

EVALUATIVE LANGUAGE IN THESIS ABSTRACT OF NOVICE WRITERS IN  
SCIENCE AN ENGINEERING

Maryam Mehrjooseresht

A thesis submitted in fulfilment of the  
requirements for the award of the degree of  
Doctor of Philosophy (Teaching English as a Second Language)

Faculty of Education (language academy)  
Universiti Teknologi Malaysia

JUNE 2016

Dedicate to my kind husband

## **ACKNOWLEDGMENT**

Firstly, I would like to thank my supervisors Assoc. Prof. Dr. Ummul Ahmad for her valuable suggestion, guidance and consistent support throughout this project.

I am grateful for my friends, especially Dr. Noormala Ibrahim for her willingness to help me throughout this journey.

I am indebted to language academy department, faculty of education, Universiti Teknologi Malaysia for full support, co-operation and help to complete this work. The international doctoral fellowship for the year 2011, 2012 and 2013 are gratefully acknowledged.

Lastly, but not least, I would like extend my gratitude to my kind parents, my kind husband and my sister; this thesis would not exist without their patience, understanding and support.

## ABSTRACT

Abstracts are considered to be the main means for researchers to handle the enormous flow of information in today's competitive research environment and they are essential part of research writing. The fierce competition for readers' attention has driven the academic writers to employ various promotional elements in their abstracts, while positioning their research findings within the disciplinary discourse. The present study concerns with how various linguistic features work together in unique combinations to help realize the rhetorical purposes identified within the abstract genre. It examines the linguistic features of evaluation within the informational structural of abstracts as being conventionalized by two disciplinary fields: Science and Engineering. Specifically, it looks into the nature of abstracts produced by novice research writers in Malaysia, collectively contained in 866 thesis, gathered from library collections of four public research universities, produced between the years of 2000 to 2010 with total word counts of 291,104. Multi-layered text analyses were carried out: at the macro-level, a generic structure of abstracts employed by the writers were identified and exemplified; at the micro-level, the linguistic realizations of evaluation in different rhetorical sections of abstracts were further explored. Different linguistic features performing three different functions of evaluation were identified and categorized into status, value and relevance. Novice writers from both Science and Engineering fields were found to use similar generic structure, reflecting their awareness of the genre. Lexico-grammatical analyses have pointed to some interesting variations in terms of the overall preferences for status over value and relevance in the two fields. The Science writers were more inclined to include status markers expressing certainty while summarizing their research findings in the Product section of abstracts whereas Engineering writers appeared less assertive. Results from this study offer significant insights for teaching and designing materials for English for Academic Purposes courses in general, and inform novice research writers about specific linguistic choices to be made in order to produce a more efficient and persuasive research writing.

## ABSTRAK

Abstrak merupakan cara utama bagi penyelidik untuk menangani aliran informasi yang besar dalam persekitaran penyelidikan yang kompetitif sekarang dan ia adalah bahagian penting dalam penulisan penyelidikan. Persaingan sengit untuk mendapatkan perhatian pembaca telah mendorong penulis akademik untuk menggunakan pelbagai elemen promosi dalam abstrak, disamping menempatkan hasil penyelidikan dalam wacana disiplin. Kajian ini menyentuh mengenai bagaimana pelbagai ciri linguistik bekerjasama dalam kombinasi yang unik untuk membantu menyerlahkan tujuan retorik yang telah dikenalpasti dalam genre abstrak. Ia mengkaji ciri-ciri penilaian linguistik dalam struktur maklumat abstrak yang biasa digunakan dalam dua bidang: sains dan kejuruteraan. Secara khusus, kajian ini mengkaji sifat abstrak yang ditulis oleh penulis penyelidik baru di Malaysia, merangkumi 866 tesis yang telah dikumpulkan dari koleksi empat perpustakaan universiti penyelidikan awam, yang ditulis antara tahun 2000 hingga 2010 dengan perkataan berjumlah 291,104. Beberapa peringkat analisis teks telah dijalankan: di peringkat makro struktur generik abstrak yang digunakan oleh penulis telah dikenalpasti dan dicontohkan; di peringkat mikro, realisasi linguistik penilaian dalam bahagian retorik abstrak yang berbeza telah diteliti. Ciri-ciri linguistik berbeza yang melaksanakan tiga fungsi penilaian yang berlainan telah dikenalpasti dan dikategorikan kepada status, nilai dan relevan. Penulis baru dari kedua-dua bidang sains dan kejuruteraan didapati menggunakan struktur generik yang serupa, menunjukkan kepekaan mereka terhadap genre abstrak. Analisis lexico - tatabahasa telah menunjukkan beberapa variasi menarik dari segi keutamaan keseluruhan untuk status berbanding nilai dan relevan bagi kedua-dua bidang. Penulis sains lebih cenderung untuk menggunakan penanda status dalam menyatakan kepastian ketika merumuskan hasil kajian dalam seksyen Produk di abstrak, manakala penulis kejuruteraan kelihatan kurang tegas. Secara umum, hasil kajian mengemukakan kefahaman yang signifikan terhadap bahan-bahan pengajaran dan rekabentuk bahan untuk kursus Bahasa Inggeris untuk tujuan akademik, dan memberi maklum kepada penulis penyelidikan baharu mengenai pilihan bahasa tertentu yang perlu dibuat untuk menghasilkan penulisan penyelidikan yang lebih cekap dan meyakinkan.

## TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGEMENTS	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLES	xi
	LIST OF FIGURES	xii
	LIST OF APPENDICES	xiv
<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
	1.0 Background of the Study	1
	1.1 Challenges in Writing Abstract	4
	1.2 Problem Statement	6
	1.3 Rationale of the Study	7
	1.4 Research Questions	10
	1.5 Theoretical Framework	10
	1.6 Conceptual Framework	12
	1.6.1 Abstracts as Genre	15
	1.6.2 Evaluative Language Features	17
	1.6.3 Genre Theory	18
	1.7 Assumptions of the Study	20
	1.8 Limitations of the Study	21

	1.9 Operational Definition of Terms	22
	1.9.1 Abstract	22
	1.9.2 Evaluation	23
	1.10 Conclusion	23
<b>2</b>	<b>LITERATURE REVIEW</b>	<b>24</b>
	2.0 Introduction	24
	2.1 The Abstract Genre	24
	2.2 Abstracts in Academic Writing	27
	2.2.1 Rhetorical Organization of Abstracts	29
	2.2.2 Disciplinary Differences in Abstract Structures	32
	2.2.3 Lexico-grammatical Characteristics in Abstracts	34
	2.3 The Concept of Evaluation	38
	2.4 Evaluation in Academic Writing	43
	2.4.1 Grammatical Realization of Evaluation	45
	2.4.2 Lexical Realization of Evaluation	48
	2.4.3 Discoursal Realization of Evaluation	49
	2.5 Evaluation in Abstracts	51
	2.6 Academic Novice Writers	54
	2.7 Summary	57
<b>3</b>	<b>RESEARCH METHODOLOGY</b>	<b>58</b>
	3.0 Introduction	58
	3.1 Description of the Corpus	59
	3.2 Treatment of Data	61
	3.3 Preparing the Data for Analysis	61
	3.3.1 Coding Moves in the Corpus of Science and Engineering Abstracts	62
	3.4 Analyzing the Sub-corpora	64
	3.4.1 The Structural Analysis (macro level)	67
	3.4.2 Lexico-grammatical Analysis (micro level)	69

	3.5 Conclusion	73
<b>4</b>	<b>RHETORICAL STRUCTURE IN THESIS ABSTRACTS</b>	<b>74</b>
	4.0 Introduction	74
	4.1 Macro-structural Analysis	75
	4.2 Reliability of Move Identification	77
	4.3 Identification of Structural Organization in Thesis Abstracts	79
	4.4 Frequency Analysis of Sections in Thesis Abstracts	94
	4.4.1 Distribution of Moves within Science Sub-corpora	97
	4.4.2 Distribution of Moves within Engineering Sub-corpora	
	4.5 Discussion	104
	4.6 Conclusion	110
<b>5</b>	<b>LEXICO-GRAMMATICAL FEATURES OF EVALUATION IN THESIS ABSTRACTS</b>	<b>111</b>
	5.0 Introduction	111
	5.1 Micro-level Analysis for Evaluative Language	112
	5.2 Distribution of Evaluative Items	115
	5.3 Distribution of Evaluative Language per Section in Thesis Abstracts	145
	5.4 Hunston's (1993) Evaluative Categories	149
	5.4.1 Distribution of Evaluation Functions	150
	5.4.2 Evaluation Functions per Section in Thesis Abstract	158
	5.4.2.1 Introduction	160
	5.4.2.2 Purpose	163
	5.4.2.3 Methods	164
	5.4.2.4 Product	166
	5.4.2.5 Conclusion	168
	5.5 Expressions of Certainty and Doubt in Thesis Abstracts	171



5.5.1	Distribution of Lexical Devices Used to Express the Degree of Writer's Certainty or Doubt	172
5.5.2	Linguistic Resources Expressing the Degree of Writer's Certainty in the Product Section	174
5.6	Discussion	180
5.7	Conclusion	196
<b>6</b>	<b>CONCLUSION AND RECOMMENDATION</b>	<b>199</b>
6.0	Introduction	199
6.1	Summary of Findings	198
6.2	Pedagogical Implications of the Study and Classroom Application	203
6.2.1	Classroom Applications of the Study	208
6.3	Limitation of the Study	227
6.4	Recommendation for Further Research	227
	<b>REFERENCES</b>	<b>230</b>
	Appendices A-D	242-247

## LIST OF TABLES

TABLE NO.	TILTLE	PAGE
2.1	Studies on Structure of Abstracts	31
2.2	Studies on Linguistic Resources in Abstracts	36
3.1	Description of the Corpus	60
3.2	A Framework for Abstract Analysis Given by Hyland (2000)	67
4.1	Results of Inter-Coder Reliability Analysis of the Five Sections	78
4.2	Moves and their Frequencies in each Discipline	95
4.3	Distribution of Moves within the Science Abstracts	98
4.4	Distribution of Moves within the Engineering Abstracts	100
4.5	Percentage of Thesis Abstracts Containing Particular Moves Compared to Hyland's (2000) Results	102
5.1	Total Frequencies of Evaluative Items	115
5.2	Distribution of Evaluative Verbs	123
5.3	Distribution of Evaluative Adverb(ial)s	129
5.4	Distribution of Evaluative Adjectives	134
5.5	Distributions of Modal Verbs	138
5.6	Distribution of Evaluative Nouns	142
5.7	Evaluative Language by Thesis Abstract Section in the Science Sub-Corpora	147
5.8	Evaluative Language by Thesis Abstract Section in the Engineering Sub-Corpora	147
5.9	Evaluation Functions and their Realizations in Thesis Abstracts	151
5.10	Evaluation Functions Counted per Section in Thesis Abstract	158
5.11	Total Lexical Devices Used to Express Epistemic Meaning	172
5.12	Most Frequent Items Expressing Stance in Rank Order by Field	175
6.1	Options for Realizing Moves in an Abstract	225

## LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
1.1	Conceptual Framework	14
3.1	The Use of Slash and Angle Bracket in the Plain Text Files to Show the Move Boundaries	63
3.2	The Concordance Lines for the Search Item <i>Show</i>	66
3.3	The Concordance Lines for <INT	69
3.4	List of Evaluative Word Forms Searched for	70
3.5	The Concordance Lines for Non-Evaluative Adjective <i>Significant</i>	72
3.6	The Concordance Lines for Evaluative Adjective <i>Significant</i>	73
5.1	List of Evaluative Word Forms Searched for	114
5.2	Concordance Lines for Evaluative Verb <i>Show</i> from Science Sub-Corpora	124
5.3	Concordance Lines for the Evaluative <i>Verbs</i> in <i>That</i> -Clauses from Engineering Sub-Corpora	125
5.4	The Concordance Lines for the Evaluative Adjective <i>Useful</i> from Engineering Sub-Corpora	136
5.5	The Concordance Lines for the Modal <i>Can</i> from Engineering Sub-Corpora	140
5.6	Evaluative Markers Counted per Section in Thesis Abstract	146
5.7	The Concordance Lines for the Evaluative Adverb <i>Probably</i> from Science Sub-Corpora	153
5.8	The Concordance Lines for the Evaluative Adjective <i>Good</i> from Science Sub-Corpora	154
5.9	The Concordance Lines for the Evaluative Adjective <i>Important</i> from Science Sub-Corpora	155

5.10	The Concordance Lines for <i>The Objective</i> from Science Abstracts	164
5.11	The Concordance Lines for Evaluative Adjective <i>Good</i> from Science Abstracts	166
5.12	Distribution of Epistemic Resources among Categories in the Product Section	173
5.13	Normalized Frequency of Epistemic Devices in the Product Section	174
6.1	A Sample Thesis Abstract Showing Rhetorical Structure	213

<b>APPENDIX</b>	<b>TITLE</b>	<b>PAGE</b>
A	Science and Engineering Thesis Abstracts and Distribution According to Disciplines and Universities	251
B	Search Items Investigated	252
C	Science Abstract from Universiti Putra Malaysia (UPM)	256
D	Engineering Abstract from Universiti Sains Malaysia (USM)	257



## **CHAPTER 1**

### **INTRODUCTION**

#### **1.0 Background of the study**

Abstracts are acknowledged to be an important form of scientific discourse. The study of abstracts has become a major concern of research in the area of applied linguistics. This growth of interest can be contributed to the fact that abstracts are an essential part of research and are considered as the main means employed by researchers in handling the enormous flow of information in today's competitive academic world. It is in abstracts that writers introduce the research, summarize the methodology used, highlight novel findings and promote their significance to the field. The persuasive nature of abstracts mandated the employment of evaluative language; not only that research writers need to situate their study, they also must convey their stance towards their knowledge claims and display their attitudes towards their own findings, all within a specified word limit and restricted space. Abstracts are considered mandatory in scientific communication. In fact, many journals published in languages other than English expects the writers to write an English abstract of their research, which is to certify the dissemination of knowledge worldwide (Lores, 2004; Ventola, 1994). Hence, abstracts are an important genre to study, for both practice and research purposes.

The American National Standards Institute (ANSI) defines abstract as “an abbreviated, accurate representation of the contents of a document, preferably

prepared by its author(s) for publication'' (ANSI, 1979, p.1 as quoted in Bhatia, 1993, p.78). Although this definition seems to consider abstracts as representation of both structure and content of their accompanying research, but as Nwogu (1990) indicates, it is not always the case. While abstracts summarize the content of the accompanying research, they are not always representation of the surface structure of their respective research. Similarly, Lores (2004) suggests that an abstract as a document that precedes the full text seems to be different from the accompanying research, and there are variations regarding its function, rhetorical structure, and linguistic realizations. These features are totally influenced by the functions of abstract.

Since the most obvious function of evaluative language is expressing the writer's feelings, there is no doubt that these features play an important role for gaining readership in academic genres as abstracts which are concerned with promotion and persuasion. To persuade readers and gain readership, abstract writers need to show that their study has the necessary academic credibility, not only that the research contains new information, but that it is also carefully situated against some prior claims or within an acceptable frame or theory. This persuasive act is not simply achieved by objective presentation of outcomes of the study using technical terminology, but by lexis that carry the expression of the writer's attitudes towards the content of their texts. Very often writer's attitudes are marked subtly by the use of evaluative lexis and they also indicate reader-writer relations (Hyland, 2000).

Negotiation of interpersonal meanings is one of the most prominent features emerged from recent research particularly in discourse studies of abstracts (see Hyland, 2000; Stotesbury, 2003; Hyland & Tse, 2005; Pho, 2008). Analyses of personal expressions in abstracts have provided new insights into the differing ways in which writers use evaluative language to convey their personal feelings and assessments in relation to the content (Hyland, 2000; Hyland & Tse, 2005; Gillaerts & Van de Velde, 2010; Hu & Cao, 2011).



The focus on stance and evaluation has been motivated by the growing recognition of the discursive features of academic discourse where authors employ various rhetorical maneuvers and linguistic devices in their writing to persuade communal acceptance for their work. Evaluative markers are indispensable to these social and interpersonal engagements. Perhaps, the most evident is the useful distinctions made between textual and interpersonal metadiscourse drawn by Hyland (2000). While textual interactions organize texts and guide readers through the information, interpersonal linguistic features convey the writer's attitudes to evaluate claims (Hyland, 2000; Hyland & Tse, 2005).

Academic writers use stance devices to express their attitude and to situate their research in relation to others' work in their field. Second language writers, however, often find representing points of view while making knowledge claims a challenging rhetorical maneuver to accomplish. An apparent unwillingness to take stance is generally explained in the literature. Explanations that the lack of taking stance by novice writers have varied include lack of clear understanding of the nature and function of evaluative stance in academic discourse amongst L2 writer (Groom, 2000), socio-cultural expectations for using interpersonal meanings in academic writing in English (Taylor and Tingguang, 1991; Connor & Kramer, 1995), and perhaps rigid practices in the exam-driven in L2 writing (Hyland and Milton, 1997).

In fact, negotiation of interactional meanings is a key feature of communication in academic writing. Through evaluation, academic writers acknowledge their viewpoints and exhibit subtly the competitive nature of the research community. Evaluation is used by academic writers, amongst others, to close off alternative viewpoints by strengthening their own asserted position (Gillaerts and Van de Velde, 2010; Hyland, 1998). Evaluation thus is an important rhetorical device that allows writers to position their current research persuasively and effectively within a broader research community of which they are a member.

## 1.1 Challenges in writing abstracts

Successful academic writing depends on how members of specific disciplines use language to project shared professional goals. Most obviously, such a projection requires writers to embed their writing in a specific social discourse whereby they construct ideal texts with specific reading audiences in mind, and seek to pursue their personal and professional aims. Writers seek to realize those ideal texts through designing their discursive structures and lexico-grammatical features to match the conventions of the genres within which they are writing. Those structures and features are traces of social interactions with others as members of a specific community (Hyland, 2000).

At a practical level, writing academic abstracts is often perceived as an effective means of introducing one's work in order to enter to the world of publication. Moreover, it could be considered as an evidence of scholarship and disciplinary knowledge. Acquiring the 'community of practice'- the shared knowledge, purposes, culture and practices of the discourse community (Wenger, 1998) is expected of novice writers in almost all disciplines and research contexts. Though, the notion of disciplinary discourse in evaluations practices may not be considered as an overtly explicit feature through which the social identities of novice writers are shaped in discourse participation. Thus, they need to be acquainted with some of the conventional disciplinary writing practices through which they position their research. It is important to note that the use of evaluative language is one of these academic practices (Hunston 1993, 2011). Academic writers use evaluative language to express their stance as well as to situate their research findings in their respective field. This positioning challenge non-native writers' attempts to construct arguments in the ways that characterize expert professional academic practices. Thus, novice writers need to represent their points of view on their research and its findings when making knowledge claims. Therefore, a study on the ways in which interpersonal meanings in academic abstracts are represented linguistically could be an efficient means for revealing discourse practices of novice writers. Moreover, studies such as these have valuable pedagogical implications for supporting emerging research writers, facilitating their engagement with academic knowledge

and managing the demands of their disciplinary discourse.

As novice research writers progress to complete their post-graduate studies, they are expected to construct arguments in the ways that matches the underlying expectations and conventions of expert professional academic practices in their field as well as one that characterizes the use of expert language by English writers. Such professional practices involve student writers to argue the value of academic interactions and require them to be concerned with the linguistic resources they need in academic writing. This kind of awareness restricts the linguistic resources required, particularly features for expressing explicit interpersonal meaning. The goal at this level is for writers to present their own research while at the same time manage the manipulation of explicit lexico-grammatical features expressing commitment to the knowledge claims. As highlighted by Hyland (2005), the signaling of writers' presence in the text is a matter of the writer's conscious choice depending on how they would like to relate their claims and argument to their respective community of practice in order to gain reader approval. The goal is achieved through appropriate employment of linguistic resources in order to produce effective and convincing academic knowledge.

Based on the above accounts, it seems clear that there are numerous challenges faced by L2 writers in writing an abstract. The construal of the rhetorical structure of abstracts and the manipulation of appropriate evaluative language in these multifunctional texts, are perceived as challenging by student writers. A review of literature would suggest that such a perception is restricted to second language student writers (Ivanic 1998), or to novice academic writers in undergraduate studies (Hyland 1998, Samraj 2000). In their academic training programs, graduate students have very few courses that offer comprehensive formal instruction in the final step in the research process: how to write an abstract. Although many faculty members are instrumental in providing informal suggestions to students in their capacity as supervisors and advisors, most emerging research writers lack a clear understanding of the abstract writing and how to successfully manage it. Even though Swales (2004) transferred their findings to pedagogical grounds, a survey of the current

handbooks reveals that there is a lack of instructional materials that provide guidelines to writers who need to learn about how to write an abstract. As a result, beginning research writers may be disadvantaged by their lack of knowledge about the rhetorical and stylistic conventions of the genre. Thus, the study of abstracts in L2 context merits further exploration, not only that it will contribute to our understanding of how the evaluative language is construed in specific disciplinary contexts of academic writing, but also more importantly, to gain insights for expanding our capacity to help students produce this genre appropriately. Therefore, the general aim of this current study is to investigate the ways in which L2 postgraduate writers employ the linguistic resources according to the conventions of their respective discipline.

## **1.2 Problem statement**

There exist clear evidence on the lack of critical perspective in novice researchers or students' writing—in particular, novice writers are found more commonly to reproduce rather than evaluate and question knowledge claims (Flowerdew, 2001). Student writers receive much advice about how to employ linguistic resources, language at the level of grammar (mostly from a structural rather than a functional perspective), and text level cohesion, but very few programs focus on formal instructions in raising student writers' awareness of the interpersonal meaning and interaction between writer and reader in writing. Hyland and Milton (1997), for example, in a study of writing in British and Hong Kong secondary schools reported a lack of evaluative stance in students' academic writing. Similarly, Groom (2000) points out that the nature and function of argument in academic genre is the most difficult feature to master for many struggling student writers, because it is the features that many novice writers are not even aware of. Moreover, the linguistics aspects of evaluation are rarely taught explicitly in writing classes. Many novice research writers are unaware that they are supposed to position themselves and situate their work in relation to the cumulative contributions of research findings in the field.

Moreover, the linguistics aspects of evaluation are rarely taught explicitly in writing classes. Many novice research writers are unaware that they are supposed to position themselves and situate their work in relation to the cumulative contributions of research findings in the field. The difficult challenge of communicating research findings effectively is compounded especially for non-native speakers of English. Flowerdew (2001) in his studies of non-native researchers in Hong Kong has documented that one of the problems in non-native speakers' writing is the lack of authorial stance. In addition, Yakhontova (2002) has proven that abstracts written by non-native researchers have shown cultural proclivities at various linguistic levels. Ventola (1994) also concerns the problem of writing abstracts particularly in a foreign language and suggest that abstracts need to be taken as a serious object of linguistic study.

Therefore, the current study has examined the difficulties faced by student writers when it comes to constructing research abstract and projecting their authorial stance. Findings from this study could contribute towards understanding the nature of writing research in second language in general, and within the genre of research abstracts, in particular. The findings also could provide some insights for student writers to effectively negotiate the positioning of their research when writing abstracts. Pedagogically, explanations of evaluative language revealed by this study will provide rich resources for teachers of advanced academic literacy, to aid their students in modeling evaluative strategies in thesis abstracts. The incorporation of the knowledge of rhetorical and linguistic features of abstracts into academic writing courses will be of great help in preparing novice research writers to participate in the world of professional publication.

### **1.3 Rationale of the study**

The rationale for this study was determined based on various factors. As it was established through the linguistic studies of genre (Swales, 1990, 2004; Bhatia,

1993), communicative purposes were found to shape the structure of the discourse and constrain the choice of content. Sawles (2004) suggests that genre is to be regarded as the frame for social action, directing users to achieve particular purposes through language use. Most of these linguistic features act as the interpersonal component in academic writing. Taking into consideration that the main purpose of thesis abstracts as an academic genre is promoting the new knowledge in a thesis, it is sensible to accept that the existence of specific rhetorical functions contribute to establishing a relatively stable structural form and even confine the use of lexicogrammatical features in realizing these forms.

Negotiation of interactional meanings is a key feature of communication in academic writing. Through evaluation, academic writers acknowledge their viewpoints and exhibit subtly the competitive nature of the research community. Hyland (2000) discusses that academic writers are oriented to do more than report research that principally represents a scientific fact. They work to pursue their personal and professional goals in their respective academic discourse through projecting their attitudes into the text when composing. Evaluation thus is an important rhetorical device that allows writers to position their current research persuasively and effectively within a broader research community of which they are part.

The study of evaluation in academic writing is important for a number of reasons. What research writers mainly do is to introduce the research, summarize the methodology used, highlight novel findings and promote their significance to the field (Hyland, 2000). Expressing an attitude towards their research findings is important in social negotiations of disciplinary knowledge, revealing how knowledge claims are constructed, negotiated and made persuasive based on appropriate disciplinary conventions. The second reason for the attention given to evaluative language in academic writing is the fact that evaluation plays a role in building relations between writer and reader. Since evaluation is personal and subjective (Hunston, 2011), the writers can be said to be using evaluative language as a means of persuasion to make the readers think in a particular way.

In genre analysis, the focus has been on the communicative purpose of the moves which in fact determines the shape of its surface structure. Since abstracts is a promotional genre with the basic aim to gain reader's interest and acceptance, the greatest concern for this study becomes the question of how thesis abstract as a promotional genre try to influence the readers through its rhetorical structure and language manipulation. Thus, it is logical to assume that the examination of linguistic choices serves as an indication of these resources being conventionalized by the respective community, which would suggest their promotional nature. Thus, the concern of the present study is to study how various linguistic features work together in unique combinations to help realize the rhetorical purposes of the moves identified in the genre.

This study of evaluative language within the genre of thesis abstracts is particularly fruitful, since it provides information about the ways in which second language writers control their resources of English, a language that is not their mother tongue, yet being used in order to achieve the communicative purposes of the genre. Specifically, this study could help to provide more reliable and comprehensive vision of evaluative language, and thereby the underlying and pragmatic intent, in academic communications in thesis abstracts written by postgraduate novice research writers in specific disciplinary fields. The main concern in this study is to be able to reveal the ways in which the generic stages of the thesis abstracts are socially constructed through communication with other members of the respective community. Thus, there is a need for research into how the values and epistemology of the discourse community are constructed in academic practices. Accordingly, identification of linguistic realizations most typically associated with evaluation is used as the starting point. By presenting objective meanings (scientific facts) with interpersonal orientation, linguistic features facilitate reader engagement with academic knowledge. It would be more informative and useful to study the distribution and co-occurrence of such features of language at once. Analyses of the quantitative results of frequency counts are intended to understand the workings of interactional practices in academic writing. Computer driven, corpus-based approaches allow us to do this. The frequencies, in other words, are intended to fill

some gaps in our knowledge of the rhetorical strategies, and provide explanations of underlying communicative purposes and interactional practices in thesis abstracts.

#### **1.4 Research Questions**

The main goal of the study is to explore how L2 novice research writers write thesis abstracts based on the conventions of their respective disciplines. To further enhance the description of the manner in which novice writers write abstracts, a comparison is made to the abstracts written by the Science and Engineering novice writers. Thus, the study focuses to find answers for these questions:

1. How do novice academic writers in Science and Engineering disciplines structure their thesis abstracts?
2. How do novice academic writers express evaluation in the abstracts of their thesis?
3. What are the evident similarities and differences across disciplines?

#### **1.5 Theoretical Framework**

An exploration of data in this study begins from a theoretical perspective that understands learning as ever-increasing participation in the community of practice. Lave and Wenger (1991) propose theory of ‘situated learning’ which conceive learning in terms of participation in the social practices by specific people in specific community. They believe that learning involves not only learning how to use tools and perform genres, but also what the values of the professional community are.

One way in which academic writers negotiate meaning in their communities



of practice is through expressing their attitude towards the knowledge structures. For instance, the genre of abstract is not only a summary, but also an opportunity for research-representation for the academic writer. Since academic knowledge is socially constructed through discourse (Hyland, 2000), exploring writer's attitude towards their knowledge claims may shift one's attention to the importance of the epistemological features in the overall social purpose of the genre, thereby making invisible interpersonal meanings and social practices visible through newly gained layers of insight. The social practices may elicit thoughts about the value, worth and significance of the knowledge claims they made.

According to Wenger (1998), communities of practice are characterized by three dimensions namely, mutual engagement, joint enterprise and a shared repertoire. Mutual engagement creates mutual relationships and it connects participants in terms of personal features or social categories. In the same line, joint enterprise creates relations of mutual accountability among participants. Wenger's third dimension, 'shared repertoire', includes routines words, tools, ways of doing things, stories, gesture, symbols, genres, actions or concepts.

In Wenger's view, the concept of 'practice' connotes doing in a historical and social context that gives structure and meaning to what we do. In this sense, practice is always social practice. Practice interacts with social structures, and it also interacts with the community's epistemology. Similarly, Swales (1990) proposes that a discourse community has a broadly agreed set of common goals and mechanisms of intercommunication among its members, emphasizing on the notion of 'discourse'. Swales' definition of a discourse community emphasizes on how it uses discourse, and more specifically the focus is on how these communities employ genres. He describes a discourse community as a socio-rhetorical community (i.e. a community of genre users); hence, a discourse community possesses one or more genres in the communicative furtherance of its aims, thus acquiring some specific lexis. However, the role of discourse communities as a genre involves much more than only linguistic patterns and specific discourse; they are just some of the elements that shape the genre, such as the role of the writers as users of genre. The theoretical focus of this

work has been motivated by the perception that attempt to link genres to the values and epistemology of the discourse community (Freedman and Medway, 1994).

Lave and Wenger's (1991) theory of 'situated learning' in a community of practice is drawn on in examining the data in this study. The issue to highlight here is that from such a theoretical position, different kinds of discourse are seen to implicate different ways of learning, and to construct different kinds of knowledge. Thus knowledge is constructed within the framework of social communities and academic writers as members of those communities need to consider the expectations of their respective community.

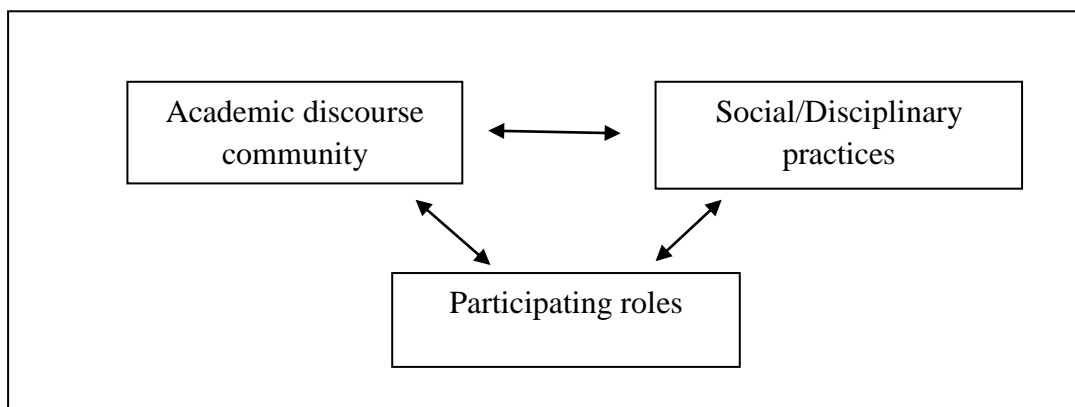
Therefore, within the theoretical framework of situated learning, the current study employed a corpus analytic approach to determine that the characteristic academic practices of novice writers can be ascribed to common socio-rhetorical practices of their respective community in terms of construction and dissemination of knowledge.

## **1.6 Conceptual framework**

A theory of social practices emphasizes the interdependency of cognition, learning and knowing in the socially structured communities (Lave & Wenger, 1991). In a theory of practice, social cognition and interaction in the world are positioned towards the development of ongoing activity. As Wenger (1998) pointed out, the participation in the social practices by specific people in specific community contributes to situated learning. Novices participate in the sociocultural practices of a professional community under the watch of experts, and they have an opportunity to develop their professional identities in relation to other community members. Learning is therefore viewed as a process by which a learner internalizes knowledge through interaction with other community members. Before the novices become

‘fully fluent’ in the community of practice, they engage in what Lave and Wenger (1991) call ‘legitimate peripheral participation’. As a result, learning in a community of practice is always based on situated negotiation of meaning in the world. Thus, this view claims that social practices (i.e., discourse community, activity and participation) shape the core of the theory of situated learning. The conceptual framework of situated learning—specifically, the concepts of discourse community (i.e., Science and Engineering fields) and genre (i.e., abstracts) —were used to facilitate the interpretation of the findings (Figure 1.1). Academic writers position their research in their communities of practice through the use of community’s epistemology (Hyland, 2000). For instance, the use of specific linguistic features is a recognized means of conveying the writers’ attitude towards professional practice in their respective community.

## Situated learning



## Academic writing

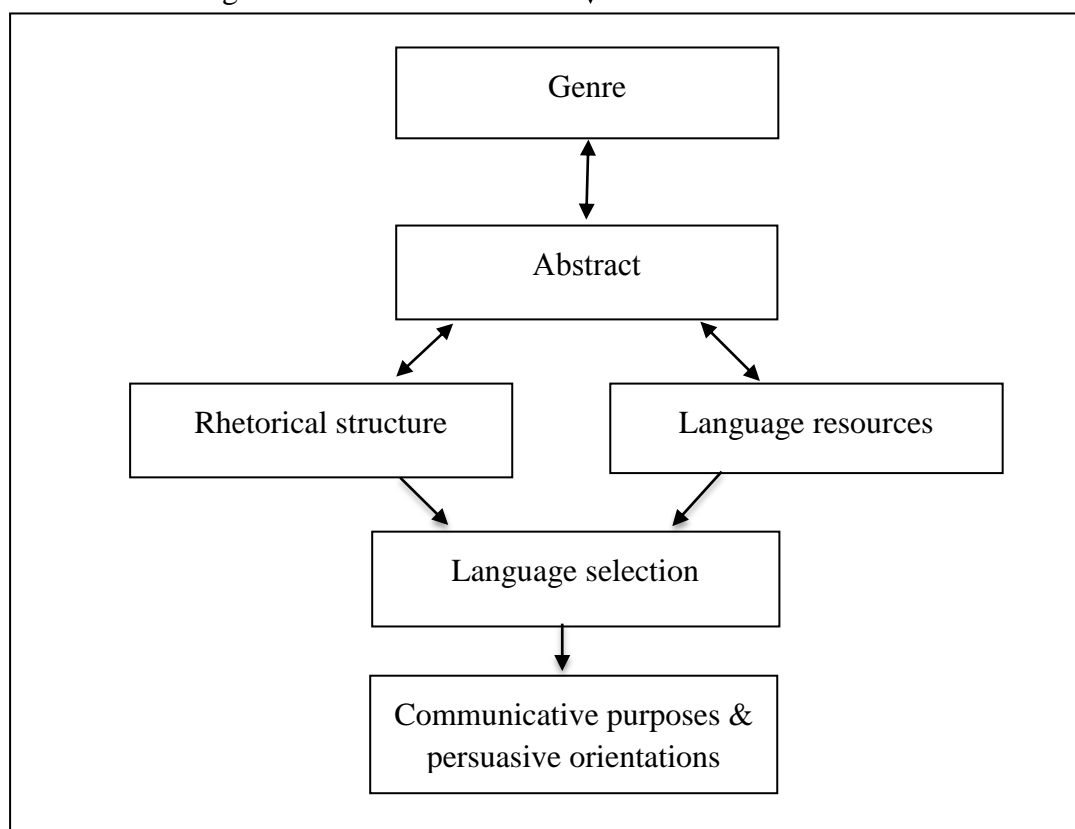


Figure 1.1: Conceptual framework

Exploring an abstract's interpersonal meaning (e.g., evaluative stance) shifts one's attention to the social perspectives on the academic discourse community through a persuasive orientation. This process of making sense of evaluative stance and how it is incorporated into the discourse practices and the process of knowledge construction recognizes the active participation of the individual within the social

world. The focus of this thesis is therefore on the linguistic analysis of the abstract genre, to explore social practices in learning the linguistic demands underlying expectations that novice writers use in the process of knowledge construction. This process of knowledge construction highlights the socially conveyed character of learning and the way it is incorporated into discourse practices recognizes the active participation of the individual within the social world.

The framework of the study was derived from principles in academic abstract writing, evaluative language and genre theory. This multifaceted approach is not unfamiliar in the study of discourse, in fact essential, to identify linguistic features that are employed for writing of a genre.

### **1.6.1 Abstracts as genre**

Abstracts as integrated part of the theses/dissertations have an important role of transferring condensed information. As students proceed to the completion of their academic studies, they are expected to construct arguments in the ways that characterize expert professional academic practices. Such professional practices require writers to add a further dimension that is beyond the level of discourse, in which they present and situate their own research. In this case, they are required to address the dual demands of objectivity and subjectivity. This coupling is realized by appearing to be objective while at the same time presenting the research without appearing too assertive. For the novice writers, the use of these features places a greater pressure and demand on them where they need to strike a balance between commitment to their ideas and claims to be further evaluated by fellow researchers. However, Shaw (2000) notes that dissertation writers were more likely to use strongly evaluative language to communicate the significance of their research and engage with readers, such as the adjectives *necessary* or *important*, and they were more likely to double-hedge their claim (overuse evaluative expressions in their claims), as in *suggesting that X may be Y* (p.52). In Shaw's view, such employment

of markers of evaluation might be ascribable to the genre or to the fact that novice research writers may be relatively lacking in writing skills or in self-confidence.

Abstracts tend to occur at the beginning of the research, and are often considered challenging in terms of the ability of student writers to negotiate their main claims and situate themselves as competent members of their community. The confined discourse of abstracts demands researchers to make the best of its space to negotiate the significance of the study and position their work in their respective discipline. Evaluative language is an important means by which writers intervene into their discourse to promote the worth and importance of their knowledge claims. This context of academic writing is used as a basis for this study, with specific attention to the disciplinary variations in the ways in which post-graduate writers position their own research in the abstracts of their theses.

The current study is strongly related to the previous research on abstracts (Hyland, 2000; Samraj 2002b), even though their focus was on published writers. Studies of abstracts written by novice writers have received comparatively less attention in research than have studies of abstracts written by the published writers. From these studies, it is apparent that abstracts serve as independent genre which are highly promotional. Features of promotion could help involvement of the writer with reader. The construction of such involvement overlaps with other constructs that refer to the linguistic marking of evaluation and stance (Hunston 1993, 2011). Stance or evaluation is a broad construct, which is defined as the expression of personal feelings, attitudes, value judgements, or assessments (Biber *et al.*, 1999). Several studies on the abstracts also work on the same linguistic feature marking evaluation.

### 1.6.2 Evaluative language features

Evaluation is a major feature of communication. Studies have suggested its importance for offering a very powerful way of looking at how writers as social participants in a disciplinary community project themselves into their work by assuming shared attitude, values, and reactions (Hunston, 1994, 2011; Hyland, 1999). Hyland's view that understands language as social interactions in communities draws attention to the phenomenon of evaluation. Evaluation and stance used as linguistic resources to project writers' attitude and reaction in texts have been studied over the years. Evaluation as a linguistic device has many different definitions; in general, however, it is used as an umbrella term by Hunston and Thompson (2000) for the expression of the speaker or writer's attitude or feelings about the entities or propositions. They discuss that "this attitude may relate to certainty or obligation or desirability or any of a number of other sets of values" (p.5). Different acts of evaluation are realized through different functions of evaluation proposed by Thompson and Hunston (2000), namely:

1. Evaluation of status, assessing the degree of certainty that could be attached to each part of the knowledge claim expressing the writer's view of the status of propositions and entities (e.g. *confirm, prove, validate*).
2. Evaluation along the positive-negative parameter, assessing the worth of something (e.g. *good, excellent, optimum*).
3. Evaluation of the importance, organizing the texts to guide the readers towards the intended coherence of what they are reading (e.g. *important, significance*).

An awareness and knowledge about effective communication of ideas is of high significance especially for L2 novice writers. It has been found that the lack of authorial voice is one of the problems of non-native speakers (Flowerdew, 2001). Incorporation of the knowledge of rhetorical and linguistic features into academic writing courses therefore will be of great help in preparing student writers to participate in the world of publication. This fact and the complexities of evaluation

used in academic English described above led to the present research to look into the rhetorical structure of abstracts and the linguistic realizations of evaluation used by novice research writers.

### **1.6.3 Genre theory**

This study of evaluative language in thesis abstracts represents a study of genre-specific linguistic features, which consequently requires that the genre analysis theory be taken into account. Genre have been largely viewed and studied from two perspectives, one that considers the genre from the perspective of generic structure and another that considers the linguistic features. Considering both perspectives, this study, then, requires a detailed analysis of generic structuring as well as the linguistic features marking evaluation, as used in a particular genre, i.e. thesis abstracts.

Perhaps the most influential work of genre analysis has still been that of Swales (1990), which gives much attention to EAP and the communicative purposes of a discourse community to achieve socially recognized goals:

“A genre comprises of a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expect member 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 constrains choice of content and styles. 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. If all high probability expectations are realized the exemplar will be viewed as prototypical by the parent discourse community” (Swales 1990: 58).



Swales (1990) acknowledges that the genre embodies a range of communicative acts interacting to accomplish the communicative purposes of the genre. The definition above emphasizes the role of communicative purposes indicating its importance for the discourse community, and refers to a group of expert members who are aware of the shared purpose(s) of genre that need to be achieved, and establish very identifiable conventions of the genre. These conventions could be seen distinctive across the genre, suggesting the notion of universal patterns of one genre. These universal patterns, which are changing constantly, could allow recognizing the category of membership (Swales, 1990). In the case of abstracts, as proposed in this research for example, some similarities such as the writer's involvement with the academic discourse community (writers and reader), the way in which the rhetorical structure of abstracts are constructed and lexical choices are incorporated in abstracts to realize certain discourse functions put the abstracts in the same genre category.

Similarly, Bhatia (1997) highlights the role of genre as a means of achieving a communicative goal and defines genre analysis as “the study of situated linguistic behavior in institutionalized academic or professional settings” (p. 1). Therefore he argues,

“Genres are essentially defined in terms of the use of language in conventionalized communicative settings. They are meant to serve the goals of specific discourse communities, and in doing so, they tend to establish relatively stable structural forms, and to some extent even constrain the use of lexico-grammatical resources in expressing those forms” (Bhatia, 1997, p. 2).

In this regard, Bhatia assembles considerable interactive perspectives for the genre analysis in respect to the complexity and dynamism, namely the real world perspective, the writer's socio-cognitive perspective, the discourse analyst perspective and the pedagogical perspective (Bhatia, 2002). In the abstract genre, from the real world perspective, the common purpose of writing abstracts is the

dissemination of knowledge. Though, there are variations in the way abstracts are written in different disciplines. For instance, abstracts written in science and social sciences may not be similar perhaps because of the variations in the organization of information systems of the discourse communities. All in all, although a genre is understood to represent characteristic and identifiable conventions, they are subject to deviations and therefore they are dynamic processes of knowledge construction.

### **1.7 Assumptions of the study**

An important assumption made for this study was that in the case of abstract writing, all L2 writers whose abstracts were collected for the development of the corpus are novice writers in English, but they may be advanced learners of English. This assumption reflects the L2 writers' ability to achieve local discourse goals (e.g. signaling sections within the generic structure) and the communicative purposes of the genre.

It is also assumed that abstracts are evaluative genre since they are summaries of the academic research which are persuasive, and as a result, they are evaluative. As indicated by Hunston (1993) and Thompson and Hunston (2000), evaluative language has proved influential in academic discourse and there is little about the generic preferential features in academic writing as well as the interaction of these features with the disciplinary preferences and conventions. They argue that evaluation is an obligatory element throughout all texts including the academic writing.

The study addresses the concerns of L2 research writers of English whose disciplinary communities are Science and Engineering. The particular site of concern in the research undertaken in this study is thesis abstracts written by advanced second language writers with the different cultural and educational backgrounds. Thus, the

texts written by less-advanced writers and their specific disciplinary conventions were not studied. Moreover, abstracts were written by non-native speakers of English; English is used as medium of instruction at post-graduate level. It is assumed that research writers were mostly from Malaysia, Asian and African countries where English is spoken as second/foreign language, and thus might be of limited use for generalization to a specific context.

### **1.8 Limitations of the study**

Although this research is carefully prepared, I am aware of its limitations. The first limitation is that the data have been collected from only four research universities in Malaysia, namely Universiti Teknologi Malaysia (UTM), Universiti Putra Malaysia (UPM), University of Malaya (UM) and Universiti Sains Malaysia (USM). Engineering abstracts are from fields such as Mechanical, Electrical, Chemical, Civil and Environmental Engineering. Science abstracts are from several fields in the Science such as Physics, Chemistry, Zoology, Botany, Physiology and Biology. The study investigates the schematic structure as well as the distribution of evaluative lexis in abstracts. The data from another research university, Universiti Kebangsaan Malaysia (UKM), were not considered in the analysis since English use is limited in thesis/dissertations.

The study explores the writing style of Master and PhD student writers in writing abstract, and all texts analyzed are from within the fields related to Science and Engineering. Thus, it is not comprehensive enough since it does not cover the abstracts in other fields (e.g. Social sciences). In addition, completing the analysis with interviews could have allowed further investigation of abstracts in terms of the students' attitudes towards writing an abstracts as well as their previous experiences and practices on abstract writing. Though, interviews were not conducted because of the students' graduation/unavailability.

The present study of evaluative language was based on a wide range of evaluative features, such as evaluative verbs, evaluative nouns, evaluative adjectives, modal verbs, adverbials. However, the study did not include evaluative language from other perspectives such as phraseology. Phraseology refers to a range of lexical bundles that express stance, such as *no doubt*, *in fact*, *according to* (see Biber et al., 1999). Besides, the study did not account for the use and association of some certain aspects of grammar with evaluation as intensifiers (e.g. *all*), explicatives (e.g. *while*, *though*, *because*), emphatics (e.g. *for sure*, *really*) and expressions of the source of propositions (cf. Chafe, 1986). Inclusion of these aspects of evaluation and stance would make a study of rhetorical devices much richer, and represents a challenging venue for future research on the way academic writers engage with reader with the aim of situating their research within a broader research community of which they are part.

## **1.9 Operational definition of terms**

The ensuing key terms are described in order to ascertain a consistent meaning in the current study.

### **1.9.1 Abstract**

The study of abstracts has become a particular research interest in the area of applied linguistics. The concern is mainly due to the importance of the genre in academia—an abstract is an essential part of research write-up, both in thesis/dissertation writing and in professional journal publications. An abstract may be recognized due to its multifunctional characteristics. In an academic setting an abstract is always understood as a tool for managing and mastering a lot of information. Yet a good abstract will be able to stand out in the competition for readers in today's digital academic publications scenario, attracting readers to look

further into the accompanying materials and thus increasing the likelihood for the materials to be cited (Lores, 2004; Ventola, 1994). The American National Standards Institute (ANSI) defines it as “an abbreviated, accurate representation of the contents of a document, preferably prepared by its author(s) for publication with it” (ANSI, 1979, p. 1, in Bhatia, 1993, p. 78). In this investigation the term abstract basically refers to a short summary of a much longer report (i.e. thesis).

### **1.9.2 Evaluation**

Evaluation has been acknowledged as anything which expresses the writer’s attitude towards the value of an entity or proposition in the text. Evaluative language is located within a societal value-system and expresses subjective and personal attitude towards a person, situation or other entity and (Hunston, 1993, 2011). The writer/speaker utilizes the evaluative language to project themselves and their work into the texts to communicate their attitude to the subject matter and readers. In this study the term evaluative language refers to the linguistic features that express the writer’s attitude towards their research work.

### **1.10 Conclusion**

This chapter has set the scene for the investigation by describing all pertinent background information relevant for the study. The multifunctional genre of abstract offered an interesting area to study. This thesis chose to focus on identifying the way in which L2 writers structure their thesis abstracts using the linguistic framework of evaluations. In the next chapter related literature will be reviewed in great length to describe previous studies related to the topic.

To sum, the general context for this study was ESL setting which is quite different from English native environments. In ESL settings, the students use their mother tongue to communicate in most of their academic activities. But they are required to write in English which is a medium of instruction at the universities as well as publishing in English medium journals of their discipline. Such a setting might be challenging for L2 emerging writers particularly in hard discipline since these students are not engaged in many writing assignments during their undergraduate studies and receive no clear writing support during their postgraduate career. Thus, they need to improve the use of English as a medium of instruction in their academic communications. Novice writers need to be made aware of the more effective use of certain linguistic features for a more effective writing. Experts in academic writing and language support staff can play a major role in making students aware of on the ways writers position their own work based on the conventions of their respective discipline, thus improving their academic literacy and advanced writing skills.

## REFERENCES

- Afros, E., and Schryer, C. F. (2009). Promotional (meta) discourse in research articles in language and literary studies. *English for Specific Purposes*, 28(1), 58-68.
- Anderson, K., and Maclean, J. (1997). A Genre Analysis Study of 80 Medical Abstracts. *Edinburgh working papers in applied linguistics*, 8, 1-23.
- Anthony, L. (2011). AntConc (Version 3.2. 2) [Computer Software]. Tokyo, Japan: Waseda University. Available from <http://www.laurenceanthony.net/software.html>
- Ayers, G. (2008). The evolutionary nature of genre: An investigation of the short texts accompanying research articles in the scientific journal Nature. *English for Specific Purposes*, 27(1), 22-41.
- Bakhtin, M. (1986). *Speech Genres and Other Late Essays*. Austin: Texas Press.
- Banerjee, M., Capozzoli, M., McSweeney, L., and Sinha, D. (1999). Beyond kappa: A review of interrater agreement measures. *The Canadian Journal of Statistics/La Revue Canadienne de Statistique*, 3-23.
- Barton, E. L. (1993). Evidentials, argumentation, and epistemological stance. *College English*, 55(7), 745-769.
- Bazerman, C. (1988). *Shaping written knowledge: The genre and activity of the experimental article in science*. Madison: University of Wisconsin Press.
- Bazerman, C. (1997). The life of genre, the life in the classroom. In W. Bishop & H. Ostrom (Eds.), *Genre and writing: issues, arguments, alternatives* (pp. 19-26). Portsmouth, NH: Boynton/Cook Publishers.
- Beach, R. & Anson, C. M. (1992). Stance and intertextuality in written discourse. *Linguistics and Education*, 4(3), 335-357.

- Becher, T., and Trowler, P. (2001). *Academic tribes and territories: Intellectual enquiry and the culture of disciplines*. UK: Edmondsbury Press.
- Besnier, N. (1993). Reported speech and affect on Nukulaelae Atoll. In Hill J. and Irvine, J. T. (Eds), *Responsibility and evidence in oral discourse* (161-181). Cambridge: Cambridge University Press.
- Bhatia, V. (2002). Applied genre analysis: A multi-perspective model. *Ibérica: Revista de la Asociación Europea de Lenguas para Fines Específicos (AELFE)*(4), 3-19.
- Bhatia, V. K. (1993). *Analysing Genre—Language Use in Professional Settings*: London, Longman.
- Bhatia, V. K. (1997). Genre-mixing in academic introductions. *English for Specific Purposes*, 16(3), 181-195.
- Biber, D. and Conrad, S. (2002). Register variation: A corpus approach. In Schiffrin, D., Tannen, D. and Hamilton, H. (Eds.) *The handbook of discourse analysis* (pp. 175-196). M. A.: Blackwell.
- Biber, D., Connor, U., and Upton, T. A. (2007). *Discourse on the move: Using corpus analysis to describe discourse structure*. Amsterdam/Philadelphia: John Benjamins Publishing.
- Biber, D., and Finegan, E. (1988). Adverbial stance types in English. *Discourse Processes*, 11(1), 1-34.
- Biber, D., and Finegan, E. (1989). Drift and the evolution of English style: A history of three genres. . *Language*, 65 (3), 487-517.
- Biber, D., Johansson, S., Leech, G., Conrad, S., and Finegan, E. (1999). *Longman grammar of spoken and written English*. London: Pearson Education Limited.
- Brown, J. D. (1996). *Testing in language programs*. . Upper Saddle River, NJ: Prentice Hall Regents.
- Bruce, I. (2008). *Academic writing and genre: A systematic analysis*: Bloomsbury Publishing.
- Burgess, S. (1997). *Discourse variation across cultures: A genre-analytic study of writing on linguistics*. Doctoral thesis, University of Reading.
- Burgess, S. (2002). Packed houses and intimate gatherings: Audience and rhetorical structure. *Academic Discourse*, 196-215.



- Busch-Lauer, I.-A. (1995). Abstracts in German medical journals: A linguistic analysis. *Information Processing and Management*, 31(5), 769-776.
- Bybee, J. L., and Fleischman, S. (1995). *Modality in grammar and discourse*. Amsterdam/Philadelphia: John Benjamins Publishing.
- Candlin, C. (1993). ESP in the workplace and the community: Discourse, social change and the impact on the ESP teacher. *Proceedings of the 1993 annual RELC Seminar*, Singapore.
- Chafe, W. (1986). Evidentiality in English conversation and academic writing. In Chafe, W. and Nicholas, J. (Eds), *Evidentiality: The linguistic coding of epistemology* (261-273). Norwood, NJ: Ablex.
- Chafe, W. and Nicholas, J. (1986). *Evidentiality: The linguistic coding of epistemology*. Norwood, NJ: Ablex.
- Channell, J. (2000). Corpus-based analysis of evaluative lexis. In S. Hunston, & G. Thompson (Eds.), *Evaluation in text: authorial stance and the construction of discourse* (pp. 38–55). Oxford: Oxford University Press.
- Channell, J. (1994). *Vague language*. Oxford: Oxford University Press.
- Charles, M. (2006). The construction of stance in reporting clauses: A cross-disciplinary study of theses. *Applied Linguistics*, 27(3), 492-518.
- Charles, M. (2007). Argument or evidence? Disciplinary variation in the use of the Noun that pattern in stance construction. *English for Specific Purposes*, 26(2), 203-218.
- Cheng, A. (2007). Transferring generic features and recontextualizing genre awareness: Understanding writing performance in the ESP genre-based literacy framework. *English for Specific Purposes*, 26(3), 287-307.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20(1), 37-46.
- Connor, U. M., and Kramer, M. G. (1995). Writing from sources: case studies of graduate students in business management. In Belcher D. and Braine G. (Eds.) *Academic Writing in the Second Language* (pp. 155-182). Publishing Corporation: Norwood, NJ, Ablex.
- Conrad, S., Biber, D. (2000). In S. Hunston & Thompson G. (Eds.), *Evaluation in text. Authorial stance and the construction of discourse* (pp. 56-73). Oxford: Oxford

University Press.

- Cope, B., & Kalantzis, M. (1993). The power of literacy and the literacy of power. In Pribady, I. Y. (Ed.), *The implementation of a Genre Based Approach to teaching narrative writing* (pp. 24-57). Oxford: Oxford University Press.
- Crookes, G. (1986). Towards a validated analysis of scientific text structure. *Applied Linguistics*, 7(1), 57-70.
- Cross, C., and Oppenheim, C. (2006). A genre analysis of scientific abstracts. *Journal of Documentation*, 62(4), 428-446.
- Dahl, T. (2000). *Lexical cohesion-based text condensation: An evaluation of automatically produced summaries of research articles by comparison with author-written abstracts*: University of Bergen: Norwegian school of economics and business administration.
- Dahl, T. (2004). Some characteristics of argumentative abstracts. *Akademisk Prosa*, 2, 49-67.
- Dascal, M. (2000). Réputation et réfutation: Linguistique, analyse du discours et interaction polie. In Weigand, E., and Dascal, M. (Eds.), *Negotiation and power in dialogic interaction* (pp. 95-105). Amsterdam: John Benjamins.
- Dudley-Evans, T. (1997). Genre models for the teaching of academic writing to second language speakers: Advantages and disadvantages. In Miller, T. (Ed.), *Functional approaches to written text* (pp.150-159). Washington D. C.: USIA.
- Fairclough, N. (2003). *Analysing discourse: Textual analysis for social research*. London: Routledge.
- Field, Y., and Yip, L. M. (1992). A comparison of internal conjunctive cohesion in the English essay writing of Cantonese speakers and native speakers of English. *RELC Journal*, 23(1), 15-28.
- Flowerdew, J. (1993). An educational, or process, approach to the teaching of professional genres. *ELT Journal*, 47(4), 305-316.
- Flowerdew, J. (2001). Attitudes of journal editors to nonnative speaker contributions. *TESOL Quarterly*, 35(1), 121-150.
- Flowerdew, L. (2000). Using a genre-based framework to teach organizational structure in academic writing. *ELT Journal*, 54(4), 369-378.

- Francis, G. (1994). Labelling discourse: an aspect of nominal-group lexical cohesion. *Advances in Written Text Analysis*, 83-101.
- Francis, G., Hunston, S., and Manning, E. (1998). *Collins COBUILD grammar patterns 2: Nouns and adjectives*. London: Harper Collins.
- Freedman, A., and Medway, P. (1994). *Genres and new rhetorics*. London: Taylor and Francis.
- Gamaroff, R. (2000). Rater reliability in language assessment: the bug of all bears. *System*, 28(1), 31-53.
- Gillaerts, P., and Van de Velde, F. (2010). Interactional metadiscourse in research article abstracts. *Journal of English for Academic Purposes*, 9(2), 128-139.
- Gosden, H. (1993). Discourse functions of subject in scientific research articles. *Applied Linguistics*, 14(1), 56-75.
- Graetz, N. (1985). Teaching EFL students to extract structural information from abstracts. In J. M. Ulijn and A. K. Pugh (Eds.) *Reading for Professional Purposes. Methods and materials in teaching language* (pp.123–135). Amersfoot: Leuven.
- Groom, N. (2000). Attribution and Averal revisited: three perspectives on manifest intertextuality in academic writing. In Thompson P. (Ed.) *Patterns and perspectives: insights into EAP writing practice* (pp. 14-25). London: University of Reading.
- Halliday, M. A. K. (1994). *An introduction to functional grammar*. London: Arnold.
- Halliday, M. A. (1985). *An introduction to functional grammar*. London: Edward Arnold.
- Hanania, E. A., and Akhtar, K. (1985). Verb form and rhetorical function in science writing: A study of MS theses in biology, chemistry, and physics. *English for Specific Purposes*, 4(1), 49-58.
- Hartley, J. (2003). Improving the Clarity of Journal Abstracts in Psychology The Case for Structure. *Science Communication*, 24(3), 366-379.
- Henry, A., and Roseberry, R. L. (1999). An evaluation of a genre-based approach to the teaching of EAP/ESP writing. *TESOL Quarterly*, 147-156.

- Henry, A., and Roseberry, R. L. (1999). Raising awareness of the generic structure and linguistic features of essay introductions. *Language Awareness*, 8(3-4), 190-200.
- Hinkel, E. (1999). Objectivity and credibility in L1 and L2 academic writing. In Hinkel, E. (Ed.), *Culture in Second Language Teaching and Learning* (pp. 90–108). Cambridge: Cambridge University Press.
- Hinkel, E. (2002). *Second language writers' text: Linguistic and rhetorical features*. London: Routledge.
- Hoey, M. (2000). Persuasive rhetoric in linguistics: A stylistic study of some features of the language of Noam Chomsky. In Hunston, S., and Thompson, G. (Eds.) *Evaluation in text: Authorial stance and the construction of discourse*, (pp. 28-37). Oxford: Oxford University Press.
- Holmes, J. (1988). Doubt and certainty in ESL textbooks. *Applied Linguistics*, 9(1), 21-44.
- Hood, S. (2004). *Appraising research: Taking a stance in academic writing*. Doctoral thesis, University of Technology, Sydney.
- Hu, G., and Cao, F. (2011). Hedging and boosting in abstracts of applied linguistics articles: A comparative study of English-and Chinese-medium journals. *Journal of Pragmatics*, 43(11), 2795-2809.
- Huckin, T. (2001). Abstracting from abstracts. *Academic Writing in Context*, 93-103.
- Hunston, S. (1993). Evaluation and ideology in scientific writing. In Ghadessy M. (Ed.) *Register analysis: Theory and practice*. London: Printer.
- Hunston, S. (1994). Evaluation and organization in a sample of written academic discourse. In Coulthard M. (Ed.) *Advances in written text analysis*. London: Routledge.
- Hunston, S. (2011). *Corpus approaches to evaluation: Phraseology and evaluative language*: London: Routledge.
- Hunston, S., and Thompson, G. (2000). *Evaluation in Text: Authorial Stance and the Construction of Discourse: Authorial Stance and the Construction of Discourse*. Oxford: Oxford University Press.
- Hyland, K. (1994). Hedging in academic writing and EAF textbooks. *English for Specific Purposes*, 13(3), 239-256.

- Hyland, K. (1996). Writing without conviction? Hedging in science research articles. *Applied Linguistics*, 17(4), 433-454.
- Hyland, K. (1998). *Hedging in scientific research articles*. Amsterdam: John Benjamins Publishing.
- Hyland, K. (1999). Disciplinary discourses: writer stance in research articles. In Candlin, C.N. and Hyland, K. (Ed.), *Writing: Texts, Processes and Practices* (pp. 99-121). Harlow: Longman.
- Hyland, K. (2000). *Disciplinary discourses: Social interactions in academic writing*. London: Longman.
- Hyland, K. (2002). Authority and invisibility: Authorial identity in academic writing. *Journal of Pragmatics*, 34(8), 1091-1112.
- Hyland, K. (2003). Genre-based pedagogies: A social response to process. *Journal of Second Language Writing*, 12(1), 17-29.
- Hyland, K. (2004). *Disciplinary Discourses: Social Interactions in Academic Writing*. Ann Arbor, University of Michigan Press.
- Hyland, K. (2005). Stance and engagement: A model of interaction in academic discourse. *Discourse Studies*, 7(2), 173-192.
- Hyland, K. (2008). Academic clusters: Text patterning in published and postgraduate writing. *International Journal of Applied Linguistics*, 18(1), 41-62.
- Hyland, K. (2010). Constructing proximity: Relating to readers in popular and professional science. *Journal of English for Academic Purposes*, 9(2), 116-127.
- Hyland, K., and Milton, J. (1997). Qualification and certainty in L1 and L2 students' writing. *Journal of second language writing*, 6(2), 183-205.
- Hyland, K., and Tse, P. (2004). Metadiscourse in Academic Writing: A Reappraisal. *Applied Linguistics*, 25(2), 156-177.
- Hyland, K., and Tse, P. (2005). Hooking the reader: A corpus study of evaluative that in abstracts. *English for Specific Purposes*, 24(2), 123-139.
- Hyon, S. (1996). Genre in three traditions: Implications for ESL. *TESOL Quarterly*, 693-722.
- Ivanič, R. (1998). *Writing and identity: The discorsal construction of identity in academic writing*. Amsterdam: John Benjamins.

- Johns, A. M. (1997). *Text, role and context: Developing academic literacies*. Cambridge: Cambridge University Press.
- Jordan, M. P. (1991). The linguistic genre of abstracts. In Della Volpe A. (Ed.), *The seventeenth LACUS forum 1990* (pp. 507–527). Lake Bluff, IL: LACUS.
- Kanoksilapatham, B. (2005). Rhetorical structure of biochemistry research articles. *English for Specific Purposes*, 24(3), 269-292.
- Kanoksilapatham, B. (2011). Civil engineering research article Introductions: Textual structure and linguistic characterization. *The Asian ESP Journal*, 7(2), 55-84.
- Keogh, T. J. (1994). *The structure of abstracts: Stylistic and structural elements in 48 scientific and technical abstracts*. Doctoral thesis, UMI.
- Kwan, B. S. (2006). The schematic structure of literature reviews in doctoral theses of applied linguistics. *English for Specific Purposes*, 25(1), 30-55.
- Labov, W. (1972). *Language in the inner city: Studies in the Black English vernacular*. Philadelphia: University of Pennsylvania Press.
- Latour, B., and Woolgar, S. (1979). *Laboratory life: The construction of scientific facts*. Princeton, NJ: Princeton University Press.
- Lave, J., and Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge university press.
- Leech, G. & Svartvik, J. (1994). *A communicative grammar of English*. London: Longman.
- Liddy, E. D. (1991). The discourse-level structure of empirical abstracts: An exploratory study. *Information Processing & Management*, 27(1), 55-81.
- Lorés, R. (2004). On RA abstracts: from rhetorical structure to thematic organisation. *English for Specific Purposes*, 23(3), 280-302.
- Lyons, J. (1981). *Language, Meaning And Context*. London: Fontania.
- Malcolm, L. (1987). What rules govern tense usage in scientific articles? *English for Specific Purposes*, 6(1), 31-43.
- Martín, P. M. (2003). A genre analysis of English and Spanish research paper abstracts in experimental social sciences. *English for Specific Purposes*, 22(1), 25-43.
- Mauranen, A. (1993). *Cultural differences in academic rhetoric*. Frankfurt: Peter Lang.

- Maynard, S. K. (1997). *Japanese communication: Language and thought in context*. University of Hawaii Press.
- Melander, B., Swales, J., and Fredrickson, K. (1997). Journal abstracts from three academic fields in the US and Sweden: national or disciplinary proclivities. In Duszak A. (Ed.), *Culture and styles of academic discourse* (pp. 251–272). Berlin: Mouton de Gruyter.
- Miller, C. R. (1984). Genre as social action. In Freedman, A. and Medway, P. (Eds.), *Genres and new rhetorics* (pp. 23-42). London: Taylor and Francis.
- Myers, G. A. (1996). Strategic vagueness in academic writing. In Ventola E. and Mauranen A. (Eds.), *Academic writing: Intertextual and textual issues* (pp. 3-17). Amsterdam: Jhon Benjamins.;
- Myers, G. (1989). The pragmatics of politeness in scientific articles. *Applied Linguistics*, 10(1), 1-35.
- Nwogu, K. N. (1990). *Discourse variation in medical texts: Schema, theme and cohesion on professional and journalistic accounts*. Nottingham: Department of English Studies, University of Nottingham.
- Oche, E. (1989). The pragmatics of Affect. *Text*, 9, 7-25.
- Orlikowski, W. J., and Yates, J. (1994). Genre repertoire: The structuring of communicative practices in organizations. *Administrative Science Quarterly*, 541-574.
- Orwin, R. G., and Vevea, J. L. (2009). Evaluating coding decisions. *The handbook of Research Synthesis and Meta-analysis*, 2, 177-203.
- Paltridge, B. (1997). *Genre, frames and writing in research settings*. Amsterdam: John Benjamins Publishing.
- Pho, P. D. (2008). Research article abstracts in applied linguistics and educational technology: A study of linguistic realizations of rhetorical structure and authorial stance. *Discourse Studies*, 10(2), 231-250.
- Poos, D., and Simpson, R. (2002). Cross-disciplinary comparisons of hedging. *Using corpora to explore linguistic variation*, 9(1), 65-84.

- Rayson, P., and Garside, R. (2000). Comparing corpora using frequency profiling. *Proceedings of the workshop on Comparing Corpora* (1-6). UK: Lancaster University Press.
- Rounds, P. (1982). *Hedging in written academic discourse: Precision and flexibility*. Ann Arbor, MI: The University of Michigan.
- Salager-Meyer, F. (1990). Discoursal flaws in medical English abstracts: A genre analysis per research-and text-type. *Text-Interdisciplinary Journal for the Study of Discourse*, 10(4), 365-384.
- Salager-Meyer, F. (1992). A text-type and move analysis study of verb tense and modality distribution in medical English abstracts. *English for Specific Purposes*, 11(2), 93-113.
- Samraj, B. (2000). Discursive practices in graduate-level content courses: The case of environmental science. *Text-Interdisciplinary Journal for the Study of Discourse*, 20(3), 347-372.
- Samraj, B. (2002a). Disciplinary variation in abstracts: The case of Wildlife Behaviour and Conservation Biology. *Academic Discourse*, 40-56.
- Samraj, B. (2002b). Introductions in research articles: Variations across disciplines. *English for Specific Purposes*, 21(1), 1-17.
- Samraj, B. (2005). An exploration of a genre set: Research article abstracts and introductions in two disciplines. *English for Specific Purposes*, 24(2), 141-156.
- Santos, M. B. (1996). The textual organization of research paper abstracts in applied linguistics. *Text-Interdisciplinary Journal for the Study of Discourse*, 16(4), 481-500.
- Shaw, P. (2000). Towards classifying the arguments in research genres. In A. Trosborg (Ed.), *Analysing professional genres* (pp. 41–56). Amsterdam: John Benjamins.
- Silver, M. (2003). The stance of stance. A critical look at ways stance is expressed and modeled in academic discourse. *Journal of English for Academic Purposes*, 2(4), 359–374.
- Singh, P., Narasuman, S., and Thambusamy, R. X. (2012). Refining teaching and assessment methods in fulfilling the needs of employment: A Malaysian perspective. *Futures*, 44(2), 136-147.



- Smoke, T. (1999). *A Writer's Workbook*. New York: Cambridge University Press.
- Stotesbury, H. (2003). Evaluation in research article abstracts in the narrative and hard sciences. *Journal of English for Academic Purposes*, 2(4), 327-341.
- Stubbs, M. (1996). *Text and corpus analysis: Computer-assisted studies of language and culture*. Oxford: Blackwell.
- Swales, J. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Swales, J. M. (2004). *Research Genres. Exploration and Applications*. Cambridge: Cambridge University Press.
- Swales, J. M. (1981). *Aspects of article introductions*. Birmingham: University of Aston in Birmingham.
- Swales, J. M., Ahmad, U. K., Chang, Y. Y., Chavez, D., Dressen, D. F., & Seymour, R. (1998). Consider this: The role of imperatives in scholarly writing. *Applied Linguistics*, 19(1), 97-121.
- Swales, J. M., Feak, C. B., Committee, S. C. D., and Council, S. (2004). *Academic writing for graduate students: Essential tasks and skills*. Ann Arbor: University of Michigan Press.
- Swales, J. M., Feak, C. B., and Hixson, V. S. (2000). *English in today's research world: A writing guide*. Ann Arbor: University of Michigan Press.
- Taylor, G., and Tingguang, C. (1991). Linguistic, cultural, and subcultural issues in contrastive discourse analysis: Anglo-american and chinese scientific texts. *Applied Linguistics*, 12(3), 319-336.
- Thompson, G. and Hunston, S. Evaluation: An introduction. In Hunston, S. and Thompson G. (Eds.) *Evaluation in text. Authorial stance and the construction of discourse* (pp. 1-27). Oxford: Oxford University Press.
- Thompson, G., and Yiyun, Y. (1991). Evaluation in the reporting verbs used in academic papers. *Applied Linguistics*, 12(4), 365-382.
- Thompson, G. and Zhou, J. (2000). Evaluation and organization in text: the structuring role of evaluative disjuncts. In Hunston, S. and Thompson G. (Eds.) *Evaluation in text. Authorial stance and the construction of discourse* (pp. 121-141). Oxford: Oxford University Press.

- Ullmann, D. (1990). *How to Write and Publish a Scientific Paper*. Cambridge: Cambridge University Press.
- Van Bonn, S., and Swales, J. M. (2007). English and French Journal Abstracts in the Language Sciences: Three Exploratory Studies. *Journal of English for Academic Purposes*, 6(2), 93-108.
- Ventola, E. (1994). Abstracts as an object of linguistic study. In S. Cmejrkova´ , F. Danes, & E. Havlova´ (Eds.), *Writing vs. speaking: Language, text, discourse, communication* (pp. 333–352). Tübingen: Gunter Narr.
- Weissberg, R., and Buker, S. (1990). *Writing up research*. New Jersey: Prentice Hall
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge university press.
- Wenger, E. (2000). Communities of practice and social learning systems. *Organization*, 7(2), 225-246.
- White, P. (2003). Beyond modality and hedging: A dialogic view of the language of intersubjective stance, *Text* 23(2), 2594–8.
- Yakhontova, T. (2002). ‘Selling’ or ‘telling’? The issue of cultural variation in research genres. In J. Flowerdew (Ed.), *Academic discourse* (pp. 216–232). Harlow, UK: Pearson Education.
- Yan, G. (2005). *A process genre model for teaching writing*. Paper presented at the English Teaching Forum. (Vol 43, No 3, 18-26).
- Zhu, Y. (2005). *Written communication across cultures: A sociocognitive perspective on business genres*. Amsterdam: John Benjamins Publishing.