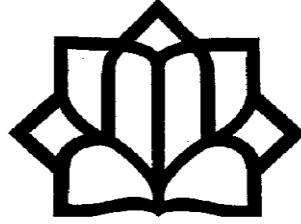


بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



University of Kashan  
Faculty of Humanities  
English Department

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR  
AN M.A DEGREE IN TEACHING ENGLISH AS A FOREIGN LANGUAGE

**Title:**

Identification of Discipline-Specific Lexical Bundles in Education

**Supervisor:**

Mohammad Rauf Moini (Ph.D)

**Advisor:**

Gholamreza sami, (PhD)

**By:**

Nadia Parvizi

Summer 2011

This thesis

“Identification of discipline-specific lexical bundles in education”

By:

Nadia Parvizi

Was submitted to the English department of the University of Kashan in partial fulfillment of the requirements for Master Degrees in Teaching English as a Foreign Language (TEFL) and approved by the committee members on

Supervisor: Mohammad Raouf Moini, Ph.D

Advisor: Gholamreza Sami, Ph.D

Internal reader: Mohammad Reza shams, Ph.D

External reader: Reza Yavarian, Ph.D

University of Kashan

Kashan, Iran

Summer 2011

## **STATEMENT OF AUTHENTICATION**

I hereby declare that “Identification of Discipline-Specific Lexical bundles in Education” is my own work and it has not been submitted anywhere else, and that all the sources mentioned are introduced in references.

Nadia Parvizi  
Summer 2011

## **ACKNOWLEDGEMENTS**

I would like to express my gratitude to those people who made the completion of this thesis possible. I owe thanks due to my cooperative, insightful, and patient supervisor, Dr. Moini who guided me through all stages of this research and gave me invaluable suggestions and enormous encouragement. My sincere thanks extend to Dr. Sami, my advisor who helped me doing my study with his helpful and constructive comments.

I owe debts of gratitude to all my professors at university of Kashan who taught me many things during my six-year studies here.

My deepest thanks should also go to my family who supported me doing my research and who gave me hope and encouraged me kindly. Finally, I must refer to my dearest friend, Atefe Zargarzadeh, without her support I couldn't manage to complete this research.

## **Abstract**

Several studies have been conducted to investigate the disciplinary and generic variations in academic registers in terms of the use of lexical bundles which are frequently recurring fixed sequences of words regardless of their idiomaticity and regardless of their structural status. The focus of this corpus-based study was on the analysis of 4-word lexical bundles frequency, structure and function in academic research articles of Education discipline. A 2 million corpus was developed from 272 Education research articles downloaded from ScienceDirect out of representative and inclusive journals in Education. Established structural and functional taxonomies were used for the classification of bundles. The results indicated that Education draws on a set of peculiar bundles in its discourse. It was also made clear that different bundles serve various functions. There were 24 various lexical bundles in the whole corpus. The number of the lexical bundles of Education research articles is low in a two million corpus. This intensifies the fact that EAP courses should concentrate on the teaching of these items to prepare people involved in the field including students of different disciplines to comprehend and produce these items.

**Keywords:** Corpus linguistics, Education, Research articles, lexical bundles, structure, function

# Table of Contents

## CHAPTER ONE: INTRODUCTION

1.1. An Overview of English for Specific Purpose.....	15
1.1.1. The manifestation of collocations in EAP.....	4
1.1.2. Lexical bundles.....	4
1.2. Statement of the problem.....	5
1.3. Objectives of the study.....	7
1.4. Research questions.....	7
1.5. Significance of the study.....	8
1.6. Definition of key terms.....	9

## CHAPTER TWO: LITERATURE REVIEW

2.1. Overview.....	10
2.2. Formulaic language.....	10
2.3. Collocations.....	17
2.4. The role of collocations in second language learning.....	21
2.5. Importance of collocations in teaching.....	23
2.6. Lexical bundles.....	27
2.6.1. Defining characteristics of lexical bundles.....	27
2.6.2. Studies of lexical bundles.....	28
2.6.3. Structural and functional classification of bundles.....	35

## CHAPTER THREE: METHODOLOGY

3.1. Overview.....	38
3.2. The compilation of the corpus.....	38
3.3. Criteria for selecting bundles.....	42
3.4. Structural and functional classification of bundles.....	42
3.5. The Softwares.....	43
3.5.1. Antconc 3.2.1.....	43
3.5.2. Wordsmith 5.....	46

## CHAPTER FOUR: RESULTS

4.1. Overview.....	50
4.2. Results of high frequency lexical bundles in the corpus.....	50
4.2.1. Prepositional phrase+ of lexical bundles as the most frequent structure in the corpus.....	53

4.2.2. Other prepositional phrases.....	53
4.2.3. Noun phrase+ of in the corpus.....	54
4.2.4. Other noun phrases.....	55
4.2.5. Other lexical bundles.....	56
4.3. Results of key bundles in abstract, introduction, and result and discussion section.....	56
4.4. Different functions of lexical bundles.....	57
4.4.1. Research-oriented bundles.....	58
4.4.2. Text-oriented bundles.....	58
4.4.3. Participant-oriented bundles.....	59
4.5. Bundles in abstract section.....	59
4.6. Key bundles in introduction section.....	75
4.6.1. Procedure bundles.....	61
4.6.2. Topic bundles.....	62
4.6.3. Framing signals.....	63
4.7. Key bundles in results section.....	64
4.7.1. Topic bundles.....	65
4.7.2. Location bundles.....	66
4.8. Key bundles in conclusion and discussion sections.....	67
4.8.1. Topic bundles.....	68
4.8.2. Location bundles.....	68
4.8.3. Procedure bundles.....	69
4.8.4. Quantification bundles.....	70
4.8.5. Description bundles.....	71
4.8.6. Resultative signals.....	72
4.8.7. Framing signals.....	73
4.8.8. Transition signals.....	74
4.8.9. Stance features.....	74
4.9. Comparison of the abstract, introduction, and result and discussion section.....	75
4.9.1. The use of research-oriented bundles in different sections of the articles.....	77
4.9.2. The use of text-oriented bundles in different sections of the articles.....	78
4.9.3. The use of participant- oriented bundles in different sections of the articles.....	79

**CHAPTER FIVE: SUMMARY, DISCUSSION, APPLICATIONS, AND IMPLICATIONS**



5.1. Overview.....	81
5.2. Summary of the study.....	81
5.3. Discussion.....	84
5.4. Pedagogical applications of the study.....	91
5.5. Implications for further research.....	92
References.....	94

## List of Tables

Table 2.1. Formulaic continuum.....	16
Table 2.2. Structural classification of lexical bundles (Biber et al, 1999).....	36
Table 2.3. Functional taxonomy used for analysis of bundles (Hyland, 2008a).....	37
Table 3.1. The selection of the articles in each journal.....	41
Table 4.1. Results of frequency and percentage of lexical bundles.....	51
Table 4.2. Structural description of lexical bundles in Education research articles.....	52
Table 4.3. Structural classification of lexical bundles.....	52
Table 4.4. Results of frequency and percentage of prepositional phrase+ of lexical bundles in the corpus.....	53
Table 4.5. Results of frequency and percentage of other prepositional phrases lexical bundles in the corpus.....	54
Table 4.6. Results of frequency and percentage of noun phrase+ of lexical bundles in the corpus.....	55
Table 4.7. Results of frequency and percentage of other noun phrases lexical bundles in the corpus.....	55
Table 4.8. Results of frequency and percentage of other lexical bundles in the corpus.....	56
Table 4.9. Results of frequency of the bundles in each section.....	57
Table 4.10. Results of Bundles used in abstract section.....	60
Table 4.11. Results of frequency and percentage of key bundles in introduction section.....	61
Table 4.12. Results of frequency of procedural bundles in introduction.....	62
Table 4.13. Results of frequency of topic bundles in introduction.....	63

Table 4.14.Results of frequency of framing signals in introduction.....	63
Table 4.15.Results of frequency and percentage of Key bundles in result section.....	64
Table 4.16.Results of frequency of topic bundles in result section.....	65
Table 4.17.Results of frequency of location bundles in result section .....	66
Table 4.18.Results of frequency and percentage of key bundles in discussion-conclusion sections.....	67
Table 4.19.Results of frequency of topic bundles in discussion-conclusion section.....	68
Table 4.20.Results of frequency of location bundles in discussion-conclusion section.....	69
Table 4.21.Results of frequency of procedure bundles in discussion-conclusion section.....	70
Table 4.22.Results of frequency of quantification bundles in discussion-conclusion section.....	71
Table 4.23.Results of frequency of description bundles in discussion and conclusion section.....	72
Table 4.24.Results of frequency of resultative signals in discussion-conclusion section.....	73
Table 4.25.Results of frequency of framing signals in discussion-conclusion section.....	74
Table 4.26.Results of frequency of transition signals in discussion-conclusion section.....	74
Table 4.27.Results of frequency of stance features in discussion-conclusion section.....	75
Table 4.28.Comparison of different sections regarding functional categories.....	76

Table 4.29.The use of research-oriented bundles in different sections of the articles.....	77
Table 4.30.The use of text-oriented bundles in different sections of the articles.....	78
Table 4.31.The use of participant-oriented bundles in different sections of the articles.....	79
Table 4.32.Lexical bundles used in different sections.....	80
Table 5.1.A comparison of the first 20 bundles in 7 corpora.....	85
Table 5.2.Comparison of lexical bundles in the current corpus and some other studies.....	87
Table 5.3.Structural Comparison of bundles in different disciplines.....	88

## **LIST OF FIGURES**

Figure 3.1. Selection of files and four-word bundles.....	45
Figure 3.2. Lexical bundles in different contexts.....	46
Figure 3.3. Functions of wordsmith.....	47

## **LIST OF ABBREVIATIONS**

AWL: Academic Wordlist

CRAC: Chemistry Research Articles Corpus

EAP: English for Academic Purpose

EFG: Educator's Frequency Guide

EFL: English as a Foreign Language

ELB: Education Lexical Bundles

ESP: English for Specific Purpose

FL: Foreign Language

GSL: General Service List

HRWC: Highly Recurrent Word Combination

KWIC: Key Word in Context

NNS: Non-Native Speakers

NS: Native Speakers

SL: Second Language

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1. An Overview of English for Specific Purpose**

English for specific purpose is a field of teaching English language which deals with the specific needs of the learners in various disciplines. It has grown to be an outstanding area in EFL teaching since 1960's. It is centered on the language appropriate for each discipline in terms of vocabulary, grammar, skills, discourse and genre. It differs from General English regarding the learners' purposes for learning. According to Hutchinson et al. (1987), "ESP is an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning"(p.19). ESP is intended to teach adults who have some basic knowledge of English and are learning English to perform some job-related functions. Therefore, ESP is supposed to assess purposes and needs of the learners. In ESP courses, English is integrated to a subject matter related to learners' needs and it is a needs analysis that determines which language skills must be focused on. It enables learners to apply their knowledge of English to their discipline of study. They learn the language items in a meaningful context and this reinforces their learning and motivation. On the other hand, their knowledge of the subject-matter improves their ability to learn English.

English for Academic Purpose is a salient sub-category of ESP which trains students in higher education setting to be able to apply the knowledge of their field of study in acquiring language. EAP programs are either pre-sessional

courses or courses taken along students' other subjects. According to Gillett and Wray (2006), EAP courses seek to find out what are the learners supposed to do in their academic courses, and help them reach this end, based on needs analysis. On the basis of this needs analysis, course objectives are specified and available resources, methodology, and syllabus are analyzed. Then the course and its outcome are evaluated. EAP courses deal with vocabulary and grammar with an eye on the academic needs of learners; for example, it focuses on the instruction of writing essays or the vocabulary of academic texts. The courses focus more on reading and writing and tend to teach formal, academic genres rather than the conversational and social genres. It covers a wide range of academic practices including: instruction (materials design and lectures), classroom interactions (tutorials, feedback), research genres (journal articles, conference papers, proposals), and student writing (assignments, exams, and dissertations).

John Swales (1991) brought up the concept of genre analysis into ESP research in his book *Genre Analysis: English in Academic and Research Settings*. The focus of genre analysis is on academic and research English. According to Swales (1991), genre analysis has become narrower and deeper. The focus has shifted from broad registers like scientific language to genre varieties used in them. The term genre is used to group the texts, representing how writers typically use language to respond to recurring situations (Hyland, 2006). Halliday categorizes genres by internal linguistic criteria as narratives, recounts, arguments, and expositions. Genre analysis describes linguistic features and communicative purposes. It enables us to interpret academic texts in their social contexts. It examines the genre's organization often characterized by its moves, and the textual and linguistic features such as style, tone, voice, grammar,



and syntax. Vijay Bhatia (1993) introduces seven steps to analyze genres in *Analyzing Genre: Language in Professional Settings*.

- Positioning a text in its situational context.
- Surveying the existing research on the genre
- Processing the researcher's understanding of the discourse community
- Collecting a corpus of the genre
- Gaining insight of the conditions in which members of a discourse community use the genre
- Deciding on the type of linguistic analysis: *lexico-grammatical features* (for example, the study of tenses), *text-patterning* (for example, how noun phrases are used in different genres), and *structural interpretation* (for example, the structural "moves" a genre utilizes to achieve its goals)
- Verifying findings based on research

In EAP, genre is defined as a communicative event used by specific discourse communities and this offers to teachers a way of understanding and addressing the communicative needs of their students. There are various genres in academic disciplines including proposals, essays, reports, case studies, etc. This intensifies the need to know language features attributed to each genre, especially the vocabulary. In an EAP course, the starting point for teaching vocabulary is academic wordlists. AWL developed by Coxhead (2000) is a salient wordlist represented in this area. It is specific to academic contexts, since it does not include words that are in the most frequent 2000 words of English, General Service List (GSL).

Learning vocabulary does not merely mean dealing with individual words, but a focus on phrasal vocabulary is a trigger which allows more fluency in production (Kuiper, 2004).

Faerch et al. (1984) hereby suggest that, “Having a word in one’s vocabulary includes knowing the most frequent collocations of that word” (p. 95).

### **1.1.1. The manifestation of collocations in EAP**

In English for Academic Purposes attempts have been made to produce lists of generic Academic vocabulary, words that in Nation’s viewpoint are shared by different disciplines but which are infrequent in order to be learned implicitly and which are not technical in a specific discipline to be taught explicitly (Nation, 2001). Yang (1986) calls them sub-technical vocabulary. Coxhead’s Academic Word List (AWL) is an example whose shortcoming is the fact that it ignores the pervasive multi-word collocational patterns. One problem facing the English teachers in EAP courses is the fact that learning technical words is intertwined with learning the subject matter (Nation, 2001). EAP identifies technical vocabulary to exclude it from the language syllabus. Jeremy Ward (2007) divides the learning task in EAP classes into two strategies:

1. Rich instruction and active elaboration on items through teaching individual collocations
2. Teaching collocation as a class that consists of raising students’ awareness of the collocations and teaching the process of reading collocations as chunks.

### **1.1.2. Lexical bundles**

The focus of studies in English for Academic purposes has mostly been on a particular type of collocation or what Biber et al. (1999) call lexical bundles or “frequently recurring fixed sequences of words regardless of their idiomaticity and regardless of their structural status” (p. 990). These multiword sequences are

not structurally complete and not idiomatic in meaning. Biber et al (1999) maintains that only 15% of the lexical bundles in conversation are complete phrase or clauses. Biber mentions that most bundles in conversations are clausal - pronoun+ verb+ complement- and in academic prose they are mostly phrasal - noun phrases or prepositional phrases- (Biber et al, 1999). They are defined as a sequence of three or more words that co-occur frequently in a particular register in Longman Grammar of Spoken and Written English. Certain bundles are common to writers and readers of a particular discourse or register. They can be looked at as extended collocations. So any lexical bundle can be defined in terms of their frequency, idiomaticity, or fixedness. It should be noted that learning the bundles lead to more communicative competence so it is beneficial to identify these sequences.

According to Biber and Barbieri (2007), lexical bundles serve different function as discourse organizers (textual functions), stance expressions (interpersonal functions), and referential expressions (ideational functions).

Discourse organizers signal the relationship between prior & coming discourse as in “What I want to do is”. Stance bundles convey attitudes. For example, “I don’t know what”. Referential bundles identify entities like in “or something like that”

## **1.2. Statement of the problem**

As part of mastering any second language, fluency, has always been a great concern for both language teachers and second language learners. The process of being fluent and proficient will be facilitated by learning chunks of language which have an impact on both perception and production of the learners.

Acquiring these prefabricated, fixed sequences is not an utterly automatic process. Learners need to get to know them consciously and use them in their language learning process. For those learners who are experiencing learning language, in this case English, for specific purposes direct focus on these items will facilitate their learning. They are provided with some lists of the most common chunks of language which will be imprinted in their minds, doing exercises to comprehend and produce them. It should be taken into account that not all disciplines share common fixed sequences and it would be more reasonable to provide the learners in each discipline with an idiosyncratic list of the most common bundles. All studies of this field focus on a peculiar discipline or a comparison between several disciplines, since lexical bundles are discipline-specific. Lexical bundles are considered as genre, register and discipline discriminators. Studies of this kind deal with EAP, so academic research articles as a specific genre in Education discipline were used in this study to obtain a list of useful lexical bundles which enable learners to gain competence in the language specific to the field of study. Education discipline has not been studied in terms of the use of lexical bundles before, so according to (Hyland, 2008b) research articles of Education discipline as “the principal site of disciplinary knowledge-making” (p.5) were used for analysis. This study focuses on intra-disciplinary variations in the use of bundles, considering the range, frequency and function. Lexical bundles are also significant because they distinguish the discourse of different genres by identifying the moves of speech in corpus studies. The lexical bundles serve different functions, so learners need to know what bundles to use in the discourse and writing to distinguish the moves of each genre.