 pages). Moreover, I am worried about how to write the paper in English correctly and make it interesting. Using the correct grammar, right words and terminology is also of concern. I do know I am required to write the paper to conform to the journal format.*
>
> *PG 1*

From the response above, it is clear that she tended to feel confident in the content of her research. Language matters, including writing styles and lexical choice, however, were not her only concern, but she was also worried about journal format and/or the research conventions with which she has to comply in order to meet the requirements of a particular research community. This issue demonstrates her concern about an understanding of the writing style and rhetorical patterns in a particular journal. The reason may be attributed to the fact that, even for the same journal, qualitative and quantitative articles will have slightly different styles of presentation. It also seems to me that her response suggested an awareness of the article length, as a common practice, in the article publication process. This probably indicates the benefits of reading research papers written in English while studying her PhD.

Language issues are echoed by another graduate student. Similar to the above response, when I asked him in the interview, "*What is your concern when preparing an article for publication in English?*", he pointed out that he felt confident in the content of research conducted. With reference to RA genre and stylistic writing, although he recognised that he had to address language matters, particularly using lexical items appropriately to fit the context when preparing a manuscript, he felt that writing for publication required another level of writing ability. Writing an article

needs to conform to the expectations of the discipline and proclivity of target discourse using the conventional syntactic constructions and linguistic features. This notion is consonant with Byrnes (2013) who explains that "an exploration of the writing to mean and learn content link must articulate with much greater specificity the language forms that characterise a genre, must relate these developmentally to the learners' L2 proficiency levels, and must consider as well potential literacies in other languages that writers bring to the task." (p. 99). He pointed out that:

> *Even if I were an inexperienced writer, I think, after conducting a study, I would have a good knowledge of the context of my study and have content in mind to express in the manuscript. I will well know the selected information I wish to show the readers. Therefore, I am worried about writing the manuscript in English and using the right words in my paper. The situation is like general communication in formal and informal situations. We have to use the appropriate language according to the contextual environment. I think writing for publication is another level of writing, which might be a serious problem for me when preparing a manuscript. We have to consider the context, level of language and technical terms to be used. Language is, thus, a major concern compared to the content of the study.*
>
> *PG 2*

In contrast, another informant who is an experienced writer and reviewer of refereed and prestigious journals asserted that, although the language used in the article has an effect on the review process, the content of the study is the first issue taken into consideration when she reviews a manuscript submitted. The following excerpt is her response to my question, "*Among the content, organisation, and language, which is the most important thing when you review the manuscript?*", describing how she worked on reviewing a research manuscript:

> *I normally focus on the content first, but, being human, I can easily get moody when reading a manuscript with broken English. Even though I do not comment on the language problem at first, at the end, I will say the language needs to be improved. However, for me, I will not take the language problem as a priority. I will try to avoid commenting on this, even if it needs revision. Content is still regarded as a big deal when I review a manuscript. Getting the manuscript proofread by a native speaker is very easy. But, as a reviewer, the paper content should be prioritised, and language comes last. We should not take the matter of native and non-native speakers into account. Language might be the case, but I do not expect all manuscripts to be perfectly written. … I do not want to think that being a non-native is a barrier against writing an article. If the content itself is good, finding a native speaker to edit the language is not a difficult task. However, the content cannot be revised by anyone, except for the author.*
>
> *FM 6*

In spite of this informant seeming to make reference to grammatical accuracy, she suggested that from a reviewer's perspective, content should be prioritised when writers prepare a manuscript. As discussed earlier, it may be the case that, as a reviewer, to select quality articles for publication, the novelty and the quality of the data and validity of the manuscript should be a prime concern. With respect to language itself, her response seemed to indicate that, although it is possible that a lack of confidence in research might be partly related to possessing inadequate English language proficiency (J. Flowerdew, 2001), language issues should not be the first priority as they are not the only problem with research manuscripts submitted. She noted that a manuscript draft could be easily checked and edited by those who speak English as a first language. This statement may imply that standard English plays a key role in disseminating and exchanging new knowledge in academic journals (Pérez-Llantada, 2012), at least in the Thai context.

9.7.1.3 Dealing with reviewers' comments

While my interview questions focused on any difficulties they might face and typical practices, when preparing a manuscript draft, two faculty members explained

that they did not feel a lot of anxiety about language matters because they could ask for help from an English instructor to proofread their paper before submitting it to a journal. However, the prospect of dealing with reviewers' feedback and comments filled them with consternation. Below is an extract from one faculty member's response to my question, *"Apart from the article format, what is your major concern when submitting a manuscript for publication in English?"*:

> *I am afraid that some readers may possibly not completely understand my paper. From my anecdotal experience dealing with the readers' comments, for instance, they asked me to confirm and verify a sentence in an abstract, as they said that the sentence was not correct in referring to what I really wanted to say in that context. They asked me to verify and adjust the text several times, but I considered the sentence to be correct, expressing what I wanted to say, and, thus, no adjustment was needed. Some journals have asked me to reformat the manuscript and resubmit it. However, this is not always the case for all journals.*
>
> *As for manuscript preparation, if the research methodology is well-designed, and the paper is well-prepared and organised, and if the study is funded by a reliable organisation, authors can ensure, to some extent, that any problems concerning content will be minimal. The major problem when writing a manuscript in English lies in the language itself, because I did not study in an international programme, so I do not know how to use English correctly. I have to ask for assistance from somebody to translate my manuscript. I then proofread it again and ask English instructors to check the language before submission. I do not ask a native speaker of English to do so because I sometimes think that Thai English instructors are better, because they have a good understanding of the context. We can also discuss and negotiate the text's meaning and concisely explain and clarify what the problem is in detail, if necessary.*
>
> *FM 1*

Based on her publication experience, her response raises two major issues—dealing with reviewers' comments and linguistic and stylistic correctness in publishing RAs in English. Firstly, she felt that reviewers must be familiar with the research topic and understand the technical content of the paper. According to Rojon and Saunders (2015), reviewers should evaluate whether the paper offers a sufficient contribution to the relevant field in accordance with the scope and readers' interest in the journal. Their comments should help authors improve the quality of the manuscript to a publishable level. To her, making revisions to the articles in response to reviewers'

comments might involve the content of research papers, English language competence, improvements in the style, and reformatting. Secondly, even though she recognised the need to address language issues, and she was not sure how to address the reviewers' comments because her English ability is quite limited, she did not request a native speaker to help check her English. In contrast, perhaps, since she thought that she was the one who knew the context and content of the study well, she felt at ease if she had to clarify some points and negotiate for mutual understanding with Thai English instructors.

Another faculty member reported her concern regarding dealing with reviewers' comments. She stated that *"dealing with reviewers' comments is my major concern. In reality, I think language is difficult, but addressing comments from reviewers is more difficult."* She remarked:

> *English is probably not a serious problem, because we can always ask someone proficient in English for help or translate the paper. Dealing with reviewers' comments is, however, so challenging. Sometimes, the readers may be from a different field to my study. They may not know some of the technical terms used in the manuscript, even though they are commonly used in the field.*
>
> *FM 4*

It seems that, to her, dealing with reviewers' comments could involve many unexpected issues she needed to address. This statement is consonant with recent research by H. Williams (2004), for example, in that, since submitting manuscripts to be accepted outright without the need for revision is rare, an author needs to be able to deal with the editor's and reviewers' comments and accommodate their concerns, perhaps on both the content and language, in a dispassionate fashion. This informant mentioned that, while it is challenging to receive a critique, this review process is a discourse with elements of subjectivity (Rojon & Saunders, 2015) because sometimes she was unwilling to make any changes, particularly on points she felt that reviewers may have actually misunderstood her topic of study.

9.7.1.4 Selecting appropriate journals for publication

Another concern about preparing a manuscript draft for publication that a majority of the informants pointed out is selecting appropriate journals. In addition to title and scope of journals which they usually took into consideration, all the informants stated that *refereed journals and a rate of acceptance* (FM 5) was one of their major concerns. The faculty members said that, because of the university's quality assurance regulations they felt compelled to select the right outlet to publish their research work, e.g. journals indexed in the TCI databases. For example, when I asked *"When you are ready to submit your manuscript, which aspect is your worry before submission?"*, one faculty member noted that:

> *In the past, we might not have been seriously concerned about the journals indexed in a particular database, but now we have to reconsider this owing to the criteria laid down in the quality assurance. I used to consider submitting my paper to the Aksorn Chula journal, from where I graduated. But the journal was not indexed in the TCI database at that time, so I did not go for it. The Journal of Language and Linguistics published by Mahidol University is another one that has not been placed in Tier I, so I decided not to submit my manuscript to them either. We have to take into consideration the quality of the journal as well. I admit that I did not worry about this in the past. I did not know what the TCI database was, but now it is essential to consider the citation index, database and the journal name before manuscript submission.*
>
> *FM 2*

One thing that is clear from the response is that publication is required for all faculty members in Thailand. FM 2's response can be understood to imply that finding appropriate journals, particularly those currently placed in Tier 1 of the TCI database which supposedly represents a high quality of publications, is essential. Most importantly, at the outset, they need to consider whether a journal has been indexed in order to correspond with the quality assurance requirements of the university.

Prompted by the same question, the response from another faculty member confirms why research publication is necessary and why the TCI database deserves serious consideration when planning for manuscript submission. She explained that

selecting prestigious journals for publication could guarantee, to some extent, the process of being granted a PhD.

> *In the past, we did not take the publication matter and journals indexed in the TCI database into consideration. I used to present research papers at conferences organised by Kasetsart University. Since then, I have learned from the process of quality assurance that I could not claim any credit from those conferences, and now understand more about the evaluation criteria established by the Office of Higher Education Commission. I have, therefore, never considered that conference again. Instead, I prefer to go for those that fit the criteria. Since the TCI categorises journals into Tier I, II, and III, based on the quality of articles published, we have to consider this before publication. I normally do not have target journals in mind before submitting my manuscript, but I will take time constraints into consideration. If I do not have much time, I will consider a publication outlet which has a high rate of acceptance. If there is time, I will consult their website to study the review process, which normally takes at least six to eight months. In my case, I have to publish my paper for graduation, so I cannot wait that long and I have to go on intuition as a rule of thumb. However, for general research, as required by National Research Council of Thailand, publishing an article in a journal placed in TCI Tier II is acceptable. I also select the journal by its name, covering my topic and related fields.*
>
> *FM 1*

As can be seen, this informant mentioned that, previously, she did not carefully and thoughtfully select journals for publication. She would aim for journals or conference proceedings with high rates of acceptance so as to achieve publication. Due to the university's quality assurance regulations, she has changed her attitudes, aiming for a refereed journal which, while of a supposedly higher standard, nevertheless, has reasonably high rates of acceptance. She noted that she would consider a few key aspects of the journals, such as topic, and aim and scope of the journals, when looking for the right ones to publish in. With respect to the peer-review process, time constraints regarding the length of the review period would be another decisive factor to be considered in selecting a journal for publication.

Graduate student informants indicated that they were aware of publication as a graduation requirement, while in the meantime, they were conscious of the structural

patterns and format of previous research published in a target journal when preparing their manuscript draft. Similarly to the faculty members' response, they mentioned that the scope and topic areas of the journals need to be taken into account. When I asked her, "*How do you select a journal for publishing your research article?*", below is an extract from one graduate student, showing a concern about the publication requirement for graduation:

> *I first consider the requirements of my curriculum and graduate schools. As I am a graduate student, I know that only by publishing my research work in an international journal will I meet the requirement for graduation. I will then consider the topic of my study, whether it can meet the scope and expectation of the target journals, and I currently think I could go for the Journals of Education, Linguistics, and related fields. I will also study the articles published in that journal, which will facilitate the task of preparing manuscripts.*
>
> *PG 1*

One faculty member who is a journal reviewer and has a number of publications in both locally published journals which include articles published in Thai and articles published in English and which are limited to Thai communities, and international journals, asserted that selecting the right journals for publication depended exclusively on the scope and scale of the study. The following extract from her response to my question, "*When you want to publish your research work, how do you decide on it and what is your concern about journals and publication?*", illustrates her view on the position of local and international journals in relation to the scope of the study to be published:

> *It depends on the topic, scope and scale of the study. If the paper is from a big research project and promising enough, I would aim at publishing it in an international journal. I fully understand the expectations of both local and international journals. If the scope of the research paper is extensive, it is extremely worth publishing an article in international journals. If the scope is quite small, local journals would warrant it. So, first of all, if I conduct a small-scale study, I would decide to submit it to local journals. For those whose language and research skills are not proficient enough, local journals might be the most appropriate for them, and they should be prioritised.*
>
> *FM 6*

It seems that she has a lot of alternatives in selecting journals for publication because language is not considered a great issue for her. Her decisions are made on the basis of whether the paper is a potential match for the journal, based on the research topic and scope of the paper. This issue is emphasised by Cargill and O'Connor (2013) who state that, if the manuscript does not meet the scope of the journal or it is of too low quality to merit publication, it will be rejected outright. The same informant asserted that, if language is one of the important barriers for the article authors, local journals might be an appropriate outlet to aim for. Her response here might be understood to imply that local journals are not of a high standard, compared to international ones in terms of the standard of English they receive. Furthermore, some articles may not be appropriate for international journals because they focus on a narrow local interest which is not relevant to readers in other contexts (Dekeyser, 2010). A connection between language, context-specificity and research skills is a key factor to consider if a research manuscript is to be accepted for publication.

9.7.2 Participants' perceptions of learning through the workshops

It is generally acknowledged that learning is a slow, incremental and cumulative process (Godfroid, Housen, & Boers, 2010; Osborne & Dillon, 2007), and that a specific intervention through workshops is not likely on its own to be responsible for huge changes in behaviours and understanding. Nevertheless, the intervention is likely to play some part in enhancing people's knowledge and awareness. In the interviews, I specifically asked people what they had gained from the intervention.

Again, I am aware that these interview informants were likely to be positive in their answers as it is typical to want to please the researcher. However, because I knew these informants quite well, I felt there was also some room for honesty. Getting their feedback on the intervention could be useful for my future work—developing teaching materials and designing learning tasks in the areas that these informants considered important and useful for writing for scholary publication (see Chapter 10 for further teaching materials created).

The following sections report on the informants' perceptions of the intervention regarding the proposed structural model of RAs and some of the phraseological patterns from the list of functional n-grams presented in the workshops.

9.7.2.1 Usefulness of the proposed rhetorical model and phraseological patterns

When asked to provide feedback on the workshops on the RA genre and phraseology with the question, "*After the workshop, what did you think or how did you feel about the knowledge of genre and phraseology?*", all of the informants expressed appreciation for this knowledge presented in the workshops. As expected, they commented that the proposed rhetorical model was particularly beneficial in terms of communicative functions, elements, useful words and sentences, which could help them in preparing a research manuscript to some extent. The following quotes from two faculty members are illustrative:

> *The knowledge obtained from the workshop is greatly helpful. If these phrases and moves/steps can be compiled in a guide book, particularly for writing an RA, it can help writers to select words when preparing their manuscript. In the meantime, concerning the benefits of this knowledge, even though I already knew about some lexical choices when writing an RA, the knowledge from the workshop helped to clarify the knowledge of selecting appropriate words as chunks and strings to be used in each section of the paper. This can help minimise some lexical and grammatical errors that frequently occur in our research works.*
>
> *FM 4*

> *The format is not different from my experience in having my papers published in Thai. This knowledge really helps me prepare my manuscript, because it helps me to understand how I can introduce the topic, and in using conjunctions which I could not remember how to use correctly. The move types and steps presented are quite similar to those in Thai. Nevertheless, I can see some differences in terms of styles of writing and ways to present the text, such as how to write the Introduction section. Some journals, however, allow the authors to write freely within the format required. With regard to move types, I think that, if the authors wish to have their research work published, they need to prepare their manuscript in agreement with the format provided within the word limits. From my publication experience, it should not exceed 15 pages. We have to limit the word length, including references, for some journals. We learn how to use useful words and phrases, which really facilitates the task of writing an RA.*
>
> *FM 2*

The first except shows that the informant found it useful to consider move types performing their communicative purposes in the text. She indicated that the set of phraseological units presented would be helpful in serving particular communicative functions for each section of the article, which could help her choose the appropriate set of phraseological patterns in crafting an RA. It may be assumed that the informant had a perception of pragmatic functions of lexical clusters which might be associated with a particular section of the article.

From the second quote, however, the informant used the knowledge from the workshops to reflect on his manuscript draft. He felt that, with respect to the rhetorical structure, the move types and communicative purposes found in the Introduction section of his manuscript were similar to what I presented in the workshop. While accepting that different journals may have different formats for presenting research, he realised that the target length for an article and the word limits should be taken into account when preparing a manuscript. He felt that the workshop was helpful because due to word limits enforced by the target journal, he had to consider appropriate words to fit each section of the article draft. Furthermore, he mentioned that he learned useful words and phrases typically used in an RA, which could facilitate the task of RA writing. This may imply that his awareness of rhetorical organisation and phraseology was raised to a certain extent.

The following quote is an excerpt from another informant who spoke of the usefulness of the proposed model and phraseological patterns presented in the workshop:

> *As for its usefulness, since it is from RAs written in English, this structural pattern is helpful because my lexicon might be limited. With some words, even though they are frequently used, their meanings might vary according to the contextual environment. Honestly, I am not good at using the prepositions "of" and "in". Some people do not fully understand how to use them accurately and correctly. The knowledge and pattern helps us know what should be included and followed when writing an RA. It is really helpful, making our writing task easier than before, in particular those who are just starting to read and write RAs.*
>
> *FM 1*

From her response, it seems to me that she found the RA genre knowledge and phraseology presented in the workshop a lot more important for writing an article than she supposed it would be. Most obviously, she said that looking at the use of some phraseological patterns in context had helped her get a better picture of how to use some lexical items that she found troublesome. She offered a rather unexpected response, however, by suggesting I make a phrase book for writing RAs and organising workshops for novice writers after I finished this research project. She went on to discuss this by acknowledging the role of the model played in writing RAs, helping those whose English might be limited as follows:

> *I would like you, when finishing your PhD study, to make a phrase book or a manual for writing RAs. I need some sort of basic tool providing information on what words should not be used and words frequently used wrongly, in order to write RAs effectively. It would be very useful because those who read your research have to be people in the field or academicians. Ordinary people who are not proficient in English, however, sometimes need a manual explaining how to write an RA. If you could do this, it would be a practical implication of your research. The knowledge is also useful for academic services such as workshops for novice writers, which could help people fully understand this knowledge, because simply reading only the manual might not lead to a full understanding, especially for those who are not good at English.*
>
> *FM 1*

The informant's response is directly related to her awareness of knowledge presented in the workshop. Apart from pointing out the usefulness of knowledge of genre and phraseology, she specifically mentioned some new perspectives on lexical choices, e.g. use of prepositions, which should be carefully used according to context. This reflects the idea that knowledge discussed in the workshop may help the informants become more aware of linguistic components and which rhetorical moves should be used and in what order in an article. Again, at the very end of her response, she highlighted the importance of this knowledge to research publication and the pressure on academic staff to publish in journals. To her, the knowledge, therefore, may be useful to offer academic services for successful research publications.

One graduate student also pointed out some benefits of the role of rhetorical structure and phraseological patterns presented by attempting to match his understanding of the thesis format with that learned from the workshop. Below is his response to the question, *"What did you think or how did you feel about the knowledge of genre and phraseology? Do you think it can help you prepare your manuscript?*:

> *From the results of your study, it can be beneficial and useful in terms of rhetorical structure, elements, language typically used and useful sentences that can be practical in preparing a manuscript to a certain extent. I can see the functions of each move, the sentences used and lexical choices. These are fruitful. They are somewhat similar to the thesis format consisting of Introduction, Literature Review, Methodology, Process of Data Analysis and Discussion. However, I do not have experience in writing an RA.*
>
> *PG 2*

Upon deeper inspection, this informant's response appeared to imply that he made a link between his thesis structure and knowledge of rhetorical organisation and phraseology presented in the workshop. This suggests that he might have believed that the format of these two genres had something in common. It can be assumed that he also recognised that lexical items and lexico-grammatical patterns are used to signal the communicative functions of moves, which is one of the issues I highlighted in the workshop.

9.7.2.2 Roles of rhetorical structures and phraseological patterns

All the informants indicated that the proposed model of structural patterns of RAs presented might be seen as a useful template for RA authors to develop coping strategies in response to the writing demands of academia. It could at least facilitate the task of structuring the ideas to be included in an article. When asked "*Do you think it can help you prepare your manuscript?"*, three of the faculty members seemed to perceive that the proposed model could be used as a checklist in the final process of manuscript preparation before submitting it to a target journal. One of the relevant excerpts is as follows:

> *It is really useful. If you could make a template or manual, writers can select words to fill in the template. The knowledge presented has both similarities and differences, compared to that of different disciplines. Those who use this rhetorical structure might need to check what the correct version is when preparing their manuscript. Is it possible that the template is related to a theoretical framework or discipline as regards to what should be included or explained in each of the four sections? This is because, holistically, it is useful in terms of clusters to be used, but some are used in several sections.*
>
> *FM 5*

He noted that, in general, some similarities and differences between the rhetorical organisation of texts presented and those in his research draft written prior to the workshops could be detected. He showed an understanding of phraseological patterns which are likely to be used in several sections of the article with regard to their semantic relations and contextual environment. He thus questioned the role of disciplines and research types, namely quantitative, qualitative, empirical studies, which might affect the ways researchers draft their manuscripts. This possibly reflects a perception that the different rhetorical intentions are conveyed through a range of lexico-grammatical features with regard to the particular contextual environment (Pérez-Llantada, 2012).

One graduate student who has never had experience in RA writing claimed that the proposed model of rhetorical structure and functional n-grams presented would be useful. She claimed that this kind of knowledge could facilitate the task of research

manuscript preparation. Below are her words that afford a glimpse of such a perception:

> *Considering the results from a presented inductive approach, as obtained from the 50 RAs, it facilitates novice writers in how to write RAs because they might learn, for example, that an essay includes introduction, body and conclusion. Specifically, in an RA, each section must provide description and details pertaining to the particular purpose of the section. For example, in the Introduction, we have to mention and state specific problems, the importance of our work, previous studies and what is known in the field, but we would actually write these things broadly. We do not think that the knowledge of moves exist, and each section comprises substantial moves and steps. From this angle, it helps us to be aware of the essential elements to be included when preparing a manuscript. As for phraseological patterns or phrases, we can make greater use of each item, and this knowledge helps make our writing task easier. I can see what we can use, e.g. tenses and linguistic features, including the use of active or passive construction and deictic features. Therefore, I think this knowledge facilitates my writing task.*
>
> *PG 1*

As is noticeable, this graduate student indicated that she understood the communicative functions of each section of an article from the results of the descriptive phase of the study. Knowledge presented in the workshop was particularly important because she felt that it could help her better organise the flow of ideas when in the stage of manuscript preparation as, rhetorically, she has learned the functions of individual moves and componential steps which can be found in each section of the texts. In addition, she indicated the purpose of using linguistic features and syntactic construction in conveying information in RAs. It seems sensible to assume that such perceptions, to a certain extent, reflect her raised awareness of which communicative functions of move types and phraseological patterns are appropriate to the target context, purpose, and audience when writing an RA.

In both of the above cases, the informants seemed to suggest that the use of phraseological patterns is crucial in writing RAs. One faculty member took a similar view, too. She stressed the role and importance of phraseological patterns, by saying that academic language, especially language used in the RA genre, has specific standardised patterns and constructions. On the other hand, as an experienced writer, she commented that some phraseological patterns were unsatisfactory because their

functional and semantic power were limited. She felt that, from her experience, reading a lot of articles would be particularly advantageous and that in order to become a good RA writer, a person needs to read published articles as often as possible to familiarise themselves with academic language and acceptable RA writing style. The following extract is her response to the question, "*Do you think the knowledge of phraseology and genre analysis can help novice writers and graduate students to prepare their research manuscript?*" in the interview:

> *Yes. From your research, however, the phraseological patterns found seem to be quite limited. Therefore, it might not be as helpful, as most of them are "of the", "in the" or "in this study". They do not indicate anything. However, if we consider these strings as academic language, we can say that they are a chunk, coming into a package. So, if writers are sensitive and aware that academic language is a chunk, the knowledge presented can help them to write an article one way or another.*
>
> *Graduate students have to read many academic papers so that they can familiarise themselves with the topic, content and language use in this genre. Its language has a typical pattern, e.g. we have to write "it is known that" not "I know that", and the reason we don't use it is because these phrases are different in terms of register.*
>
> *FM 6*

Her response showed an awareness of phraseology in writing RAs. Regarding the roles of phraseology in RAs, she acknowledged that academic discourse was built upon recurring structural patterns. Consistent with Hyland and Tse (2005), she, in turn, suggested that a good author be sensitive and aware of the fact that lexical items in RAs, as demonstrated by some functional n-grams I presented, do not occur in isolation but collocational or phraseological patterns. Alongside phraseological patterns presented, it seemed that she considered that hedges are an important device in academic writing including the RA genre as they increase or reduce a degree of uncertainty to a great extent, and at the same time foreground the validity of the claims made in the text. This generally reflects her good understanding of phraseology and language use in RAs.

9.7.2.3 Formatting article and article structure

When prompted with the question, "*How do you prepare your manuscript draft before submitting to a target journal?*", both groups of informants reported that the manuscript drafts needed to follow the article format required as closely as possible, usually available on the journal website. This response meets my expectation as, due to the variations in article format, they explained that their article normally followed the IMRD typical format. There could be differences; however, according to the journal policy or guided format. An extract from a faculty member provides an example of this viewpoint:

> *Because some journals provide a required format available on the website, it is easy to follow the format suggested, which explains possible topics, sections and information we should prepare. We, therefore, just try to prepare our manuscript to conform to the format provided, which normally includes Introduction, Methodology, Results, Discussion and Conclusion sections.*
>
> *FM 2*

This interview informant went on to make a further argument for the necessity of conformity with the journal format required. Hyland (2010) postulates that writers should address formatting, word length, and referencing style in response to publishing requirements usually posted on the journal's website; otherwise, rejection or the requirement to resubmit may follow. The informant clearly demonstrated his understanding with anecdotal evidence:

> *If our manuscript does not conform to the format required, the editor will certainly ask us to reformat it before reviewing the manuscript. Therefore, we need to consider this first when submitting the paper in order to avoid resubmission. We have to follow the journal format and policy if we want to publish our research work in the right journals.*
>
> *FM 2*

Another faculty member believed that conformity with the required format seemed to be the usual practice expected by every academic journal. She provided evidence from her experience of manuscript submission when she was advised by the editor to reformat the manuscript before sending it for a peer-review process. She pointed out that the article might be rejected if the writer does not understand

comments and is prepared to address reviewers' demands, or even if the article does not follow the format required. The following is her response to my question, "*When you prepare your manuscript, do you conform to the rhetorical structure presented?*":

> *I will consult the journal format from its website, if possible, before preparing my manuscript draft. Following the format required will minimise organisational problems at least, because I had an experience where my manuscript did not conform to the format required. The editor asked me to reformat it, by sending me a guided format, which I thought was strange and weird as I had to add a brief conclusion after the list of references. They probably wanted a brief summary or needed to know about some contributions. After reformatting the manuscript and addressing the reviewers' comments, I had my article published. Journals generally have their criteria or an evaluation form, which we only usually see after receiving feedback from the editor. If we do not address the comments and suggestions made, or even the format, our article might be rejected. I will not try to create a new format for the article.*
>
> *FM 1*

One graduate student explained that, apart from consulting article guidelines available on the journal website, reading and studying articles published in those target journals was another preferred practice. She believed that they could provide some advice on how to organise ideas and format her research manuscript draft. It might be assumed that this strategy is a useful approach to manuscript preparation as she has no publication experience. The following quote is from her response to the question, "*If you have to write an article, will you follow the rhetorical structure presented?*":

> *I will consult and check through the journal website first to see if there is a required format. As I am inexperienced in publication, I have to look at the rules, review procedures and structure of previous research published in the target journal in terms of rhetorical organisation, and the paper format. I then make full use of these to write and prepare my writing.*
>
> *PG 1*

The above statements in the interviews imply that the informants were aware that their manuscript draft needed to be well-prepared and organised according to the particular journal format required. This awareness may lead to the development of certain self-perceptions with regard to manuscript preparation, which, to some extent,

corresponds with the aim of the interventionist strand of this research. These responses are also in line with a comment by a faculty member who stressed that the IMRD format was generally followed by article writers because of its usefulness in organising an RA. In some cases, however, the format and writing style depend on the reviewers and journal editor who are the gatekeepers of the journal, who need to be satisfied. I therefore asked her "*You review papers published in several journals. Do you find the writing conventions of the journals different?*" The following is an explanation of perspectives on the IMRD format provided by this faculty member:

> *Most of the manuscripts I have reviewed contained IMRD sections, but their subsections are another issue, and these might be different from one another. When reading, in respect to a micro structure, I would say both local and international journals are not different in terms of organising the IMRD or even the IMRDC. It is like a block or template the authors have to follow, but as regards their subsections — it depends.*
>
> *In my case, when preparing my manuscript, I will write it in the IMRD format. So, the Discussion section in my paper will always follow the Results section. But in the Results section itself, I will add some discussion, because I do not want my readers to wait for comments on the reported finding. I then will discuss them again in the Discussion section.*
>
> *I think there is a continuous change with respect to the IMRD sections, for example, combining the Results and Discussion sections. The Conclusion can be added to the very end of the article, which I see as repeating what has been put in the Discussion section. I do not think that this is one of the innovations of publication format, but it is another issue raised by the gatekeepers or the journal editor who require it that way. Therefore, if the journal prefers the authors to do anything, please do so and just follow it. […]*
>
> *IMRD really helps authors to write. Researchers should conduct a research study and use the template to facilitate the task of writing RAs. If experienced, skilful and good at English writing, they can do anything they need. For me, I am not thinking about moves and steps anymore because I am beyond those levels. However, when I am stuck with my writing, I will go back and look at the knowledge of move types. If I cannot write the Discussion section, for example, I will go through the step level, and add some descriptions to my manuscript.*
>
> *FM 6*

While the above response seems to emphasise an understanding of the IMRD format as it is deemed to be commonplace in RAs, it can be seen that her response underlines the importance of subsections which could be different based on the findings to be presented and the journal policy. She argued that, by comparison with international journals, local journals also follow an IMRD or IMRDC format which authors need to take into account when they prepare their manuscript. Importantly, this informant claimed that the IMRD structure of articles is not absolute as some sections, such as the Results and Discussion, or Discussion and Conclusion sections could be combined. She thought that this issue was not re-defining the rhetoric of RAs, but originated from the reviewers or journal editor as the gatekeepers. The IMRD format, in fact, facilitates the task of manuscript preparation, guiding authors in terms of what elements should be included in an RA, and helping readers when reading to find specific information in it. When she is stuck and cannot figure out her next step in writing, she uses the knowledge of RA rhetorical patterns. She suggested that we, as authors or novice writers, strictly read and follow the submission guidelines of the target journal right from the very beginning of the stage of preparing our article draft.

9.7.2.4 Perceived limitations

Given the goal of the workshops, I predicted that the knowledge of rhetorical move strategies and phraseological patterns could provide the interview informants with practical support in the process of manuscript preparation. When I asked the informants to think about whether the proposed model could facilitate their task of writing for publication, most of them considered the model was helpful because they perceived that it could provide useful information and elements to be included in an article. However, as has been briefly discussed above and will be shown more below, some of the informants (two faculty members and two graduate students) gave unexpected responses. For example, one graduate student seemed to be reluctant to use the proposed model as he perceived that it was not established and might be changed if the corpus was taken from other sources. When asked, *"If you have to write an RA in English, will you use the knowledge of genre analysis and phraseology presented?"*, he raised some limitations about the applicability of the proposed rhetorical model and phraseological patterns as follows:

> *I will use the proposed model if it is widely accepted and established. This is because, if it is not accepted, I then have to go back and find some previous works to follow when preparing a manuscript. Using the template as a guideline may be wasting time. I will, in turn, take a look at previous studies and use them as guidelines instead. However, I believe that the template is a good representative because it derives from refereed journals published in Thailand, which are considered as among the best in representing the target journals as a whole. It is very useful and reliable, like a textbook our students study. As we live in Thai society, we believe in our teachers' knowledge, in what they have taught, and students are likely to use it as it is. Sometimes, we do not consider whether what we are studying and using is right or wrong. We just follow it like the way we study. We do not create a new thing. Therefore, if we can create our new own template from reliable and acceptable resources, I think it would be fruitful, and I will use it.*
>
> *As for phraseological patterns, readers from these journals are enthusiastic about different topics and have different research interests, so the language use found in each article, as a potential factor, might be different too.*
>
> *PG 2*

This graduate student expressed his feelings about knowledge gained from the workshop and gave two reasons for some limitations of the model and phraseological patterns presented. Firstly, he felt that the proposed model was of importance to him to organise ideas and components in a manuscript appropriately. However, he revealed some uncertainties about the acceptability of the proposed model. He would rely on articles previously published in a journal in which he was aiming to have a manuscript published. It seems to him that it would be better if the proposed model and functional n-grams identified were guaranteed in terms of acceptability and reliability by a wide group of researchers. Secondly, he commented that some of the phraseological patterns might be changed if the corpus was taken from different research topics, articles and academic journals. He further added that for Thai scholars, using words that reflect the traits of humility and modesty is appreciated and expected. Researchers are encouraged to keep a balance between conforming to the norms and expectations of the discourse community and maintaining idiosyncratic aspects in their manuscript. As a result, when writing an article, individual writers may merely create their own writing style and template.

One faculty member reacted to knowledge learned from the workshops with their personal experience of RA publication. She claimed that knowledge about rhetorical patterns and phraseology presented could assist her in preparing a research manuscript, as well as those whose manuscript might not be well prepared in accordance with the standard format required. However, when asking her the question, *"Will you use the knowledge of genre analysis and phraseology presented when drafting a manuscript?"*, I failed to envisage that she was going to claim some limitations of the proposed model and some of the phraseological patterns presented as she said:

> *The template proposed might not be applicable to writing articles in other fields of study in detail; however, in general, the structural organisation, move types and components can be readily used. I think some people might not prepare their manuscripts in the move sequences as presented. But the manuscript can be improved in the sense of the components, functions and pragmatic purposes that should be considered. The workshop is a useful guideline for preparing a manuscript for publication, because many of the words and phrases demonstrated are really helpful. The template really represents the research writing of papers written in English and published in Thailand. But it might need additional data to confirm the findings.*
>
> *FM 1*

I presumed from her response that, among many things, article authors need to be aware of which communicative functions are appropriate to the target context, purpose, and genre because one of the basic principles of writing RAs is to conform to the expectations of the discipline and, therefore, an academic style should be prioritised. She indicated that some researchers might not prepare their manuscript in the rhetorical patterns as presented according to differences in research types. Nonetheless, the authors might apply this knowledge when they wish to improve their manuscript, by paying attention to the textual organisation of the paper and lexico-grammatical features (Biber et al., 2007). Moreover, she appeared to indicate that she, as an experienced author, had certain reservations and suggested improvements to the proposed model and the phraseological patterns presented due to the limited number of articles written in English, and only published in Thailand analysed in this study.

Thus, the proposed model and phraseological patterns identified may have limited capacity for across-the-board application.

Another faculty member who had some publication experience stated that the proposed model and phraseological patterns might be particularly useful for novice writers and those who are not proficient in English. However, since more experienced writers may recognise and perceive the presence of the linguistic characterisation of individual components commonly used in each section of an RA, it is possible that they may not need special provisions. One faculty member explicitly mentioned this:

> *It depends on the journal. The template proposed might be useful for those who are not proficient in English, and not professional writers. This is because they fully understand what should be included in RAs from their publication experience. For example, the phrases "according to the" and "Based on the" can be used to refer to something, or a particular study. I want to know specific words or phrases used, or frequently used words in certain contexts, and how to use them correctly, including writing style.*
>
> *As for the format, we have to understand what to write and include. This format is necessary for those who have only just begun to write RAs.*
>
> *FM 2*

Another comment from one graduate student gave an idea that there might be something beyond the proposed model presented. She pointed out that some academic journals may require a different format and demand different language styles of writing. She revealed that, to minimise some problems regarding internal sections of RAs that may arise in the submission process, following related articles previously published in such a journal might be necessary. Her comment also taps into a sense of the predominance of English in academic and research contexts (Pérez-Llantada, 2012), where correct and proper English is prioritised, as she mentioned that proofreading a paper is necessary before submission:

> *Since I am new, as a beginner with regard to writing for publication, and have no experience in it, I have to use and follow the rhetorical structure presented. I may have to use it with the journal format required and the style of previous works published in a target journal. The journal might require something beyond the template suggested; it can help me with rhetorical patterns, organisation, tenses, phrases, and the structure of each section, but there might be something that cannot be explained, which can be found from articles previously published in that journal. I will study how they are written and trends they follow. The template proposed can help me a lot in writing the Discussion, Results and Methods sections, but the Introduction section is still difficult for me. The suggested template clearly shows how to write it, cite or refer to previous studies, but, when I apply it to my research writing, it might be a bit different. Thus, I will find other related RAs to help and guide me in what to do with this particular section. Moreover, at the last stage, I will definitely have to find someone to help proofread my manuscript again before submission to the journal.*
>
> *PG 1*

One faculty member who is a professional author also indicated that, even if the knowledge of rhetorical structures and phraseological patterns outlined and presented in the workshops was fruitful, some limitations regarding the size of the corpus and phraseological patterns could be seen. The rhetorical structures could be different, demonstrating individual idiosyncrasies and types of research conducted. However, she offered article authors useful and practical advice on applying the proposed model and phraseological patterns presented. At the base level, one should remember that it was not meant to be a recipe. Rather, article writers could appropriately make connections between this move-step sequence knowledge and the task of manuscript preparation based on the research characteristics. They could be used as a guideline to increase sensitivity to certain communicative functions in the internal discourse structure of each section and to make appropriate language choices. That is, the authors should be able to manipulate their genre knowledge to serve their own intentions to be expressed in the text (Kanoksilapatham, 2007a, 2015; Tessuto, 2015). Below is her response to the question, "*Do you think the template and phraseological patterns presented today can help with the task of writing for publication?"*:

> *It depends on how writers pick up knowledge of these two things, and how they are applied to writing a manuscript, because the move types and templates can vary according to disciplinary variation. The thing is, they should consider and use them appropriately to the discipline and requirements of the journals. These are the real benefits of the template and strings suggested. For example, you can use the word "dictation", but my "dictation" is different to other works. Thus, the block itself is helpful. If this kind of knowledge does not exist, if there are no blocks or templates for novice writers, how can they start writing an RA? As for professors and experienced writers, they have solid background, experience and publications. Writing an RA is an easy task for them, compared to graduate students. However, everyone is different in terms of writing, depending on the research characteristics. If your work is a qualitative study, you will not get this kind of rhetorical structure. If your study is quantitative, but does not find any significant differences, the block could be different.*
>
> *FM 6*

When asked whether she thought the knowledge of RA macro- and micro-structure gained from the workshops is useful and practical guidance on how to write an RA, she replied that there was no absolute template for writing RAs. Her response indicated that published articles might not be promising and interesting to read if every writer always followed the internal organisation of move types for the IMRD format. As she said:

> *I don't think this is an absolute template for all, but it is a guideline and the author himself has to be ready to adapt when using it. Authors need to make the manuscript sufficiently enticing and convincing to get readers to appreciate the article. If everyone follows the IMRD block, nobody would want to read the paper because it is not interesting. It is the authors' task to make it distinctive, commenting on their work and previous studies. For example, even though you had your decided methodology, but, in the real situation and experiment, you made some changes, you have to say how and why you did that. Readers need to read something like this.*
>
> *FM 6*

As can be seen from her response, she suggested that, in order to succeed in writing an article, writers need to know how to adapt this knowledge to construct discourse organisational patterns to achieve their generic objectives. They should possess not only the skills and expertise to develop ideas and evaluate the findings of

the study but also those needed to write and argue persuasively to support the claim or evidence offered in the article (Kanoksilapatham, 2012a, 2012b, 2015).

9.9 Conclusion and a Meta-comment on Reporting of Interview Data

This chapter presented an in-depth discussion and justification of the interview approach employed in this study. The selection of the workshop participants, interview informants, and conducting semi-structured interviews as a main method for data collection was clearly delineated. The account of the coding process was also presented before reporting the interview results according to themes emerging from the interview data.

As the interview data and feedback reported in this chapter confirm, the knowledge of rhetorical structures and phraseology covered in the workshops was seen as a useful and practical guide for the task of RA writing for publication. Worries about writing, language difficulties, dealing with reviewers' comments, and selecting appropriate outlets for publication were mentioned by informants. Moreover, due to the relatively small size of the sample of articles analysed in the descriptive phase of this study, certain criticisms of and suggestions to improve the proposed model and phraseological patterns presented in the workshops were received from the interviewees.

The ultimate goal of the intervention of this research was to raise awareness of faculty members and Thai graduate students about RA genre and phraseology. Besides the pedagogic process adopted in the workshops, I am aware that the interviews themselves could function as a pedagogic contribution and a learning process, because of the way in which they encouraged informants to reflect on their writing practices. Therefore, the interviews should not be seen simply as vehicles for transferring information about what the informants think, but also as devices to encourage them to think about their practice and raise their awareness about RA writing.

Given the characteristics and profile of this group of informants, the responses gathered seem to me a reasonably positive evaluation of the intervention in the light of its purpose within the time constraints. For example, these informants showed, to some extent, their awareness of rhetorical structure and the importance of using

appropriate phraseological patterns in drafting a research manuscript. Their publication experience and difficulties in writing RAs expressed in the interviews also offer insightful ideas for the development of further teaching materials which will be discussed in the subsequent chapter. Nonetheless, I would argue that I am interpreting and reporting the data that were gathered over several conversation turns. This would, in turn, offer sufficiently detailed information regarding the subject matter. As such, the interview data gathered "provides sufficient description to allow the reader to understand the basis for an interpretation, and sufficient interpretation to allow the reader to understand the description" (Quinn, 2002, pp. 503-504).

CHAPTER 10

FURTHER TEACHING MATERIALS

10.1 Overview

The results of the interviews, particularly considering that the informants experienced and/or found difficulty in writing RAs, inspired and provided me with an approach to the development of further instructional materials and activities that might be useful for teaching and learning writing for publication. Although there are existing resources and textbooks available, they might lack the relevant content in response to the issues these people expressed in the interviews. The potential materials presented in this chapter were intentionally created in order to help graduate students overcome the difficulties they experienced in writing RAs. These further materials have not yet been implemented, and commentary on each worksheet is therefore based only on my ideas about it and the advantages that I predict in using it.

Based on the information derived from the interviews, the content of the activities and materials created includes five key issues: 1) the development of information in the Introduction section; 2) the development of information in the Discussion section; 3) the choice of words; 4) grammatical issues (English articles); and 5) complex noun groups. Similarly to the materials used in the pedagogic phase, the presentation of the newly created materials consists of two main parts—the activity and the material itself, accompanied by a commentary. All the text examples and extracts were taken from the corpus of 110 articles studied in the present research.

10.2 The Development of Information in the Introduction Section

Most of the interview informants indicated that it was quite difficult for them to convince the readers and sufficiently get their attention to read the whole article, particularly when they wrote the Introduction section. The findings from the descriptive phase support Murray's (2012) suggestion in that, in the Introduction section, the author needs to provide the reader with a general statement(s) about the field of research or research topic. Then, more specific statements regarding the areas or problems that were studied by other researchers are needed before indicating the

need for further investigation. At the very end of the section, the author should give very specific statements about the purpose of the study. Therefore, I considered that students should recognise how to organise texts in a logical way. In order to help the article authors with this problem, the task and activity should be language-based, providing them with the opportunity to explore how to express information and organise the section logically and effectively. Activity 1 is, thus, intended to show the authors how the linguistic features and organisation of the different paragraphs differ from one another in order to form the section.

Figure 10-1 Activity 1-Information development in the Introduction section

A
Activity 1

An Introduction section from an RA is given here, with the information in scrambled order. Rearrange and number them in order that you think the authors originally present them.

_____ Moreover, not only does general vocabulary knowledge affect students' reading comprehension, but specific vocabulary also assists students to comprehend a specific text effectively. Readers' familiarity with the key vocabulary of a particular field combined with reading strategies leads to better reading comprehension (Ref). From the aforesaid studies, teaching specific vocabulary not only leads to greater familiarization with general vocabulary, but also facilitates students to comprehend a text more effectively.

_____ Vocabulary knowledge is a key aspect in reading proficiency (Ref). The importance of vocabulary is affirmed in a famous quotation from David Wilkins, who wrote that "…while without grammar, very little can be conveyed. Without vocabulary, nothing can be conveyed" (Ref).

_____ However, one problem is that teachers cannot decide which vocabulary should be introduced to prepare students to read and write research articles. This is because they do not know which words frequently appear and are truly representative of the vocabulary in specific fields.

_____ Additionally, vocabulary knowledge is very closely and positively related to reading comprehension (Ref). Vocabulary knowledge can assist reading comprehension, and reading can in turn contribute to an increase in vocabulary size (Ref). Similarly, a substantial vocabulary size can contribute to reading comprehension (Ref). It is impossible to understand texts either in one's own language or in a foreign language without understanding essential vocabulary.

_____ Regarding vocabulary pedagogy in Thailand, inadequate vocabulary knowledge is one of the predicaments that Thai students encounter when reading (Ref). Many educational institutions introduce new vocabulary to their students to prepare them for reading and writing assignments for academic texts in specific fields.

_____ To this end, this study attempted to develop a Social Science Word List (SSWL), a list of content words representing words frequently utilized in social science research articles. The aim is for the SSWL to be used in vocabulary pedagogy in both undergraduate and graduate studies in the field of social science. Teachers, instructors and course designers of EAP and ESP may select appropriate vocabulary to introduce to students studying in the social science field. This word list can assist undergraduate and graduate students in familiarizing themselves with essential words useful for the reading and writing of social science papers.

_____ Vocabulary acquisition is regarded as a vital factor in learning a foreign language since vocabulary knowledge has a direct effect on the reading and writing proficiency of English learners (Ref). For academic purposes, learning vocabulary aids students' academic achievement because vocabulary greatly contributes to reading comprehension and proficiency (Ref). Students who have better vocabulary knowledge generally perform better in reading comprehension and proficiency (Ref).

Commentary

This worksheet targets the skills of organising sentences into paragraphs, using cohesive devices and developing ideas into a coherent piece of discourse. If learners do not have any previous experience of reading and writing RAs, they might find this task difficult. To perform this task, learners should be encouraged to read and explore the information in the text without giving clues or explanations about ordering the information covered in the Introduction section. It may be useful to have a brief discussion at the start of the task, for example, informing the learners that the text they are reading is about vocabulary knowledge and acquisition. This might help them to identify the first paragraph of the text. This task can be done in groups of three or four, but all group members should co-operate to perform the task and make sure that they read and understand the text. When each group has its ideas clearly established, the groups can exchange their opinions about the order or rhetorical organisation of the paragraphs or any unknown vocabulary that they have found.

After the groups have discussed the text to share their ideas with the whole class, the structure of the section should be introduced. It is important to stress that each paragraph must be clearly written and logically linked to the next paragraph. In doing so, some language features and cohesive devices used in the text, such as *moreover*, *however*, *additionally*, and *to this end*, which are found to be useful models of language, are highlighted. They can ease the task of organising ideas into a coherent piece of discourse for the section.

The activity works even better if the learners have the opportunity to practise the task with several different topics in the field and/or those meeting their interests. In this way, they can compare and contrast the similarities and differences between how language is used and how the section is structured in Activity 1 and Activity 2.

Figure 10-2 Activity 2-Information development in the Introduction section

Activity 2

The excerpts below are taken from an Introduction section of an RA. Rearrange and number them in order that you think the author originally wrote them. Then compare and discuss with a peer the organisation of the text with that of Activity 1.

_____ As instructors who teach Japanese language courses at higher education level, we have noticed different learning styles of students while they are attempting to acquire and produce a foreign language. The anxiety or nervousness is ordinarily seen when the students are required to speak in class, and during exams and tests. When the students do have anxiety, it eventually leads them to dislike and lack of enthusiasm in learning. This feeling might have something to do with learning outcome. That is, anxiety might be one cause of failure.

_____ Studying language might be perceived difficult for some students. They feel worried and anxious in language classroom (Krashen, 2003). The nature of learning languages is different when compared with other subjects. According to Borg (2006), in foreign language teaching, the content and the process for learning the content are the same. In other words, the medium is language itself, and instruction requires interaction patterns such as conversing, discussion, and presentation.

_____ Therefore, many studies investigated students' learning anxiety and some concerned variables such as the relationship between language anxiety and language proficiency. Several researchers (Gardner, Tremblay, and Masgoret, 1997; and Sanguanpong, 2007) have found correlation between anxiety and proficiency. However, proficiency may not be related to tension in different context, and students may experience anxiety because of other factors.

_____ In order to have clear understanding on students' nature, this study was conducted to examine the level of their anxiety, some factors that might be related to anxiety, and the use of anxiety reducing strategies. The first-year students were chosen in this study because they were new in the university, and Japanese language is also a new subject for them. Taking a Japanese course might be perceived difficult for them. With the findings and implications of this study, students and instructors can increase the awareness of foreign language anxiety in class. Accordingly, some better ways of dealing with foreign language anxiety can be adopted, and an enjoyable and effective language-learning environment can therefore be developed.

_____ With feelings of discomfort and insecurity, they find it difficult to share their opinions and participate in class discussions. These students are afraid of making mistakes, so they avoid doing or saying if they are not sure. Moreover, the task difficulty might be one of the factors leading to anxiety. Other factors such as teacher-students interactions in class and students' own accomplishment are the potential causes of students' second foreign language anxiety.

Commentary

This worksheet shares some similarities with Activity 1 in that it also aims to raise awareness about linguistic features and organisation of the section. It uses the technique of information scramble. However, as it is considered a follow-up task, to complete this worksheet, the learners should be asked to work in pairs to read and rearrange all paragraphs, recognising how paragraphing works in organising ideas when writing an article. Then, they are asked to compare the organisation of the text with that of Activity 1. This enables learners to see informational and organisational parallels and contrasts, even though these texts were taken from RAs in the same academic field. As an extra activity, it is a good idea to ask them to draw a diagram illustrating how the information of the text is organised according to its function, providing them with an understanding of the structure of the section which will enable them to write their own introduction appropriately. In essence, Activities 1 and 2 can help writers appreciate what makes a successful product in terms of such aspects as linking ideas within and across sentences or in terms of global organisation of texts.

10.3 The Development of Information in the Discussion Section

Using appropriate lexico-grammatical features to achieve the purposes of the Discussion section was one of the major concerns of the interview participants. Coxhead and Byrd (2007) suggest that, as ideas are generated for writing, selecting appropriate vocabulary with which to express those ideas is necessary. In order to deal with this issue, I considered that the main focus of the activity should be on the use of words and the essential vocabulary the authors employ to discuss their findings. Clearly, it is useful to create a task that helps learners to understand the specific function, form and focus of words when used in context. The sample worksheet created was, therefore, designed to encourage the learners to focus on verbs, particularly reporting verbs, and the information elements particularly included in the Discussion section.

Figure 10-3 Activity 3-Information development in the Discussion section

A

Activity 3

Read the following excerpt from a Discussion section. Underline (1) the verbs and (2) modal auxiliaries which help identify the information elements in the section. Complete the chart below and write down the information element of each item.

❶ Regarding the first question of this research, it appears that the three tasks consisting of different degrees of involvement load yielded differing results. ❷ The results of the Chinese EFL students who completed Task 3 were remarkably better than those students who completed Task 2, followed by those who completed Task 1. ❸ The results were consistent in both the immediate and delayed tests. ❹ The effects of the most involving tasks were greater than those of the least involving tasks after two weeks. ❺ Thus, the results of the present study fully support the predictions of the Involvement Load Hypothesis. ❻ This is in line with previous studies on the matter (Ref). ❼ However, the results were different from (Ref), where Task 3 was not more effective than Task 2. ❽ One possible explanation may lie in the differences of designing Task 3 across the two studies. ❾ Although Task 1 and Task 2 were similar in both studies, Task 3 in the present study required participants to write an original composition on any theme, while Task 3 in (Ref) study was concerned with creating an original sentence. ❿ This might mean that producing connected discourse (writing a composition) facilitated learners in more elaborate processing of words than creating sentences (unrelated). ⓫ As proposed in (Ref) study, the mean scores of the sentence writing task were significantly lower than that of the composition writing task.

⓬ With regard to the second research question, armed with the above data analysis, the results indicated that free production using the target words was more difficult than active recall of the target words for learners at the 3,000 word level. ⓭ This means that learners can only learn the use of an unknown word after they have understood the word form and meaning (Ref). ⓮ The results highlighted the importance of active word knowledge. ⓯ While many teachers focus on receptive word knowledge when teaching new words, it may be the active word knowledge which is the most difficult dimension to learn. ⓰ Therefore, it is highly suggested that, when teachers organize different tasks and expect students to learn words incidentally from reading, the aspect of active word knowledge should be taken into account.

	VERBS	TENSE	FUNCTION(S)
Sentence 1	appear	present simple tense	reporting the findings
Sentence 2			
Sentence 3			
Sentence 4			
Sentence 5			
Sentence 6			
Sentence 7			
Sentence 8			
Sentence 9			
Sentence 10			
Sentence 11			
Sentence 12			
Sentence 13			
Sentence 14			
Sentence 15			
Sentence 16			

Commentary

As discussed earlier, the major purpose of Activity 3 is to help the learners become aware of the use of different reporting verbs and tenses to report and discuss the findings of a study. The task of identifying verbs and tenses might not be difficult for the learners, but determining function(s) might be. It would be best if it is stressed to the learners that the appropriate use of *the present tense, past tense,* or various *modal auxiliaries* depends on which attitude the article authors take towards the findings. Therefore, the choice of these linguistic features results from their particular ideas and ability to interpret their research findings. The advantage of this task is that it can help students develop a range of vocabulary typically used in the Discussion section.

While the learners are completing the task, teachers can go round and help them (if necessary) to answer the questions. In this way, the teachers can collect some information regarding the use of reporting verbs in context. When the learners have completed it, they should be asked to discuss the answers with a partner, giving their reasons for why each reporting verb and modal auxiliary were used as such. It is probably best to match verbs with their pragmatic functions and group them, which might be helpful to the individual author.

10.4 Language Use

Coxhead and Byrd (2007) claim that every writer, whether a native speaker or non-native writer, experiences situations in which they are unable to think of the right word and phrase when writing. It is acknowledged that good writers focus first on meaning, on getting the ideas or information down in the writing. However, some of the interview informants indicated that they were unsure about using the right words and phrases, especially correct prepositions and grammar.

I considered that the materials created should have the potential to provide learners with a source of linguistic information, enabling them to extend their set of productive vocabulary and to deepen their appreciation of language use in the RA genre. My research (Chapter 7) obviously revealed a number of potentially important n-grams to focus on. However, due to the space limit of this thesis, I could not offer worksheets which cover all of the phraseological patterns identified and covered in the

lists which are frequently used in writing an RA, but I have designed some specifically to sensitise learners to the differences in meaning and usage of some confusing words and phrases, and increase their awareness of language use in context. It requires them to think carefully about accuracy in RA writing. The material I developed for this stage is presented as follows:

Figure 10-4 Activity 4-Language use

Activity 4

Read the following sentences carefully. Choose the most appropriate words in the bracket.

1. (*According to* / *Based on*) (Ref), extensive reading can promote the incidental learning of L1 and L2 receptive vocabulary.
2. Therefore, similar to EIL, (*according to* / *based on*) ELF, intelligibility, rather than native speaker norms, is considered the ultimate goal of English language learning.
3. Overall, all (*the findings from* / *the findings of*) the 'Self-Assessment Table' seem to support (Ref) that 'In a conversation, we must continually make decisions on the basis of what other people mean.
4. The class observation and conversational interviews supported (*the findings from* / *the findings of*) student' reading responses.
5. Regarding 'reading novels, newspapers, short stories, magazines, or something from internet, etc', this finding is in agreement with (*the findings from* / *the findings of*) a number of studies which have shown that second language learners acquire vocabulary through reading (Ref).
6. (*According to* / *Based on*) a t-test analysis, however, Table 2 indicates that there was no significant difference in the overall LLS use between males and females ($t = 1.97$, $p>.05$).
7. Participants were selected (*according to* / *based on*) the academic records from high proficient male and female students.
8. As it is clear from the letter coding schemes, each letter should be perceived (*according to* / *based on*) its own position on word, whether by comparing it to anchor points or detecting its position which is itself length dependent.
9. (*The findings from* / *the findings of*) this study indicate that the features of the CLT approach supported the participants' senses of competence, and autonomy of learning to speak English.
10. The results generated (*from this study* / *in this study*) will heighten the awareness of the importance of teaching and learning vocabulary as well as sharpen scholars' sensitivity to be more prudent when delivering their instruction.
11. In addition, the results (*from this study* / *in this study*) can be compared with the studies of actual vocabulary knowledge or vocabulary level of high school students by using a vocabulary level test and its effects on students' comprehension.
12. The high level use of metacognitive strategies (*from this study* / *in this study*) was in line with previous studies on LLS (Ref).
13. The generally robust internal consistency reliabilities for the subscales on the questionnaire employed (*from this study* / *in this study*), served to mitigate somewhat the low sample size and generally accorded with the 2007 findings of (Ref).

Commentary

Some guidelines and help might be needed at the appropriate level for particular classes, and examples which are directly related to the level of learners' writing should be used. In order to ensure that this worksheet works best when learners need help in completing it, the learners could look at concordance lines from my corpus. In addition, they can make full use of looking up words in a dictionary to explain their meanings and usage. The following meanings and grammatical rules taken from the Cambridge Dictionary might be used to explain to them.

- *According to* means 'as reported by' or 'as stated by' and refers to an opinion which is not the speaker's opinion.
- *Based on* is used if you use particular facts, ideas or theoretical concepts; you use them to make a decision or develop a theory further.
- We use *from* to talk about the way we use materials or ingredients to make things, or to talk about the way we use materials or ingredients to make things.
- We use *in* to talk about where something is in relation to a larger area around it.

Although this might not be a lengthy activity, it is a good idea for teachers to find new words that the learners find difficult to use. The n-grams included in the functional list in this research (see Appendix F) are a suitable starting point. The materials should focus on words which are useful rather than random ones which it might not be necessary to use. This includes various aspects of language accuracy: punctuation, common grammatical errors, etc. Then, the learners are asked to give example sentences so that they remember how to use these words. At this point, if possible, the learners may be allowed to look up the words in a dictionary. They might be encouraged to write down the words they do not know the meaning and usage of in their personal dictionary, sometimes referred to as a vocabulary notebook. This learning strategy is useful in improving their reading and writing skills.

Activity 5 also aims to raise learners' awareness of academic writing style. As English has a very rich vocabulary derived from many languages, there are several alternatives for expressing an action or occurrence. Swales and Feak (2012) discuss how, in everyday spoken English, prepositional verbs (verb + preposition) are often used, rather than a single verb, especially verbs with Latinate origins. However, for

written academic style, writers tend to use a single verb when possible, which is a very distinctive stylistic characteristic. The following figure is the worksheet I developed.

Figure 10-5 Activity 5-Focusing on verbs

Activity 5

Choose a verb from the list to replace each underlined verb to reduce the informality of the sentence. Note that you may need to add tense to the verb from the list. Write down any other single verbs that you think could also work in the following sentences.

consider	**decrease**	**develop**	**investigate**	**increase**
conclude	**constitute**	**determine**	**eliminate**	**maintain**

1. Firstly, positive motivation starts at 11.21% in the beginning phase, *goes up* to 45.04% in the middle phase and sharply decreases to 18.77% in the final phase.
2. Such an analysis can then illustrate how meanings, systems of ideas and beliefs, ideologies, are constructed in discourse and function to *keep up* and transmit existing power relations.
3. Within a single post, there were often references to activities that *make up* different writing process stages.
4. However, most of the previous studies, except that of Tawilapakul, did not *look into* other linguistic factors which could account for correct and incorrect use of English tenses by Thai learners.
5. The questions were designed to force the respondents to express their opinions by checking the options that apply to them because the survey was designed for elementary students and the researcher wanted to *get rid of* "Don't Know" or "Neutral" responses.
6. The possibility of self-efficacy was likely to continuously *go down*, especially in the final phase of learning.
7. Descriptive statistics, such as means and standard deviations, were calculated from the SILL's scores to *figure out* the LLS patterns used by Cambodian EFL students when learning English.
8. To use English language for communication in hotel, the staff has to *think about* the interpersonal relations and cross-cultural situations as well.
9. This study hopes to encourage Thai writers, scholars, and relevant stakeholders to *set up* English language teaching textbooks by balancing students' local cultures and intercultural issues that can allow them to further discuss their own and other cultures while learning English.
10. We can *make a decision* that current ELT textbooks are less gender biased compared to the past and such mixed-gender dialogues provide equal opportunities for both female and male students' participation in speaking activities.

Discussion question

In each question, can you think of other verbs which can be appropriately replaced in the sentence? Why? Discuss with your partner.

Commentary

This worksheet focuses on issues of word choice. The task may seem simple if users know a synonym for the word provided. By completing this worksheet, the learners would have the opportunity to think about other appropriate vocabulary in RA writing. They should be informed that sometimes replacing prepositional verbs by Latinate verbs may not be necessary; however, it may make the piece of writing more eloquent, conforming to the conventional style of academic writing. They should also be aware that, while, in certain cases, these words in the task can be substituted for one another, in other cases their meanings may be subtly, but significantly different. Furthermore, it is a good idea for the texts themselves to be used as a good exemplar, highlighting appropriate language and the style of RA writing. This is a very useful way of building awareness of language style and specific aspects of lexico-grammar in publication writing.

Apart from the benefits of recognising language style in RAs, learners also learn new words (if they do not know them already) and ways of practising the words in context. This task can be carried out at every stage of learning by changing the target vocabulary and examples in context to the article section they are about to write. For example, while writing the Results section, a list of essential words or words frequently occurring in the section can be highlighted in order that they can use them effectively. This can help them notice some similarities and differences in the word choices that are typically used in the given section.

10.5 English Articles

L2 learners often have difficulty in using English articles as a result of the multiple concepts underlying English noun phrases (White, 2009). The issue of grammar errors in article usage (*a, an* and *the*) represents semantic and pragmatic functions, including definiteness, generic reference and countability. This is important as an English text usually contains a substantial proportion of noun phrases, which can be written in several ways to convey their meaning, e.g. referring to shared information, pointing back at old information, pointing forward to specifying information, etc. Consequently, all of these language aspects involve the use of

articles. Even though accurate use of English articles may not be seen as hugely significant on a communication level, compared to the flow of ideas regarding the process of writing, they represent writers' proficiency and fluency. Therefore, the following worksheet was designed in response to the problem of the linguistic aspects of English articles and noun phrases.

Figure 10-6 Activity 6-English articles

Activity 6

Following is an excerpt from a Methods section of a research article. Fill in the blank with the articles *a*, *an*, or *the* where necessary. Some of the blank do not require filling in. Then find and circle noun phrases, and discuss the question that follows.

Participants

(1)____ opportunity sampling was used to select five class groups of (2)____ compulsory general English course, English II, to take part in (3)____ study, resulting in (4)____ total sample size of 104 participants. This sample was taken from (5)____ general population (327 students) of (6)____ first year undergraduate students enrolled in (7)____ Faculty of Arts at Chulalongkorn University, Thailand. (8)____ sample population was fairly homogenous in terms of age (approximately 18 years old), first language (all native Thai speakers) and (9)____ length of English study (approximately 15 years).

Within (10) ____ Faculty of Arts as a whole, there are significantly higher numbers of female students, which is reflected in (11)____ gender profile of (12)____ sample group, with (13)____ 89 female participants and 15 males.

For (14)____ practical reasons relating to (15)____ assessment of oral fluency, it was not deemed possible for (16)____ sample size to be greater than 104; however, this figure is considered an acceptable minimum sample size for (17)____quantitative research based on (18)____ general *rule of thumb* stating that (19)____ samples should consist of approximately 10 % of (20)____ overall population with (21)____ minimum size of 100 (Dornyei, 2007).

Instrumentation

As (21)____ OCSI was originally developed and delivered in Japanese, (22)____ English language version published by Nakatani (2006) contains items using complex vocabulary which may inhibit comprehension by EFL learners. Additionally, (23)____ OCSI does not include any items relating to (24)____ lexical compensation, which are common in all of (25)____ major taxonomies; therefore, (26)____ decision was taken to adapt (27)____ questionnaire and translate it into (28)____Thai language.

In adapting (29)____ questionnaire, (30)____ English versions of (31)____ original items were compared to (32)____ items used in two other studies: Chiang (2011), who used an adapted version of OCSI, and Chuanchaisit and Prapphal's (2009) questionnaire, Strategies Used during Speaking Tasks Inventory (SUSTI). As a result of (33)____ comparison, 18 items were reworded, 5 items were moved to (34)____ different category, 8 new items were created and 2 items were deleted. This resulted in (35) ____ total of 37 items relating to speaking and 25 items relating to listening.

Discussion questions

1) Give five examples of sentences that refer to the *old, assumed or shared* information.
2) Give five examples of sentences that present the *new* information.
3) Discuss ways to construct complex noun phrases with a peer.

Commentary

This task could be criticised on the basis that the learners might find each question quite difficult to complete within a short period of time, as the task can be quite demanding, even for advanced learners. However, in this case, it reflects that choosing the correct article is difficult for them and, thus, they need to practise it. The first two questions aim for the learners to learn how to use the definite article *the* when referring to a specific thing which has been already mentioned, whereas the first mention usually uses the indefinite article *a/an*. Likewise, if the noun is countable, adding the plural marker (-s) and omitting any article, or using it in its singular form with the indefinite article *a* or *an*, is necessary. Question 3 is designed to alert the learners to thinking about possible ways to construct complex noun phrases. It is likely, at this point, that explanations of the nominalisation process are needed. However, if the learners think that this task is too difficult for them, further activities focusing on complex noun phrases, such as Activity 7 presented in Section 10.6, might be useful. In short, Activity 6 aims to contribute to raise learners' awareness of the complexities of using English articles and complex noun phrases.

10.6 Complex Noun Phrases

Often, in many research articles, long and complex noun phrases, as a result of nominalisation, are used. They obviously occur in many places through the text and tend to carry a lot of meaning in a rather compact form. This feature may be particularly useful in terms of the stylistic considerations when the writer considers the sentence-level choices that may contribute to the development of writing style. It is useful for learners to understand the noun-phrases as chunks and eventually start to use them. However, using complex noun phrases is quite difficult for L2 learners (e.g. Baratta, 2010; J. Flowerdew, 2010).

In order to help learners to pay attention to and use complex noun phrases in RA texts, the Sketch Engine might be useful because learners can look at some of the most complex noun groups in the corpus and see a list of some of the occurrences of the phrases in the corpus from concordance lines. I thus considered that it would be a good idea to ask the learners to go back to the corpus where some of the complex noun

groups identified in the list of content-based n-grams appear. The activity created here aims to help learners to begin to address the importance of noun phrases and what is typically or frequently used in writing RAs. The following worksheet was designed to focus on the use of complex noun phrases in academic articles.

Figure 10-7 Activity 7-Complex noun phrases

Activity 7

Look at the screenshots of some of the concordance lines of '*foreign language anxiety*' and '*language classroom anxiety*'. What do you understand by these two complex noun phrases conceptually? Discuss with your partner.

Home
Search
Word list
Word sketch
Thesaurus
Sketch diff
Corpus info
Manage corpus
My jobs
User guide

Save
Make subcorpus
View options
KWIC
Sentence
Sort
Left
Right
Node
References
Shuffle
Sample

Query foreign, language, anxiety 109 (215.19 per million)

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file485020...	language learners. In the context of Thailand,	foreign language anxiety	has been studied in connection with students'
file485020...	experience (Ref). While there have been	foreign language anxiety	studies conducted on Thai learners (Ref
file485020...	Furthermore, studies have indicated that	foreign language anxiety	is a situation specific construct which
file485020...	are: 1. What is the correlation between	foreign language anxiety	and gender? 2. What is the correlation
file485020...	gender? 2. What is the correlation between	foreign language anxiety	and year of study? 3. What is the correlation
file485020...	study? 3. What is the correlation between	foreign language anxiety	and academic achievement? Sample and Methodology
file485020...	between genders, years of study, and GPA with	foreign language anxiety	. At the end of the questionnaire, students
file485020...	whether there was any relationship between	foreign language anxiety	and gender. From Table 2, results indicated
file485020...	correlative relationship between year of study and	foreign language anxiety	. It appears that year of study is positively
file485020...	determine the correlation between GPA and	foreign language anxiety	(Table 4). It appears that students' GPA
file485020...	relationship between years of experience and	foreign language anxiety	, students mentioned that anxiety does not
file485020...	experience, and GPA had any relations to	foreign language anxiety	, students' responses from the interview
file485020...	learners, as with older learners, experience	foreign language anxiety	. It is crucial to note, though, that experiencing
file485020...	an even more diverse perception towards	foreign language anxiety	. Conclusion This study reiterates the value
file485020...	pursuing, plus this study further confirms that	foreign language anxiety	is a situation specific construct which
file485029...	anxiety-provoking experience for various reasons.	Foreign language anxiety	is different from anxiety in other disciplines
file485029...	distinguishable from other specific anxiety", (Ref).	Foreign language anxiety	is "a distinct complex construct of self-perception
file485029...	language learning process" (Ref). For (Ref),	foreign language anxiety	is referred to as learners' complex psychological
file485029...	and self-confidence. According to (Ref),	foreign language anxiety	occurs in a second or foreign language
file485029...	tension and apprehension. (Ref) categorize	foreign language anxiety	into three dimensions: communication apprehension

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Home
Search
Word list
Word sketch
Thesaurus
Sketch diff
Corpus info
Manage corpus
My jobs
User guide

Save
Make subcorpus
View options
KWIC
Sentence
Sort
Left
Right
Node
References
Shuffle
Sample

Query language, classroom, anxiety 42 (82.92 per million)

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file485029...	items on extrinsic motivation. 2.2 Foreign	Language Classroom Anxiety	Questionnaire, adapted from (Ref), with
file485030...	second part was a questionnaire of Foreign	Language Classroom Anxiety	Scale (FLCAS) measurement created by (Ref
file485031...	foreign language anxiety, (Ref) Foreign	Language Classroom Anxiety	Scale (FLCAS) was employed as a research
file485031...	research findings obtained from the Foreign	language classroom anxiety	scale (FLCAS) and focus group interviews
file485034...	To discover the level of reported foreign	language classroom anxiety	of grade 10 students studying English listening
file485034...	To compare the difference of the foreign	language classroom anxiety	of grade 10 students studying English listening
file485034...	To compare the difference of the foreign	language classroom anxiety	of grade 10 students studying English listening
file485034...	To compare the difference of the foreign	language classroom anxiety	of grade 10 students between the experimental
file485034...	experiment. The instrument used was the Foreign	Language Classroom Anxiety	Scale (FLCAS) questionnaire which was translated
file485034...	. To determine the mean level of foreign	language classroom anxiety	reported by the grade 10 students in the
file485034...	determine the reported level of foreign	language classroom anxiety	. Paired sample two tailed t-tests were
file485034...	significant difference in reported foreign	language classroom anxiety	at the beginning and the end of the study
file485034...	groups regarding their total reported foreign	language classroom anxiety	and the three specific anxieties of communication
file485034...	as follows: The reported level of foreign	language classroom anxiety	of grade 10 students studying English listening
file485034...	decrease in the level of reported foreign	language classroom anxiety	over an eight week period for the students
file485034...	in the reported level of reported foreign	language classroom anxiety	over an eight week period for the students
file485034...	difference in the reported level of foreign	language classroom anxiety	of grade 10 students studying English listening
file485034...	Discussion Think-Pair-Share and Reducing Foreign	Language Classroom Anxiety	The findings of the study do not support
file485034...	think-pair-share method significantly reduces foreign	language classroom anxiety	. Contrary to (Ref) study, students who
file485034...	report a significant reduction in foreign	language classroom anxiety	. The study was undertaken at the start

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Extra activities

Use the Sketch Engine to find the following complex noun phrases. Discuss with your partner what the concept of these phrases means to you. Is the concept of these complex noun phrases similar or different? Discuss with your partner.

- learning and teaching vs. teaching and learning
- the significant effect vs. the significant relationship
- breadth of vocabulary vs. depth of vocabulary

Commentary

With concordance lines, this activity provides learners with an opportunity to have access to the corpus, and therefore see and notice language patterns surrounding the phrases they need to know. The use of concordances also allows them to see how the meaning of a complex noun phrase is created in each particular case. For example, from the worksheet, it can be concluded from the screenshots of concordance lines that '*foreign language anxiety*' and '*language classroom anxiety*' tend to be remodified and frequently used, compared to *(feel) anxiety about (learning) foreign language*, or *anxiety about a language classroom*.

The complex noun phrases in the extra activities were chosen from the list of content-based n-grams generated in this study. The use of concordance data again is helpful in providing interesting insights into the usage of those phrases. For instance, for the case of '*teaching and learning*' and '*learning and teaching*', learners may find that these two phrases can be used synonymously. This is not wrong because having looked at the concordance lines that appear for them, I found that they are used in the same context in the corpus. Nonetheless, concordance lines indicate that '*teaching and learning*' is preferred (68 occurrences) to '*learning and teaching*' (14 occurrences) in writing RAs. This task helps raise the learners' awareness of choosing complex noun phrases which are more usual in article writing.

In addition, the phrases '*the significant effect*' and '*the significant relationship*' are likely to be confused by the students. These two lexical groups are generally used to interpret the results of the study, and are especially statistical terms. In quantitative research, a statistically significant 'effect' might serve as good tentative evidence that there is a causal 'relationship' between two variables. Again, concordance views can reveal characteristic patterns of word and phrase usage that students can immediately apply in their own writing. The screenshots below taken from the Sketch Engine can provide insights into their usage as 'the significant effect' is normally followed by 'on' if it means the result of a particular influence. Meanwhile, 'the significant relationship' is used to talk about two things or factors. It is followed by 'between…and'. It is important to note that this activity can also raise the students' awareness of collocation, showing them how words and their close neighbours occur together in the corpus.

Figure 10-8 Sketch Engine screenshot showing a concordance output for the lexical group 'the significant effect'

Query significant, effect 19 (37.51 per million)

file#0	questions and multiple choice options in L2.	Significant effects	of using L1 in place of L2 on students'
file#0	versions for each item. This is to determine	significant effects	of using L1 in the questions and the multiple
file#15	learning consistently shows the following	significant effects	: higher self-esteem; increased confidence
file#17	. For Factor3: Techniques of Teaching had no	significant effect	on the Total Outcome for Evaluation and did not
file#44	studies expect one reported a statistically	significant effect	of reading strategy instruction and students'
file#45	factor. It was found that there was a	significant effect	of proficiency level [F (1, 18) = 4.56, p < 0.05]
file#52	with a level of 5,000 word families, the	significant effect	that vocabulary size has in the prediction of
file#60	the different sequences of feedback types had a	significant effect	on the students' writing ability (F= 3.77, p<.
file#60	the levels of general English proficiency had a	significant effect	on the students' writing achievement (F= 28.55
file#60	and the differences in English proficiency had	significant effects	on the students' writing ability, a
file#60	the levels of general English proficiency had	significant effects	on the students' writing achievement in a
file#60	the levels of general English proficiency had a	significant effect	on the students' writing ability with a small
file#60	According to the results of the study,	significant effects	of the different sequences of types of feedback
file#81	conducted on the delayed test also revealed a	significant effect	of Task, F(1,76)=4.562, P=0.02, and
file#81	Task, F(1,76)=4.562, P=0.02, and a	significant effect	of Time, F(2,76)=6.463, P=0.01. A
file#81	conducted on the delayed test also revealed a	significant effect	of Task, F(1,76)=4.069, P=0.021, and
file#81	Task, F(1,76)=4.069, P=0.021, and a	significant effect	of Time, F(2,76)=6.063, P=0.012. A
file#102	context gives us the awareness of its	significant effects	as to help our students make use of it
file#105	Ref), who observed that gender and status have a	significant effect	on the strategies of the responses of Thais. (

Figure 10-9 Sketch Engine screenshot showing a concordance output for the lexical group 'the significant relationship'

Query significant, relationship 30 (59.23 per million)

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file#6	SLA. Moreover, (Ref) found a very weak	significant relationship	between assertiveness and L2 academic success
file#15	was used to determine if there was any	significant relationship	between the use of language learning
file#15	. Research Objective Two: Is there any	significant relationship	between the use of language learning
file#15	accepted the research hypothesis H1: There is	significant relationship	between the use of language learning
file#15	and in this study the researcher has found a	significant relationship	between the use of language learning
file#43	are gender, age and educational level do have	significant relationship	with choice of language in all domains.
file#43	often (see Table 3). There is a statistically	significant relationship	between language choice and gender as the x[2]
file#43	language. The x[2] value indicates the	significant relationship	between language choice and age group.
file#43	language, declines (see Table 5). There is a	significant relationship	between language choice and education level as
file#43	than in females. The x2 value indicates the	significant relationship	between language choice in family domain and
file#43	. (see Table 7). The x2 value represents the	significant relationship	between language choice in family and age
file#43	. The result shows that there is a statistically	significant relationship	between language choice in family and
file#43	. The result shows that there is a statistically	significant relationship	between language choice in family and
file#43	Table 12). The x[2] values show statistically	significant relationships	between language choice in friend domain and
file#43	ethnic language use. The x[2] value indicates a	significant relationship	between language choice in friend domain and
file#43	than males (see Table 14). To test if there is a	significant relationship	between language choice in work domain and
file#43	x[2] value is calculated and the result shows a	significant relationship	between them. Work domain and educational
file#43	calculated and the result shows that there is no	significant relationship	between them. Temple domain and age group Table
file#43	. The result shows that the x[2] value indicates	significant relationship	between them. School domain and educational
file#43	and informal topics. Nonetheless, there is a	significant relationship	between language choice in school domain and

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10.7 Conclusion

Based on the findings from the interviews and corpus of 110 articles, I have developed materials for a group that is quite advanced in terms of linguistic ability and research experience. Although Swales and Feak's (2012) book offers a range of EAP

writing activities that draw upon research writing in a similar way to the set of learning materials presented here, the focus of my proposed materials has been on the single discipline of Applied Linguistics. The benefits of genre-based analysis and corpus-based approach in my study could effectively inform each task created, providing alternative exercise types and language exemplars. Some worksheets presented in this chapter are easy, but some are not, so teachers' facilitative role and support might be needed to complete them. However, it should be noted that the worksheets created and presented here are not templates. They can be used as guidelines in teaching and writing for scholarly publication, and teachers may wish to adapt the materials presented here for different goals, activities, and EAP classes.

CHAPTER 11

DISCUSSION AND CONCLUSIONS

11.1 Overview

In this final chapter, I will conclude by discussing key findings obtained from the application of two distinct approaches — a move-based genre analysis and a corpus-based approach, with my interpretations linked to previous studies. I will then address some important theoretical and pedagogic implications drawn from the study. Finally, limitations of the study and recommendations for future research areas are discussed.

The current study has the ultimate goal of raising Thai faculty members' and graduate students' awareness of rhetorical organisation and phraseology as to RA writing in Applied Linguistics in order to enhance the possibility of their publishing research work in refereed journals. To accomplish this goal, I first qualitatively examined macro-level structures of 50 Applied Linguistics RAs published in journals indexed in the TCI database (through move-based genre analysis). I then examined micro-structures by generating n-grams from a dataset of 110 RA texts (the original group of 50 plus an additional 60) to create two lists of phraseological patterns: functional and content-based strings, and to connect the possible pragmatic functions of functional strings to the communicative functions of the texts in which they are used. An interventionist strand was developed in an attempt to share the knowledge generated from this descriptive analysis with the aforementioned groups. Two-day workshops, emphasising the schematic structure and phraseological units derived from the analysis, were organised. Eight informants (two Thai graduate students and six faculty members) were interviewed to investigate their attitudes and perceptions regarding the knowledge presented and their awareness of RA writing and publication. The experience of the workshops allowed me to generate further teaching materials for future use, as discussed in Chapter 10. In the section below, the findings of this research project are summarised and discussed in relation to the four research questions stated in the Introduction chapter.

11.2 Summary and Discussion of the Findings

11.2.1 Rhetorical moves and steps in the four sections of 50 RAs in Applied Linguistics

Inspired by Swales' (1990, 2004) theoretical framework, and guidelines on carrying out textual analysis as outlined by Connor et al. (2007), the analysis yielded 17 distinct rhetorical patterns across the four internal sections of the texts (see Chapter 6). Each section has different, but clear communicative purposes. Each move type also contains its own steps (Swales, 1990, 2004) or strategies (Bhatia, 1993). The frequency of occurrence of each move identified allowed me to determine the status of individual moves, be they obligatory, usual, or optional. The moves tended to occur in a particular sequence pattern, that is, Moves 1-3-4 in Introduction sections, Moves 6-7-8-9 in Methods sections, Moves 12-13 in Results sections, and Moves 16-17 in Discussion sections. Certain cyclical patterns or repetition of moves prevailed. This finding confirms Swales' claims, in that a text within a genre follows a typical structural organisation, and move patterns in RAs do not occur unexpectedly, but are in a particular pattern. This effectively highlights the relationship between moves and their communicative functions in each section, which, when working together, fulfils the overall communicative purpose of the RA genre (Biber et al., 2007).

Similarities and differences regarding the number of moves and constituent steps, and variation in the frequencies of occurrence identified in this study, compared to previous studies on move-based genre analysis of RAs, were revealed. With regard to the Introduction section, the findings generally conform to the rhetorical structure of the CARS model. The move pattern of M1-3-4 found in the present study is similar to previous studies (e.g. Chang & Schleppegrell, 2011; Hirano, 2009; Kanoksilapatham, 2007a; Lakic, 2010; Samraj, 2002; Swales, 2004), indicating that this section tends to occur in M 1-2-3 sequence. As mentioned elsewhere, the occurrence of Move 2, *Presenting statement of problems/needs*, is rather specific in the present study, and not found in previous works. The frequency occurrence of Move 2 (32%) suggests that this move is optional; however, I would argue that the use of this move in 16 out of 50 RA Introductions is not trivial. This contributes to one of the theoretical implications of Swales' (1990, 2004) move-based genre-analysis with regard to the classification of move types into three categories based on frequencies: obligatory, usual and optional (see Section 11.3.1 for more discussion).

The number of steps found in Move 4, *Introducing the present work*, in the present study are fewer than that found in previous studies, for example, in Kanoksilapatham (2012a) who investigated civil engineering RAs. As each discipline is deemed to have its own writing preference, as shown by the frequency of occurrence of individual moves and steps in civil engineering, authors present major findings for their respective studies, define the relevant terminology, state corresponding study sites and suggest directions for future research in the Introduction section. In the Applied Linguistics field, in contrast, these features could be found in the Methods section, except for when stating future research, which is often presented when the authors discuss the findings. It might be the case that the research activities in the civil engineering discipline focus on the design and construction determined by the locations and setting of the study site. Summarising results and procedures in the Introduction section of RAs can provide an incentive to readers to maintain their interest and encourage them to continue reading.

The Methods section can be seen as a routine section (Murray, 2012), reporting the methodological processes followed in the study. The occurrence of five distinct moves discovered in the present study is partly in agreement with Lim's (2006), Nwogu's (1997) and Peacock's (2011) studies. It should again be noted that the number of moves and steps found in this section might not be similar to these studies, due to the fact that the texts analysed in these studies were drawn from a range of disciplines (Lim in management, Nwogu in medical science and Peacock in eight academic disciplines). The distinctive results regarding the textual norms again highlight that the disciplinary communities constrain the rhetorical conventions of academic knowledge production (Hyland, 2004a, 2004b, 2005). However, a careful step-by-step description, supported by using references, is a shared common characteristic of this section in RAs across different disciplines.

The moves and steps constituting the Results section identified in this study generally support previous findings on the same section in the discipline of sociology (Brett, 1994), computer science (Posteguillo, 1999), biochemistry (Kanoksilapatham, 2005), medical science (I. A. Williams, 1999) and Applied Linguistics (Lim, 2010; Wannaruk & Amnuai, 2015; Yang & Allison, 2003). Although several discrepancies regarding the number of moves and steps can be found between these studies and the current study, the finding that the RA Results section not only reports results (Move

12), but also comments pertaining to them (Move 13) is supported. The cyclical nature of these moves suggests that they seem to be closely connected in this section, regardless of the different academic disciplines sampled.

Concerning the Discussion section, the section is certainly a place for researchers to expatiate upon the new or interesting findings of their work. The presence of the three distinct moves identified in this current study substantiates Kanoksilapatham's (2012b) study, which demonstrated that, regardless of the steps, the discussion sections across three engineering sub-disciplines comprise three main moves: Move 1: *Review the present study*, Move 2: *Consolidate results*, and Move 3: *State limitations and possible future research*. The three move types identified are also congruent with Basturkmen (2009, 2012), who analysed RA Discussions published in the British Dental Journal. They also corroborate Yang and Allison's (2003) work focusing on the Discussion and Conclusion sections in Applied Linguistics RAs and Swales and Feak's (2004) study analysing Applied Linguistics texts. Although these studies focus on the Discussion section in different disciplines, the texts they analyse appear to share the common generic identity in the section with the recursion of Moves 16 and 17. That is, the authors try to facilitate readers in getting access to background information on the research before discussing the findings of the study being reported, without going back to that already established in the Introduction and/or the Methods sections.

In addition to the structural organisation, this study investigates the salient linguistic features in each move identified. I would argue that, as shown in Chapter 6, each move is linguistically diverse. For instance, the Introduction section basically expresses the purposes of the research being reported, and, thus, the use of the present simple tense is particularly common. Meanwhile, the Methods section, which is known to present a methodological procedure, could be interpreted as objective, as a passive construction is frequently used. The linguistic features found to occur frequently in each section of the text elucidate knowledge of the RA genre and its associated textual features, including lexico-grammatical features, communicative functions and content (Hyland, 2007; Swales & Feak, 2004). Even if the frequency of occurrence of the linguistic features is not reported as I consider that it may vary according to the length of the text, the findings presented throughout the move-based genre analysis indicate that a move is not presented as an abstract unit, but as a

discourse unit that can be characterised, at least, by a set of linguistic features suggesting the communicative purpose of the move. Observing typical linguistic features expressing each communicative function is, thus, illuminating, representing an initial attempt to linguistically characterise the language of particular sections of RAs. Taking this into consideration, I would argue that, to receive complete knowledge of the RA genre, besides identifying move boundaries, scrutinising linguistic exponents to understand the possible function of moves and steps is pivotal.

11.2.2 Recurring word combinations frequently appearing in the corpus

Unlike previous studies investigating four-word bundles (Biber et al., 1999; Conrad & Biber, 2004; Cortes, 2004, 2013; Durrant, 2017; Grabowski, 2015; Hyland, 2005, 2007; Wei & Lei, 2011), the current study specifically explored the quantitative distribution of three-word n-grams in the corpus of the systematically selected 110 RAs, based on a cut-off point of at least eight occurrences in the corpus, as the length of the list of n-grams generated seemed a sensible maximum for qualitative analysis. They were considered psycholinguistically unproblematic and pedagogically interesting (Simpson-Vlach & Ellis, 2010), serving the purposes of the pedagogic phase of the study. With a minimum frequency of eight occurrences in the texts and occurrence in at least five texts, I went through the qualitative analysis procedures--separating out content-based n-grams and functional n-grams. The list of content-based strings contains 163 noun groups (of which 49 strings were considered complex noun phrases), which could be useful as the basis for learning worksheets that might help graduate students improve their article writing skills (see Chapter 10).

The initial list of functional n-grams generated was too long and difficult to be manageable in the pedagogic phase. I thus decided to select the n-grams which were syntactically complete units and had grammatical and/or semantic relations and likely to be useful for pedagogic purposes. To reduce the length of the list and to avoid limited psychological saliency and lack of pedagogical utility, four experienced EAP instructors who understood the purpose of the study and the Thai context were then invited to work towards identification of those appearing to be pedagogically useful in reading and writing RAs. From these systematic procedures, I was able to arrive at a pedagogically useful list of 228 functional phraseological patterns (see Appendix F).

Some of these functional n-grams were used to inform the development of learning worksheets and activities in the pedagogic phase and learning materials for writing for publication (see Chapters 8 and 10).

As these phraseological units are syntactically complete units, their characteristics are, thus, distinctive from those of lexical bundles (Biber et al., 2004; Cortes, 2004, 2007, 2013). A possible reason explaining this finding is that Biber et al.'s and Hyland's classifications were derived from analysing a huge corpus in each case, including a mixture of various disciplines and registers (see Section 2.4.2 in Chapter 2). Because the current study focuses exclusively on three-word phraseological patterns, unlike four-word bundles or more in previous works (e.g. Biber et al., 2004; Conrad & Biber, 2004; Cortes, 2004; Hyland, 2008a, 2008b), it is likely that their functions could be distinctive. Furthermore, looking at a specific corpus from a single discipline in this study, in turn, might be beneficial as it may yield more specific functional characteristics (Durrant, 2017), as discussed in Chapter 7.

11.2.3 The relationship between the rhetorical structures and multiword combinations

The data obtained from a quantitative approach performed by investigating three-word n-grams frequently appearing in the IMRD sections of a corpus of 110 RA texts, revealed that, out of 228 phraseological patterns included in the pedagogically useful list, 92 seemed to be frequently found in particular sections (12 phraseological patterns in the Introduction section, 22 in Methods section, 37 in the Results section, and 21 in the Discussion section). Nonetheless, some of them appeared to have multi-functionality, as appearing across several sections. For instance, '*according to the*' could appear in the Methods, Results and Discussion sections, while '*some of them*' was found in all sections throughout the text (see Chapter 7). This finding seems to be consistent with Gennari et al. (2007) and Erk et al. (2013) in suggesting a complex interplay of language and context.

It is intriguing to explore a possible relationship between the communicative purposes of the rhetorical moves and steps identified and the pragmatic functions of phraseological patterns. I. A. Martinez, Beck, and Panza (2009) and R. Martinez and Schmitt (2012) point out that an academic word list based on semantic and pragmatic

criteria would be more meaningful than that based solely on frequency criteria. A concordance-based qualitative analysis, checking line-by-line some of the phraseological patterns in the functional n-gram list, was, therefore, performed. The analysis demonstrated that they are used in the text with regard to salient pragmatic functions related to the communicative purposes of the move identified in the given section. As presented in Chapter 7, this relationship is established in all of the four internal sections of RAs. This finding is of value in teaching faculty members and Thai graduate students in workshops on publication and applies directly to the development of the pedagogic phase. It also corroborates Swales' (2004) insight into genres which develop as a staged process, and affirms that "genres developed as a staged process, and that the various stages, or moves, carried with them typical associated phraseological patterns" (J. Flowerdew, 2015, p. 111). Showing how a pragmatic function can be operationalised to allow for creating meanings in different situational contexts is in response to Biber et al. (2007), who succinctly note that corpus-based analyses must go beyond simple counts of linguistic features, but it is crucial to include qualitative, functional interpretations of quantitative patterns. I believe that these approaches are challenging, as the process is time-consuming, but can, to some extent, be fruitful, particularly with the specialised, genre-specific corpus used in this study, in facilitating the task of RA writing.

11.2.4 Faculty members' and Thai graduate students' awareness of rhetorical structures and phraseological patterns when writing an RA for publication

I organised two workshops emphasising knowledge of the genre, which embodies rhetorical action, on the one hand, and phraseology focusing on linguistic means of its accomplishment on the other.

The workshop participants shared what they knew about the RA genre and writing before my teaching. Given the role of model texts, exploration and their RA publication experience, it was observed that those who had more experience in article publication could reflect on and understand how rhetorical meanings in the text are structured and achieved as a result of co-articulation of the linguistic resources used. A top-down approach which immerses the participants in a macro view of RA writing

without explaining the components making up the text, was considered appropriate for them. Less experienced writers, on the other hand, were somewhat passive, and, thus, a more bottom-up approach which begins with introducing and explaining concepts to the participants, and then expecting them to complete tasks to practice, was used when conducting their workshops.

Feak and Swales (2010) and Swales and Feak (2012) inspired me to collect findings using a corpus-based approach, which can then be incorporated into teaching materials. In this study, I used the data from a corpus of 110 texts and incorporated them into materials used in the pedagogic intervention. Therefore, real contextualised examples of authentic language in RAs were used to inform these materials. The teaching materials were considered as the corpus-informed materials which were entirely 'top-down' based on a corpus of RA discourses (Tomlinson, 2010). A set of instructional materials used in the teaching phase provided workshop participants with some opportunity, although limited in time, to work on linguistic and rhetorical aspects of scholars' texts. In this way, the participants could begin to become aware of the conventional usage of language in the RA genre.

The information provided by eight interview informants included both expected and unexpected topic areas relating to publishing RAs in English. Generally, as Chapter 9 illustrates, they seemed to be aware of how knowledge of genre and phraseology contributes to the construction of RAs. They spoke of difficulties related to the article writing process and finding appropriate journals for publication. Some of them, particularly more experienced writers, commented that they sometimes felt dissatisfied with reviewers' insensitive comments in some reviews. The informants reported that the Introduction and Discussion sections are the most difficult to write. This finding corroborates Basturkmen's (2009) statement, in the sense that writing an RA is a challenging undertaking because writers need to understand the forms and functions of writing conventions. In addition, most students often do not have prior experience of writing the Discussion section, and thus the section seems difficult to write (L. Flowerdew, 2015; Jalongo & Saracho, 2016). Likewise, in the Introduction section, the writers should be able to express complex and inter-related ideas and arguments to meet the expectation of the discourse community which will read and evaluate the article (Murray, 2012). Concerning the article format, the informants claimed that an understanding of the linguistic and textual elements and

communicative functions of each of the article sections is needed in writing an RA. They would study how to format their article from articles published in a target journal to which they intended to submit their research manuscript. Throughout the interviews, the responses revealed opinions and challenges faced by Thai faculty members and graduate students with regard to RA writing and publications. The interview process itself is valuable in raising these several issues, enabling informants to reflect on Applied Linguistics RA writing and the publication process as understood in the Thai context and perspective.

Interviewing the informants also reflected the fact that language plays a crucial role in knowledge construction, which is manifested in academic RA genres, both for the macro- and micro-patterns of language, including rhetorical patterns and lexico-grammatical features used to position research in the field, at least in RAs in the Applied Linguistics field. Most of them indicated that knowledge from the descriptive phase presented in the workshops offered useful insights into writing RAs, especially for publication in journals indexed in the TCI database. Some of them mentioned the significance of ‘language as a chunk’ regarding the use of ‘block’ and ‘template’ in preparing a manuscript draft, which corroborates the idea of building blocks in discourse (Biber & Barbieri, 2007; Biber et al., 2007; Cortes, 2013; Hyland, 2008a, 2008b). According to Biber et al. (2007), rhetorical moves can be considered the main building blocks of a genre. In a similar way, Cortes (2013) proclaims that “linguistic features have been seen as building blocks to be used in the construction of discourse” (p. 35). Interview informants mentioned that the bringing together of move schemata and phraseology was helpful for them, particularly when drafting and deciding on what needed to be included in an article for publication. It is possible that the knowledge from the workshops may help authors spend less time on text-level grammar (L. Flowerdew, 2016, p. 10). This finding supports Flowerdew’s (2012) notion in that, because using language appropriate to the discipline and genre into which they are being socialised is expected, the article authors should take into account the textual and rhetorical patterns beyond the word level which may aid their attempts at publication. Crucial concerns and difficulties that the informants expressed in the interviews, as well as some of the complex noun phrases included in the list of content-based strings, were used to inform the development of further instructional materials presented in Chapter 10.

Although the advantages of the proposed model of rhetorical structures of Applied Linguistics RAs and the phraseological patterns useful for pedagogic purposes predominated in the interview responses, some of the informants pointed out their perceived limitations of the proposed model and the list of functional n-grams obtained from the descriptive phase. This leads to one of the limitations of the present study, which will be further discussed in Section 11.4.

11.3 Implications of the Study

The results obtained from the study have a number of theoretical, methodological and pedagogical implications.

11.3.1 Theoretical and methodological implications

This study contributes to a growing body of literature on move-based genre analysis and corpus-based analysis focusing on phraseology. Regarding move-based genre analysis, turning now to Swales' (1990, 2004) CARS model, his theoretical framework was originally developed for identifying the academic English discourse of Introductions. It is likely that, since Swales' three-move schema found in RA Introductions in many leading journals is relatively well-known and widely accepted among scholars, as witnessed by a plethora of research activities along these lines, his suggested model has become prototypical and has entered the consciousness of article authors. Furthermore, because of its robustness in the field, the article writers potentially know how to write an RA which is consistent with Swales' CARS model. The model, nonetheless, leaves open the question of whether the RA genre in every academic discipline follows the same organisational pattern. Swales' ground-breaking framework has, then, theoretically eclipsed investigation of the effect of cross disciplinary studies and specific contexts (e.g. Arsyad, 2013; Basturkmen, 2009, 2012; Bruce, 2009; Chang & Schleppegrell, 2011; Kanoksilapatham, 2012a, 2012c, 2015; Lim, 2010; Ozturk, 2007; Peacock, 2011; Yang & Allison, 2003), and has stimulated research into a range of other academic and professional genres (Bhatia, 2002; Hyon, 2008), and different languages (Hirano, 2009). Incontrovertibly, by extending CARS principles to distinctive genres or corpora, the same structural patterns generated by these studies would not be expected to be shown.

Despite the ongoing debate about the usefulness of Swales' genre analysis, the scope and context of the current study is quite different from previous studies as it focuses on a particular group of academics (Thai faculty members and graduate students), their academic circumstances and attention to publishing research work, and specificity of the RA texts indexed in the TCI database. The results of this study could generate a heuristic model of Applied Linguistics RAs in that context, illustrating that there seems to be a general rhetorical pattern of organisation in terms of moves and steps that predominate in each section of the article. Although this study was looking at a relatively specific corpus of Applied Linguistics RAs in the TCI database, the proposed model, encapsulating both rhetorical moves and steps, could provide a better understanding of how RAs are organised and what needs to be included in writing an RA in this discipline, particularly as understood from the Thai perspective and those journals in the TCI database.

The findings obtained from move-based analysis shed light on how to categorise move types based on their communicative purposes. As discussed in Chapter 2, to determine a move status, there is no consensus and percentage of a cut-off point suggested in the literature to allow a move to be categorised as obligatory or optional. I would argue that the typical two-way distinction between obligatory and optional moves is too crude. Among those moves which occur in fewer than 100% of successful texts, (and therefore cannot be obligatory), it still seems necessary to distinguish between those which are frequent, and those which are infrequent and perhaps idiosyncratic. I have therefore proposed a *three* way distinction, between moves which seem obligatory (100% of texts), moves which seem usual (between 60% and 99% of texts), and moves which seem optional (fewer than 60% of texts). This is an important issue for move-based analysis.

This study makes a valuable contribution to the debate about the degree of subjectivity in move identification, which has been subject to criticism in much of this line of research (Ädel, 2014; Kanoksilapatham, 2005, 2013, 2015). A realisation of the rhetorical moves was made possible through the process of inter-coder reliability assessment in building the draft genre framework for this study. This process facilitated the identification of the schematic structure and made the development of the analytical genre framework in the main study more solid, because the percentage of agreement revealed that both the two experts in ELT and Applied Linguistics and

myself reached a satisfactory level of agreement in determining move demarcation. Through the process of training, discussion and negotiation, the coding scheme yielded 15 different move types across the four sections of the IMRD format. The coding scheme was then used as a baseline to attempt to code the texts in the main study. The findings generated from the move-based genre analysis in the main study suggest an amendment of the draft genre framework (from 15 to 17 move types in the main study). This process contributes to an accurate body of knowledge and a description of Applied Linguistics RAs published in English, in journals indexed in the TCI database.

Because what I was doing in this thesis is very specific, the findings regarding rhetorical moves and how language is used in RAs generated by this study cannot be applicable to the term 'applied linguistics research' generally perceived worldwide, as discussed in Section 1.2.3. This study, nonetheless, throws light on specific contexts and articles in the Applied Linguistics field, which are understood from the Thai perspective. The findings obtained from this study are somewhat different from previous studies. At a macro-structural level, there is an uneven distribution of the moves and steps described by the CARS model; for example, the occurrence of Move 2 in the Introduction section is not identified in Swales' framework and previous studies. This reflects that the underlying structure of the Introduction section should not be thought to be universal. Moreover, distinct differences in frequencies of occurrence of each move identified are found. In terms of steps, the smaller structural constituents, there is a distinct difference in structural patterns between those found in this study and those reported in the literature. Furthermore, as three-word clusters appear to be interesting in terms of their grammatical and/or semantic relations, this study looked at three-word multiword combinations. This is different from previous research mostly focusing on four-word bundles. These findings, despite relative uniformity imposed by the RA genre, accentuate the advantages of using the small, but specific, corpus of this study. Rather than being overwhelmed by too much data from a big corpus, the corpus of this study can provide deeper information and perspectives on language at both rhetorical and phraseological levels of the Applied Linguistics RAs in order to be appropriately used as a basis for drafting a manuscript for publication.

The integration of move-based genre analysis and phraseological study is a significant part of the theoretical and methodological contribution of this thesis, as it has great potential to inform this kind of research and practice. The integration of these two different, but complementary, theories, enables us to receive a more thorough understanding of how language is used in a particular context and/or in a particular genre, or how context can influence which words are used. In this study, the textual analysis, including inter-coder reliability analysis performed by two university instructors to code a portion of the texts, strengthened the analysis procedures entailed by move-based genre analysis. In addition, the selection of phraseological patterns to be included in the list of functional n-grams that are pedagogically useful, drew upon the results of a corpus-based approach and instructors' insights.

Using a corpus-based approach and instructors' judgements could be seen as a complementary perspective, wherein quantitative analysis was validated qualitatively. Even a small corpus, including instructors' perceptive insights as another selection criterion, could maximise the potential for the pedagogical usefulness of the list of functional strings. These methodological procedures strengthen the analytical procedures entailed by move-based genre analysis and phraseology in demystifying the organisational and lexico-grammatical patterns used to build Applied Linguistics RA discourse. The methods used here could, thus, ensure that the list generated is pedagogically motivated and merits the pedagogic purposes established in this study. Bringing all of those strands together — quantitative frequency, my qualitative judgements about meaningful phrases, and input from other experts in the field to consider and narrow down those useful phrases, demonstrates a thorough perspective on conducting textual analysis to receive in-depth, insightful and specific information, verify the outcomes and ensure that the results of this study are accurate and reliable.

Regarding the development of further teaching materials created in this thesis, I have demonstrated that research-based findings can be translated into ways of developing and designing teaching materials and activities linked to specific needs, difficulties and contexts. The development of the teaching materials, pedagogical activities and accompanying commentary presented in Chapter 10 are thus distinctive in terms of their specificity from those used in the pedagogic phase which were based on intuition alone. This is in line with Feak and Swales (2010), Harwood (2010), Swales and Feak (2012) and Tomlinson (2010) who claim that materials writing can

be research-led. The materials and activities created in the pedagogic phase and from the expanded corpus of 110 texts would be useful to graduate students who are beginning to write and draft an article for publication, for example, raising awareness of linguistic and rhetorical knowledge and useful phrases that play an important role in helping them shape an article to meet the expectations of a journal and respective discourse community. Using the findings of the research to inform the material development can help bring the language used and the language taught closer together. This would improve teaching provision not only in the field of article writing but also more generally in any course aiming to develop skills for efficient and effective communication.

Overall, this study has been an enthralling discovery about the relationship between size of corpus, phraseology and the advantages of looking at a small corpus. Working with the corpus size of this study, the findings can provide insights into in-depth, accurate and specific information on and actionable knowledge about language and context. In addition, apart from using the frequency-driven method, combining perspectives from instructors with a principled manner of identifying multiword combinations and a qualitative approach, the lists of frequent phraseological patterns generated, both functional n-grams and content-based strings, could become a powerful tool to be used effectively in raising faculty members' and graduate students' awareness of RA writing. It could serve these people's needs to use them to draft a manuscript, or at least to familiarise themselves with the writing of the Applied Linguistics RA genre, and demands of research communities in this field.

11.3.2 Pedagogical implications

As for novice writers and Thai graduate students, knowledge concerning rhetorical organisation of texts, as well as their communicative purposes identified in and phraseological patterns obtained from this study, can effectively improve their understanding of academic reading and writing RAs. The insights into how RAs in Applied Linguistics, particularly those published in the TCI database, are constructed, can allow them to organise their articles in a form which meets the expectations of particular journals, enhancing the chances of being accepted for publication. This knowledge may particularly serve as a useful basis for preparing manuscript drafts for

journal submission. Since article authors are expected to use language which is appropriate to their discipline (L. Flowerdew, 2016), instructors can integrate knowledge from this study with the use of authentic texts to demonstrate how an RA is organised and phraseological patterns are frequently used, as well as the pragmatic functions they perform in different sections of the text. In other words, graduate students should be encouraged to associate these functions and forms within the context of language use. The present study has a contribution to make to awareness-raising of the forms and functions of repeated patterned-expressions or phraseological patterns in academic texts, and how they may enhance students' overall expertise in writing English for publication.

Bearing the benefits of the investigation with pedagogic purposes in mind, the approaches employed in this study — finding a very specific corpus, looking at it using both move-based and phraseological approaches, and then applying a teaching and learning cycle related to that knowledge, can be potentially generalisable to a pedagogic approach. In other contexts, within the advanced reading and writing classroom, instructors can benefit from these approaches in teaching academic reading and writing, particularly writing for publication. Taking into account the comprehensive picture of RAs yielded from this study, the instructors can direct students' attention to the knowledge of what rhetorical moves and phraseological patterns can be expected when reading and what can be included when writing an RA. This supports the notion of Wood (2015), suggesting that the knowledge of formulaic sequences can be used with sensitivity with the power of language input, interaction between teacher-students, students-teacher or students-students, and even form-focused instruction. As most of the interview informants indicated that the Introduction and Discussion are difficult to write, based on the findings from genre-based analysis, the instructors can highlight the extent to which lexico-grammatical features are specific to these particular sections in their instruction, pointing to the fact that a set of linguistic features and phraseological patterns in texts contributes to a particular functional meaning. Therefore, the communicative functions of the text segments and the pragmatic functions of the words associated with the stretch of the texts can definitely help interpret the purposes of the text segment to be understood when reading it. This knowledge can also help faculty members and graduate students to draft their research work, using accurate phraseological units strongly connected to

the primary functions of particular sections. Explicit teaching and making them aware of and sensitive to the linguistic challenge they are likely to encounter when reading and writing RAs, can help prepare them to better cope with a wide range of language variation in the texts. By this approach, the students might gain more confidence when they read RAs and prepare their manuscript draft corresponding to acceptable and comprehensible English publication writing.

At a relatively more advanced level, the comprehensive approach to the selection of the pedagogically useful phraseological patterns included in the lists obtained in the current study may be considered a starting point in setting vocabulary goals for advanced language courses, particularly guiding graduate students in their independent study. Hyland and Tse (2009) suggest that the best way to prepare the students for their studies is not to search for universally appropriate teaching items. I, however, would argue, with reference to a genre-based approach to teaching, that the instructors can take advantage of the approach of selecting phraseological units to create a particular academic wordlist to fit a specific classroom setting, context and pedagogic purpose. They may explain to the students that the selected phraseological patterns included in the list are some of the important linguistic features they may encounter in an academic setting, and in engaging with RAs in particular. Specifically, the selection criteria in relation to the identification of formulaic sequences and the elimination of meaningless combinations of words could be used to help instructors to select texts and to develop learning-related activities to promote students' sensitivity to the importance of lexico-grammatical features and phraseological patterns frequently occurring in the texts.

The relationship between the phraseological patterns and their pragmatic functions as genre-frame is also of great pedagogical value. Practically, the instructors should encourage them to practise using these selected words in their writing of academic texts, in order to meet the expectations of discourse conventions, by, for example, incorporating the list created into their academic courses of EAP reading and writing.

With regard to designing teaching and learning materials, the process of creating the list of functional phraseological patterns applied in this study is worth special attention when developing syllabi, curricula or designing teaching materials

for writing for publication. Material designers can consider a combination of quantitative and qualitative aspects in selecting useful phrases, including the identification of their pragmatic functions in the texts, as a reference in developing textbooks and classroom materials. Specifically, the selection criteria, including quantitative and qualitative points of view, and instructors' judgements, can be valuable in designing a language textbook to teach advanced students and graduate students RA reading and writing. As mentioned by one of the informants and demonstrated by this study, it is suggested that academic language be considered in formulaic sequences, not decontextualised language production. The selected phrases, thus, might represent good candidates for providing an effective basis for teaching and learning materials development. I believe that, if the materials account for phraseological patterns and their pragmatic use, this practice, in turn, can help develop instructors' and students' awareness to recognise and use lexical clusters in an appropriate context.

11.4 Significance of the Study

The current study is significant on both a local level and a wider disciplinary level. Its importance in the Thai context is evidenced by the fact that it received an Educational Award for Excellence 2016 (Humanities and Social Science) from the Anglo-Thai Society. The award is judged by a panel of distinguished academics who take into consideration the contribution the research makes to the Thai nation. The award recognises the exceptional academic achievements of Thai post-graduate scholars carrying out research at British universities, highlighting research which is likely to be significant and make an impact on Thai researchers, graduate students and people in the Thai context.

Within that community, the findings of the study may be new. While they may not be hugely different to findings from previous research about other RA genres, and so may not seem surprising to the international Applied Linguistics community who are familiar with such previous research, they still have considerable impact potential in a context which may be less familiar with worldwide Applied Linguistics. For Thai novice writers and graduate students who have begun to write in this genre, it is imperative that the rhetorical structure of every section of their target genre be made

explicit. Conforming to the proclivities of the target genre by using the conventional syntactic constructions and key linguistic features with specific communicative function and purpose contributes not only to the opportunities for getting an RA published, but also to successful participation in the research community.

On a wider disciplinary level, the study also makes some contributions. Firstly, the discovery that the published texts may contain examples of non-standard language usage, which should have potentially been edited before publication, is important to the debate about English as a Lingua Franca in academic publishing. This finding can be interpreted in two ways. On the one hand, it suggests that gatekeepers are more accepting of ELF-type language- at least, in so far as publishing in the Applied Linguistics field in Thailand is concerned. On the other hand, it could suggest the need to improve the quality of journals, gatekeepers, the review process, or even the TCI database itself if the standard of language usage in the articles written in English is a major concern, in order to make the journals more visible and prestigious at the international level.

Secondly, the research shows how a research-based and corpus-based approach is beneficial to the development of instructional materials. Materials designers who are considering how to develop teaching materials to support graduate students and novice writers in drafting their research manuscripts can use the research findings of this study to inform materials so that the language taught is closer to the language used for research writing purposes. Furthermore, the teaching materials used in the pedagogic intervention and further teaching materials developed from the interview data highlight the originality of the current research.

Lastly, it should be seen as a contribution to the wider endeavour of genre analysis. Every piece of research genre or sub-genre analysis increases our knowledge of genres in the world and how each genre is formulated and constructed differently. Evidence of the value of my work in the wider Applied Linguistics community is that I have been able to publish articles based on it in national and international peer-reviewed journals and conference proceedings (please see declaration at the beginning of the thesis). Genre analysis is a cumulative endeavour and each individual study makes a contribution to the whole.

11.5 Limitations of the Study

Even though careful and thorough attention was given to the methodological design, this thesis is not without its limitations.

One of the limitations is the fact that the proposed rhetorical model, together with the communicative purposes were derived from a corpus of 50 RAs, whereas the pedagogically useful lists of functional and content-based strings were generated from 110 RA texts indexed in the TCI database. The size of the corpus suggests caution when interpreting and applying the findings to other specific contexts. Taken together, this specific corpus was taken from RAs published in the years 2013 to 2015. There might be some changes in research topics, content and focus of studies over time, which might contribute to possible variations in the rhetorical pattern model and frequent phraseological patterns included in the list. I also acknowledge that, with regard to the role of English as a lingua franca in the academic (as noticed from the excerpts of non-standard English usage at the clause level) and research context, speakers of other languages may have a wide variety of strategies for writing RAs different to those of native speakers of English. This non-standard English usage is seemingly acceptable in research publication as long as it does not detract from the preciseness of research understanding. This can contribute to prevalent differences in terms of stylistic issues, linguistic features, discourse organisation and development of writing. Furthermore, some published RAs have multiple authors, resulting from a research team effort. Style of writing used in the articles cannot be, thus, considered specific to any particular individual. The selected RAs analysed in this study have gone through peer-review, and journal gatekeepers and the copy editing process may have changed the writing style of the authors. It should be acknowledged that these variations will remain in the selected RAs, and these variations were not taken into account in the study.

The size of corpus examined and the limited scope of the present study might affect the generalisability of this study. The findings attained from the study should be interpreted cautiously and considered to be merely illustrative, because they are applied only to articles in the TCI database analysed, rather than those in the Applied Linguistics discipline generally. The results yielded might vary due to the fact that each journal analysed may have different standards of publication, even though the

data collection for this study was systematically controlled. Given the specificity, size of corpus, and variation in length of move boundaries identified, unlike Cortes (2013), who worked with a large corpus of RA Introductions taken from various different disciplines, I could investigate the pragmatic functions of co-occurring words which might be exclusively linked to the primary function of each move type or step. Henry and Roseberry (2001) also explain that teaching genre knowledge effectively needs "to be supplemented by a knowledge of the specific language associated with each move" (Henry & Roseberry, 2001, p. 155). I would argue that, despite those caveats, exploring through the specific corpus taken from RAs in the Applied Linguistics field only, this study could provide data about the use of prefabricated phraseological patterns strongly associated with the communicative functions and/or with the specialised context of language use of the given IMRD sections in which they are used. These pragmatic functions could advance methods for classifying general structures and functions, as suggested by Biber et al. (2004) and Hyland (2008a, 2008b), in terms of the communicative purposes of RA internal sections.

Concerning the selection criteria employed in this study, the items selected for inclusion in the pedagogically useful lists of functional n-grams and content-based strings are not intended to represent the entirety of all phraseology frequently used in articles published in English in this field. There may be phraseological patterns, pragmatic functions and complex noun groups that are not revealed in the current study. However, the findings of this study are, at least, considered meaningful enough for those who intend to publish their research work in journals, particularly in the TCI database.

This study might not be complete in itself in terms of the model of genre knowledge suggested by Johns et al. (2006) and Tardy (2009), despite combining quantitative and qualitative approaches in arriving at the proposed model of RA rhetorical patterns and the list of functional phraseological patterns, and investigating faculty members' and graduate students' awareness of RA writing. According to Tardy (2009), the model of genre knowledge incorporates four different dimensions, including formal knowledge (the structural elements of genre), process knowledge (the composing processes for written genre), rhetorical knowledge (the intended purposes of a given genre), and subject-matter knowledge (specialised content knowledge related to the discipline). Drawing from the methods and findings of this

thesis, only formal knowledge and rhetorical knowledge could be covered, leaving the issues of process knowledge and subject-matter knowledge unexplored due to time constraints. Nevertheless, it should be noted that aspects and perceptions of reformatting, dealing with review comments from reviewers, and the publication process, were brought up by the interview informants in the pedagogic phase (see Chapter 9).

I acknowledge that different teachers have different ideas and styles in designing and adapting materials for their learners. They may have different teaching styles and beliefs (Harwood, 2010). The teaching materials created in this study might need to be adapted to fit a particular learning need and pedagogical context. Supplementing by providing extra activities might be necessary. I also acknowledge that, since some of the materials created in this study were not implemented (further teaching materials), they might be questioned in terms of their effectiveness. It would be worth implementing these teaching materials and researching their reception more systematically in further work. A systematic approach to evaluation and further revision would be required.

Regarding the pedagogic intervention, the workshops and interview informants were relatively limited in terms of their numbers and specific socio-geographical context. The findings concerning the participants' awareness of the knowledge of the proposed model and the lists cannot be widely generalised. Since this study aimed to explore faculty members' and graduate students' awareness of genre and RA writing, I acknowledge that their long-term acquisition and learning process should be taken into account. I also realise that it would be interesting to return to my interviewees after the completion of this research project to investigate how they have applied the knowledge learned when preparing their manuscripts, what changes they have made to their article drafts, and how they dealt with reviewers' comments and the submission process and so on. This kind of information would be extremely useful, providing a more contextualised understanding and comprehensive picture of the knowledge highlighted in this study, as well as of interviewees' knowledge of RA genre, the effect of genre pedagogy and the publication process. Nonetheless, given the scope of this study and time constraints, I hope that in-depth and specific information gained from these participants has demonstrated a number of significant issues about writing for scholarly publications, especially in the Thai context.

11.6 Directions for Future Studies

The results of this study have provided a relatively comprehensive picture of the micro- and macro-structure of RAs in the Applied Linguistics field in the selected journals, and a number of implications for writing for publication. The study, notwithstanding, suggests some possibilities worthy of further investigation.

The current study investigated a specialised corpus of RAs in journals in the TCI database (50 texts in conducting move-based genre analysis, and 110 RAs in identifying functional and content-based n-grams). In order to establish a more accurate and more comprehensive exposition of rhetorical structures and phraseological patterns, similar studies using a larger set of texts is ideally recommended, so that the findings of this study can be verified and confirmed. Based on the concept of a corpus-based approach, exploring a large corpus would be of great use, as some generic structures, phraseological patterns and other useful types of functional characteristics might be detected. Since this study has dealt with Applied Linguistics RAs only, the entire rhetorical structure and phraseological units commonly used in a broader range of disciplines could not be explored. A challenging study to be carried out might explore the extent to which the rhetorical organisation and phraseological patterns found in this study share language characteristics in terms of the frequencies and functions, and divergences or convergences used in the texts to construct the RA discourse in other disciplines. It may also help in pointing to the essential attributes of the lists of phraseological patterns and even their pragmatic functions performed in particular sections of an RA in other disciplines.

There is also a need for research focusing on the issue of awareness in terms of how genre and phraseology knowledge are longitudinally developed. As mentioned previously, observing article authors throughout the process of manuscript preparation, submission process, dealing with reviewers' comments, and, eventually, how they revise and improve their manuscript draft for publication, would be extremely beneficial. It might be possible to follow the writing careers of individuals, and see how this changes. This type of study will ultimately address how they acquire and understand expected characteristics of the genre, both the macro- and micro-level structures of the RA genre and awareness of writing for publication, in order to arrive at a more refined description regarding awareness of the RA genre, including

rhetorical appeals and phraseological patterns, the article submission process, and editing and publication process. It would be of great value to include a number of people involved in the article publication process, such as journal editors, reviewers and language editors in the interviews, if possible. Data from and viewpoints of this group of people could lead to a far better understanding of their expectations of the RA publication process.

The effects of the use of the teaching and learning cycle and explicit genre-based instruction on the development of RA writing and/or qualitative changes in the writing process for novice researchers and graduate students also deserve further investigation. Since explicit genre and critical genre awareness teaching may assist students in making appropriate generic choices and produce effective and relevant texts to achieve social purposes in particular contexts of use (Hyland, 2007; Johns, 2008; Swales & Feak, 2012), it would be worthwhile for further studies focusing on advanced English courses using a teaching and learning cycle and genre-based instruction, to investigate the influence of teaching methods used in students' writing productions or article drafts.

The selection process for inclusion of multiword combinations in the lists was executed not only by considering frequency information, but also by requesting assistance from EAP instructors. The integration of these approaches has advanced rudimentary criteria in building an academic list in general. It is, nonetheless, acknowledged that most of the academic lists in the literature consider high-frequency words should be included as students are expected to benefit from them (Salazar, 2011; Simpson-Vlach & Ellis, 2010). As such, more research focusing on a corpus-based approach and a psycholinguistic approach to creating an academic word list that helps to deepen our understanding of the knowledge of formulaic sequences is really needed. Moreover, most of the available academic lists (e.g. Liu, 2012; R. Martinez & Schmitt, 2012; Simpson-Vlach & Ellis, 2010), thus, might not include useful content words for writing an RA. In order to arrive at a more refined list of phraseological patterns for pedagogical purposes, further research could be conducted by applying other useful methods, such as using corpus statistics, prioritisation informed by experienced instructors, and additional syntactic and semantic criteria, for the word selection.

11.7 Conclusion

This study attempted to uncover macro- and micro-structural levels of the selected RAs in the Applied Linguistics field in order to assist faculty members and Thai graduate students to publish their work in refereed journals. The study has demonstrated how a combination of genre-based analysis and corpus-based analysis greatly contributes to the description of how these RAs are constructed and what phraseological patterns are frequently used in each of the sections of the text. The study sheds light on the importance of understanding communicative functions of the moves identified and the lexico-grammatical features which commonly occur in the text in discoursal processing and production. Knowledge of phraseology offers the possibility of creating lists of phraseological patterns, both functional n-grams and content-based strings, including the investigation of their pragmatic functions closely associated with the text in which they are used. Responses from the interviews also facilitate a better understanding of some challenges faced by those people in terms of RA writing and concerns regarding the publication process. Based on the difficulties and concerns of the informants expressed in the interviews, research-informed teaching materials can be successfully developed and proposed. The implications and recommendations drawn from this study may benefit material designers and genre theorists in general, and Thai novice researchers and graduate students in particular, in several ways. It is hoped that the detailed exposition, implications and practical applications of this study will facilitate the reception and the production of academic papers. The relevant organisational patterns, sets of linguistic features and phraseological knowledge provided by the present study may facilitate novice writers, and Thai graduate students in particular, in preparing research manuscript drafts that meet the requirements, demands and expectations of target journals, particularly those in the TCI database.

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APPENDIX A

Corpus of Research Articles Included in the Study

JES Journal of English Studies
JLA Journal of Liberal Arts, Prince of Songkla University
SPPJ Sripatum Review of Humanities and Social Sciences
NET The New English Teacher
LEA Language Education and Acquisition Research Network (LEARN) Journal
VEJ Veridian E-Journal
SJSH Silpakorn University Journal of Social Sciences, Humanities, and Arts
SCOJ Scholar
MNY MANUSYA: Journal of Humanities

JES 1 Wuttipornpong, T. (2013). Prejudicial assessment? The inherent flaws of reading comprehension test for EFL students. *Journal of English Studies*, *8*, 32-74.

JES 2 Kanoksilapatham, B. (2013). Thai university students' voices heard: Aspired pronunciation model. *Journal of English Studies*, *8*, 124-153.

JES 3 Na Ranong, S. (2014). Idiom comprehension and processing: The case of Thai EFL learners. *Journal of English Studies*, *9*, 51-97.

JES 4 Sojisirikul, P., & Vasuvau, S. (2014). Analysis of sentence structures through translation for a reading task. *Journal of English Studies*, *9*, 98-122.

JLA 1 Dorkchandra, D. (2013). The effects of question generating strategy instruction on EFL freshmen's reading comprehension and use of English tenses. *Journal of Liberal Arts, Prince of Songkla University*, *5*(2), 33-45.

JLA 2 Lanongphol, J., & Chatupote, M. (2013). Developing ability to translate homonyms and homographs via training in part of speech identification and dictionary use. *Journal of Liberal Arts, Prince of Songkla University*, *5*(2), 1-17.

JLA 3 Thongwichit, N., & Buripakdi, A. (2014). Perceptions of college students on L1 use with different levels of English proficiency on L1 use in English classrooms. *Journal of Liberal Arts, Prince of Songkla University*, *6*(2), 96-109.

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NET 8 Parreño, A. (2013). The effectiveness of the three common types of written corrective feedback in improving grammatical accuracy. *The New English Teacher, 7*(1), 102-121.

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LEA 8 Yumanee, C., & Phoocharoensil, S. (2013). Analysis of collocational errors of Thai EFL students. *Language Education and Acquisition Research Network (LEARN) Journal, 6*(1), 90-100.

LEA 9 Thiamtawan, S., & Pongpairoj, N. (2013). Avoidance of the use of English participial reduced relative clauses among L1 Thai learners. *Language Education and Acquisition Research Network (LEARN) Journal, 6*(2), 12-27.

LEA 10 Phat, C.H. (2013). The implementation of literature in teaching speaking for advanced students. *Language Education and Acquisition Research Network (LEARN) Journal, 6*(2), 43-61.

LEA 11 Teng, F. (2014). Incidental vocabulary learning by assessing frequency of word occurrence in a graded reader: Love or Money. *Language Education and Acquisition Research Network (LEARN) Journal, 7*(2), 36-50.

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VEJ 2 Nomnian, S. (2013). Thai cultural aspects in English language textbooks in a Thai secondary school. *Veridian E-Journal, 6*, 13-30.

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SCOJ 3 Vu, T. (2013).A study of secondary school students' and teachers' perceptions of and satisfaction with service learning activities at Ruamrudee International School in Thailand. *Scholar, 5*(1), 47-52.

SCOJ 4 Teeranusoun, T. (2013). Students' evaluation on factors affecting effective teaching in science field of Assumption University. *Scholar, 5*(2), 61-69.

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APPENDIX B

PARTICIPANT INFORMATION SHEET

Title of Research Project: **A Corpus-based Investigation of Macro and Micro Structures in Applied Linguistics Research Articles in the TCI database: Descriptive and Pedagogic Dimensions**

Researcher: Attapol Khamkhien, PhD candidate, Centre for Applied Linguistics, University of Warwick

Email: A.khamkhien@warwick.ac.uk

Participant selection and purpose of study:

You are invited to participate in a study of macro and micro structures in research articles in the discipline of applied linguistics, and its pedagogic implications. The main purpose of this study is to identify how research articles and manuscript drafts in applied linguistics are constructed and how linguistic features are used in writing these articles, and to apply the research findings to English language teaching with a view to enhancing the likelihood of publication for graduate students.

What your participation will involve:

If you are willing to participate, you will be asked to

1. provide the researcher with copies (or allow me to make copies) of your research manuscript(s) which you intend to submit to a journal for publication. These manuscripts are, therefore, at the time of study, in the peer-review process.

OR

2. allow the researcher to access your manuscript(s) submitted to the journal indexed in TCI database.

Confidentiality and disclosure of information:

All data obtained as above will be confidential to the researcher and they will be used solely for research purposes. In any research report, publication or information will be provided in such a way that no participant can be identified by name, affiliation, article submission ID or any form of information that can be tracked to the participant.

Feedback to participants:
At the completion of the study, all participants will be most welcome to consult the research findings.

Your consent:

Your decision on whether or not to participate will not affect your chances of being published in the journals to which you submitted your manuscript drafts. *If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without prejudice*. If you have any additional inquiries concerning the research project, the researcher, Mr Attapol Khamkhien, will be happy to discuss these with you. He can be reached at: A.khamkhien@warwick.ac.uk.

APPENDIX C

PARTICIPANT CONSENT FORM

Title of Research Project: **A Corpus-based Investigation of Macro and Micro Structures in Applied Linguistics Research Articles in the TCI database: Descriptive and Pedagogic Dimensions**

Researcher: Attapol Khamkhien, PhD candidate, Centre for Applied Linguistics, University of Warwick

Email: A.khamkhien@warwick.ac.uk

I confirm that I have read and understood the participant information sheet dated March 24, 2014 for the above project, which I may keep for my records, and on which I have had the opportunity to ask any questions.

I agree to take part in the study and am willing to:

1. provide the researcher with copies (or allow me to make copies) of a research manuscript or manuscripts which I intend to submit to a journal for publication. These manuscripts are, therefore, at the time of study, in the peer-review process.
   OR
2. allow the researcher to access my manuscript(s) submitted to the journal indexed in TCI database.

I understand that my information will be held and processed for research purposes. I understand that I will not be personally identifiable from any research report.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without being penalized or disadvantaged in any way.

…… ……..

Name of Research Participant (please PRINT) Signature of research participant

…… ……..

Date March 24, 2014 Signature of researcher, Mr Attapol Khamkhien

APPENDIX D

Rhetorical Moves and Constituent Steps Identified in the Study

The table below summarises 17 rhetorical moves and constituent steps, including their communicative functions and salient linguistic features found in 50 Applied Linguistics RAs analysed in the present study.

Introduction section

Rhetorical moves and steps	Communicative functions and/or purposes	Linguistic features initially observed in move analysis
Move 1: Establishing the topic being studied		
Move 1, Step 1: Announcing the importance of the field	To accentuate the current knowledge, highlighting its importance in relation to the research topic	Emphatic lexical items (*important*) Evaluative adjectives and predicative adjectives The present verb tense in active or passive construction The present perfect
Move 1, Step 2: Making topic generalisation	To state the knowledge and development generally known in the field or practice as it currently exists	Present tense verbs, in active or passive construction
Move 1, Step 3: Reviewing previous research	To review any related studies and/or to criticise previous claims of knowledge	Citations or reference (*Ref*) The present perfect tense (*has been conducted*) The past tense The past simple tense
Move 2: Presenting statement of problems/needs	To acknowledge any problematic issues, leading to the necessity and/or need to conduct the present study	The present tense verbs Words containing negative meaning (*difficulties*) Contradiction connectors Citations or reference *(Ref)*
Move 3: Establishing a niche		
Move 3, Step 1: Indicating research gaps	To express critical comments addressing a current gap in the existing research known for being limited	Negative quantifiers and evaluation such as indefinite adjectives or pronouns Negation devices (*no, few, little*) Evaluative adjectives (*under-explored*) Adversative connectors (*yet*)
Move 3, Step 2: Presenting positive justification	To justify the need for the existence of the study, specifying the expected benefits to be obtained from the study being reported	Present tense verbs Lexical items with the meaning of demand for conducting research Lexical items with positive reasons in conducting the study being reported
Move 4: Introducing the present study		
Move 4, Step 1: Stating objectives	To explicitly ground the purpose(s) of the research being reported on	Deictic references, including demonstrative adjective (*this*), and specific determiners (*the*) followed mainly by the common nouns (*study, research, paper*)
Move 4, Step 2: Listing research procedures	To briefly describe the methodological procedures and/or experimental framework adopted by the studies	Expressions related to research procedures and research tools Activity verbs describing research activities

Rhetorical moves and steps	Communicative functions and/or purposes	Linguistic features initially observed in move analysis
Move 4, Step 3: Claiming research value	To inform the readers of the value of the research being presented	The simple future tense (*will provide*) Cognitive nouns (*awareness*) Likelihood nouns (*empirical evidence, helpful guidance*) Predicative and possibility modals (*will, may*) Deictic elements, including specific determiners or demonstrative adjectives (*this*) followed by common nouns (*study*)
Move 4, Step 4: Indicating research questions	To explicitly state the purpose(s) of the study in the form of research questions	List of the research questions

Methods section

Rhetorical moves and steps	Communicative functions and/or purposes	Linguistic features initially observed in move analysis
Move 5: Summarising research objectives and methods		
Move 5, Step 1: Announcing research objectives/ questions	To address the objectives of the research, or the question(s) to be answered in the study	The use of *to* or *in order to*, followed by infinitive verb form (investigate)
Move 5, Step 2: Presenting research design	To provide a general review of the research design and/or the approaches to collecting the research data	The type or nature of research (*qualitative, quantitative research*), and research methods or data collection techniques The use of past tense verbs, be it active or passive construction
Move 6: Describing participants/ sources of data		
Move 6, Step 1: Providing the description of the participants/ data	To report the number of participants who took part in the research study	Description of the participants specific name of geographical locations
Move 6, Step 2: Justifying selection criteria	To provide the rationale and/or criteria used in the selection of participants/data in the study	The use of past simple tense Adjectives *convenient* and *useful* Ordinal numbers (e.g. *firstly, secondly, also*)
Move 6, Step 3: Defining variables	To provide information about the research variables	The past tense verbs (*were*) Research variables
Move 7: Stating research instruments		
Move 7, Step 1: Detailing research instruments	To describe how the research instruments were obtained, adapted, or created, pertaining to the particular objective(s) of the study	Lexical items related to research techniques for collecting data in the study or approaches to data analysis The past tense verbs in passive construction
Move 7, Step 2: Presenting the development/ justification of research instruments	To describe the process of implementing the research instrument and/ or to provide a justification for their choice of research instruments	Lexical signals such as *was piloted, to ensure, was revised, were rewritten, were elaborated, was eradicated, clarity enhanced* Infinitive verbs (*to ensure, to establish*)

Rhetorical moves and steps	Communicative functions and/or purposes	Linguistic features initially observed in move analysis
Move 8: Demonstrating research / data collection procedures	To selectively present the data collection procedures in detail	Past tense verbs, especially in passive voice (*was carried out, were asked, were required, were given, were informed, was accessed*) Subordinate conjunction
Move 9: Describing data analyses	To illustrate how the data obtained from the data collection process was analysed	Expression related to the approaches to analysing the data collected for the study e.g. statistical devices Past tense verbs in passive voice (*were analyzed, was used, was employed, was used*)

Results section

Rhetorical moves and steps	Communicative functions and/or purposes	Linguistic features initially observed in move analysis
Move 10: Indicating the section structure	To explain the structure of the Results section	Present tense verbs in either active or passive voice The expression *the finding*
Move 11: Restating research questions and/or methodology	To remind the readers of what is mentioned in the Methods section, probably restating the purpose(s), research question(s) and procedures used for the study before presenting the results	A combination between objectives of the study (*to investigate*) Research questions, a brief description of methodology used
Move 12: Reporting results	To report, present or highlight the major results obtained in a format accessible to the readers in an orderly and logical sequence, using both text and illustrative materials where necessary	Pointers (*table, figure*) Reporting verbs (*show, present, reveal*) Past tense verbs (*revealed, said*) Present tense verbs, be they active voice or passive voice construction
Move 13: Discussing/Commenting on results		
Move 13, Step 1: Interpreting/ Evaluating results	To interpret the results and/or to provide a personal judgment of the findings of the study being reported on, using attitudinal statements	Adjectives *likely* Modals of possibilities such as *can, may* lexical signals (e.g. *indicate, seem, suggest*) Extraposed 'it' with *that* complement clause controlled by predicative adjectives (*it is obvious that*), as well as *to* complement clause controlled by adjectives (e.g. *it seemed to, it can be challenging to*)
Move 13, Step 2: Comparing results with previous studies	To discuss how the findings obtained can contribute to the field by comparing the results of the study with previous research studies	Citations or references *(Ref)* Lexical items (e.g. *corroborate, in contrast with, agree with, confirm, support, similar to*)
Move 13, Step 3: Accounting for results	To explain or offer the readers a possible justification for any differences or unexpected findings and discoveries	Likelihood adjectives (e.g. *likely, possible, probably*) Expressions describing probabilities (*may be due to, could be explained*) Citations or references *(Ref)*

Rhetorical moves and steps	Communicative functions and/or purposes	Linguistic features initially observed in move analysis
Move 14: Summarising results	To provide a summary of the major results of the study to remind the readers of what has been reported in the Results section	Summarising expressions (*in conclusion, in summary*)

Discussion section

Rhetorical moves and steps	Communicative functions and/or purposes	Linguistic features initially observed in move analysis
Move 15: Reviewing the present study	To give the readers an overview of the background information related to the present study, including the purpose(s), and the major methodological features of the study	Research questions and/or research purposes The past tense verbs (*was*) Cognitive nouns (*purpose, objective*) Common nouns (*research, study*) Deictic references to the present texts, either specific determiners (*the*) or demonstrative adjectives (*this*)
Move 16: Analysing and extending from results		
Move 16, Step 1: Reporting selected findings	To report on the major findings in order for them to be subsequently discussed in the Discussion section	Numerical values derived from statistical analysis Reporting verbs (*point out, indicate, show*) Pointers (*Table 4*)
Move 16, Step 2: Comparing results	To highlight the results being presented by comparing the results to those of previous studies	Citations or references (*Ref*) Verb 'be' and adjectives of comparison (e.g. *was similar to, was consistent with, is in line with, is more consistent with*) The simple present tense (*is, support*) Past simple tense (*was, did not coincide with*)
Move 16, Step 3: Explaining results	To inform potential readers of the possible reasons for claiming the results discussed in the Discussion section	The present simple tense, be it active (*is likely that, is possible that*) or passive construction (*may be assumed, can be explained*) Modals of possibility and ability *can* and *may*
Move 16, Step 4: Presenting arguments/positions	To present some of the arguments against the results found in the study being presented or to express their position	Expressions such as *should be, this could be interpreted that* Communication verbs e.g. *suggest, argue* in the present tense
Move 17: Evaluating the study		
Move 17, Step 1: Stating value of the study	To highlight the significance of the study, possibly mentioning how important it is to the research application or the wider implications of the findings of the study	The present or past simple tense (*is illuminating, illustrated, hopes*) Words or evaluative adjectives showing the significance of the study, such as *beneficial, useful, significance, new lights on* Deictic elements (*this, the*), followed by common nouns (*finding, study*)

Rhetorical moves and steps	Communicative functions and/or purposes	Linguistic features initially observed in move analysis
Move 17 Step 2: Offering implications	To explicitly state the implications generated by the study being reported on	Modals of obligation/suggestion and possibility (*should, may*) Citations or references (*Ref*)
Move 17, Step 3: Indicating limitations	To specifically introduce some possible limitations of the study	Words and expressions (e.g. *remain to be substantiated, rather restricted, is limited*) Modals of possibility (*can*)
Move 17, Step 4: Suggesting further research	To indicate possible avenues, directions and aspects for future research	Expressions (e.g. *further research, further studies, future studies* and *another interesting research theme*) Modals of obligation/suggestion *should*

APPENDIX E

List of Content-based N-grams

Below is a list of content-based n-grams generated from the corpus of 110 RA texts. Those marked in boldface are considered complex noun phrases which are likely to be useful for pedagogic purposes.

No.	Content-based n-grams	Freq .of occurrence
1	**vocabulary learning strategy/strategies**	128
2	**foreign language anxiety**	92
3	**English language learning**	89
4	**child/children with autism**	83
5	past tense forms	78
6	a foreign language	74
7	depth of vocabulary	69
8	the target language	66
9	simple past tense	65
10	teaching and learning	61
11	the English language	54
12	**Jane Austen's novels**	50
13	**typically developing children**	49
14	speakers of English	46
15	the writing process	46
16	**reading for pleasure**	44
17	**foreign language classroom(s)**	43
18	a significant difference	42
19	**English language teaching**	38
20	groups of speakers	37
21	positive attitudes towards	34
22	pleasure in English	33
23	**consonant segmental phonemes**	32
24	**listening ability group**	32
25	the low proficiency	32
26	negotiation for meaning	30
27	the three groups	30
28	use of strategies	30
29	**written corrective feedback**	28
30	learners of English	27
31	features of English	26
32	**low vocabulary subjects**	26
33	motivation for English	26

No.	Content-based n-grams	Freq .of occurrence
34	the experimental group	25
35	the high proficiency	25
36	the control group	24
37	breadth of vocabulary	23
38	**low proficiency group**	23
39	**language classroom anxiety**	22
40	males and females	21
41	the corpus-based method	21
42	**high vocabulary subjects**	20
43	**newly learned words**	20
44	**academic listening comprehension**	19
45	**high listening ability**	19
46	**significant linguistic features**	19
47	the CLT classroom	19
48	period of time	18
49	the native speakers	18
50	the new words	18
51	**multiple choice options**	17
52	Thai EFL learners	17
53	the correct answers	17
54	the Thai corpus	17
55	their reading comprehension	17
56	fear of negative	16
57	**general English proficiency**	16
58	older age groups	16
59	the students' writing	16
60	**high proficiency group**	15
61	**low listening ability**	15
62	**paper-pencil peer feedback**	15
63	**positive politeness strategies**	15
64	Thai Melayu Culture	15
65	the mean score	15
66	the older age	15
67	**coded corrective feedback**	14
68	**language learning strategies**	14
69	**negative politeness strategies**	14
70	patterns of language	14
71	the literal meaning	14
72	the multiple choice	14
73	types of feedback	14
74	**frequently used strategies**	13

No.	Content-based n-grams	Freq .of occurrence
75	**perceived communication mobility**	13
76	the main idea	13
77	A grammatical error	12
78	an online game	12
79	Target English collocation	12
80	Thai and English	12
81	the process writing	12
82	an important role	11
83	**no significant difference**	11
84	pre-test and post-test	11
85	**students' writing ability**	11
86	teachers and learners	11
87	teachers of English	11
88	**teaching cultural content**	11
89	the academic year	11
90	The first part	11
91	the first semester	11
92	the Thai version	11
93	the vocabulary size	11
94	their language learning	11
95	tourism and hospitality	11
96	**vocabulary size test**	11
97	writing with peer	11
98	a literature class	10
99	a moderate level	10
100	confidence in teaching	10
101	**English major students**	10
102	**information gap tasks**	10
103	meaning of words	10
104	number of students	10
105	number of words	10
106	**overall mean score**	10
107	**process writing approach**	10
108	reading and writing	10
109	students' attitudes towards	10
110	the research questions	10
111	The second part	10
112	the training program	10
113	**vocabulary learning problems**	10
114	words and non-words	10
115	attitudes towards reading	9

No.	Content-based n-grams	Freq .of occurrence
116	**e-mail writing abilities**	9
117	**English language use**	9
118	Evaluation of Teaching	9
119	following research questions	9
120	**foreign language learning**	9
121	**L2 metaphorical competence**	9
122	level of anxiety	9
123	Literal Thai Notes	9
124	meaning and usage	9
125	Notes on meaning	9
126	piece of writing	9
127	present simple tense	9
128	relationship between teacher	9
129	**serial verb construction**	9
130	the Aspect Hypothesis	9
131	the English version	9
132	the foreign language	9
133	the high achievers	9
134	the learning process	9
135	the output page	9
136	the sample size	9
137	the second language	9
138	the second semester	9
139	the Thai context	9
140	their English language	9
141	university in Thailand	9
142	**younger age groups**	9
143	a significant effect	8
144	a significant relationship	8
145	a systematic planner	8
146	attitudes towards learning	8
147	**each interviewee's opinion**	8
148	**English language textbooks**	8
149	**five-point Likert scale**	8
150	other two groups	8
151	parts of speech	8
152	perceptions of teaching	8
153	Reading Engagement Index	8
154	the above table	8
155	the age groups	8
156	The average score	8

No.	Content-based n-grams	Freq .of occurrence
157	the concordance lines	8
158	the content validity	8
159	the EFL course	8
160	the high vocabulary	8
161	the international corpus	8
162	their oral proficiency	8
163	thoughts and feelings	8

APPENDIX F

Pedagogically Useful List of Functional Multiword Combinations

This appendix presents the pedagogically useful list of 228 functional multiword combinations identified in the corpus-based analysis in this study. Please note that case sensitive (upper and lower cases) still remains. An asterisk (*) is used to replace those which have syntactical functions (e.g. the, this, that) tenses, and singular and plural. Pragmatic functions are derived from the interpretation of the occurrence of the phraseological units in context. The function categories include:

Research-oriented functions help writers structure their research activities and experiences. These include: those referring to research **location or place, procedure, quantification, description** and topic of the research, and **intangible framing attributes** which indicate an abstract property of something**.**

Text-oriented functions are used to show relationships. This group include the **transition, resultative, structuring** and **framing signals** of the text.

Stance-oriented and **engagement functions** convey epistemic and affective judgements, evaluations and degrees of commitment to the researcher's claims.

Other functions refer those that vary widely according to their use in particular context, interpretation, socio-cultural factors, social conventions, etc.

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
1	in this study*	20	394	Introduction
	in this study	103		Methods
	in this study	57		Results
	in this study	75		Discussion
	In this study	8		Introduction
	In this study	28		Methods
	In this study	20		Results
	In this study	23		Discussion
	in the study	23		Methods
	in the study	12		Results
	in the study	25		Discussion

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
2	the use of*	80	382	Introduction
	the use of	62		Methods
	the use of	146		Results
	The use of	12		Results
	the use of	74		Discussion
	The use of	8		Discussion
3	of this study*	38	313	Introduction
	of this study	35		Methods
	of this study	14		Results
	of this study	72		Discussion
	of the study	17		Introduction
	of the Study	17		Introduction
	of the study	49		Methods
	of the study	19		Results
	of the study	52		Discussion
4	in order to*	56	302	Introduction
	In order to	17		Introduction
	in order to	59		Methods
	In order to	20		Methods
	in order to	56		Results
	In order to	20		Results
	in order to	60		Discussion
	In order to	14		Discussion
5	in terms of*	35	279	Introduction
	In terms of	10		Introduction
	in terms of	34		Methods
	in terms of	85		Results
	In terms of	35		Results
	in terms of	59		Discussion
	In terms of	21		Discussion
6	as well as	47	220	Introduction
	as well as	53		Methods
	as well as	58		Results
	as well as	62		Discussion
7	the present study*	22	198	Introduction
	The present study	8		Introduction
	the present study	37		Methods
	The present study	8		Methods
	the present study	29		Results
	the present study	75		Discussion

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
	The present study	19		Discussion
8	based on the*	17	197 197	Introduction
	based on the	58		Methods
	based on the	38		Results
	Based on the	28		Results
	Based on the	19		Discussion
	based on the	17		Discussion
	based on their	12		Methods
	based on their	8		Results
9	the results of*	12	152	Introduction
	The results of	8		Introduction
	the results of	8		Methods
	the results of	37		Results
	The results of	18		Results
	the results of	46		Discussion
	The results of	23		Discussion
10	One of the*	12	146	Introduction
	One of the	12		Results
	one of the	51		Introduction
	one of the	14		Methods
	one of the	35		Results
	one of the	22		Discussion
11	according to the*	20	144	Methods
	according to the	40		Results
	According to the	37		Results
	According to the	19		Discussion
	according to the	14		Discussion
	according to their	14		Methods
12	be able to*	19	131	Introduction
	be able to	18		Results
	be able to	39		Discussion
	was able to	13		Discussion
	were able to	16		Results
	were able to	26		Discussion
13	result of the*	9	123	Results
	result of this	8		Discussion
	results of the	14		Methods
	results of the	49		Results
	results of the	43		Discussion
14	there is a*	14	122	Introduction

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
	there is a	30		Results
	there is a	19		Discussion
	there was a	38		Results
	There was a	9		Results
	there was a	12		Discussion
15	the meaning of*	19	118	Methods
	the meaning of	67		Results
	the meaning of	15		Discussion
	the meanings of	9		Results
	the meanings of	8		Discussion
16	was used to*	67	114	Methods
	was used to	8		Results
	were used to	29		Methods
	were used to	10		Results
17	the frequency of*	8	104	Introduction
	the frequency of	8		Methods
	the frequency of	58		Results
	The frequency of	8		Results
	the frequency of	22		Discussion
18	In other words	15	104	Introduction
	In other words	13		Methods
	In other words	41		Results
	In other words	35		Discussion
19	the number of*	24	101	Methods
	the number of	57		Results
	The number of	9		Results
	the number of	11		Discussion
20	this study is*	12	101	Introduction
	this study is	16		Discussion
	this study was	24		Methods
	This study was	10		Methods
	this study was	17		Discussion
	this study were	22		Methods
21	most of the*	15	100	Introduction
	most of the	46		Results
	Most of the	15		Results
	most of the	16		Discussion
	most of their	8		Results
22	part of the	12	96	Introduction
	part of the	30		Methods

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
	part of the	34		Results
	part of the	20		Discussion
23	the relationship between	19	94	Introduction
	the relationship between	15		Methods
	the relationship between	41		Results
	the relationship between	19		Discussion
24	did not have	11	92	Results
	did not know	16		Results
	did not know	11		Discussion
	did not use	8		Results
	do not have	10		Results
	do n't know	16		Results
	do n't like	12		Results
	do n't want	8		Results
25	it was found*	43	90	Results
	It was found	16		Results
	it was found	20		Discussion
	It was found	11		Discussion
26	it can be*	8	89	Introduction
	it can be	41		Results
	It can be	9		Results
	it can be	17		Discussion
	It can be	14		Discussion
27	was found that	55	86	Results
	was found that	31		Discussion
28	the other hand	19	85	Introduction
	the other hand	43		Results
	the other hand	23		Discussion
29	that there is*	15	85	Results
	that there is	13		Discussion
	that there was	31		Results
	that there was	12		Discussion
	that there were	14		Results
30	shown in Table	18	84	Methods
	shown in Table	66		Results
31	show that the*	16	82	Results
	showed that the	22		Results
	showed that the	20		Discussion
	shows that the	24		Results
32	to be a*	13	79	Introduction

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
	to be a	12		Results
	to be an	10		Introduction
	to be the	9		Methods
	to be the	23		Results
	to be the	12		Discussion
33	the participants were*	33	77	Methods
	The participants were	19		Methods
	the participants were	15		Results
	the participants were	10		Discussion
34	On the other*	13	74	Introduction
	On the other	35		Results
	on the other	9		Results
	On the other	17		Discussion
35	the findings of*	13	72	Results
	the findings of	33		Discussion
	The findings of	26		Discussion
36	as shown in*	10	70	Methods
	as shown in	30		Results
	As shown in	30		Results
37	the importance of	30	69	Introduction
	the importance of	10		Results
	the importance of	29		Discussion
38	a number of*	19	68	Introduction
	A number of	8		Introduction
	a number of	8		Methods
	a number of	13		Results
	a number of	20		Discussion
39	the fact that	16	68	Introduction
	the fact that	36		Results
	the fact that	16		Discussion
40	meaning of the	8	68	Methods
	meaning of the	48		Results
	meaning of the	12		Discussion
41	related to a*	10	68	Results
	related to the	13		Introduction
	related to the	12		Methods
	related to the	20		Results
	related to the	13		Discussion
42	can be seen	10	67	Discussion
	can be seen	57		Results

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
43	in the present	19	67	Methods
	in the present	18		Results
	in the present	30		Discussion
44	difference in the*	13	65	Results
	differences in the	13		Introduction
	differences in the	8		Methods
	differences in the	22		Results
	Differences in the	9		Results
45	found in the	9	65	Methods
	found in the	32		Results
	found in the	24		Discussion
46	seem to be*	8	63	Results
	seemed to be	14		Results
	seemed to be	8		Discussion
	seems to be	12		Introduction
	seems to be	11		Results
	seems to be	10		Discussion
47	the following table	10	59	Results
48	found that the*	12	59	Introduction
	found that the	23		Results
	found that the	16		Discussion
	found that there	8		Discussion
49	findings of the*	9	58	Results
	findings of the	22		Discussion
	findings of this	27		Discussion
50	due to the*	29	56	Results
	due to the	18		Discussion
	due to their	9		Discussion
51	in which the	13	56	Introduction
	in which the	11		Methods
	in which the	20		Results
	in which the	12		Discussion
52	indicate that the*	8	55	Results
	indicated that the	22		Results
	indicated that the	12		Discussion
	indicates that the	13		Results
53	the process of	15	52	Introduction
	the process of	9		Methods
	the process of	17		Results
	the process of	11		Discussion

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
54	to investigate the	20	52	Introduction
	to investigate the	15		Methods
	to investigate the	8		Results
	to investigate the	9		Discussion
55	there is no*	17	50	Results
	there was no	15		Results
	There was no	9		Results
	there was no	9		Discussion
56	in the following	9	49	Methods
	in the following	40		Results
57	aware of the	17	48	Results
	aware of the	31		Discussion
58	the development of	18	48	Introduction
	the development of	8		Methods
	the development of	8		Results
	the development of	14		Discussion
59	found to be	8	48	Introduction
	found to be	22		Results
	found to be	18		Discussion
60	the end of	28	47	Methods
	the end of	19		Results
61	the analysis of*	10	47	Methods
	the analysis of	17		Results
	The analysis of	9		Results
	the analysis of	11		Discussion
62	the effects of	24	47	Introduction
	the effects of	8		Results
	the effects of	15		Discussion
63	revealed that the	23	46	Results
	revealed that the	10		Discussion
	revealed that they	13		Results
64	the characteristics of	15	44	Introduction
	the characteristics of	20		Results
	the characteristics of	9		Discussion
65	the current study	8	43	Introduction
	the current study	19		Methods
	the current study	16		Discussion
66	to answer the*	10	43	Introduction
	To answer the	13		Methods
	to answer the	10		Methods

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
	to answer the	10		Results
67	The questionnaire was*	25	42	Methods
	the questionnaire was	17		Methods
68	the scores of	16	41	Results
69	because of the*	8	40	Introduction
	because of the	13		Results
	because of the	10		Discussion
	because of their	9		Results
70	different types of	10	40	Introduction
	different types of	14		Results
	different types of	16		Discussion
71	suggest that the*	9	40	Discussion
	suggested that the	10		Results
	suggested that the	9		Discussion
	suggests that the	12		Results
72	the field of	11	39	Introduction
	the field of	14		Methods
	the field of	14		Discussion
73	the majority of*	29	39	Results
	The majority of	10		Results
74	with regard to*	13	39	Results
	With regard to	8		Results
	with regard to	10		Discussion
	With regard to	8		Discussion
75	the role of	14	39	Introduction
	the role of	8		Results
	the role of	17		Discussion
76	need to be*	12	38	Introduction
	need to be	16		Discussion
	needs to be	10		Discussion
77	to find out	13	38	Methods
	to find out	13		Discussion
78	understanding of the	9	38	Introduction
	understanding of the	13		Results
	understanding of the	16		Discussion
79	As a result	8	37	Results
	As a result	17		Discussion
	As a result	12		Introduction
80	relationship between the	10	37	Methods
	relationship between the	12		Results

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
	relationship between the	15		Discussion
81	such as the	13	37	Introduction
	such as the	15		Results
	such as the	9		Discussion
82	analysis of the	8	36	Methods
	analysis of the	28		Results
83	knowledge of the	9	36	Introduction
	knowledge of the	10		Results
	knowledge of the	17		Discussion
84	regard to the	8	36	Methods
	regard to the	15		Results
	regard to the	13		Discussion
85	a variety of	16	35	Introduction
	a variety of	11		Results
	a variety of	8		Discussion
86	in relation to	8	35	Methods
	in relation to	14		Results
	in relation to	13		Discussion
87	would like to	35	35	Results
88	be noted that	26	34	Results
	be noted that	8		Discussion
89	between the two	26	34	Results
	between the two	8		Discussion
90	the context of	15	34	Introduction
	the context of	9		Results
	the context of	10		Discussion
91	be divided into*	9	33	Results
	was divided into	11		Methods
	were divided into	13		Methods
92	compared to the*	13	33	Results
	compared to the	12		Discussion
	compared to those	8		Results
93	the data was*	9	33	Methods
	the data were	12		Methods
	The data were	12		Methods
94	to identify the	14	33	Methods
	to identify the	9		Results
	to identify the	10		Discussion
95	at the end	15	32	Methods
	at the end	17		Results

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
96	the ability to	16	32	Introduction
	the ability to	16		Discussion
97	in the field	9	31	Introduction
	in the field	12		Methods
	in the field	10		Discussion
98	pointed out that*	9	31	Introduction
	pointed out that	14		Results
	points out that	8		Introduction
99	was a significant	23	31	Results
	was a significant	8		Discussion
100	results from the	30	30	Results
101	results of this	9	30	Introduction
	results of this	21		Discussion
102	was used in*	8	30	Methods
	were used in	14		Methods
	were used in	8		Results
103	is likely to*	8	29	Discussion
	are likely to	10		Introduction
	are likely to	11		Discussion
104	focus on the*	8	29	Results
	focus on the	12		Discussion
	focused on the	9		Introduction
105	is one of	19	29	Introduction
	is one of	10		Results
106	the beginning of	12	28	Methods
	the beginning of	16		Results
107	it would be	10	28	Results
	it would be	10		Discussion
	It would be	8		Discussion
108	that it is*	11	28	Results
	that it is	8		Discussion
	that it was	9		Results
109	the case of	20	28	Results
	the case of	8		Discussion
110	It should be*	16	27	Results
	it should be	11		Results
111	study was conducted	15	27	Methods
	study was conducted	12		Discussion
112	The purpose of*	8	26	Introduction
	the purpose of	18		Methods

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
113	a lot of	25	25	Results
114	at the beginning	13	25	Methods
	at the beginning	12		Results
115	be concluded that	15	25	Results
	be concluded that	10		Discussion
116	should be noted	25	25	Results
117	data from the	16	25	Methods
	data from the	9		Results
118	the issue of	8	25	Introduction
	the issue of	8		Results
	the issue of	9		Discussion
119	the result of	13	25	Results
	the result of	12		Discussion
120	all of the	15	24	Results
	all of the	9		Discussion
121	by the researcher	24	24	Methods
122	for the study	11	24	Methods
	for this study	13		Methods
123	This means that	15	24	Results
	This means that	9		Discussion
124	be seen in	23	23	Results
125	difference between the*	13	23	Results
	differences between the	10		Results
126	the nature of	10	23	Results
	the nature of	13		Discussion
127	study aimed to*	9	23	Introduction
	study aims to	14		Introduction
128	the study of	12	23	Results
	the study of	11		Discussion
129	This finding is	11	23	Results
	This finding is	12		Discussion
130	are consistent with*	8	22	Discussion
	is consistent with	14		Discussion
131	by the participants	8	22	Methods
	by the participants	14		Results
132	the lack of	13	22	Results
	the lack of	9		Discussion
133	findings from the	12	21	Results
	findings from the	9		Discussion
134	purpose of the*	12	21	Methods

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
	purpose of this	9		Introduction
135	the percentage of	21	21	Results
136	were required to	21	21	Methods
137	is based on*	9	21	Introduction
	was based on	13		Methods
138	attitudes towards the	10	20	Results
	attitudes towards the	10		Discussion
139	of the text	10	20	Introduction
	of the text	10		Results
140	results show that*	12	20	Results
	results showed that	8		Discussion
141	as a result	10	19	Results
	as a result	9		Discussion
142	in the future	9	19	Results
	in the future	10		Discussion
143	so that the	8	19	Methods
	so that they	11		Discussion
144	This is because	9	19	Introduction
	This is because	10		Results
145	a total of*	10	18	Methods
	A total of	8		Methods
146	be said that	8	18	Results
	be said that	10		Discussion
147	tend to use*	10	18	Results
	tended to have	8		Results
148	from this study	17	17	Discussion
149	reliability of the	17	17	Methods
150	seen in Table	17	17	Results
151	the findings from	9	17	Results
	the findings from	8		Discussion
152	are presented in	16	16	Results
153	more likely to	8	16	Results
	more likely to	8		Discussion
154	the content of	15	15	Results
155	of the research	14	14	Methods
156	interviews were conducted	13	13	Methods
157	students were asked	13	13	Methods
158	the concept of	13	13	Introduction
159	was conducted in	12	12	Methods
160	likely to be	12	12	Discussion

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
161	should be conducted	12	12	Discussion
162	the effectiveness of	12	12	Introduction
163	the knowledge of	12	12	Discussion
164	to examine the	12	12	Introduction
165	was no significant	12	12	Results
166	when compared to	12	12	Results
167	large number of	11	11	Introduction
168	by means of	11	11	Methods
169	from the context	11	11	Discussion
170	in the context	11	11	Introduction
171	included in the	11	11	Methods
172	the basis of	11	11	Methods
173	results revealed that	11	11	Results
174	the differences in	11	11	Results
175	This indicates that	11	11	Results
176	This suggests that	11	11	Results
177	an analysis of	10	10	Results
178	below illustrates the	10	10	Results
179	can also be	10	10	Results
180	data were analyzed	10	10	Methods
181	depends on the	10	10	Results
182	even though the	10	10	Results
183	high level of	10	10	Results
184	in the process	10	10	Results
185	it is important	10	10	Discussion
186	is suggested that	10	10	Discussion
187	It is also	10	10	Discussion
188	on the basis	10	10	Methods
189	provided by the	10	10	Methods
190	the most important	10	10	Introduction
191	This might be	10	10	Discussion
192	a large number	9	9	Introduction
193	a part of	9	9	Discussion
194	answer the following	9	9	Introduction
195	attention to the	9	9	Results
196	be related to	9	9	Results
197	collected from the	9	9	Methods
198	considered to be	9	9	Results
199	data were collected	9	9	Methods
200	for further research	9	9	Discussion

No.	Multiword combinations	Freq. of occurrence in a particular section	Freq. of all occurrences	Sections associated with
201	given by the	9	9	Results
202	in accordance with	9	9	Discussion
203	in response to	9	9	Results
204	is presented in	9	9	Results
205	is regarded as	9	9	Introduction
206	of the findings	9	9	Discussion
207	of the following	9	9	Results
208	taken into consideration	9	9	Discussion
209	stated that the	9	9	Results
210	the reliability of	9	9	Methods
211	validity of the	9	9	Methods
212	a group of	8	8	Discussion
213	also revealed that	8	8	Results
214	analyze the data	8	8	Methods
215	can be said	8	8	Discussion
216	can be interpreted	8	8	Results
217	considered as a	8	8	Introduction
218	employed by the	8	8	Discussion
219	from the questionnaires	8	8	Results
220	influenced by the	8	8	Discussion
221	participants were asked	8	8	Methods
222	research has been	8	8	Introduction
223	should be taken	8	8	Discussion
224	the data from	8	8	Methods
225	the data of	8	8	Results
226	the influence of	8	8	Results
227	This implies that	8	8	Discussion
228	to some extent	8	8	Discussion

APPENDIX G

Multiword Combinations Associated with the IMRD typical sections

Below is the list of multiword combinations associated with the IMRD typical sections (those that occurred only in one section are highlighted in boldface).

The Introduction section

a large number
large number of
(A) a number of
a variety of
answer the following
are likely to
As a result
as well as
based on the
be able to
it can be
the fact that
because of the
considered as a
the development of
differences in the
different types of
of this study
focused on the
found to be
the frequency of
(In) in order to
In other words
(In) in terms of
in the context
the current study
in the field
the field of
(The) the present study
the use of
(In) in this study
in which the
is based on
is one of
(One) one of the
is regarded as
found that the
knowledge of the
most of the
need to be
of the text
On the other
the other hand
part of the
points(ed) out that
purpose of this
The purpose of
related to the
research has been
of the study
results of this
(The) the results of
seems to be
study aims(ed) to
such as the
the ability to
the characteristics of
the concept of
the context of
the effectiveness of
the effects of
the importance of
the issue of
the most important
the process of
the relationship between
the role of
there is a
This is because
this study is
to answer the
to be a (an)
to examine the
to investigate the
understanding of the

The Methods section

a (A) total of
a number of
according to the (their)
analysis of the
analyze the data
as shown in
as well as
at the beginning
at the end
based on the (their)
by means of
by the participants
by the researcher
collected from the
data from the
data were analyzed
data were collected
differences in the
for the (this) study
found in the
in (In) order to
in (In) this study
In other words
in relation to
in terms of
in the field
in the following
in the present
in the study
in which the
included in the
interviews were
conducted
meaning of the
of the research
of the study
of this study
on the basis
one of the
part of the
participants were asked
provided by the
purpose of the
regard to the
related to the
relationship between the
reliability of the
results of the
shown in Table
so that the
students were asked
study was conducted
the (The) participants were
the (The) data was (were)
the (The) present study
the analysis of
the basis of
the beginning of
the current study
the data from
the development of
the end of
the field of
the frequency of
the meaning of
the number of
the process of
the purpose of
the relationship between
the reliability of
the results of
the use of
the (The) questionnaire
was
this (This) study was (were)
to (To) answer the
to be the
to find out
to identify the
to investigate the
validity of the
was (were) divided into
was (were) used to
was based on
was conducted in
was used in
were required to
were used in

The Results section

a lot of
a number of
a variety of
According (according) to
the
all of the
also revealed that
an analysis of
analysis of the
are presented in
as (As) a result
as shown in
as well as
at the beginning
at the end
attention to the
attitudes towards the
aware of the
based (Based) on the (their)
Be (were) able to
be concluded that
be divided into
be noted that
be related to
be said that
be seen in
because of the (their)
below illustrates the
between the two
by the participants
can also be
can be interpreted
can be seen
compared to the (those)
considered to be
data from the
depends on the
did not have
did not know
did not use
difference(s) between the
difference(s) in the
different types of
do not have
don't know
don't like
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due to the
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focus on the
found in the
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given by the
high level of
in (In) order to
in (In) terms of
in (In) this study
In other words
in relation to
in response to
in the following
in the future
in the present
in the process
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in which the
indicate(s/ed) that the
is one of
is presented in
it (It) can be
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more likely to
most (Most) of the (their)
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of the study
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pointed out that
regard to the
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result(s) of the
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seem (s/ed) to be
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stated that the
such as the
suggests (ed) that the
tend to use
tended to have
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that there is (was/were)
the (The) analysis of
the (The) frequency of
the (The) majority of
the (The) number of
the (The) results of
the (The) use of
the beginning of
the case of
the characteristics of
the content of
the context of
the data of
the development of
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the effects of
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the fact that
the findings from
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the following table
the importance of
the influence of
the issue of
the lack of
the meaning(s) of
the nature of
the other hand
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the process of
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the study of
there (There) is (was) a
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This finding is
This indicates that
This is because
This means that
This suggests that
to answer the
to be a (the)
to identify the
to investigate the
understanding of the
was (were) used to
was a significant
was found that
was no significant
were used in
when compared to
with (With) regard to
would like to

The Discussion section

a group of
a number of
a part of
a variety of
According (according) to
the
all of the
as (As) a result
as well as
attitudes towards the
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Be (was/were) able to
be concluded that
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did not know
different types of
due to the (their)
employed by the
findings from the
findings of the (this)
focus on the
for further research
found in the
found that the (there)
found to be
from the context
from this study
in (In) order to
in (In) terms of
in (In) this study
in accordance with
In other words
in relation to
in the field
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is (are) consistent with
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is suggested that
it (It) can be
it (It) was found
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It is also
it is important
knowledge of the
likely to be
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more likely to
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of the study
of this study
On the other
one of the
part of the
regard to the
related to the
relationship between the
result(s) of (the) this
results showed that
revealed that the
seems(ed) to be
should be conducted
should be taken
showed that the
so that they
study was conducted
such as the
suggest(ed) that the
taken into consideration
that it is
that there is (was)
the (The) findings of
the (The) present study
the (The) results of
the (The) use of
the ability to
the analysis of
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the characteristics of
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the current study
the development of
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the importance of
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the knowledge of
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the meaning(s) of
the nature of
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the other hand
the participants were
the process of
the relationship between
the result of
the role of
the study of
there is (was) a (no)
This finding is
This implies that
This means that
This might be
this study is (was)
to be the
to find out
to identify the

to investigate the	understanding of the	with (With) regard to
to some extent	was a significant	was found that

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APPENDIX H

PARTICIPANT CONSENT FORM

Title of Research Project: **A Corpus-based Investigation of Macro and Micro Structures in Applied Linguistics Research Articles: Descriptive and Pedagogic Dimensions**

Researcher: Attapol Khamkhien, PhD candidate, Centre for Applied Linguistics, University of Warwick

Email: A.khamkhien@warwick.ac.uk

I confirm that I have read and understood the participant information sheet for the above project, which I may keep for my records, and on which I have had the opportunity to ask any questions concerned.

I agree to take part in the study and am willing to:

1. provide the researcher with my attitudes and perceptions before and after the implementation of workshop.
2. allow the researcher to video and audio record the workshop.
3. interview individually at my convenience, in case in-depth information about writing my research manuscripts is required.
4. provide the researcher, if possible, with my manuscript draft and the newest draft after attending the workshop.

I understand that my information will be held and processed for research purposes. I understand that I will not be personally identifiable from any research report and presentation.

I understand that my participation is voluntary and that I have full rights to withdraw from the research project at any time, without giving any reason, and without being penalised or disadvantaged in any way.

…… ……

Name of Research Participant (please PRINT) Signature of research participant

…… ……

Date Signature of researcher, Mr Attapol Khamkhien

APPENDIX I

Profile information of interterview informants

FM 1 is a full-time lecturer at the Faculty of Liberal Arts and Science, Kasetsart University. She has 11-year experience in teaching English as a foreign language to undergraduate students. She had just completed her PhD studies in 2015 from King Mongkut's University of Technology North Bangkok. She received some research funds and had some research articles published in local journals.

PG 1 is a PhD student in Curriculum and Instruction at Chulalongkorn University. She is now in the period of data collection for her PhD thesis focusing on English instructional process based on lexical network theory. She received her master's degree in Linguistics from Chulalongkorn University, Thailand. She has extensive experiences in teaching linguistics and English phonetics to undergraduate students for more than 10 years.

FM 2 holds a PhD in Language Science. He is currently in his 15th year of teaching at the Faculty of Liberal Arts, Kasetsart University. His research interests include discourse analysis, and stereotype and identity in written discourse. He has some research publications in journals in the TCI database. He is also a reviewer of a local journal published in Thailand. He regularly presents research papers at several national conferences and publishes papers in conference proceedings.

PG 2 completed a master's degree in Linguistics from Chulalongkorn University, Thailand. He is a first-year PhD student in English as an International Language at Chulalongkorn University. His research interests are narrative discourse, creating and managing corpus, and machine translation. He has no experience in research publication.

FM 3 received a PhD from Ramkhamhang University, Thailand. He taught graduate students for three years at Naresuan University, Bangkok campus. Currently, he is in his 6th year of teaching, as a full-time lecturer at the Faculty of Liberal Arts and Science, Kasetsart University. He teaches research methodology to undergraduate students. He has been appointed to be a reviewer for academic papers published in refereed journals.

FM 4 is a full-time faculty member at the Faculty of Liberal Arts and Science, Kasetsart University. She holds a PhD from a university in Australia. Currently, she is in her 13th year of teaching English as a foreign language to undergraduate students. She has some research publications locally and internationally. She is also a reviewer of refereed journals published in Thailand.

FM 5 is a full-time lecturer at the Faculty of Education, Silpakorn University. He holds his PhD in Development Education from Chulalongkorn University, Thailand. He delivers lectures on research methodology at various universities. Currently, he is an editor of two local journals indexed in the TCI database. He has published a number of research articles, mainly in the field of Education.

FM 6 is a professor of English at the Faculty of Arts, Silpakorn University, Thailand. She completed her PhD in Linguistics a university in the United States. Her current research interests are in genre analysis, multidimensional analysis, corpus linguistics, pronunciation, and sociolinguistics. She published a co-authored chapter and single authored chapters in books and encyclopaedia. She has published various research articles in local and international journals. She is also a member of the editorial board and reviewer of prestigious journals.

APPENDIX J

Interview Schedule

The interview schedule below outlines the information included in the interviews, including confidentiality statements, participation information and interview questions.

Title of research project: Macro- and Micro-structures of Applied Linguistics Research Articles in the TCI database: Descriptive and Pedagogic Dimensions

Name of interviewee: _____

Venue: _____ **Date of interview: _____**

Introduction to the research

1. My name is Attapol Khamkhien. I am doing my PhD thesis about move-based genre analysis and phraseological patterns in applied linguistics research articles indexed in the TCI database. As part of the research, I am carrying out interviews with faculty members and graduate students to see their perceptions and attitudes about the knowledge presented in the workshops. The information I gather today will be used to help write up my PhD thesis.
2. Please be assured that no local authority or individual will be named in the thesis and nothing will be linked back to the interviewee. Therefore, everything you tell me will be treated as confidential. However, if you mention something that leads me to believe that you and/or someone else is at risk of serious physical and/or emotional harm, I will have to pass this information on to my supervisor.
3. The interview should take about 30 minutes.
4. You are free to withdraw from the interview at any point if you wish to. Are you happy to take part in the interview today?
5. Is it OK to record our conversation?
6. Do you have any questions before we start?

Interview Questions

Pre-workshop interviews

Background Information

1. Are you a faculty member/ graduate student? How long are you in this position?
2. In your view, how important is research publication?
3. Do you have any publication experience? In local journals or international journals?

Post-workshop interviews

Concerns about Writing Research Manuscripts

1. In your view, which section do you think it is the easiest to write? Why?
2. What is the most difficult section to write? Why?
3. What are your concerns about research publication?
4. Is English is one of the challenges for you when you draft a research manuscript?
5. How do you prepare your research manuscript in English?
6. How do you select journals for publication?

For those who have publication experience, more additional questions were used as follows:

1. How do you deal with reviewers' comments?
2. As a reviewer, which section do you think remains the most problematic? Why?
3. Do you think language is a problem regarding publication?

Evaluation of the workshops

1. After the workshop, how did you feel about the knowledge of genre and phraseology presented? Do you think it can help you prepare your research manuscript?

2. If you have to write an article in English, will you use the knowledge of genre analysis and the list of phraseological patterns presented?
3. Do you have anything more to add?

For those who have publication experience, more additional questions were used as follows:

1. As you are a writer and editor, when you prepare your manuscript, do you conform to the rhetorical structure presented?
2. What do you do if the manuscripts submitted do not conform to the format guided?
3. As you are a reviewer, if the language is problematic, what do you do with the manuscript?
4. When you review an article, do you comment on the structural organisation?
5. Among the content, organisation, and language, which is the most important thing when you review the manuscript?
6. When you prepare a manuscript draft, do you see any differences or similarities between your draft and the proposed rhetorical model presented?

Closing

1. I appreciate the time you took for this interview. Is there anything else you think would be helpful for me? Do you have anything more to add?
2. Thank you again for your time and information.

APPENDIX K

Coding Categories and Definitions

Coding protocol

- Coding begins when the informants start responding to the questions asked.
- Each code is applied by content.
- A coded section ends when the content or topic changes.
- If the same topic is returned to it is coded as a new example.
- Coding categories can overlap if more than one feature appears in one text segment.
- The interviewer's contributions are not coded unless they form part of the interview informants' dialogue over extended turns.

The following are predetermined and data-driven codes in the coding process. The two categories came from the interview questions and the codes were from the way that the informants responded to them.

Category: Concerns about writing research manuscript

Subcategory 1: Difficulties related to article writing process

Code: Selecting research topics	= [1] RESEARCH TOPIC
Code: Information elements	= [2] INFO ELEMENTS
Code: Creative thinking	= [3] CREATIVITY
Code: Selecting content to present in the article	= [4] SELECT CONTENT
Code: Using appropriate language	= [5] USING LANG
Code: Looking at previous published articles	= [6] PUBLISHED ARTICLES
Code: Manuscript length limits	= [7] LENGTH LIMIT
Code: Translation	= [8] TRANSLATION
Code: Proofreading process	= [9] PROOFREADING

Subcategory 2: Dealing with linguistic difficulties and article format

Code: Using appropriate language and linguistic features (overlaps with difficulties related to article writing process)	= [10] LING FEATURES
Code: Genre transfer	= [11] GENRE
Code: Article format	= [12] ARTICLE FORMAT

Subcategory 3: Dealing with reviewers' comments

Code: Understanding the paper content	= [13] CONTENT
Code: Copy-editing	= [14] EDITING

Subcategory 4: Selecting appropriate journals for publication

Code: Scope of the target journal	= [15] SCOPE
Code: Rate of acceptance	= [16] ACCEPT RATE
Code: Abstracting and database	= [17] DATABASE
Code: Publication process	= [18] PROCESS
Code: Academic position	= [19] POSITION
Code: Renewing job contract	= [20] CONTRACT
Code: Career development	= [21] DEVELOPMENT
Code: Acceptance in the field	= [22] ACCEPTANCE
Code: University's quality assurance	= [23] QUALITY
Code: University ranking	= [24] RANKING
Code: Graduation requirement	= [25] GRADUATION

Category: Participants' perceptions of learning through the workshops

Subcategory 1: Usefulness of the proposed rhetorical model and phraseological patterns

Code: Helping select information elements	= [26] ELEMENTS SELECTION
Code: Helping select the right words and phrases	= [27] WORDS SELECTION
Code: Suggestions for disseminating the knowledge	= [28] SUGGESTIONS

Subcategory 2: Roles of rhetorical structures and phraseological patterns

Code: Roles of rhetorical structures	= [29] RHETORIC

Code: Roles of phraseological patterns = [30] PHRASEOLOGY

Subcategory 3: Formatting article and article structure

Code: Following the journal format provided = [31] CONFORMITY

Code: Using IMRD format = [32] FORMATTING

Subcategory 4: Perceived limitations

Code: Limitations of the proposed rhetorical model = [33] LIMIT RHETO

Code: Limitations of phraseological patterns = [34] LIMIT PHRASEO

Code: Attitudes towards peer-review process = [35] PEER-REVIEW

Code: Comments on publication process = [36] COMMENTS

APPENDIX L

Example of Interview Transcripts and Coding

Note that dots (…) indicate hesitations or pauses occurring in the dialogue. (T = interviewer or researcher and FM1 = interviewee or informant)

T:	Is publication in English important to you?	
FM1:	I think it is important for both instructors and the university. [23]Taking the university's quality assurance into account, each faculty has to annually report the number of publications to the Office of Higher Education Commission, which has an influence on [24]the evaluation of the university's ranking. If we publish articles in Thai, [17]paper citations cannot be high because they are not international, as opposed to papers written in English.	[23] QUALITY [24] RANKING [17] DATABASE
T:	When preparing research manuscripts, which section is the most difficult for you to write?	
FM1:	I think it is the Introduction section, [2]because we have to write it to demonstrate that our paper is interesting and convince readers to read it by indicating the benefits of the study and the reasons why it is necessary. [5]Generally, if this section is well-written, it will facilitate readers, or even professors, to recognise the necessity of the study, consider that the article is interesting to read and that it is addressing a serious issue. If not, the paper might seem to be unpromising, showing nothing different from previous studies.	[2] INFO ELEMENTS [5] USING LANG
T:	Right.	
FM1:	Another section I feel difficult to write is the Discussion section. [2]This section reports some guidance and highlights some contributions and why the study has been conducted. It tells readers how they can apply the study findings to a particular topic or context. (…) I have read some papers that did not say either anything new or have any research implications, so I did not see the benefits of that study. Therefore, I think the Discussion section is also important. When I read an article for review, I like to read this section to see the author's opinion regarding the contributions of the studies, suggestions and issues discussed.	[2] INFO ELEMENTS
T:	What is your major concern when preparing a manuscript for publication in English?	

FM1:	I am worried about, firstly, [12]the article format, because different journals require different formats, including referencing style.	[12] ARTICLE FORMAT
T:	Yeah. What else?	
FM1:	[13]I also think about the readers who will read, comment and evaluate my manuscript. [36]Some people have the mind-set of evaluation aspects; for example, some readers do not like citing research works older than five years of publication, which is sometimes impossible if the topic is quite rare and specialised.	[13] CONTENT [36] COMMENTS
T:	Ah ha. Right.	
FM1:	I am also afraid that some readers may possibly not completely understand my paper. From my anecdotal evidence dealing with the readers' comments, for instance, [14]they asked me to confirm and verify a sentence in an abstract, as they said that the sentence was not correct in referring to what I really wanted to say in that context. They asked me to verify and adjust the text several times, but I considered the sentence to be correct, expressing what I wanted to say, and, thus, no adjustment was needed. (…) [12]Some journals have asked me to reformat the manuscript and resubmit it. However, this is not always the case for all journals.	[14] EDITING [12] ARTICLE FORMAT
T:	What about your manuscript preparation?	
FM1:	As for manuscript preparation, [4]if the research methodology is well-designed, and the paper is well-prepared and organised, and if the study is funded by a reliable organisation, authors can ensure, to some extent, that any problems concerning content will be minimal. [5]The major problem when writing a manuscript in English lies in the language itself, because I did not study in an international programme, so I do not know how to use English correctly. [8]I have to ask for assistance from somebody to translate my manuscript. [9]I then proofread it again and ask English instructors to check the language before submission. I do not ask a native speaker of English to do so because I sometimes think that Thai English instructors are better, because they have a good understanding of the context. We can also discuss and negotiate the text's meaning and concisely explain and clarify what the problem is in detail, if necessary.	[4] SELECT CONTENT [5] USING LANG [8] TRANSLATION [9] PROOFREADING
T:	When you are ready to submit your manuscript, which aspect is your worry before submission?	

FM1:	Er. In the past, [17]we did not take the publication matter and journals indexed in the TCI database into consideration. I used to present research papers at conferences organised by Kasetsart University. Since then, [23]I have learned from the process of quality assurance that I could not claim any credit from those conferences, and now understand more about the evaluation criteria established by the Office of Higher Education Commission. (laughs) I have, therefore, never considered that conference again. Instead, I prefer to go for those that fit the criteria. [17]Since the TCI categorises journals into Tier I, II, and III, based on the quality of articles published, we have to consider this before publication. (…) I normally do not have target journals in mind before submitting my manuscript, but I will take time constraints into consideration. [22]If I do not have much time, I will consider a publication outlet which has a high rate of acceptance. If there is time, [18]I will consult their website to study the review process, which normally takes at least six to eight months. In my case, [25]I have to publish my paper for graduation, so I cannot wait that long and I have to go on intuition as a rule of thumb. [17]However, for general research, as required by National Research Council of Thailand, publishing an article in a journal placed in TCI Tier II is acceptable. [15] (…) I also select the journal by its name, covering my topic and related fields.	[17] DATABASE [23] QUALITY [17] DATABASE [22] ACCEPT RATE [18] PROCESS [25] GRADUATION [17] DATABASE [15] SCOPE
T:	After the workshop, what did you think or how did you feel about the knowledge of genre and phraseology? Do you think it can help you prepare your manuscript?	
FM1:	For me, in reality, even though the knowledge presented is based on applied linguistics research articles, it can be applied to other related disciplines, such as business and social sciences, in writing an RA. [29]Their articles are written or structured like the rhetorical pattern proposed. This insightful information is not limited only to Applied Linguistics RAs, but are similar to other academic fields.	[29] RHETORIC
T:	Do you think the knowledge is useful?	
FM1:	[26]As for its usefulness, since it is from RAs written in English, this structural pattern is helpful because my lexicon might be limited. [27]With some words, even though they are frequently used, their meanings might vary according to the contextual environment. Honestly, I am not good at using the prepositions "of" and “in". Some people do not fully understand how	[26] ELEMENTS SELECTION [27] WORDS SELECTION

	to use them accurately and correctly. [26]The knowledge and pattern helps us know what should be included and followed when writing an RA. It is really helpful, making our writing task easier than before, in particular those who are just starting to read and write RAs. (…) [28]I would like you, when finishing your PhD study, to make a phrase book or a manual for writing RAs. [27]I need some sort of basic tool providing information on what words should not be used and words frequently used wrongly, in order to write RAs effectively. It would be very useful because those who read your research have to be people in the field or academicians. [28]Ordinary people who are not proficient in English, however, sometimes need a manual explaining how to write an RA. If you could do this, it would be a practical implication of your research.	[26] ELEMENTS SELECTION [28] SUGGESTIONS [27] WORDS SELECTION [28] SUGGESTIONS
	Thank you. (laughs) I will.	
	The knowledge is also useful for academic services such as workshops for novice writers, which could help people fully understand this knowledge, because simply reading only the manual might not lead to a full understanding, especially for those who are not good at English.	
T:	When you prepare your manuscript, what do you do? Do you conform to the rhetorical structure presented?	
FM 1:	[12]I will consult the journal format from its website, if possible, before preparing my manuscript. [12]Following the format required will minimise organisational problems at least, because I had an experience where my manuscript did not conform to the format required. The editor asked me to reformat, by sending me a guided format, which I thought was strange and weird as I had to add a brief conclusion after the list of references. They probably wanted a brief summary or needed to know about some contributions. After reformatting the manuscript and [13]addressing the reviewers' comments, I had my article published. Journals generally have their criteria or an evaluation form, which we only usually see after receiving feedback from the editor. If we do not address the comments and suggestions made, or even the format, our article might be rejected. (…) [12]I will not try to create a new format for the article. As a Thai culture, we conform to what people in the field have done. For example, if the editor asks me to combine the Discussion and	[12] ARTICLE FORMAT [12] ARTICLE FORMAT [13] CONTENT [12] ARTICLE FORMAT

183–186		Results section, I will do so. [6]I will check with the articles published earlier in that particular journal. I think that is acceptable and do not seek to reformat the article.	[6] PUBLISHED ARTICLES
187	T:	Do you have anything more to say?	
188–193	FM 1:	[33]The template proposed might possibly not be applicable to writing articles in other fields of study in detail; however, in general, the structural organisation, move types and components can be readily used. I think some people might not prepare their manuscripts in the move sequences as	[33] LIMIT RHETO
194–196		presented. [29]But the manuscript can be improved in the sense of the components, functions and pragmatic purposes that should be seriously	[29] RHETORIC
197–203		considered. The workshop is a useful guideline for preparing a manuscript for publication, [30]because many of the words and phrases demonstrated are really helpful. The template really represents the research writing of papers written in English and published in Thailand. But it might need additional data to confirm the findings.	[30] PHRASEOLOGY
204	T:	Right.	
205–207	FM 1:	[34]As for the publication process, I think we cannot avoid the influence of a Thai viewpoint, perspective and style. We have our own framework and follow it.	[34] COMMENTS
208–215		[35]Potential readers may have their own specific viewpoint, and, thus, some problems might be caused if the number of readers is quite limited. For example, in my case, I used a word referring to a statistical value, which was suggested by a big name in Thailand; the reader, on the other hand, did not agree with it. I did not know how to deal with it and who I should trust. A pertinent question thus emerged: "*If the*	[35] PEER-REVIEW
216–221		*reviewers are not interested in my topic, will they understand it?* Several times, I have had to resist and confirm what I wanted to use and express in my paper. Thus, if the reviewers are good and professional enough, it would be better when we receive comments demonstrating various different	
222–228		aspects and point-of-view. [36]The editor should also be good enough to summarise major points the author needs to revise and clarify. (…) In Thailand, I think the reviewing process should be improved, because, sometimes, the reviewers ask me to reword and rewrite some sentences, which I think is not such a big deal but loses the sense of the paper.	[36] COMMENTS
229		Oh. That's not good.	

230	[36]Another concern is time processing. The publication	[36] COMMENTS
231	process of the journals indexed in TCI Tier 1 takes a	
232	long time. I, therefore, have to go for those in Tier 2	
233	instead, even though I aim at those in Tier 1. If my	
234	need is just for graduation, and I do not know anyone	
235	looking after the target journal, how long do I have to	
236	wait for the acceptance letter? Therefore, I have to	
237	ask for help. The situation is sometimes hard to	
238	explain.	