



**THESIS APPROVAL**  
**GRADUATE SCHOOL, KASETSART UNIVERSITY**

Master of Arts (English for Specific Purposes)

**DEGREE**

English for Specific Purposes

**FIELD**

Foreign Languages

**DEPARTMENT**

**TITLE:** Hedging in Research Articles about English Language Teaching Written by  
Thai and Native Speakers of English

**NAME:** Ms. Maneerat Sukhanindr

**THIS THESIS HAS BEEN ACCEPTED BY**

\_\_\_\_\_ **THESIS ADVISOR**

( \_\_\_\_\_ Assistant Professor Bussba Tonthong, Ph.D. \_\_\_\_\_ )

\_\_\_\_\_ **DEPARTMENT HEAD**

( \_\_\_\_\_ Mrs. Wannana Soontornnaruerangsee, Ph.D. \_\_\_\_\_ )

**APPROVED BY THE GRADUATE SCHOOL ON** \_\_\_\_\_

\_\_\_\_\_ **DEAN**

( \_\_\_\_\_ Associate Professor Gunjana Theeragool, D.Agr. \_\_\_\_\_ )

THESIS

HEDGING IN RESEARCH ARTICLES ABOUT ENGLISH  
LANGUAGE TEACHING WRITTEN BY THAI  
AND NATIVE SPEAKERS OF ENGLISH

MANEERAT SUKHANINDR

A Thesis Submitted in Partial Fulfillment of  
the Requirements for the Degree of  
Master of Arts (English for Specific Purposes)  
Graduate School, Kasetsart University

2008

Maneerat Sukhanindr 2008: Hedging in Research Articles about English Language Teaching Written by Thai and Native Speakers of English. Master of Arts (English for Specific Purposes), Major Field: English for Specific Purposes, Department of Foreign Languages. Thesis Advisor: Assistant Professor Bussba Tonthong, Ph.D. 151 pages.

This research aims to explore hedging expressions used by Thai and native English authors in a corpora of research articles. These hedging expressions appear in the forms of modal verbs, lexical verbs, adjectives, adverbials, nouns, and It/There introductory phrases. Their frequencies in each research article section, and the characteristics of hedging proposed by Crompton (1997) are also investigated.

Twenty research articles were selected from English language teaching and learning journals which were published from 1997 to 2006. Each research article section was distinguished by its communicative purpose following Swales (1990). The search of target items in the corpora was conducted by a computer program named 'Concapp Concordance and Word Profiler Version 4.' Then two native English readers were asked to determine whether the sentences of the target items indicated hedging or not.

The findings reveal that Thai authors tend to use less and limited items and means for expressing hedging in English academic writing than native authors do. Hedging expressions were most frequently employed in discussion sections of research articles, and were employed the least in method sections. Epistemic modal verbs, lexical verbs, and adverbials were the three most common forms of hedging found.

---

Student's signature

---

Thesis Advisor's signature

## ACKNOWLEDGEMENTS

The contributions of many people who helped make this study possible will always be remembered.

First of all, I would like to express my deepest gratitude to my beloved parents and sister for all their support, love and understanding. This study is dedicated to you all.

I am highly indebted to Dr. Bussba Tonthong, my thesis advisor, for her benevolent advice, great kindness and patience, and for her valuable time and encouragement throughout this study.

I am particularly indebted to Mr. Anthony Reardon for his helpful guidance with understanding, great kindness, giving of his valuable time and suggestions, and efforts to help edit my paper.

I would especially like to thank Mr. Stephen Cannell for his generosity to devote his valuable time to help and provide useful comments on the study.

I am also grateful to all ESP teachers for their kindness and encouragement throughout the course and the consultation process. A very special thanks goes to Mr. Ismael Mercado for introducing me to English academic writing and the interesting term called 'hedge.'

Finally, I would like to thank my friends, especially Mr. Sornron Thongprasert and both MA-ESP and B.A. classmates, for their constant understanding and encouragement. Thank you very much for sharing memorable experiences during my master's degree, and giving me friendly support.

Maneerat Sukhanindr  
September 2008

## TABLE OF CONTENTS

	<b>Page</b>
LIST OF TABLES	iii
LIST OF FIGURES	vi
CHAPTER I INTRODUCTION	1
Rationale of the Study	1
Objectives of the Study	4
Research Questions	5
Benefits of the Study	5
Scope and Limitations of the Study	6
Definitions of Terms	7
CHAPTER II REVIEW OF LITERATURE	8
Overview of Academic English Writing	8
General Characteristics of Research Article	12
Concept of Hedging	15
Summary of Thai Culture in Communication	34
CHAPTER III METHODOLOGY	39
Data Collection	39
Data Analysis	45
Analysis of Hedging	48
Validity of the Study	55
CHAPTER IV RESULTS	57
Epistemic Items as Hedging Found in the Corpora	57
Occurrences of Hedging in Each RA Section of the Corpora	69
Characteristics of Hedging Proposed by Crompton (1997) in the Corpora of RAs	88

## TABLE OF CONTENTS (CONTINUED)

	<b>Page</b>
CHAPTER V DISCUSSIONS AND RECOMMENDATIONS	92
Discussions of the Main Research Findings from the Study of Corpora of RAs	92
Recommendations for Further Research	100
REFERENCES	104
APPENDICES	111
Appendix A An Example from the Selected RA Written by a Thai Author with Marked Sections and Epistemic Items	112
Appendix B An Example from the Selected RA Written by a Native Author with Marked Sections and Epistemic Items	121
Appendix C Ten Examples from Hedging Analysis Tables with Marked Decisions by Native Reader 1	129
Appendix D Ten Examples from Hedging Analysis Tables with Marked Decisions by Native Reader 2	140
BIOGRAPHICAL DATA	151

**LIST OF TABLES**

<b>Table</b>		<b>Page</b>
1	Relative Frequency (Expressed as a Percentage) of Major Grammatical Classes Used to Express Epistemic Modality (Holmes, 1982)	26
2	List of RAs Taken from Each Journal for the TH Corpus	43
3	List of RAs Taken from the ELT Journal for the NA Corpus	44
4	List of the Most Frequent Epistemic Items in Academic Writing (Hyland and Milton, 1997)	50
5	Qualification Items as Hedging (Jordan, 2004)	51
6	Adverbs and Nouns as Hedging (Jordan, 2004)	52
7	Epistemic Items Investigated in the Study Compiled from Hyland and Milton (1997), Jordan (2004), Holmes (1988) and Hyland (1996b)	53
8	List of Epistemic Modal Verbs as Hedging in TH and NA Corpora	58
9	List of Epistemic Lexical Verbs as Hedging in TH and NA Corpora	60
10	List of Epistemic Adjectives as Hedging in TH and NA Corpora	63
11	List of Epistemic Adverbials as Hedging in TH and NA Corpora	64
12	List of Epistemic Nouns as Hedging in TH and NA Corpora	67

## LIST OF TABLES (CONTINUED)

<b>Table</b>	<b>Page</b>
13 List of It/There Introductory Phrases as Hedging in TH and NA Corpora	68
14 Occurrences of All Hedging in Each RA Section in TH and NA Corpora	70
15 Occurrences of Epistemic Modal Verbs as Hedging in the Corpora	71
16 Occurrences of Epistemic Modal Verbs as Hedging in Each RA Section of the Corpora	72
17 Occurrences of Epistemic Lexical Verbs as Hedging in the Corpora	73
18 Occurrences of Epistemic Lexical Verbs as Hedging in Each RA Section of the Corpora	75
19 Occurrences of Epistemic Adjectives as Hedging in the Corpora	76
20 Occurrences of Epistemic Adjectives as Hedging in Each RA Section of the Corpora	78
21 Occurrences of Epistemic Adverbials as Hedging in the Corpora	79
22 Occurrences of Epistemic Adverbials as Hedging in Each RA Section of the Corpora	81
23 Occurrences of Epistemic Nouns as Hedging in the Corpora	82
24 Occurrences of Epistemic Nouns as Hedging in Each RA Section of the Corpora	84

**LIST OF TABLES (CONTINUED)**

<b>Table</b>		<b>Page</b>
25	Occurrences of It/There Introductory Phrases as Hedging in the Corpora	85
26	Occurrences of It/There Introductory Phrases as Hedging in Each RA Section of the Corpora	86
27	Occurrences of All Compound Hedging Found in Each RA Section in the Corpora	87
28	Occurrences of Characteristics of Hedging Proposed by Crompton (1997) Found in the Corpora	88
29	Occurrences of Characteristics of Hedging Proposed by Crompton (1997) Found in Each RA Section of the Corpora	90

## LIST OF FIGURES

<b>Figure</b>		<b>Page</b>
1	Considerations in Academic Writing	9
2	Overall Organization of the Research Paper	12
3	The CARS Model for Article Introductions	13
4	Scale of Certainty	27
5	Main Procedures of Data Analysis	45
6	Overview of the Framework of the Study	48

# **CHAPTER I**

## **INTRODUCTION**

### **Rationale of the Study**

English is generally known as an international language. A great deal of the world's knowledge is generally presented in English. Undoubtedly, English plays an important role in education. Crystal (1997: 102) also states that 'a person is more likely to be in touch with the latest thinking and research in a subject by learning English than by learning any other language.'

In an academic world, journals are one of the rich sources of up-to-date information frequently cited in research papers. A journal consists of many interesting articles on research studies. It is very advantageous for both teachers and learners to obtain data from journals. They will know what has been done and going to be done in the educational world. Furthermore, experts and university professors generally write research articles (RAs) in order to elevate their professional position and credit. According to the survey of Gibbs (1995: 92-95) cited in Swales and Feak (2000: 2), it was estimated that 'about 31 percent of the world's research papers in major journals came from the United States.' This finding reaffirms the importance of the English language for educators all over the world today.

Since the RA is one of the channels used to communicate among members in a discourse community around the world, it is essential for all educators to keep up-to-date with information in their disciplines. They may find that information from RAs beneficial to their present professions or studies. RA readers will see the evolution of the studies and ideas from the past until the present which could bring about better developed and proper researches in the future. In educational disciplines, both teachers and students can follow other researchers' works through RAs. When they

have to write up theses or RAs, referring to other related RAs can increase the validity and reliability of their papers.

Postgraduate students are also readers who will have to obtain data by reading academic works of others which are mostly published in English. Many researchers have realized the importance of academic writing particularly for non-native English language students. Negretti (2001), for example, conducted a needs analysis of academic writing for international graduate students. She noted that the different background or academic environment of foreign students tended to bring about a lack of awareness of style and of American academic writing standards.

Hedging is commonly found in RAs because it is one of the important features used in academic writing in order to help writers to qualify their statements. Many researchers have conducted studies about hedging in academic writing. Of particular note is Ken Hyland, one of the big names in pragmatics and written discourse analysis, who has conducted several research studies concerning hedging in academic and scientific discourse.

Hyland (1996a) has examined the frequency, functions and realizations of hedges in order to discuss the importance of hedging devices in scientific writing, and a range of strategies for teaching L2 students to recognize and use hedges properly. He found that hedging devices are significant features of successful academic writing which L2 students need to learn how to use appropriately. It is therefore essential for ESP courses to help L2 students to improve their writing and understanding of how to hedge properly by making students realize the expert writers' hedging strategies, and developing the proper use of hedging forms.

Subsequently, Hyland and Milton (1997) conducted a comparative study on the expression of doubt and certainty in examination scripts of Hong Kong and British learners. The findings revealed that the Hong Kong learners relied on a more limited range of devices, proposed stronger commitments, and clearly had major problems in expressing a precise degree of certainty.

More recently, Hyland (2000) explored how fourteen Cantonese undergraduates respond to hedges and boosters in an academic text. The study concluded that most students were unaware of the hedges and boosters in the given academic text. In addition, hedges seemed to be more invisible than boosters. Three students failed to notice a hedge at all from the text whereas at least one booster was noticed by every student.

Apart from Ken Hyland, other researchers also realize the importance of hedging in academic writing.

Crompton (1997) wrote up an argumentative academic article about hedging in academic writing. He pointed out that the responsibility of writers for the claims should be taken into account when identifying hedging, and proposed six main characterizations of hedging which are copulas other than 'be', epistemic modals, clauses relating to probability, adverbials relating to probability, reported propositions with author existence, and reported propositions with non-existent author.

Hinkel (1997) conducted a comparative study on indirectness devices used in native and non-native speaker students' essays. The study concluded that non-native students, who were Chinese, Korean, Japanese, and Indonesian, employed rhetorical questions and tags, disclaimers and denials, vagueness and ambiguity, repetition, several types of hedges, ambiguous pronouns, and the passive voice more than native students did.

Lewin (2005) studied both authors' and readers' identification of hedging in scientific texts. Not only were the authors asked to identify hedges in their own texts, and their motivation for using them, but PhD students in English for Academic Purposes (EAP) were also asked to identify hedging in those texts. Lewin had three main findings. Firstly, the authors' identification of hedges was not similar to the hedges identified by linguists. Secondly, politeness was not the authors' general motivation for hedging in their texts. Thirdly, PhD students as readers identified more hedging than the authors intended.

Suggested categories of hedging by Crompton (1997) seem to be feasible for further study, but none of the studies about hedging have chosen to follow his proposed criteria. Therefore, it is interesting to employ his proposal as one of the frameworks in this study.

However, although ESL authors and learners are frequently a major sample in most studies, none of the studies have principally investigated Thai authors and learners. In addition, most studies were focused on scientific or medical discourse. For example, Hyland (1996a, 1996c) and Lewin (2005) conducted research studies about hedging in scientific texts. Prince, Frader and Bosk (1982) investigated hedging in physical discourse while Salager-Meyer (1994) and Skelton (1997) did research on medical written discourse. This might be because scientific writing is more argumentative than social science writing (Hyland, 1996a). However, it would be beneficial and contributory to the field of English for Specific Purposes (ESP) if more studies were conducted on English educational discourse. Consequently, it is interesting to investigate hedging occurring in RAs written by Thai authors in comparison to their counterparts.

That is to say, since many research studies about hedging have been conducted in a physical science discipline with not so many having been conducted in a social science area, it is therefore worthwhile to study the use of hedging in educational discourse which is a major field in social science.

### **Objectives of the Study**

The purpose of this study is to explore the extent to which hedging is used by Thai and native of English language authors in RAs in academic journals printed in Thailand. The specific objectives of the study are as follows:

1. To compare the extent to which hedging is used by Thai and native English authors in the selected RAs.

2. To explore the frequency of occurrence of hedging in each RA section in the corpora.

3. To analyze the frequencies of characterizations of hedging proposed by Crompton (1997) which are used in the corpora.

### **Research Questions**

The research questions of this study are as follows:

1. To what extent is hedging used by Thai and native English authors in the selected RAs?

2. What is the frequency of occurrence of hedging in each RA section of the corpora?

3. Which characterizations of hedging proposed by Crompton (1997) are mostly used in the corpora?

### **Benefits of the Study**

The findings of the study will exhibit the overview of hedging used in academic writing by Thai and native authors, especially in the genre of RAs. In addition, this study will be one of the channels that help members of the English language teaching and learning discourse community, especially graduate students, to realize the importance of hedging in academic writing. Furthermore, Thai academic authors may be more aware of expressing their propositions in writing while, as readers, they may notice and recognize what the writers really convey. This study will also benefit EAP as it focuses on the language in an educational context, which can be a sub-division of ESP.

### **Scope and Limitations of the Study**

1. This study is limited to twenty RAs. All selected RAs are related to the field of English language teaching because it is one of the commonly found topics in academic journals on language teaching in Thailand.

2. The selected RAs are those published between 1997 and 2006 in order to obtain RAs which are not outdated.

3. All selected RAs are distinguished by the communicative purposes according to Swales (1990), which are Introduction, Method, Results and Discussion (IMRD) sections. When there was a combination of results and discussion, the section with such a combination was classified as results (R). Accordingly, a section with a combination of interpretation of the research findings, comments and recommendations based on the study, and a conclusion was classified as discussion (D).

4. The hedging used in abstracts, quotations, transcribed dialogues, examples, and visuals (tables and diagrams) are excluded.

5. Regarding the various and unpredictable forms of hedging (Brown and Levinson, 1987, Hyland, 1994, and Skelton, 1988), the compilation of epistemic items employed in this study were limited to the list from 'Most Frequent Epistemic Items in Academic Writing' (Hyland and Milton, 1997), Jordan (2004), Holmes (1988), and Hyland (1996b).

6. There are only two native readers as specialists in the field to determine hedging in the selected RAs because hedging is a sensitive issue concerning individual judgment. Reader understanding of hedging in academic writing and reader willingness are essential.

7. This study is limited to the epistemic items which both native readers in the study agreed were used as hedging. There were some words which one reader might view as hedging while another reader might not. Although these words were eliminated from the study, there was a possibility that some of them would perhaps express hedging.

8. Following the suggestion of Crompton (1997), whose framework is employed in this study, *impersonality, passivization, IF-clauses, time reference* and *sentences without the authors' commitment* are not counted as hedging. Briefly, this study mainly focuses on epistemic modals, epistemic lexical verbs, epistemic adjectives, epistemic adverbials, epistemic nouns, and *It/There* introductory phrases which relate to the probability or hypotheses made by the authors.

9. The suggested characterizations of hedging by Crompton (1997) is the framework employed in this study because it seems that no established studies have followed his proposal before.

### **Definitions of Terms**

**Native Authors:** In the study, 'native authors' refers to authors who are native speakers of English, including first or second language speakers of English.

**Thai Authors:** In the study, 'Thai authors' refers to authors who are native speakers of Thai.

## **CHAPTER II**

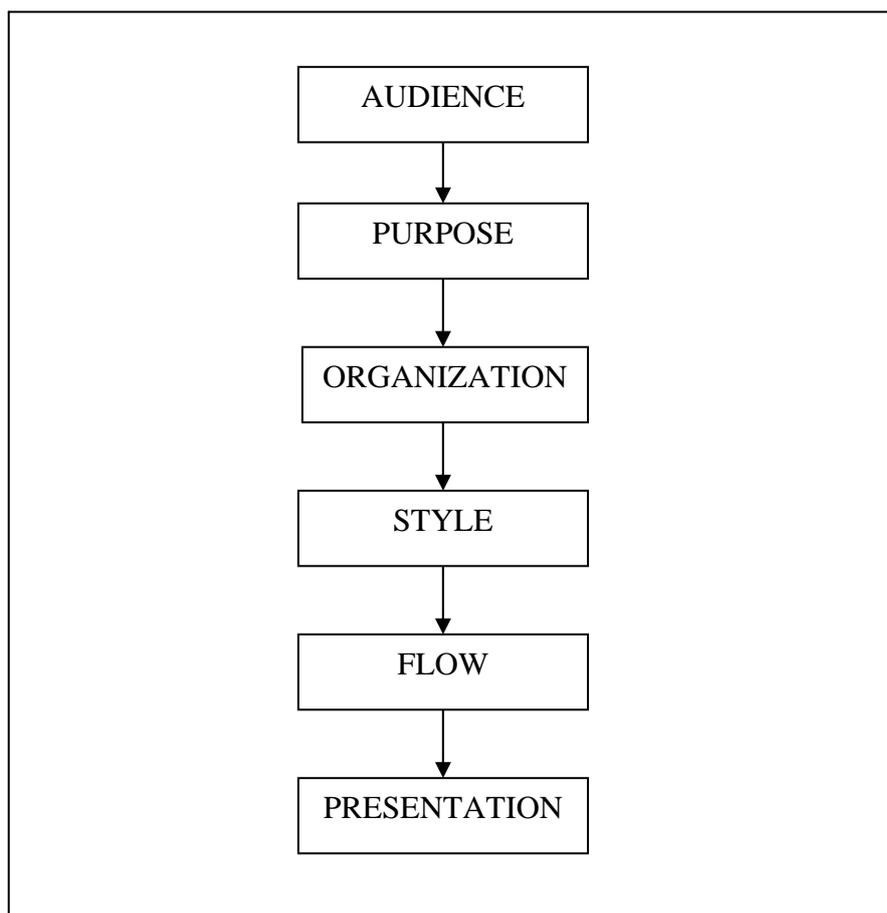
### **REVIEW OF LITERATURE**

Since this study deals with hedging in research articles (RAs), there are four main related subjects which are presented in this chapter. Firstly, the overview of academic English writing is shown followed by the general knowledge of RA. Then the concept of hedging is presented, and common Thai culture in communication is finally described.

#### **Overview of Academic English Writing**

Oshima and Hogue (1998: 2) define academic writing as ‘the kind of writing that you are required to do in college or university.’ Since postgraduate students who study in the English language field, especially ESP, need to conduct research studies or write theses in English for graduation, being able to write academically therefore is necessary.

According to Swales and Feak (1994: 7), there are six major issues which academic writers should take into consideration: audience, purpose, organization, style, flow, and presentation. These considerations are shown in figure 1.



**Figure 1** Considerations in Academic Writing

Source: Swales and Feak (1994: 8)

The first consideration is the audience. In order to communicate appropriately and effectively, academic writers should know who is going to be the audience. For instance, most postgraduate students tend to have their professors or instructors as the immediate audience. For this reason, the successful content of writing is realizing the *audience's expectations* and *prior knowledge*. However, in the authentic situation, readers who may be in the higher or lower level than the writers could also be the audience if their work is published.

The second consideration is the purpose of the writing. As aforementioned, it is important to know the prior knowledge of the audience since it will affect the writers' strategy of writing. The purpose of writing would be to *instruct* if the

audience's knowledge is less than the writers. In contrast, the writers tend to *display* their familiarity, expertise, and intelligence if the audience's knowledge is more than them.

The third consideration is the organization of the writing. Generally, each genre has a typical and expected pattern of organization; for instance, application letters, grant proposals, reprint request, and so forth. Writers need to organize information systematically, and be selective about word choices in order to fulfill the purpose of writing. However, the structure of academic writing is varied. Although the use of *external* organization features such as chapters, sections, and paragraphs will help readers to follow the text easily, it is also important to systematize information in the text through *internal* organization. Hoey (1983) cited in Swales and Feak (1994: 12) presented a *problem-solution* pattern for arranging ideas in academic writing efficiently. This orderly pattern contains four sections which are *description of a situation, identification of a problem, description of a solution, and evaluation of the solution*.

The fourth consideration is the style of academic writing. Apart from being clear, consistent, and comprehensible for the audience or readers, academic writers need to observe whether their writing follows the five general guidelines of academic writing style:

1. Avoid colloquial or spoken expressions such as slang, abbreviations, contractions, and phrasal verbs.
2. Be formal and impersonal by employing passive constructions or the third person, and be selective about academic terms which is called *vocabulary shift* (Swales and Feak, 1994: 15). For example, describing in a word of Latin, Greek or French origin instead of a long sentence or phrasal verb such as using the word 'create' in written language rather than 'come up with.'

3. Be cautious and careful with personal propositions. Writers could employ hedging in their writing to qualify their claims and avoid personal commitments.

4. Be careful with writing structure which would help readers to get the idea of the text easily and quickly.

5. Provide evidence to support the statements by including citations.

(Chandler, n.d.)

The fifth consideration is the flow in academic writing. Academic writers should employ transition signals or discourse markers such as *in addition*, *firstly*, *however*, and *generally* to communicate ideas with the audience smoothly. The connection of ideas or flow will help readers to follow the text precisely and easily. It also reflects the neatness and awareness of academic writers.

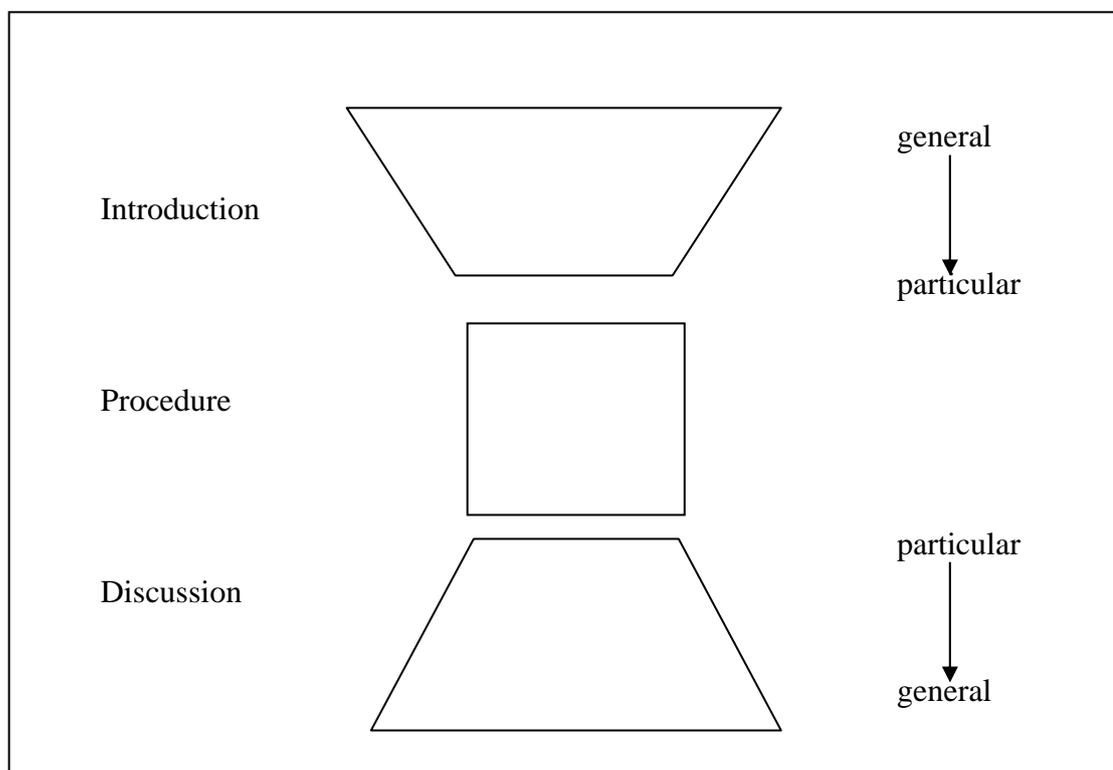
The last consideration is the presentation. Before submitting or publishing a paper, academic writers need to ensure that the overall format of the paper, grammar, and spelling are correct and appropriate. These three aspects may bring about positive feedback from the readers.

In summary, in order to be successful in academic writing, academic writers need to consider both content and form of the writing (Hairston, 1992: 5-7) which can best serve the purpose of the writers and is suitable for the audience. Also, style or characteristics of academic writing is significant for writers to take into consideration when writing academic works. Apart from transition signals, writers should employ hedging devices such as *appear*, *may*, *seem*, and *likely* in their writing in order to qualify overstatements or generalizations, and to be polite and humble with respect to readers.

## General Characteristics of Research Article

A research article (RA) is an academic article which reports on new knowledge to the discipline. It can be retrieved both from an academic journal and database. It is one of the common genres in the educational world today which will be checked and approved by specialists or 'peer-reviewed' before being published in journals.

The diagram below is the overview of RA structure presented by Hill et al. (1982: 335).



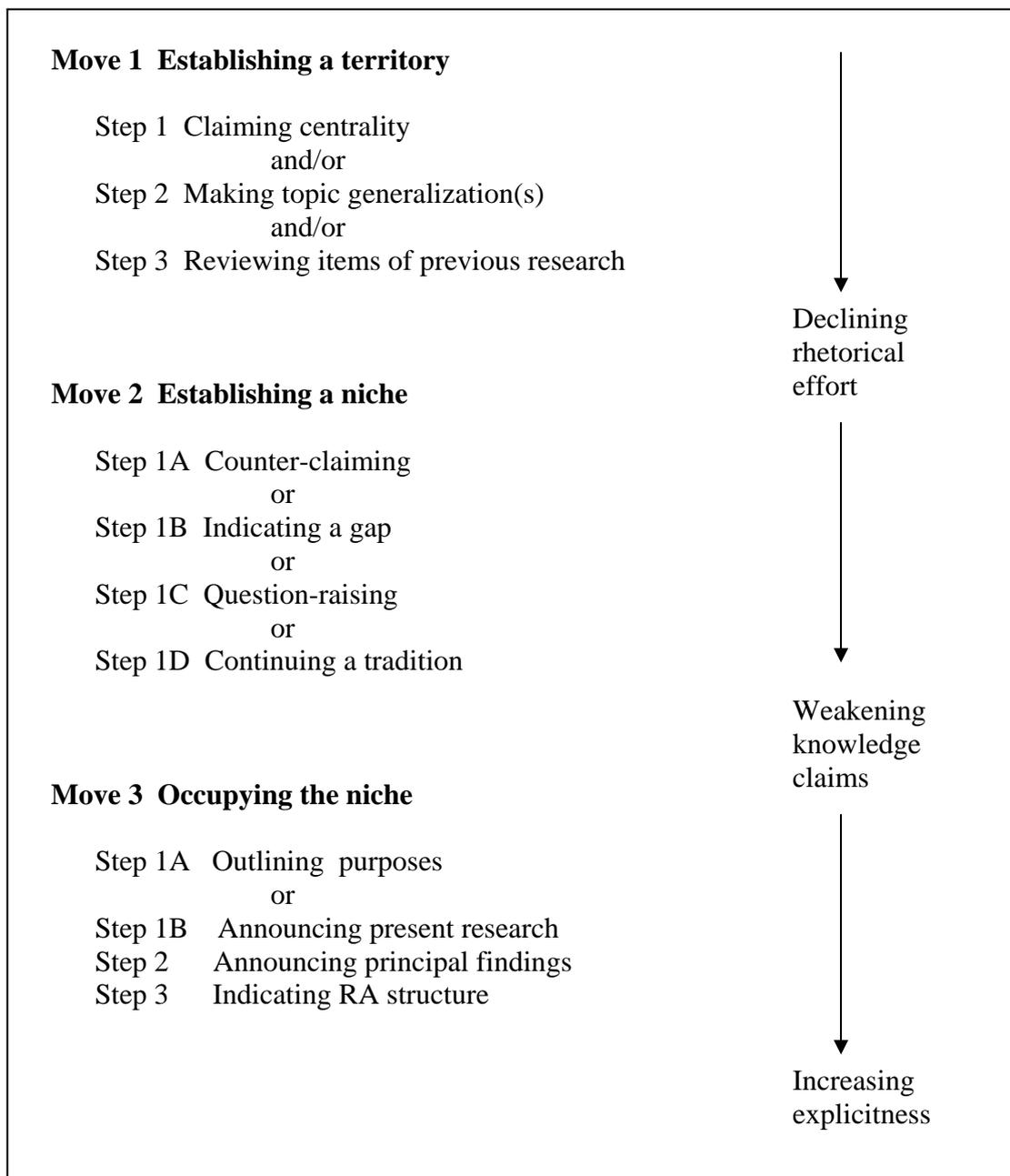
**Figure 2** Overall Organization of the Research Paper

Source: Hill et al. (1982: 335)

According to Swales (1990), the RA is a genre which has a standard rhetorical pattern: Introduction-Method-Results-Discussion (IMRD).

The first section of the article is the introduction. It is a link between what has been done in the field and the present article (Bhatia, 1993: 82). In other words,

researchers refer to previous works which will reasonably lead and justify their present research through a gap or ‘niche’ that is missing in the field. Swales (1990) proposed a ‘Create a Research Space’ (CARS) model as a commonly found means of RA introduction writing. The CARS model is shown in figure 3 below.



**Figure 3** The CARS Model for Article Introductions

Source: Swales (1990: 141)

CARS consists of three major moves: establishing a territory, establishing a niche, and occupying the niche. Each move has different steps to follow which introduces general (previous research in the field) to specific (motivation for the present study) information. The introduction is somewhat difficult to start when writing a research article, and some researchers may write it up after completing the methods and the results sections. Furthermore, Myers (1985) cited in Swales (1990) indicated that many risky claims were eliminated or toned down into careful statements in the introduction of scientific papers.

The second section of the article is the method. It presents the theoretical concept of the research and details of data collection and data analysis. Researchers should carefully describe the research procedure step-by-step with the support of past simple tense, anaphoric reference, and lexical repetition (Swales, 1990: 169).

The third section of the article is the results. The findings of the study are presented by the use of tables, graphs, or diagrams for readers to have a quick understanding of the data. Researchers generally describe the results through the similarity and difference statements.

The last section of the article is the discussion. Researchers usually redescribe the results, add their comments or limitations of the work, and suggest an area for further research in the field. Estimations or predictions claimed in the section will not be beyond the introduction. According to Swales (1990: 172-173), there are eight moves which are frequently found in a discussion section. The list of eight moves is as follows:

1. Background information
2. Statement of results
3. (Un)expected outcome
4. Reference to previous research
5. Explanation
6. Exemplification

7. Deduction and Hypothesis
8. Recommendation

Each move, in contrast to the introduction section, introduces specific (results of the study) to general (implications for the field) information.

In summary, an RA is one of the sources of knowledge which provides useful and up-to-date information within disciplines. Most RAs contain four sections which are Introduction, Method, Results, and Discussion (IMRD). Each section has different communicative purposes. The motivation for conducting a piece of research and its significance can be found in the introduction. The research procedure and research findings are cautiously described in sequence in the method and results sections respectively. The discussion section presents interpretation of research results and researchers' comments or recommendations which may be useful for other researchers. Since RA writers need to claim the importance of their works and discuss the results, hedging is therefore frequently employed in writing RAs, especially in the introduction and discussion sections.

### **Concept of Hedging**

#### **Definition of Hedging**

Dictionaries of language use describe the meaning of hedging as follows:

In discourse analysis and speech act theory, hedging is the qualification and toning-down of utterances or statements commonly appearing in speech and writing in order to reduce the riskiness of what one says.

Wales (1994: 215)

Hedges are also weakeners, downtoners, detensifiers and understatement. In speech and writing, hedges are linguistic devices that writers use either

to indicate the writer's lack of commitment to the truth of a statement or desire not to express that commitment categorically. Hedges are linguistic items such as *perhaps, somewhat, sort of, might, to a certain degree, it is possible that*. Such items may occur as often as once in every 15 seconds of conversation, depending on context of communication.

Richards and Schmidt (2002: 237)

George Lakoff (1972) is the first person who introduced the term 'hedge.' He defined hedge as 'words whose job is to make things fuzzy or less fuzzy' (cited in Hyland, 1994: 240, 1995, 1996a: 477, 1996b: 251; Jordan, 1997: 240; Prince et al., 1982: 84; Salager-Meyer, 1994: 150; Skelton, 1988: 37).

In addition, other researchers give the meaning of hedging in their works. Some of them are exemplified below:

Lyons (1977: 797) defined a hedged utterance as 'any utterance in which the speaker explicitly qualifies his commitment to the truth of the proposition expressed by the sentence he utters.'

Swales (1990: 175) described hedges as 'rhetorical devices both for projecting honesty, modesty and proper caution in self-reports, and for diplomatically creating research space in areas heavily populated by other researchers.'

Hyland (1996a: 478, 1996b: 251) stated that:

A *hedge* is any linguistic means used to indicate either (a) a lack of complete commitment to the truth of an accompanying proposition or (b) a desire not to express that commitment categorically. Hedges are therefore the means by which a writer can present a proposition as an opinion rather than a fact.

Therefore, hedging; in brief, is ‘the expression of tentativeness and possibility in language use’ (Hyland, 1995, 1996b, 1996c). Lewin (2003) agreed with Hyland’s definition that ‘hedging is the expression of tentativeness and possibility.’ He thought that this is the ‘narrowest’ definition of hedging.

In short, hedging is a language device which is commonly employed in both spoken and written communication to indicate that speakers/writers are not certain or lack commitment to the truth of their statements.

### **The importance of Hedging in Academic Writing**

A number of researchers point out the importance of hedging in language use. Skelton (1988: 38) stated that ‘without hedging, the world is purely propositional, a rigid (and rather dull) place where things either are the case or are not. With a hedging system, language is rendered more flexible and the world more subtle.’

In addition, Hyland (1996a: 478-479, 1996b: 251) emphasized the importance of hedging in scientific writing. He gives three main reasons for hedging in scientific discourse which are ‘to enable writers to express a perspective on their statements, to present unproven claims with caution, and to enter into a dialogue with their audiences.’ Salager-Meyer (1994: 150) also agreed with the importance of hedging in a scientific community. She stated that:

Today’s scientists are urged to use a style of writing which projects both personal modesty and honesty. Argumental arrogance and exuberance are not well regarded by the scientific community; whereas contrast, humility, coyness, and cautiousness are...As a consequence, everything must be toned down; speculation can obviously be made but it must be apologized for.

Moreover, successful scientific writing is based on effective argumentative statements; in contrast, writing in social science research is rather interpretive (Hyland,

1996a: 487). This is probably the reason why researches about hedging are mostly conducted in scientific, biological, and medical discourse while the number of researches in social science or educational discourse are less.

In academic writing, it is necessary to be cautious when reporting research and making propositions. Writers should be honest to readers by employing hedging to reduce the degree of commitment to the truth of their claims which have no or perhaps less than certain evidence as support. Since written discourse is a long-lasting source, writers need to qualify their claims in order to protect themselves from any criticisms afterwards (Hamp-Lyons and Heasley, 1993: 90-91).

Montgomery (1982: 152) pointed out the disadvantages of expressing oneself accurately and precisely. A man is liable to ‘contradict himself before long, to misunderstand others, to say things he doesn’t mean, and he leaves himself open to easy criticism from those who specialise in the same subjects as he does.’

It shows that being accurate in thoughts and conveying those thoughts is significant, and the understanding of how to avoid these disadvantages has to be realized in academic writing.

Similarly, Hyland (1994: 241) noted that employing hedging in academic writing is essential because hedging ‘allows claims to be made with due caution, modesty, and humility, and the status of such claims to be diplomatically negotiated when referring to the work of colleagues and competitors.’

For students, Dudley-Evans and St. John (1998: 77) recognized the need for academic learners to understand hedging in language use. They stated that ‘learners need to be able to appreciate the role of hedging in academic, professional and business genres and to manipulate its actual linguistic devices. They also need to understand why a writer of an article or a report is using a hedging device.’

Hyland (1995) supported this view on the advantages of learning about hedging. He argued that knowledge about hedging enables learners, especially non-native speakers (NNSs), to have a clear understanding of the interactional and rhetorical nature of scientific RAs, and to perform more effectively in today's academic research world. Also, the greater the understanding of hedging, the better the understanding of academic writing and vice versa.

Consequently, hedging is crucial to academic writing. Learners should know about hedging and know how to employ it in their writing properly. Although hedging in writing assists writers to make appropriate and defensible claims, applying too many hedging devices is somewhat harmful. It could reduce the value of the work, and writers may be accused of saying nothing (Swales and Feak, 1994: 89).

### **Characterizations of Hedging in Academic Writing**

There are various word and phrase choices for writers to express hedging such as the use of modal verbs (may, might, could), adjectival, adverbial and nominal modal expressions (possible, perhaps, probability), modal lexical verb (believe, assume), *if*-clauses, question forms, passivisation, impersonal phrases, and time reference (Hyland, 1994: 240). Many researchers categorize and exemplify hedging that is commonly found in academic writing by grammatical class or the functions of hedging when attached to a sentence.

According to Swales and Feak (1994), there are five qualifications.

#### **1. Probability**

Not only are modal auxiliaries such as *could*, *may*, *might* and *would* frequently used, but phrases such as *that*-phrase are also employed to express probability. For example,

- A reduced speed limit *may result in* fewer highway injuries.
- A reduced speed limit *might/could result in* fewer highway injuries.
- *It is possible that* a reduced speed limit will result in fewer highway injuries.
- *There is a slight possibility that* a reduced speed limit will result in fewer highway injuries.

## 2. Distance

Writers can remove themselves from strong claims by using introductory verbs such as *seem* and *appear*. For example,

- Consumers *seem* to have less confidence in the economy.

Alternatively, writers can distance themselves by using phrases to weaken the claims. For example,

- *According to this preliminary study*, a lower speed limit may reduce highway fatalities.

## 3. Generalization

A generalization is a statement which suggests that a characteristic of 'all' of a group is deduced from the certain amount of obtained information such as 'Women drivers are the most careless,' 'The Irish are alcoholics,' and so forth. It could be dangerous to generalize statements in writing. However, generalizations are acceptable if properly presented with sufficient evidence (Ruby and Yarber, 1983: 142-143).

To qualify generalizations in writing, the simplest method is to use the verb 'tend'. For example,

- Consumers *tend* to have less confidence in the economy.

In addition, writers can qualify words or noun phrases by using the word ‘many’, ‘most’ or ‘majority.’ For example,

- *Many* consumers have less confidence in the economy.
- A *majority* of consumers have less confidence in the economy.
- Consumers *in most income brackets* have less confidence in the economy.

Apart from qualifying words or noun phrases, writers can add ‘exceptions’ to protect generalized statements. For example,

- *Except for* a few oil-rich states, national economies in Africa are not likely to improve greatly over the next decade.
- *Apart from* a few oil-rich states, national economies in Africa are not likely to improve greatly over the next decade.
- *With the exception of* a few oil-rich states, national economies in Africa are not likely to improve greatly over the next decade.

#### 4. Weaker Verbs

Writers may choose a weaker verb to reduce the strength of a claim. The first two examples are a comparison between the uses of *establish* and *indicate*.

- The results *establish* that there is a link between smoking and lung cancer.  
(stronger)
- The results *indicate* that there is a link between smoking and lung cancer.  
(weaker)

The following two examples are a comparison between the uses of *shows* and *suggests*.

- Table 9 *shows* that Venezuelan scientists may need help with writing English. (stronger)
- Table 9 *suggests* that Venezuelan scientists may need help with writing English. (weaker)

## 5. Combined Qualifications

The aforementioned qualifications can be combined in order to weaken the claims. The examples below are a comparison between a sentence without hedging and a sentence with five hedges combined.

- The use of seat belts prevents physical injuries in car accidents. (strong claim)
- *According to simulation studies, in some circumstances* the use of seat belts *may reduce certain types of* physical injuries in car accidents. (weak claim)

Other qualifying phrases are:

According to simulation studies	(adding distance)
In some circumstances	(generalization)
May reduce	(adding probability)
Prevent → reduce	(weaker verb)
Certain types of...	(generalization)

Salager-Meyer (1994: 154-155) divided the category of hedges in a study of hedging in fifteen medical articles into five categories.

### 1. Shields

Shields include all modal verbs expressing possibility; semi-auxiliaries like “*to appear*,” “*to seem*” (also called “plausibility shields” in Prince et al. [1982: 90]; probability adverbs like “*probably*,” “*likely*” and their derivative adjectives; epistemic

verbs (that is, verbs which relate to the probability of a proposition or a hypothesis being true) such as “*to suggest*,” “*to speculate*.”

## **2. Approximators**

Approximators include stereotyped “adaptors” as well as “rounders” (see Prince et al. 1982) of quantity, degree, frequency and time (e.g., “*approximately*,” “*roughly*,” “*somewhat*,” “*quite*,” “*often*,” “*occasionally*”) which express heed and coyness. According to Salager-Meyer, even though not all approximators serve to make things vague – some are indeed used when exact figures are irrelevant or unavailable or when the state of knowledge does not allow the scientists to be more precise – they were all recorded as “hedges.”

## **3. Authors’ personal doubt and direct involvement**

This category includes the expressions such as “*I believe*,” “*to our knowledge*” “*it is our view that...*”

## **4. Emotionally-charged intensifiers**

This category includes comment words used to project the authors’ reactions such as “*extremely difficult/interesting*,” “*dishearteningly weak*,” “*of particular importance*,” “*particularly encouraging*,” “*unexpectedly*,” “*surprisingly*.”

## **5. Compound hedges**

Compound hedges comprise “strings of hedges” (i.e., the juxtaposition of several hedges). Such compound hedges can be double hedges (“*It may suggest that...*,” “*it could be suggested that...*”), treble hedges (“*It would seem likely that...*, *it seems reasonable to assume*), quadruple hedges (“*It would seem somewhat unlikely that...*”), and so on.

Crompton (1997: 284) discussed the problems of hedging in terms of its definition and forms. He also proposed an argumentative scheme for identifying hedging, and suggested six characterizations of hedged propositions as below:

1. Sentences with copulas other than *be*. For example,
  - The moon *appears to be* made of cheese.
  
2. Sentences with modals used epistemically. For example,
  - The moon *might be* made of cheese.
  
3. Sentences with clauses relating to the probability of the subsequent proposition being true. For example,
  - *It is likely that* the moon is made of cheese.
  
4. Sentences containing sentence adverbials which relate to the probability of the proposition being true. For example,
  - The moon is *probably* made of cheese.
  
5. Sentences containing reported propositions where the author(s) can be taken to be responsible for any tentativeness in the verbal group, or non-use of factive reporting verbs such as ‘show,’ ‘demonstrate,’ ‘prove.’ These fall into two sub-types:
  - a) where authors explicitly designate themselves as responsible for the proposition being reported.
    - *I suggest that* the moon is made of cheese.
  
  - b) where authors use an impersonal subject but the agent is intended to be understood as themselves.
    - It is therefore *suggested that* the moon is made of cheese.

6. Sentences containing a reported proposition that a hypothesized entity X exists and the author(s) can be taken to be responsible for making the hypothesis. For example,

- These findings *suggest* a cheese moon.

Holliday (2002: 180) summarized that there are two main functions of hedging – *distancing* and *softening*. Writers can dissociate themselves from the claims by using reporting verbs such as *suggest*, *appear to*, *seem to*, and *tend to*; for instance,

- The data quoted in the Financial Times *show* that the value of the dollar is rising.
- The data quoted in the Financial Times *suggest* that the value of the dollar is rising.

From the example, the use of *suggest* instead of *show* indicates less of writers' commitment to the claims.

Apart from distancing, writers can give comments and opinions politely. Thus, hedges can also be used as politeness devices in writing. For instance:

- Jones *appears not to have understood* the point I was making.

Here, the use of *appears* diminishes the strength of the proposition. Hedging can reduce serious criticisms that may occur to writers, and it could bring more acceptances from readers in the field.

There are innumerable ways to express hedging in English (Skelton, 1988: 37). Nevertheless, the considerable forms of hedging can be classified by grammatical categories which are epistemic modals, epistemic lexical verbs, epistemic adjectives, epistemic adverbials, epistemic nouns (Holmes, 1988 and Hyland, 1996b), and *It*-introductory phrase (Hewings and Hewings, 2002). Holmes (1982: 16) reported the

relative frequency of different grammatical classes epistemic devices used to express hedging in both spoken and written texts as provided in Table 1.

**Table 1** Relative Frequency (Expressed as a Percentage) of Major Grammatical Classes Used to Express Epistemic Modality

Grammatical Class	Speech	Writing	Total Corpus
Modal verbs	42.4	36.8	40.2
Lexical verbs	31.5	35.9	33.3
Adverbial constructions	21.5	12.8	18.1
Nouns	2.3	7.7	4.5
Adjectives	2.3	6.6	4

Source: Holmes (1982: 16)

The words and phrases used in these forms are exemplified below:

### 1. Epistemic modals

In general, there are two basic forms of the modals which are *simple* and *periphrastic* modal verbs (Yule, 1998: 86). The first form is simple modal verbs (also called *original* modals [Disterheft, 2004: 121], or *pure* modal verbs [Parrott, 2000: 121]). These usually have single forms; for example, *can*, *could*, *may*, *might*, *will*, *would*, *should*, and *must*. The second form is periphrastic modal verbs (also called *phrasal* modals [Disterheft, 2004: 121], or *semi-modal* verbs [Parrott, 2000: 121]). This form usually has more complex structure or appears in phrases such as *able to*, *allowed to*, *have (got) to*, *going to*, and *supposed to*.

Modal verbs in English express the viewpoint of the speakers/writers regarding their certainty of what is being stated and their social awareness. According to Yule (1998: 88-89), Asher and Simpson (1994: 2516-2517), and Cruse (2004: 298-299),



modal verbs. The first reason is there are no definite principles of expressing and interpreting modal meaning. Although the differences between epistemic and deontic modality are mutual understanding, it is usually difficult to interpret the modals' meaning when they occurred in the practical context. Also, it is difficult for NNS to define the precise degrees of certainty of epistemic modals.

The second reason is expressing doubt and certainty in practical situations is dominated by both linguistic and non-linguistic devices. Native speakers use both devices, particularly *paralinguistic signals* (eyebrow movement, facial expression, eye gaze and gesture) in most face-to-face interactions to convey the degrees of commitment to their propositions. It is challenging to NNS to interpret utterances in conversation precisely with the assistance of non-linguistic signals.

The third reason is a linguistic device may convey various types of meaning at the same time. In addition, the meanings of some modal verbs are hardly different from one another (Weissberg and Buker, 1990: 83). For example, the past forms of modal verbs *could* and *would* indicate more doubt and uncertainty compared to the present forms of *can* and *will* (Montgomery, 1982: 153). Moreover, Leech (1987: 74) described each modal verb meaning and noted that the meanings of *can* (ability and possibility) are very close and may be difficult to interpret. Nevertheless, *can* could be interpreted as *ability* or *permission* if the agent is a human or an animate subject while *possibility* meaning will be interpreted if the subject is inanimate or occurs in passivization.

Therefore, epistemic modals can be used to express hedging by speakers/writers. Many research studies about hedging such as Butler (1990), Hyland (1994), Holmes (1982), and Vassileva (2001) have revealed that epistemic modal verbs are the most common and frequent means used to express doubt and certainty in academic writing. However, the way to express and interpret modals is still troublesome for NNS since each modal verb contains more than one meaning, and they are not very distinct from one another. Besides, there are no clear-cut criteria for modals expression and interpretation when occurring in written text.

## 2. Epistemic lexical verbs

Epistemic lexical verbs expressing hedging can be found in a text in different forms. Hyland (1996b: 264-266) stated that the items *indicate*, *suggest*, *appear*, and *propose* are the most frequent epistemic lexical verbs forms found in scientific text, especially *indicate* and *suggest*. These two items were used by writers more often than the other verb forms. However, there are two major categories of lexical verbs used to express hedging. The first category is *judgmental verbs*. It refers to the epistemic lexical verbs used in propositions which involve judgment by the writer. A judgment on the truth of a proposition could be taken from the writer's speculation or calculation. Writers can express their attitudes by the use of speculative verbs which mainly consist of 'performative' items such as *suggest*, *propose*, *believe*, and *speculate*.

The occurrence of epistemic lexical verbs with first pronoun subjects 'I' and 'We' explicitly shows the writers' responsibilities with respect to the claims. For example,

- Thus, we *propose* that this insert is the major site of interaction with the membrane. (Hyland, 1996b)

Also, epistemic lexical verbs could appear in statements which lack a personal agent, but the interpretation includes the writers' commitment. For example,

- *The model implies* that the function of grana is to shield varying amounts. (Hyland, 1996b)

The second category of epistemic lexical verbs is *evidential verbs*. It refers to the epistemic lexical verbs used in propositions in which a writer presented justification from the evidential support. For example,

- *Trifonov [38] has suggested* that the 530 loop is a component... (Hyland, 1996b)

- These changes *appeared* to involve both assimilatory and basic N metabolism... (Hyland, 1996b)

- We *sought to investigate* this by studying the regulatory properties of PEPc kinase. (Hyland, 1996b)

### 3. Epistemic adjectives

Epistemic adjectives are used to express hedging less frequently than other grammatical forms. According to Table 1 from Holmes (1982), although epistemic adjectives are found in written discourse more than spoken discourse, the amount of usage appears to be less than the other forms. Nevertheless, adjectives expressing hedging frequently found in speech and written text are *(un)likely, possible, certain, apparent, probable*, and so forth. For example,

- It is also *possible* that phosphorylation of PEPc actually stimulates a proteolytic... (Hyland, 1996b)

### 4. Epistemic adverbials

Similar to epistemic lexical verbs, epistemic adverbials have a wide range of items for expressing hedging. According to Holmes (1982), epistemic adverbials are the third most commonly used devices after epistemic modal verbs and lexical verbs (see Table 1). However, Hyland (1996b: 269) reported that epistemic adverbials were the second most frequently found hedging devices in scientific text. It may be that Hyland (1996b) and Holmes (1982) investigated hedging in different genres and disciplines. Holmes explored hedging in ESL textbooks, but Hyland focused on the use of hedging in scientific texts. Therefore, the rank order of epistemic adverbials expressing hedging found could be different.

The most common items of epistemic adverbials are such as *apparently, probably, essentially, relatively, and generally*. For example,

- ...were observed in the cytoplasm, which is *apparently* in contradiction to results obtained by subcellular fractionation experiments. (Hyland, 1996b)
- Oscillations in fluorescence and O<sub>2</sub> evolution activity are *probably* an expression... (Hyland, 1996b)
- Our samples gave *essentially* the same patterns irrespective of ... (Hyland, 1996b)

## 5. Epistemic nouns

Similar to epistemic adjectives, epistemic nouns are also found in written text more than in speech (as can be seen in Table 1). However, it appears that the means to express hedging by epistemic nouns is less than other forms. The range of epistemic noun items is rather small; still, the items such as *assumption*, *possibility*, *doubt*, and *probability* can be found in written text. For example,

- One cannot exclude a *possibility* that the activity of EF-2 Kinase in wheat germ... (Hyland, 1996b)
- ...there can be little *doubt* that the latter is sometimes born...(Holmes, 1988)

## 6. It/There introductory phrases

Hewings and Hewings (2002: 374) investigated *It*-introductory phrases in journal articles and dissertations from the field of business studies. They found that one of the functions of *It*-introductory phrases is hedging. The patterns of *It*-introductory phrases as hedging which are noticeable in Hewings and Hewings' study are:

- It is + adjective [It is likely that...]
- It may be + adjective [It may be practical to...]
- It + appears [It appears that...]
- It + seems (+ adjective) [It seems (clear, likely) that...]
- It + modal verb + main verb [It can be argued...]
- It + main verb + [It is argued...]

Apart from *It*-introductory phrase, writers could also employ *There*-introductory phrase to express probability in written discourse. These following examples are exemplified by Swales and Feak (1994: 87):

There is a <i>strong</i> possibility that	}	a reduced speed limit will result in fewer injuries.
There is a <i>good</i> possibility that		
There is a <i>definite</i> possibility that		
There is a <i>slight</i> possibility that		
There is a <i>remote</i> possibility that		

### **Discrepancies and Identifying Hedging**

A number of studies about hedging have been conducted, but there is still no consistency in the way researchers employ the various frameworks. Apart from the numerous and unpredictable forms of hedging, the person who makes a decision whether a statement is hedged or not should be the linguist, the author, or the reader (Lewin, 2005: 164). Lewin (2003, 2005) investigated how the authors of texts and the readers identify hedging. The results indicated that the authors identified very few hedges in the texts while the readers identified many more hedges than the authors. Interestingly, politeness was also not a motivation for hedging for writers. This point might indicate that the true functions of hedging could also be in dispute because many researchers; for example, Brown and Lewinson (1987: 146), Myers (1989: 12), and Holliday (2002: 180), appear to consider that the authors employ hedging to address politeness towards the readers. That is to say, the meaning and function of hedging used in linguistic semantics are likely to be interpreted and employed differently among researchers, writers, and readers.

Crompton (1997) disagreed with Hyland (1994) that *impersonality*, *passivization*, *time reference*, and *if-clauses* can be counted as hedging. He argues that the authors may not indicate that they lack certainty when giving opinions through the use of *impersonality* and *passivization*, but rather are using politeness strategies to show their humility and modesty in the discourse community. Besides, whether *time*

*reference* and *if-clauses* are hedging is still debatable. Therefore, the issue which researchers should take into consideration for hedging is the responsibility of the authors attached to the propositions.

Crompton (1997) pointed out the two main problems which researchers of hedging generally encounter. The first problem is the form of hedging. The form which is identified as hedging can also be used in other functions such as the use of *suggest*. Not every *suggest* is used for hedging. From his example,

1. I *suggest* that pigs fly.
2. Smith *suggests* that pigs fly.

According to Crompton, the first sentence can be counted as hedging because the author used the word *suggest* to weaken the commitment to his/her own proposition. In contrast, the second sentence cannot be counted as hedging because the author did not show his/her responsibility with respect to the statement cited. That is to say, a reporting verb will be counted as hedging only if the authors employ it to express the degree of commitment to their own propositions.

Similarly to modal expressions, there is no clear criterion for researchers to judge whether the used modals are hedging. The second problem is the identifying of hedging. There is a possibility that researchers will unintentionally overlook the hedge which appeared in the unspecified forms since the forms of hedging are abundant and changeable.

Although the definition, function, and identifying of hedging are still controversial, a number of researches about hedging have been conducted. Their findings might lead to a more acceptable and applicable framework, and improvement in teaching English academic writing in ESP, especially for non-native learners.

### Summary of Thai Culture in Communication

Kedthed (1991: 276) indicated that hedging is one of the communicative strategies that Thai people who have cultural awareness ought to perform on suitable situations.

Language not only specifies the national uniqueness, but it can also reflect the culture of language users.

Thai language is one of the world languages which is distinctive and systematic. Nakornthap (1997) explains the two major features of Thai language as follows:

**1. Thai language is prosperous.** Many new words have been constantly created for use in communication; for example, word formation by compounding, reduplication, embedding, language borrowing, and assigning terminologies for particular purposes.

**2. Thai language is systematic.** There are clear principles of the language use in terms of the system of sounds, words, and sentences. Originally in the Sukhothai period, King Ramkhamhaeng the Great initially established the Thai alphabet (Lai Sue Thai) for use. In subsequent periods, textbooks were written in order to educate Thai people to comprehend the principles of Thai language; for instance, Chindamanee, the first Thai textbook in the Ayutthaya period, and the four Thai grammar textbooks of Phraya Ouppakitsilapasarn in the Ratanakosin period.

Therefore, in order to preserve Thai language, Thai people need to use the language correctly and appropriately for the culture of language.

Rungjang (1993: 24-29) described the two main subjects of the culture of language which are the suitable communication for culture and the culture in communication.

## 1. The suitable communicating in Thai culture

1.1 Use the right traditional Thai scheme in communication: the system of sounds, words, and sentences.

1.2 Avoid vulgar language.

1.3 Use clear or unambiguous words, except for self-protection which can also be found in written language. Changkhwanyuen (2005: 116) indicates that a sentence generally consists of a verb and the verb agent, but writers may select the words ‘มี’ (There...) and ‘เป็น’ (It...) as the subject of the sentence to express impersonal statements such as เป็นการไม่ถูกต้องที่... (It is incorrect to...) and มีความคิดหนึ่งกล่าวว่า... (There is a proposition that...). Self-involvement in academic writing is one of the commonly found problems in thesis/dissertation writing. (Kedthed, 1991: 276).

1.4 Use favorable language. This could reflect the mental basis of Thai people who generally think in positive ways. For example, to give blessing for happiness, success, and good fortune to each other in any situation (e.g. birthday, new year, examination day, holiday). Children, teenagers and adults receive encouragement through such blessings.

1.5 Use enjoyable language in order to sustain valuable friendship. For instance, if seeing someone who is in a bad way, the person who has cultural awareness will avoid or carefully select the word choices in order to create less impact upon the feeling of the listener. For example, ‘You look tired’ may be a better greeting than ‘Why do you look so pale?’

1.6 Use moral precepts in language. Thai society has been deeply-rooted in Buddhist beliefs for a long time. Buddhist proverbs, aphorisms, and witty speech

are used to remind or edify people of good deeds. For example, the teachings of monks such as ‘Birthday celebration is like celebration of death,’ ‘A sad ending is better than never ending sadness,’ and so forth.

1.7 Use suitable and proper language for the right status of people. Since Thai society has a hierarchical relationship, Thai language therefore possesses different language levels which Thai people with communicative competence should use appropriately.

Notwithstanding, items 1.3 and 1.5 above, not only ambiguous words are used in the communication of Thai people to protect the speakers/writers from remonstrances, but evasive statements are also used to teach and maintain goodwill with the audience.

## **2. The culture in communication**

Nakornthap (n.d.) cited in Rungjang (1993) and Chanchaisakulwat (1994) categorize Thai culture in communication by the purposes of language use listed below:

**2.1 For teaching:** Apart from writing various textbooks, Buddhist teaching is propagated in several ways such as the translation of Tripitaka into Thai and Jataka tales. There are also many proverbs, aphorisms, mottos, and maxims for edification.

**2.2 For communication:** There are numerous words for correct usage with people in different levels. Consequently, suitability, person, etiquette, and psychology have to be taken into account. In other words, people should consider the message whether it is appropriate or not in order to avoid dissensions and mental impacts. This is consonant with the opinion of Nakwatchara (2002: 28). He stated that ‘Thai people are likely to be deeply aware of the context, especially employing

rightful and harmonious speech. Consequently, less talking does not mean that s/he is foolish, but probably cautious.’

**2.3 For creative:** Up until now, there have been many remarkable works of literature, prose, and poetry which deserve admiration and careful study. The language used for composing these works must be carefully refined through thinking about the process, attitude, knowledge, belief, and experience of the author.

In conclusion, the main characteristic of Thai people reflected in communication is the employment of polite language with the right people at the right time. That is to say, Thai people are circumspect. They think before speaking to nurture the goodwill in relations because Thai society appears to be collectivistic. People live happily, peacefully, and united together. Therefore, it could be stated that hedging is one of the communicative strategies used by Thai people with cultural awareness.

In summary, hedging is any linguistic device used to indicate a writer’s doubt or uncertainty about a statement. It is one of the important features in academic writing which is frequently found in RAs, the source of knowledge for all experts and learners in various disciplines. Not only understanding the role of hedging in academic writing through the view of readers, but knowing how and when to hedge appropriately as writers is also necessary. Many researchers have studied about hedging in both a spoken and written context. A number of hedging devices have been gathered and classified by grammatical forms and their purposes. However, there are still discrepancies among researchers, particularly how to identify hedging. One of the researchers, Crompton (1997), proposed an alternative characterization and the way to identify hedging in his argumentative paper. His suggested categories of hedging seem to be feasible for further study, but none of the studies about hedging have chosen to follow his proposed criteria. Therefore, it is interesting to employ his proposal as one of the frameworks in this study. Thai learners need to learn more about hedging and use them appropriately in their writing in order to avoid self-commitment to the propositions which they are uncertain about. This study aims to

investigate the use of hedging in RAs which are written by native speakers of English and Thai authors. Also, Thai participants who participated in most studies of hedging appeared to be a small part in a large group of NNS, and none of the studies have mainly studied hedging by Thai writers. Since communicating in Thai culture indicates that hedging also reflects Thai culture in written communication, it is interesting to explore how Thai writers use hedging devices.

## **CHAPTER III**

### **METHODOLOGY**

This research study investigates hedging in academic writing. In this chapter, research articles (RAs), which were used as sources of data, were carefully selected as follows:

#### **Data Collection**

There are two corpora of RAs in this study which are Thai (TH) and Native (NA). The TH corpus consists of ten RAs which were written by Thai writers and the NA corpus consists of ten RAs which were written by native speakers of English. Consequently, the number of RAs used in this study was twenty. The total number of words in the TH and NA corpora are 27,833 and 31,234 respectively. The criteria to select the journals and RAs for the study are presented below.

#### **The Selection of Journals**

Selected journals from which all the RAs were drawn were continually published academic works in English between 1997 and 2006, and were related to English language teaching and learning. Journals published in Thailand were surveyed first as the number of RAs found for the TH corpus would be established as a base for comparison. There seemed to be a limited number of RAs written in English by Thai authors because most journals published in Thailand contain articles written in Thai rather than English. Therefore, the selected RAs in the TH corpus were drawn from five journals which are as follows:

- 1. Pasaa**, an academic journal on language and language teaching, published by the Language Institute of Chulalongkorn University.

**2. Reflections**, an academic journal on language and language teaching, published by the Department of Applied Linguistics, King Mongkut's University of Technology Thonburi.

**3. Journal of English Studies**, an academic journal on language and language teaching, published by the Department of English, Thammasat University.

**4. Humanities Journal**, an academic journal on language and language teaching, published by the Humanities Faculty of Kasetsart University.

**5. Studies in Languages and Language Teaching (SLLT)**, an academic journal on language and language teaching, published by the Department of Foreign Languages, Mahidol University.

These journals were selected because they are regularly published English academic works about language and language teaching containing articles by Thai authors, and they are all widely accepted journals which are published by well-known universities in Thailand.

In the NA corpus, the RAs were selected from the ELT journal which is published by Oxford University.

The reason to select the aforementioned journals was they had been widely accepted as rich academic resources which could be easily approached by teachers and students who are interested in the English language field in the academic community in Thailand.

### **The Selection of RAs**

After all selected journals were obtained, the RAs in both the TH and NA corpora were purposively selected according to the following criteria. The selection began with the TH corpus first.

**1. The form of the articles:** The selected articles were only those in the form of an RA. The academic articles which described or discussed an issue were not taken for the study.

**2. Number of pages:** The selected RAs were published in a journal and not more than 15 pages long.

**3. Keywords:** One of these keywords had to be found in the title of the RA: *Teaching, Pedagogy, English Language Teaching (ELT) or Instruction*. These keywords could help the researcher to, at least some degree, control the scope of the contents of each selected RA to have the same focus; that is, English language teaching.

**4. Author(s):** The selected RAs in the study were not written by the same authors, and they were native speakers of Thai and native or second language speakers of English.

**5. Published year of RAs:** Since the number of selected RAs in the ELT journal was found to be more than in the TH corpus, the articles were selected from the latest year back.

**6. Availability of the journals:** Since *Reflections* and *Studies in Languages and Language Teaching (SLLT)* journals were drawn from the journals' official websites: [http://arts.kmutt.ac.th/sola/index.php?option=com\\_magazine&Itemid=1](http://arts.kmutt.ac.th/sola/index.php?option=com_magazine&Itemid=1), and [www.sc.mahidol.ac.th/sclg/sllt/index.html](http://www.sc.mahidol.ac.th/sclg/sllt/index.html) respectively, only available RAs which agreed with the criteria were taken for the study.

Ten selected RAs written by Thai authors were found for the study. Since the study aims to compare the use of hedging in the RAs between Thai and native authors, the RAs which were drawn from ELT then had to be equal to the number of RAs in the TH corpus.

Table 2 and Table 3 show the title of each RA, the year when it was published, and the name of the journal from which it was taken for both the TH and NA corpora respectively.

**Table 2** List of RAs Taken from Each Journal for the TH Corpus

<b>Journals</b>	<b>Year</b>	<b>Titles</b>
Pasaa	1998	a) Self-Directed Learning Through the Internet and Intranet <i>Pedagogy: A Choice for Language Teachers</i>
	2000	b) A Reflection on Team- <i>Teaching</i> in an EFL Classroom
	2001	c) University <i>ELT</i> Faculty's Use of IT, Their Opinions on the Roles of IT and the Promising Tasks
Reflections	2005	a) Training Teachers to Use the Web in <i>ELT</i>
	2006	b) Teachers' Beliefs Concerning Large-Class English <i>Teaching</i> at the University Level
	2006	c) Using a Lecture and Tutorial Approach in <i>Teaching Large Classes</i>
Journal of English Studies	2003	a) English Proficiency of Thai Learners and Directions of English <i>Teaching</i> and Learning in Thailand
	2005	b) Corpus Analysis and Its Applications in <i>ELT</i>
Humanities Journal	2001	a) An Evaluation of English Proficiency of First-Year Students at Kasetsart University Using Communicative and Grammar-Based <i>Instruction</i>

**Table 2** (Continued)

<b>Journals</b>	<b>Year</b>	<b>Titles</b>
Studies in Languages and Language Teaching	2001	a) The Use of the Internet for <i>ELT</i> in Thai Public Universities

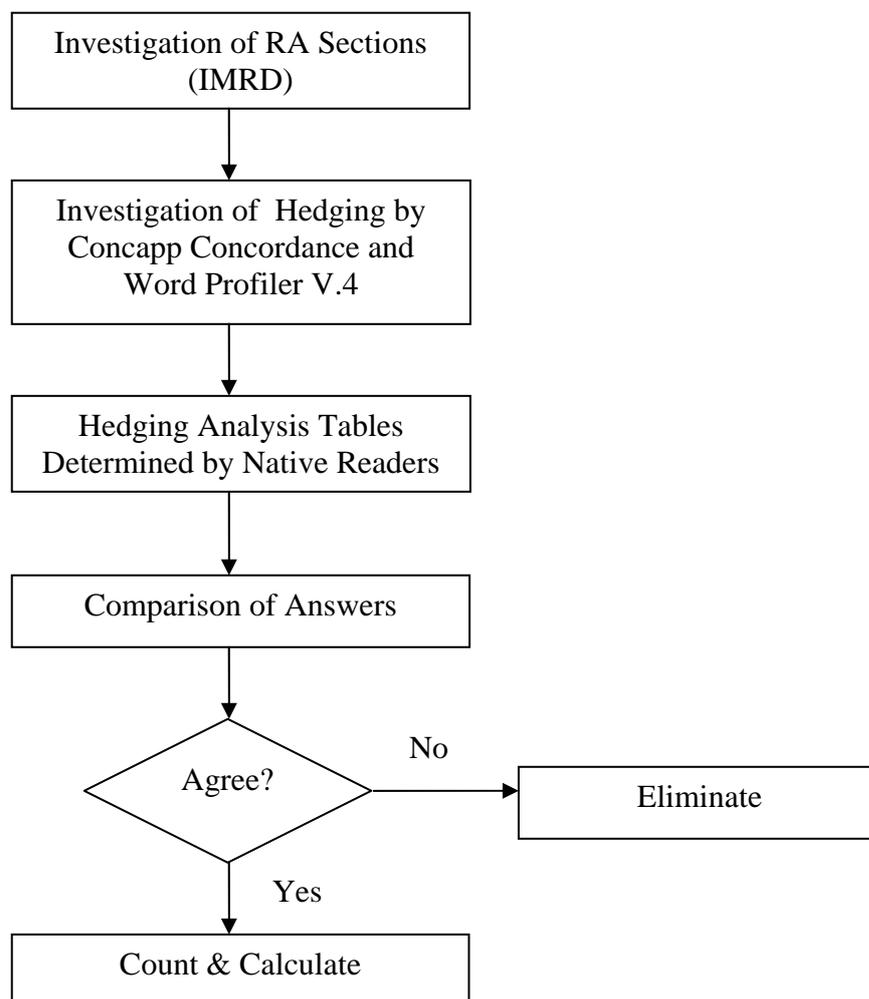
**Table 3** List of RAs Taken from the *ELT Journal* for the NA Corpus

<b>Journal</b>	<b>Year</b>	<b>Titles</b>
ELT Journal	2000	a) The Treatment of Ecological Issues in <i>ELT</i> Coursebooks
	2001	b) Self-Perception and Practice in <i>Teaching Grammar</i>
	2001	c) Adapting Grice's Maxims in the <i>Teaching</i> of Writing
	2002	d) Cultures of <i>Teaching</i> : Voices From Vietnam
	2002	e) A Class-Centred Approach to Language <i>Teaching</i>
	2003	f) <i>Teaching</i> English as an International Language: the Chilean Context
	2003	g) <i>Teaching</i> Vocabulary Through Code-Mixing
	2004	h) The Assessment of Second Language <i>Teaching</i>
	2005	i) Towards a Framework for <i>Teaching</i> Spoken Grammar
	2006	j) Collaborative EFL <i>Teaching</i> in Primary Schools

After all selected RAs were obtained for both the TH and NA corpora, RAs which were in the form of hard copies were converted into soft copies for analysis.

### Data Analysis

The overview of main procedures to analyze the data in the study is shown in figure 5.



**Figure 5** Main Procedures of Data Analysis

There were four main steps to analyze the data. The first step was the investigation of the RAs structure. The second step was the identifying of hedging. The third step was the analysis of hedging. The last step was the presentation and discussion of the frequencies of occurrence and the characteristics of hedging in each RA section.

The first step was the investigation of each RA structure. In order to obtain hedging conveyed by the authors directly, abstracts, quotations, tables, diagrams, transcribed dialogues, and examples were excluded from the RAs. According to Swales (1990), a research article generally consists of four sections which are Introduction, Method, Result and Discussion (IMRD). This rhetorical format is widely acknowledged by most researchers who study or compose their own RAs. Therefore, the IMRD model was employed in this study. Firstly, all RAs were read thoroughly. Then each RA section was marked. Rationale and significance of the study, and motivation for conducting the study were put in I section. M section covered the research procedure which generally explained how to collect and analyze the data. R section included research findings. Accordingly, interpretation of the research findings, comments and recommendations of the study, and any conclusion section were classified as D section. After that, all the marked RA sections were cross-checked with the thesis advisor in order to make sure that the division of RA sections was correct.

The second step was the identification of hedging. Salager-Meyer (1998: 298) suggests two procedures to identify hedging: *Introspection* and *Contextual Analysis*.

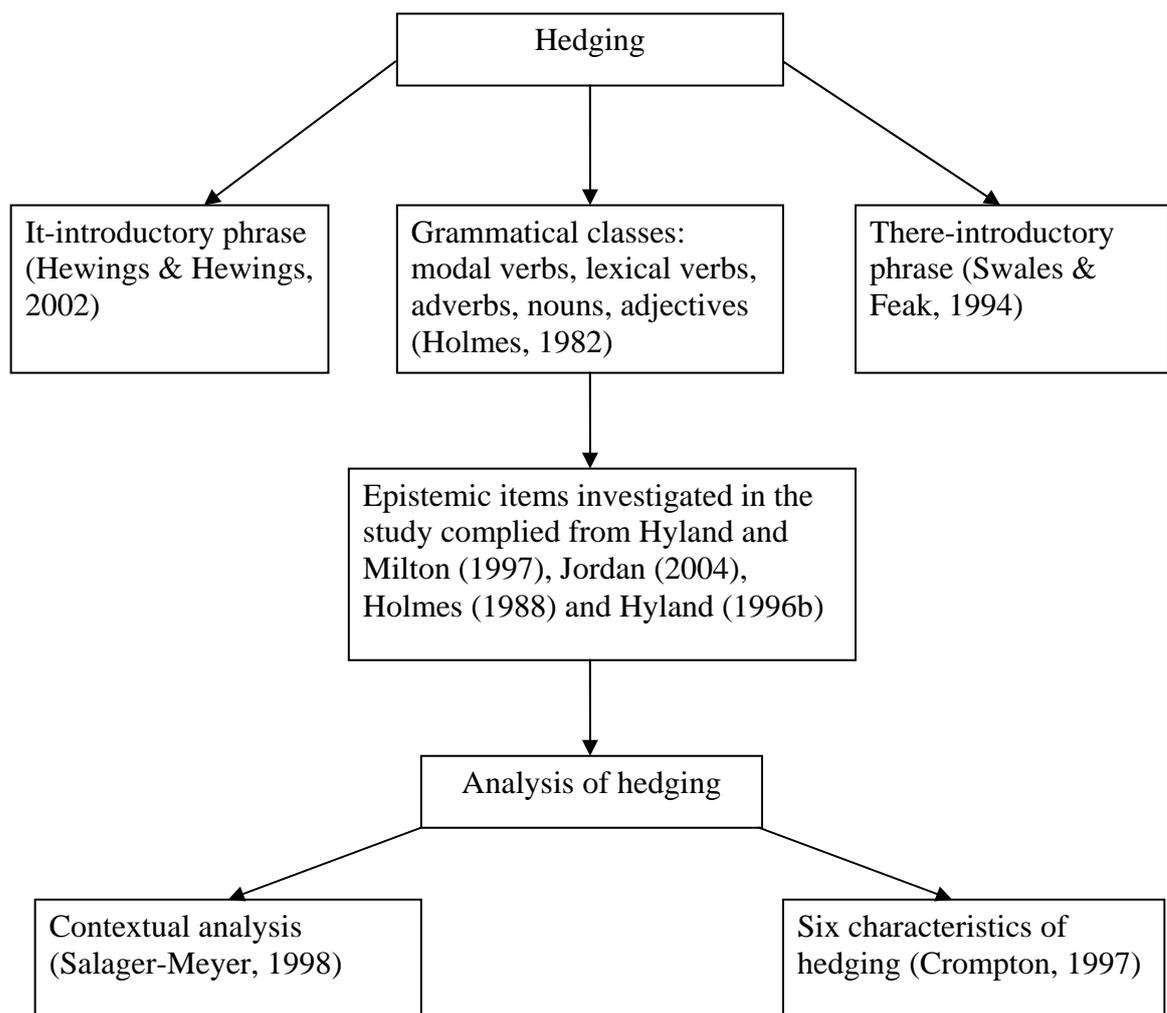
In *introspection* stage, hedging could be noticed because of our familiarity with its usage in communication. However, to increase the validity of this stage, the most frequent epistemic items in academic writing (after Hyland and Milton (1997), Jordan (2004), Holmes (1988), and Hyland (1996b)) were employed as a guideline. In order to investigate the frequencies of occurrence of hedging found in the RAs and to calculate percentages, the computer program named “Concapp Concordance and Word Profiler Version 4” was employed. Concapp is a creation of Chris Greaves (1993-

2003). It mainly performs concordance, collocation and word searches, and it also codifies search results into statistics. Since this program can support all languages in the world (especially those in the UNICODE codeset), it is one of the first choice programs chosen by researchers or language teachers and students who conduct text analysis. In order to run the program, the RAs were turned into readable text (UNICODE or ANSI) as required by the program. Secondly, target items were filled in the box provided one by one for each text. Finally, the entire range of target items occurring in the chosen text were displayed.

In the *contextual analysis* stage, as suggested by Salager-Meyer (1998), hedging could be identified by taking into account the context with the help of an expert in the field. In this stage, native readers were given the photocopies of all selected RAs of both corpora, and asked to identify hedging by checking in the hedging analysis tables. In the tables, sentences which contained the marked items were listed. The readers were asked to decide whether each marked item indicated hedging or not. If their answers were 'yes,' the readers were asked to consider the degree of certainty of each item by marking it as 'strong,' 'medium' or 'slight' (See Appendices C and D). It is assumed that 'strong' hedging indicates the very uncertainty of the writers' commitment to the statements while 'slight' hedging indicates that writers are more certain about the statements. There was also a 'remark' space for the readers to give suggestions and ideas. In the table of analysis, there was a 'section' space to indicate the RA sections (IMRD) where each statement appeared in order for the readers to trace the context of the sentence. To illustrate, 'T' stood for the articles written by Thais in the TH corpus; on the other hand, 'N' stood for the articles written by native authors in the NA corpus. The number 1-10 after T or N referred to the order of the articles. 'P' stood for Page. The number after P was the page number of the article which was renumbered from one; not from the original page number. For example, the code 'T1P1' means that the marked item could be found on page 1 in article number 1 which was written by a Thai author in the TH corpus (The tables can be seen in Appendices C and D).

### Analysis of Hedging

The third step was the analysis of hedging. The overview of the framework employed in the study is presented in figure 6. Then the source of epistemic items and the framework of characterizations of hedging used for the analysis in the study are described in the following section.



**Figure 6** Overview of the Framework of the Study

## **Epistemic Items**

Owing to the numerous forms of hedging in academic writing, the epistemic items searched for in this study were taken from the collections and examples of epistemic items found in English academic writing textbooks and research studies about hedging. The commonly found epistemic items used in English academic writing indicated by Hyland and Milton (1997) and Jordan (2004) are shown in Tables 4-6. Then, accordingly, the list of epistemic items investigated in the study compiled from both Hyland and Milton (1997) and Jordan (2004), and other researchers, namely Holmes (1988) and Hyland (1996b), is presented in Table 7.

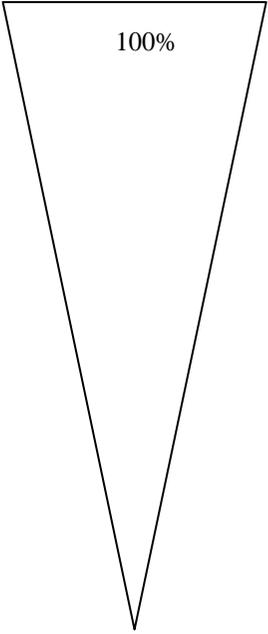
The list of the most frequent epistemic items used in academic writing compiled by Hyland and Milton (1997) is shown in Table 4.

**Table 4** List of the Most Frequent Epistemic Items in Academic Writing

Modal Verbs	Nouns	Verbs	Adjectives	Adverbs
Could	Claim	Appear	Always	Likely
Couldn't	Doubt	Argue	(not) Always	Never
May	Estimate	Assume	Apparent	Normally
Might	Evidence	Believe	Certain	Obviously
Should	Possibility	Claim	A certain extent	Of course
Shouldn't		Doubt	Clear	Often
Would		Estimate	Evident	Perhaps
Wouldn't		Expect	Possible	Possibly
Will		Indicate	Probable	Presumably
Won't		Know		Probably
		Predict		Quite
		Presume		Rarely
		Propose		Relatively
		Seem		Sometimes
		Speculate		Surely
		Suggest		Undoubtedly
		Propose		Usually

Source: Hyland and Milton (1997: 205)

**Table 5** Qualification Items as Hedging

Percentage Guide	QUANTITY	FREQUENCY	PROBABILITY		
			Adverbs	Adjectives	Verbs
	all/every/each	always	certainly	certain	will
	most		definitely	definite	is/are
	a majority (of)		undoubtedly	undoubted	must/have to
	many/much		clearly	clear	should
	a lot (of)	usual (ly)	presumably	(un) likely	would
	enough	normal (ly)	probably	probable	ought to
	some	general (ly)			
	a number (of)	on the whole			
	several	regular (ly)			
	a minority (of)	often	conceivably		may
		frequent (ly)	possibly	possible	might
		sometimes	perhaps		can
		occasional (ly)	maybe		could
a few/a little	rare (ly)	uncertainly	uncertain		
few/little	seldom				
	hardly ever			will	
				is/are	
				can	
				could	
0%	no/none/not any	never			} + not

Source: Jordan (2004: 68)

**Table 6** Adverbs and Nouns as Hedging

Adverbs	Nouns
Apparently	Assumption
Approximately	Claim
Hardly	Estimate
Practically	Evidence
Presumably	Possibility
Relatively	Presumption
Scarcely	Chance
Seemingly	Likelihood
Slightly	
Virtually	

---

Source: Jordan (2004: 69)

**Table 7** Epistemic Items Investigated in the Study Compiled from Hyland and Milton (1997), Jordan (2004), Holmes (1988) and Hyland (1996b)

<b>Modal Verbs</b>	<b>Nouns</b>	<b>Verbs</b>		<b>Adjectives</b>	<b>Adverbs</b>	
Can	Possibility	Appear	Speculate	Apparent	Approximately	Kind of
Could	Probability	Assume	Suggest	Certain	Practically	Sort of
May	Assumption	Argue	Tend	Possible	Scarcely	Uncertainly
Might	Claim	Believe	Suppose	Probable	Slightly	Conceivably
Will	Estimate	Claim	Know	Improbable	Virtually	Seemingly
Would	Evidence	Caution	Think	Evident	Partially	Hardly
Shall	Presumption	Doubt		Uncertain	Apparently	About
Should	Likelihood	Expect		Definite	Relatively	Almost
Must	Chance	Estimate		Undoubted	Moderately	Around
Need		Hypothesize		Clear	Evidently	Quite
Dare		Imply		Slight	Perhaps	Generally
Ought to		Indicate			Possibly	Actually
Have (got) to		Predict			Presumably	Normally
Had better		Presume			Probably	Certainly
Be able to		Propose			Somehow	Definitely
Be allowed to		Report			Somewhat	Undoubtedly
Going to		Seem			Likely/Unlikely	Clearly
					Rather	Fairly

The list of epistemic items used for the analysis in the study is listed in Table 7. Apart from epistemic items which could be categorized in five grammatical classes (Holmes, 1982), It/There introductory phrases and combined epistemic items were also explored in the study. Consequently, the focus on epistemic items used as hedging in this study includes:

1. Modal verbs
2. Lexical verbs
3. Adverbs
4. Adjectives
5. Nouns
6. It/There introductory phrases. The use of It-introductory phrase expressing hedging has been reported by Hewings and Hewings (2002), and the use of There-introductory phrase expressing probability has been exemplified by Swales and Feak (1994).
7. Combined qualifications or compound hedging has been categorized as one of the characteristics of hedging by Swales and Feak (1994) and Salager-Meyer (1994).

Briefly, this study is a combination of quantitative and qualitative research methods because it dealt with both numbers of frequencies, and the explanation and discussion of the findings. The frequencies of occurrence of hedging devices found in the forms of modal verbs, lexical verbs, adverbs, adjectives, nouns, and It/There introductory phrases in the study were investigated, and the findings are explained and discussed relating to the theories.

### **Characterizations of Hedging**

The characteristics of hedging have been categorized by many researchers, including Crompton (1997). Crompton divided the characterizations of hedging into six categories: copulas other than 'be', epistemic modals, clauses relating to probability, adverbials relating to probability, reported propositions with author

existence, and reported propositions with non-existent author (Examples of each category can be seen in Chapter 2). Since modals were commonly used in both spoken and written communication and they could be sub-divided into seventeen forms in the study -- can, could, may, might, will, would, shall, should, must, need, dare, ought to, have (got) to, had better, be able to, allow to and going to -- the researcher; therefore, generated modals tables for the convenience of the analysis. As a result, a complete set of hedging analysis tables, which contained modals and other grammatical forms of epistemic items, together with photocopies of all selected RAs, was given to each reader to determine whether the marked items in the tables served as hedging or not. Crompton's identification and division of hedging seemed to be reasonable and feasible to apply to any study of hedging in academic writing, and it is likely that there has not been any research studies which mainly follows his proposal before. However, both readers found that referring to the name of the third person might be a way which writers employ to remove themselves from their statements. This description seemed likely to fall on one of the qualifications of expressing hedging described as 'distance' by Swales and Feak (1994). In contrast to Crompton's proposal about hedging, only statements with the authors' responsibilities or when the authors used hedging devices to hedge their own propositions were considered as hedging. Consequently, the analysis of hedging in the study was open to allow for the readers' perspectives by employing the proposals of both Crompton (1997) and Swales and Feak (1994). After obtaining the readers' feedback, all hedging devices identified by the readers were classified according to the six characterizations of hedging suggested by Crompton (1997).

The last step was the presentation and discussion of hedging found in each section of RAs in terms of their frequencies of occurrence and characterizations.

### **Validity of the Study**

Since the concept of validity is significant for any kind of research, this study then was conducted carefully in both the collection and analysis of the data.

In data collection, all the RAs were selected by the keywords in order to assure that these RAs were in the same topic area, which was English language teaching.

In data analysis, there were three issues which the researcher conducted in order to increase the validity and reliability of the findings. The first issue was the usage of epistemic items compiled by Hyland and Milton (1997), Jordan (2004), Holmes (1988) and Hyland (1996b) as guidelines for the introspection stage since identifying hedging by oneself was likely to be risky, especially for a non-native speaker of English. The second issue was the assistance of a software program Concapp in counting and calculating the number of hedges found in the RAs. The final issue was the support of native readers. Two native readers in the English language field, Mr. Anthony Reardon and Mr. Stephen Cannell were asked for validation of the hedging and advice that was essential for the analysis. Mr. Reardon is a lecturer in the International College for Sustainability Studies at Srinakharinwirot University, and Mr. Cannell is a lecturer in the Department of Foreign Language, Faculty of Humanities, Kasetsart University. Both Mr. Reardon and Mr. Cannell are British. After the analysis of both native readers were obtained, only the items which both readers agreed as hedging were counted and finally calculated for the frequency of occurrence.

## **CHAPTER IV**

### **RESULTS**

The research findings obtained from the selected RAs are tabulated with respect to the research objectives which are to compare the extent to which hedging is used by Thai and native English authors, to explore the frequency of occurrence of hedging in each RA section in the corpora, and to analyze the frequencies of characterizations of hedging proposed by Crompton (1997) which are used in the corpora. This chapter consists of three main sections. The first section presents the investigation of epistemic items which are in the forms of modal verbs, lexical verbs, adjectives, adverbials, nouns, and It/There introductory phrases used as hedging found in the corpora. The second section presents the occurrences of hedging used in the corpora in the form of numbers and percentage. The final section presents the findings of characterizations of hedging used in the corpora.

#### **Epistemic Items as Hedging Found in the Corpora**

According to research question number 1, the extent of hedging used in the corpora was identified. Epistemic items appearing in the forms of modal verbs, lexical verbs, adjectives, adverbials, nouns, and It/There introductory phrases are alphabetically listed and compared in Tables 8-13.

The list of epistemic modal verbs used as hedging in the corpora is shown in Table 8.

**Table 8** List of Epistemic Modal Verbs as Hedging in TH and NA Corpora

<b>Epistemic Modal Verbs</b>	
<b>TH</b>	<b>NA</b>
can	can
could	could
may	may
might	might
	would
	should
	be able to
	allow to

---

**Note:** TH = Corpus of RAs written by Thai authors

NA = Corpus of RAs written by native authors

As shown in Table 8, both Thai and native authors in the study used *can*, *could*, *may*, and *might* as hedging while *would*, *should*, *be able to*, and *allow to* were considered as hedging by readers only in the NA corpus.

The following are examples of how modal verbs were employed epistemically in the corpora:

- Some disadvantages **can** be seen to have been experienced by both the students and their teachers who have had a chance to experience a team-teaching technique. (T2 P7)
  
- This **can** be attributed to the consciousness or awareness of students that these items were targeted for learning, and that the teacher's intention was to teach them, rather than to engage in play with them. (N7 P6)

- If the teachers who want to make changes in their approach to language teaching choose to adopt the technique with the aforementioned guidelines in mind, it is believed that team-teaching **could** prove to be as successful as, if not more so, than other currently-used teaching methods. (T2P11)
- A more ambitious study **could** compare the language learning of students in these teachers' classes with results from colleagues who had not attended the workshop. (N4 P7)
- The changes **may** bring about both positive and negative responses from the ELT faculty. (T3 P2)
- Spelling **may** be inaccurate, especially when the lexis has been presented or introduced through oral/aural modes. (N7 P7)
- The mismatch **might** come from teachers in that they did not report their attitudes openly. (T4 P4)
- Similarly, if they felt that the agitated behaviour of a single student was unsettling the class, a teacher **might** pay special attention to that student's needs before returning to the business of teaching. (N5 P2)
- One way of dealing with this **would** be to inform students of organizations that take positions opposed to those of most conservation groups, such as those which maintain that global warming is just an unproven theory. (N1 P7)
- This **should** also help all those involved with teacher education to see that these criteria are flexible and mutable, and part of a continuing process of making them more valid and more reliable. (N8 P9)

- Teachers who are sensitive to both the pedagogic and social needs of their classes **are often able to** transform oral presentations into a positive experience that affirms the existence of a spirit of social unity within their class. (N5 P5)
- Attention to these issues **allows** teachers to develop an extended, rather than a restricted, conceptualization of KAL and its role in their work. (N2 P8)

The list of epistemic lexical verbs used as hedging in the corpora is shown in Table 9.

**Table 9** List of Epistemic Lexical Verbs as Hedging in TH and NA Corpora

Epistemic Lexical Verbs	
TH	NA
appear	appear
believe	argue
imply	assume
indicate	believe
seem	indicate
suggest	seem
tend	suggest
	tend
	think

**Note:** TH = Corpus of RAs written by Thai authors  
 NA = Corpus of RAs written by native authors

As shown in Table 9, both Thai and native authors in the study used *appear*, *believe*, *indicate*, *seem*, *suggest*, and *tend* as hedging. However, the use of *imply* was considered to have epistemic meaning in the TH corpus while *argue*, *assume*, and *think* were used as hedging only in the NA corpus.

The following are examples of how lexical verbs were employed epistemically in the corpora:

- Therefore, it **appears** that, at least from a learning perspective, students perceive lectures as being least useful. (T6 P8)
- In this situation, the feeling of common purpose **appeared** to enhance the students' individual learning. (N4 P6)
- The strength of the approach, I would **argue**, is that it exploits a convenient harmony between a methodological emphasis on noticing, and a sociolinguistic view that native speakers (and their cultures) should not be portrayed as models to imitate or aspire to. (N9 P7)
- Researchers have **assumed** that the twin processes of teaching and learning can be understood without reference to the social context within which they occur. (N5 P6)
- It is also **believed** that with an understanding of the nature of the technique, hard work, and commitment both to teaching and to the students and with collaboration and cooperation with other team members, the teachers will benefit from professional growth and the students will ultimately reap the rewards of this. (T2 P11)
- The separation of EIL from any one culture has, I **believe**, important implications for the teaching of EIL, among them the following. (N6 P2)
- The definition **implies** that the corpus can be said to be representative if the means of collecting language output are principled and systematic. (T8 P2)

- The results **indicate** that the average English proficiency of Thai students is lower than that of students from other ASEAN countries. (T7 P3)
- Whilst the data **indicated** that perceived impact on pupils was positive, the implementation of innovative teaching and the extent of professional development of LETs appeared variable. (N10 P7)
- Self-Directed Learning through the Internet and Intranet Pedagogy **seems** to be an answer to language teachers. (T1 P1)
- The students, regardless of level, **seemed** to find this sufficient input with which to produce novel sentences, including the target lexis with relative confidence. (N7 P6)
- Their answers **suggest** that they all wanted the four skills with the same proportion although the percentage is not high. (T1 P4)
- The comments of these teachers **suggest** that they wanted, and worked towards encouraging an active attitude in their students. (N4 P5)
- The analysis reveals that passives and past tense verbs **tend** to occur quite frequently in biochemistry corpus. (T8 P5)
- When they did, however, they **tended** to paraphrase the concepts rather than come up with near-synonyms. (N7 P4)
- I do, however, **think** that some of the comments offer very interesting food for thought. (N9 P6)

The list of epistemic adjectives used as hedging in the corpora is shown in Table 10.

**Table 10** List of Epistemic Adjectives as Hedging in TH and NA Corpora

<b>Epistemic Adjectives</b>	
<b>TH</b>	<b>NA</b>
possible	appeared assumed certain possible

**Note:** TH = Corpus of RAs written by Thai authors

NA = Corpus of RAs written by native authors

As can be seen in Table 10, native authors in the study used *appeared*, *assumed*, *certain*, and *possible* as hedging. In contrast, *possible* was the only epistemic adjective expressing hedging found in the TH corpus.

The following are examples of how adjectives were employed epistemically in the corpora:

- Whilst the data indicated that perceived impact on pupils was positive, the implementation of innovative teaching and the extent of professional development of LETs **appeared** variable. (N10 P7)
- A particular difficulty here is that in the relationship **assumed** in this piece of correspondence, there is an asymmetrical distribution of power between customer (the reader and initiator of the correspondence) and supplier (the writer and responder). (N3 P3)
- Given that code-mixing is utilized by bilinguals, and that the use of L1 is justified to a **certain** extent (appropriateness, practicality, efficiency, affect, etc.) in the teaching of L2, the rationale to use code-mixing in speaking classes is well-supported. (N7 P3)

- Most teachers used the CD with colleagues, so it is **possible** that teachers were not autonomous learners and lacked self-confidence in using the CD individually. (T4 P5)
- While the focus of this report has been on one type of second language teacher education context, it is **possible** to generalize some key points to other contexts in which assessment criteria are used. (N8 P9)

The list of epistemic adverbials used as hedging in the corpora is shown in Table 11.

**Table 11** List of Epistemic Adverbials as Hedging in TH and NA Corpora

<b>Epistemic Adverbials</b>	
<b>TH</b>	<b>NA</b>
generally	generally
likely	largely
normally	likely
often <sup>1</sup>	perhaps
presumably	possibly
probably	presumably
somehow	probably
	somewhat

**Note:** TH = Corpus of RAs written by Thai authors

NA = Corpus of RAs written by native authors

<sup>1</sup> Time references are not counted in the study, but there is one usage of ‘often’ in the TH corpus in which both native readers agreed that it brought epistemic meaning to the sentence.

As can be seen in Table 11, both Thai and native authors in the study used *generally*, *likely*, *presumably*, and *probably* to express hedging. However, *largely*,

*perhaps, possibly, and somewhat* were found to use as hedging only in the NA corpus whilst the use of *normally, often* and *somehow* epistemically were found in the TH corpus.

The following are examples of how adverbials were employed epistemically in the corpora:

- Therefore, **generally** the English class consists of an input, a practice by means of drilling or doing exercises, a production of the language taught and feedback from the teacher. **(T6 P1)**
- Again LETs **generally** portrayed a slightly more positive outlook than NETs with more positive than negative responses in the open-ended questionnaire data. **(N10 P7)**
- Eric was a native speaker of English who had been involved in TEFL for over 15 years. His approach to teaching grammar was **largely** impromptu. **(N2 P2)**
- Therefore, a higher number of students studying in a conventional classroom mode seems **likely** to cause management problems in that interaction and feedback are difficult to provide. **(T6 P2)**
- This is **likely** due to the absence of visual support of the input (i.e. seeing the lexis in its correctly spelt form). **(N7 P7)**
- In order to cover those activities, teaching English is **normally** conducted in a smaller class compared with other subjects; the number of students in the English class in Thailand is between 30 and 45 in the English foundation courses in government universities. **(T6 P1)**

- With more teachers and students involved, **it can often happen that** classroom instruction will not go as initially planned. (T2 P10)
- **Perhaps** learners also inferred this from the fact that the L2 words were new to them, and the challenge and expectation in a classroom environment was for them to learn and use the target items. (N7 P6)
- This was **possibly** because they were aware of the learning process, and they noticed the rule—both necessary procedures for conscious learning to take place as Schmidt (1990) claims. (N7 P5)
- **Presumably**, this group of students probably wanted multi-skill activities. (T1 P4)
- Generally, NETs have not been widely deployed in primary school EFL, **presumably** on the grounds that the limited language resources of the young learner may render communication difficult. (N10 P1)
- Their responses in Table 5 **probably** give some guidelines. (T1 P5)
- A long-term study of these teachers' classrooms would **probably** be carried out more effectively by the local authorities, who have responsibility for the ongoing in-service programme. (N4 P7)
- The fact that the questionnaire was distributed with the final examination paper might **somehow** have determined the low return rate. (T2 P3)
- In the same way as reported in the previous section, NETs were **somewhat** sceptical about their impact on the professional development of LETs. (N10 P6)

The list of epistemic nouns used as hedging in the corpora is shown in Table 12.

**Table 12** List of Epistemic Nouns as Hedging in TH and NA Corpora

Epistemic Nouns	
TH	NA
	believing
	indication
	likelihood
	possibility

**Note:** TH = Corpus of RAs written by Thai authors

NA = Corpus of RAs written by native authors

As shown in Table 12, epistemic nouns expressing hedging could only be found in the NA corpus; they are *believing*, *indication*, *likelihood*, and *possibility*.

The following are examples of how nouns were employed epistemically in the NA corpus:

- I am going to argue that there are three grounds for **believing** that it may be desirable to teach native speaker spoken language in the classroom. **(N9 P2)**
- This is an **indication** that this word was accurately linked or connected to other words in the same semantic field. **(N7 P5)**
- Given that linguistic focus can be both systemic and strategic, there is a greater **likelihood** of challenge for trainees in this area. **(N8 P8)**

- Indeed, for unskilled writers, there is a distinct **possibility** that their intentions will be subverted by their inept or unintentional outing or violating of the maxims. (N3 P2)

The list of It/There introductory phrases used as hedging in the corpora is shown in Table 13.

**Table 13** List of It/There Introductory Phrases as Hedging in TH and NA Corpora

<b>It/There Introductory Phrases</b>	
<b>TH</b>	<b>NA</b>
It...that	It...that
	It...to
	There...
	There...that

**Note:** TH = Corpus of RAs written by Thai authors  
 NA = Corpus of RAs written by native authors

As shown in Table 13, *It...that* phrases were used as hedging by both Thai and native authors in the study. Not only *It...that* phrases, but also *It...to*, *There...*, and *There...that* phrases were found to express hedging in the NA corpus.

The following are examples of how It/There introductory phrases were employed epistemically in the corpora:

- **It may be concluded that** some English teachers have negative attitudes towards using the Internet for ELT. (T10 P9)
- Contrary to what I had imagined, **it seems that** students who are shy, or slow to speak, or who have poor articulation, do not want to maintain a low profile within their classes. (N5 P4)

- Furthermore, I believe that **it is possible to** perceive the ideology of the UDS in the taken-for-granted assumptions of what constitutes good, clear, communication in many assessment schemes. (N3 P2)
- Given that linguistic focus can be both systemic and strategic, **there is a greater likelihood** of challenge for trainees in this area. (N8 P8)
- Indeed, for unskilled writers, **there is a distinct possibility that** their intentions will be subverted by their inept or unintentional outing or violating of the maxims. (N3 P2)

In sum, native authors in the study tend to have more means for expressing hedging, both epistemic items and It/There introductory phrases, in academic writing than Thai authors. As shown by the data in Tables 8-13, the use of epistemic modal verbs (would, should, be able to, allow to), epistemic lexical verbs (argue, assume, think), epistemic adjectives (appeared, assumed, certain), epistemic adverbials (largely, perhaps, possibly, somewhat), epistemic nouns (believing, indication, likelihood, possibility), and It/There introductory phrases (It...to, There..., There...that) were found only in the NA corpus, while there are four epistemic items which are one lexical verb (imply), and three adverbials (normally, often, somehow) that were used as hedging only in the TH corpus.

### **Occurrences of Hedging in Each RA Section of the Corpora**

According to research question number 2, hedging in each RA section of the corpora were explored and calculated in percentage terms. The data are shown in Tables 14-27. First, the overall frequencies of hedging in each RA section of the corpora are presented in Table 14. Next, the overall frequencies of hedging appearing in the forms of modal verbs, lexical verbs, adjectives, adverbials, nouns, and It/There introductory phrases in the corpora are presented respectively along with their frequencies in each RA section in Tables 15-26 successively. Then the overall

frequencies of compound hedging in each RA section of the corpora are presented in Table 27.

**Table 14** Occurrences of All Hedging in Each RA Section in TH and NA Corpora

RA Sections	TH		NA	
	No. of Occurrences	%	No. of Occurrences	%
Introduction	19	5.31	64	17.88
Method	8	2.23	13	3.63
Results	32	8.94	55	15.36
Discussion	50	13.97	117	32.68
Total	109	30.45	249	69.55

As can be seen from the data in Table 14, the overall number of hedges employed in the TH and NA corpora are 109 (30.45%) and 249 (69.55%) times respectively. In the TH corpus, D section contained hedging the most (13.97%), followed by R section (8.94%), I section (5.31%), and M section (2.23%). Similarly, hedging was used the most in D section of the NA corpus (32.68%), followed by I section (17.88%), R section (15.36%), and M section (3.63%).

In brief, the native authors in the study tend to employ hedging in their RAs more than the Thai authors. Hedging is found the most in D section and the least in M section of both the TH and NA corpora. However, it appears that Thai authors in the study employ hedging in R section more than I section. In contrast, hedging is found in I section more than R section in the NA corpus which supports the overview of RAs presented in Swales (1990) who states that hedging is commonly found in I and D sections.

**Table 15** Occurrences of Epistemic Modal Verbs as Hedging in the Corpora

Epistemic Modal Verbs	TH		NA	
	No. of Occurrences	%	No. of Occurrences	%
can	7	3.91	14	7.82
could	1	0.56	13	7.26
may	31	17.32	35	19.55
might	31	17.32	17	9.50
would	0	-	25	13.97
should	0	-	3	1.67
be able to	0	-	1	0.56
allow to	0	-	1	0.56
<b>Total</b>	<b>70</b>	<b>39.11</b>	<b>109</b>	<b>60.89</b>

Table 15 shows that epistemic modal verbs which were used as hedging in the TH and NA corpora are 70 (39.11%) and 109 (60.89%) times respectively. In the TH corpus, *may* and *might* were used the most (17.32%) each, followed by *can* (3.91%), and *could* (0.56%). In the NA corpus, the use of *may* was also found the most (19.55%), followed by *would* (13.97%), *might* (9.50%), *can* (7.82%), *could* (7.26%), *should* (1.67%), *be able to* (0.56%), and *allow to* (0.56%) orderly.

In sum, *may* is the most commonly and frequently found device for expressing hedging in RAs of both the TH and NA corpora. Also, the use of *might*, *can*, and *could* are found in the top ranks of the list. This point supports the investigations of modality of some researchers such as Vassileva (2001: 92) who reported that *may*, *might*, and *could* are commonly found devices used as hedging in RAs.

**Table 16** Occurrences of Epistemic Modal Verbs as Hedging in Each RA Section of the Corpora

Epistemic Modal Verbs	I				M				R				D			
	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%
can	2	1.12	3	1.67	0	-	0	-	4	2.23	2	1.12	1	0.56	9	5.03
could	0	-	0	-	0	-	1	0.56	0	-	3	1.68	1	0.56	9	5.03
may	6	3.35	10	5.59	0	-	4	2.23	10	5.59	4	2.23	15	8.38	17	9.50
might	1	0.56	4	2.23	5	2.79	0	-	3	1.67	5	2.79	22	12.29	8	4.47
would	0	-	8	4.47	0	-	1	0.56	0	-	5	2.79	0	-	11	6.14
should	0	-	1	0.56	0	-	0	-	0	-	0	-	0	-	2	1.12
be able to	0	-	0	-	0	-	0	-	0	-	1	0.56	0	-	0	-
allow to	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	0.56
<b>Total</b>	<b>9</b>	<b>5.03</b>	<b>26</b>	<b>14.52</b>	<b>5</b>	<b>2.79</b>	<b>6</b>	<b>3.35</b>	<b>17</b>	<b>9.49</b>	<b>20</b>	<b>11.17</b>	<b>39</b>	<b>21.79</b>	<b>57</b>	<b>31.85</b>

As shown by the data in Table 16, epistemic modal verbs used as hedging were employed the most in D section of the TH corpus (21.79%), followed by R section (9.49%), I section (5.03%), and M section (2.79%). In the NA corpus, D section also contained hedging in the form of modal verbs the most (31.85%), followed by I section (14.52%), R section (11.17%), and M section (3.35%).

The data indicates that the use of epistemic modal verbs as hedging between Thai and native authors in the study is relatively similar. It is used the most in D section and the least usage is found in M section of both corpora. However, native authors tend to employ epistemic modal verbs to express hedging more than Thai authors in all RA sections, especially I and D sections. 5.03% of them were found in I section of the TH corpus while 14.52% were found in the NA corpus. In D section, the use of epistemic modal verbs as hedging of the TH corpus was 21.79% while 31.85% were found in the NA corpus.

**Table 17** Occurrences of Epistemic Lexical Verbs as Hedging in the Corpora

Epistemic Verbs	TH		NA	
	No. of Occurrences	%	No. of Occurrences	%
appear	1	0.83	9	7.50
argue	0	-	9	7.50
assume	0	-	1	0.83
believe	1	0.83	4	3.34
imply	3	2.50	0	-
indicate	9	7.50	15	12.50
seem	11	9.17	26	21.67
suggest	5	4.17	16	13.33
tend	1	0.83	6	5.00
think	0	-	3	2.50
<b>Total</b>	<b>31</b>	<b>25.83</b>	<b>89</b>	<b>74.17</b>

Table 17 shows that epistemic lexical verbs which were used as hedging in the TH and NA corpora are 31 (25.83%) and 89 (74.17%) times respectively. The use of *seem* (9.17%), *indicate* (7.50%), and *suggest* (4.17%) were the top-three most found in the TH corpus. Similar to the NA corpus, *seem* was also used the most in the corpus (21.67%), followed by *suggest* (13.33%), and *indicate* (12.50%).

In sum, native authors in the study tend to use epistemic lexical verbs to express hedging in their works more often than Thai authors do.

**Table 18** Occurrences of Epistemic Lexical Verbs as Hedging in Each RA Section of the Corpora

Epistemic Verbs	I		M		R		D									
	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%
appear	0	-	0	-	0	-	1	0.83	1	0.83	5	4.17	0	-	3	2.50
argue	0	-	7	5.83	0	-	0	-	0	-	0	-	0	-	2	1.67
assume	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	0.83
believe	0	-	2	1.67	0	-	1	0.83	0	-	0	-	1	0.83	1	0.83
imply	1	0.83	0	-	0	-	0	-	2	1.67	0	-	0	-	0	-
indicate	1	0.83	3	2.50	0	-	0	-	4	3.34	6	5.00	4	3.34	6	5.00
seem	6	5.00	5	4.17	0	-	1	0.83	2	1.67	7	5.83	3	2.50	13	10.84
suggest	1	0.83	2	1.67	0	-	0	-	3	2.50	2	1.67	1	0.83	12	10.00
tend	0	-	2	1.67	0	-	1	0.83	1	0.83	3	2.50	0	-	0	-
think	0	-	0	-	0	-	1	0.83	0	-	0	-	0	-	2	1.67
<b>Total</b>	<b>9</b>	<b>7.49</b>	<b>21</b>	<b>17.51</b>	<b>0</b>	<b>-</b>	<b>5</b>	<b>4.15</b>	<b>13</b>	<b>10.84</b>	<b>23</b>	<b>19.17</b>	<b>9</b>	<b>7.50</b>	<b>40</b>	<b>33.34</b>

As can be seen from the data in Table 18, the use of epistemic lexical verbs as hedging were employed the most in R section of the TH corpus (10.84%), followed by I and D sections (7.49%) each. Their usage could not be found in M section. In the NA corpus, D section contained epistemic lexical verbs expressing hedging the most (33.34%), followed by R section (19.17%), I section (17.51%), and M section (4.15%).

There is an obvious difference in the occurrences of epistemic lexical verbs used as hedging found in the corpora of the RAs. Native authors are likely to employ hedging in the form of lexical verbs more than Thai authors do in every RA section. In I section, Thai authors used 7.49% of epistemic lexical verbs to express hedging while their counterparts used 17.51%. In M section, there is no usage of epistemic lexical verbs as hedging in the TH corpus while native authors used 4.15% of them here. In R section, Thai authors used them 10.84% of the time while 19.17% were used by native authors. In D section, only 7.50% of epistemic lexical verbs were used as hedging in the TH corpus while 33.34% of them were used by native authors.

**Table 19** Occurrences of Epistemic Adjectives as Hedging in the Corpora

Epistemic Adjectives	TH		NA	
	No. of Occurrences	%	No. of Occurrences	%
Appeared	0	-	1	8.33
Assumed	0	-	1	8.33
Certain	0	-	1	8.33
Possible	2	16.67	7	58.34
<b>Total</b>	<b>2</b>	<b>16.67</b>	<b>10</b>	<b>83.33</b>

Table 19 shows that epistemic adjectives which were used as hedging in the TH and NA corpora are 2 (16.67%) and 10 (83.33%) times respectively. The use of *possible* is the most frequently found item in the corpora; that is, 16.67% in the TH corpus, and 58.34% in the NA corpus. However, the use of *appeared*, *assumed*, and *certain* as hedging could not be found in the TH corpus, but 8.33% each in the NA corpus.

**Table 20** Occurrences of Epistemic Adjectives as Hedging in Each RA Section of the Corpora

Epistemic Adjectives	I		M		R		D									
	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%
appeared	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	8.33
assumed	0	-	0	-	0	-	1	8.33	0	-	0	-	0	-	0	-
certain	0	-	1	8.33	0	-	0	-	0	-	0	-	0	-	0	-
possible	0	-	4	33.33	0	-	1	8.33	0	-	0	-	2	16.67	2	16.67
Total	0	-	5	41.66	0	-	2	16.66	0	-	0	-	2	16.67	3	25.00

As shown in Table 20, most epistemic adjectives used as hedging were found in the NA corpus. Indeed, only 16.67% or twice usage of them were found in D section of the TH corpus. However, in the NA corpus, 41.66% of hedging appearing in the form of adjectives were found in I section, followed by D section (25.00%), and M section (16.66%). None of them were used in R section of both corpora of the RAs.

Again, it can be seen that native authors tend to employ hedging in the form of adjectives more than Thai authors in most of the RA sections.

**Table 21** Occurrences of Epistemic Adverbials as Hedging in the Corpora

Epistemic Adverbials	TH		NA	
	No. of Occurrences	%	No. of Occurrences	%
generally	1	2.22	5	11.11
Likely	2	4.45	9	20.00
largely	0	-	2	4.45
normally	1	2.22	0	-
Often	1	2.22	0	-
perhaps	0	-	9	20.00
possibly	0	-	1	2.22
presumably	1	2.22	2	4.45
probably	3	6.67	6	13.33
somehow	1	2.22	0	-
somewhat	0	-	1	2.22
<b>Total</b>	<b>10</b>	<b>22.22</b>	<b>35</b>	<b>77.78</b>

Table 21 shows that epistemic adverbials which were used as hedging in the TH and NA corpora are 10 (22.22%) and 35 (77.78%) times respectively. The use of *probably* (6.67%), and *likely* (4.45%) were found in the RAs written by Thai authors in the study more than the use of *generally*, *normally*, *often*, *presumably*, and *somehow* which appeared to be 2.22% each. In the NA corpus, *likely* and *perhaps* were employed the most (20.00%) each, followed by *probably* (13.33%), *generally*

(11.11%), *largely* and *presumably* (4.45%) each, and *possibly* and *somewhat* (2.22%) each respectively.

**Table 22** Occurrences of Epistemic Adverbials as Hedging in Each RA Section of the Corpora

Epistemic Adverbials	I				M				R				D			
	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%
generally	1	2.22	2	4.45	0	-	0	-	0	-	2	4.45	0	-	1	2.22
likely	1	2.22	2	4.45	0	-	0	-	0	-	1	2.22	1	2.22	6	13.33
largely	0	-	1	2.22	0	-	0	-	0	-	1	2.22	0	-	0	-
normally	1	2.22	0	-	0	-	0	-	0	-	0	-	0	-	0	-
often	0	-	0	-	0	-	0	-	0	-	0	-	1	2.22	0	-
perhaps	0	-	2	4.45	0	-	0	-	0	-	4	8.89	0	-	3	6.67
possibly	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	2.22
presumably	0	-	1	2.22	0	-	0	-	1	2.22	1	2.22	0	-	0	-
probably	0	-	1	2.22	1	2.22	0	-	2	4.45	1	2.22	0	-	4	8.89
somehow	0	-	0	-	1	2.22	0	-	0	-	0	-	0	-	0	-
somewhat	0	-	0	-	0	-	0	-	0	-	1	2.22	0	-	0	-
<b>Total</b>	<b>3</b>	<b>6.66</b>	<b>9</b>	<b>20.01</b>	<b>2</b>	<b>4.44</b>	<b>0</b>	<b>-</b>	<b>3</b>	<b>6.67</b>	<b>11</b>	<b>24.44</b>	<b>2</b>	<b>4.44</b>	<b>15</b>	<b>33.33</b>

As can be seen from the data in Table 22, epistemic adverbials used as hedging were found the most in I and R sections of the TH corpus which were 6.66% each, followed by M and D sections 4.44% each. In the NA corpus, D section contained epistemic adverbials expressing hedging the most (33.33%), followed by R section (24.44%), and I section (20.01%). There were not any epistemic adverbials used as hedging found in M section of the NA corpus.

Although there is no usage of epistemic adverbials as hedging found in M section of the selected RAs of native authors, the number of hedging used in the form of adverbials by native authors is still more than Thai authors in the study in most of the RA sections.

**Table 23** Occurrences of Epistemic Nouns as Hedging in the Corpora

Epistemic Nouns	TH		NA	
	No. of Occurrences	%	No. of Occurrences	%
Believing indication	0	-	1	20.00
likelihood	0	-	2	40.00
possibility	0	-	1	20.00
Total	0	-	5	100.00

Table 23 shows that epistemic nouns expressing hedging were found only in the NA corpus; they are *indication* (40.00%), *believing*, *likelihood*, and *possibility* (20.00%) each respectively.

**Table 24** Occurrences of Epistemic Nouns as Hedging in Each RA Section of the Corpora

Epistemic Nouns	I				M				R				D			
	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%
believing	0	-	1	20.00	0	-	0	-	0	-	0	-	0	-	0	-
indication	0	-	0	-	0	-	0	-	0	-	1	20.00	0	-	1	20.00
likelihood	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	20.00
possibility	0	-	1	20.00	0	-	0	-	0	-	0	-	0	-	0	-
<b>Total</b>	<b>0</b>	<b>-</b>	<b>2</b>	<b>40.00</b>	<b>0</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>1</b>	<b>20.00</b>	<b>0</b>	<b>-</b>	<b>2</b>	<b>40.00</b>

As shown by the data in Table 24, epistemic nouns used as hedging could only be found in the NA corpus. Their usage appeared in I and D sections which were 40.00% each, followed by R section (20.00%). M section of the NA corpus contained no hedging in the form of epistemic nouns as the same as in all RA sections of the TH corpus.

**Table 25** Occurrences of It/There Introductory Phrases as Hedging in the Corpora

It/There Phrases	TH		NA	
	No. of Occurrences	%	No. of Occurrences	%
It...that	11	28.21	21	53.85
It...to	0	-	5	12.82
There...	0	-	1	2.56
There...that	0	-	1	2.56
Total	11	28.21	28	71.79

Table 25 shows that It/There introductory phrases which were used as hedging in the TH and NA corpora are 11 (28.21%) and 28 (71.79%) times respectively. In the TH corpus, *It...that* phrases were the only pattern found (28.21%). In the NA corpus, not only the use of *It...that* phrases were employed the most (53.85%), but other patterns of the phrases which are *It...to* (12.82%), *There...* (2.56%), and *There...that* (2.56%) were also found in the study.

**Table 26** Occurrences of It/There Introductory Phrases as Hedging in Each RA Section of the Corpora

It/There Phrases	I				M				R				D			
	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%
It...that	1	2.56	9	23.08	1	2.56	0	-	1	2.56	4	10.26	8	20.51	8	20.51
It...to	0	-	4	10.26	0	-	0	-	0	-	0	-	0	-	1	2.56
There	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	2.56
There...that	0	-	1	2.56	0	-	0	-	0	-	0	-	0	-	0	-
<b>Total</b>	<b>1</b>	<b>2.56</b>	<b>14</b>	<b>35.90</b>	<b>1</b>	<b>2.56</b>	<b>0</b>	<b>-</b>	<b>1</b>	<b>2.56</b>	<b>4</b>	<b>10.26</b>	<b>8</b>	<b>20.51</b>	<b>10</b>	<b>25.63</b>

As shown in Table 26, It/There introductory phrases used as hedging were found the most in D section of the TH corpus (20.51%), followed by I, M and R sections which were 2.56% each. In the NA corpus, I section contained It/There introductory phrases expressing hedging the most (35.90%), followed by D section (25.63%), and R section (10.26%). The use of It/There introductory phrases as hedging could not be found in M section of the NA corpus.

Nevertheless, the number of It/There introductory phrases used to express hedging seems to be employed by native authors more than Thai's.

**Table 27** Occurrences of All Compound Hedging Found in Each RA Section in the Corpora

Compound Hedging in RA Sections	TH		NA	
	No. of Occurrences	%	No. of Occurrences	%
Introduction	2	3.92	16	31.37
Method	3	5.88	1	1.96
Results	2	3.92	5	9.81
Discussion	3	5.88	19	37.26
<b>Total</b>	<b>10</b>	<b>19.60</b>	<b>41</b>	<b>80.40</b>

As shown in Table 27, the overall number of compound hedging found in the TH and NA corpora are 10 (19.60%) and 41 (80.40%) times respectively. In the TH corpus, D and M sections contained compound hedging 5.88% each, followed by I and R sections 3.92% each. In the NA corpus, compound hedging were used the most in D section (37.26%), followed by I section (31.37%), R section (9.81%), and M section (1.96%).

**Characteristics of Hedging Proposed by Crompton (1997)  
in the Corpora of RAs**

According to research question number 3, hedging found in the corpora of the RAs were analyzed and divided their characterizations into groups which are proposed by Crompton (1997). Then the classified data were counted and presented in Table 28 and 29. The overall frequencies of characteristics of hedging found in the corpora are given in Table 28 while the data in Table 29 provides the overview of each characteristic of hedging used in each RA section of the corpora.

**Table 28** Occurrences of Characteristics of Hedging Proposed by Crompton (1997)  
Found in the Corpora

Characteristics of Hedging	TH		NA	
	No. of Occurrences	%	No. of Occurrences	%
1. Copulas other than 'be'	9	2.37	41	10.79
2. Epistemic modals	70	17.63	109	28.69
3. Clauses relating to probability	11	2.89	28	7.37
4. Adverbials relating to probability	10	2.63	35	9.21
5. Reported propositions (existence)				
5.1 Explicitly designated author	2	0.53	23	6.05
5.2 Implicit entity	3	0.79	6	1.58
6. Reported propositions (non-existence)	13	3.42	23	6.05

As can be seen from the data in Table 28, epistemic modals were the most frequently used hedging devices of both the TH (17.63%) and NA (28.69%) corpora. Apart from epistemic modals, reported propositions with non-existent author (3.42%), clauses (2.89%) and adverbials (2.63%) relating to probability were commonly used by Thai authors whereas copulas other than 'be' (10.79%), followed by adverbials (9.21%) and clauses (7.37%) relating to probability were commonly found in the native authors' work. This suggests that both Thai and native authors are likely to

employ epistemic modals, reported verbs, adverbials, and clauses to express hedging in academic writing. However, the reported propositions with author existence which can be subdivided into explicitly designated author (the use of first pronoun as a subject of a statement), and implicit entity (the use of impersonal pronoun as a subject of a statement) tend not to be employed as frequent as other characteristics.

**Table 29** Occurrences of Characteristics of Hedging Proposed by Crompton (1997) Found in Each RA Section of the Corpora

Characteristics of Hedging	I				M				R				D			
	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%	TH	%	NA	%
1. Copulas other than 'be'	5	1.32	6	1.58	0	-	3	0.79	3	0.79	13	3.42	1	0.26	19	5.00
2. Epistemic Modals	9	2.37	26	6.84	3	0.79	6	1.58	17	4.47	20	5.27	38	10.00	57	15.00
3. Clauses relating to probability	1	0.26	14	3.68	1	0.26	0	-	1	0.26	4	1.05	8	2.11	10	2.63
4. Adverbials relating to probability	3	0.79	9	2.37	2	0.53	0	-	3	0.79	11	2.89	2	0.53	15	3.95
5. Reported propositions (existence)								-								
5.1 Explicitly designated author	0	-	9	2.37	0	-	2	0.53	1	0.26	1	0.26	1	0.26	11	2.89
5.2 Implicit entity	1	0.26	2	0.53	0	-	0	-	2	0.53	2	0.53	0	-	2	0.53
6. Reported propositions (non-existence)	2	0.53	2	0.53	0	-	0	-	6	1.58	7	1.85	5	1.32	14	3.68

As shown by the data in Table 29, the three most used characteristics of hedging were put in rank order. Epistemic modals were found the most in every RA section of both corpora. In the TH corpus, apart from epistemic modals, the use of copulas other than 'be' and adverbials relating to probability were employed in I section 1.32% and 0.79% respectively. Adverbials (0.53%) and clauses (0.26%) relating to probability were found in M section. R section contained reported propositions with non-existent author (1.58%) and adverbials relating to probability (0.79%). Clauses relating to probability and reported propositions with non-existent author were used 2.11% and 1.32% respectively in D section of the TH corpus. In the NA corpus, apart from epistemic modals, the use of clauses relating to probability (3.68%), adverbials relating to probability and reported propositions with explicitly designated author which were 2.37% each were employed to express hedging in I section. Copulas other than 'be' and reported propositions with explicitly designated author were found 0.79% and 0.53% respectively in M section. R section contained copulas other than 'be' (3.42%) and adverbials relating to probability (2.89%). The same characteristics of hedging could be found in R section, copulas other than 'be' (5.00%) and adverbials relating to probability (3.95%) were employed in D section of the NA corpus.

In sum, as can be seen from the percentage in each table, it can be concluded that Thai authors seem to have less means or linguistic devices for expressing hedging than native authors. Also, hedging is frequently found in the RAs written by native authors, especially in D and I sections. Although Thai authors in the study appear to employ hedging evidently less than native authors, the RA sections which filled with hedges are, interestingly, D and R sections. In addition, the characteristics of hedging used in the selected RAs of both Thai and native authors are quite varied. However, epistemic modals, lexical verbs, and adverbials are found to be the three most frequent characteristics of hedging employed in the corpora of the RAs.

## **CHAPTER V**

### **DISCUSSIONS AND RECOMMENDATIONS**

This study aimed to explore hedging used by Thai and native authors in RAs which are related to the English language teaching field. There are two main sections in the present chapter which are discussions and recommendations based on the study. The discussions section presents the redescription of the main research findings in Chapter 4 with some additional views about hedging found in the study, and the implications of the study. The recommendations section presents the suggestions for further research with respect to both methodology and study issues.

#### **Discussions of the Main Research Findings from the Study of Corpora of RAs**

The data from the study indicated the differences, at least in some aspects, of how Thai and native authors employ hedging in writing RAs. The four important issues are included in this section: language devices for hedging in academic writing, occurrences of hedging found in the corpora of RAs, characterizations of hedging proposed by Crompton (1997), and implications of the study.

#### **Language Devices for Hedging in Academic Writing**

The findings indicated that both Thai and native authors employ hedging in writing RAs of English language teaching. However, the items for hedging found in the study indicated that Thai authors tend to have a more limited range of devices for expressing hedging than native authors. This point concurs with the study of doubt and certainty expressed by Hong Kong learners of Hyland and Milton (1997) whereas it is in contrast to the findings in the study of indirectness devices used by the non-native students of Hinkel (1997) who were Chinese, Korean, Japanese and Indonesian. In Hinkel's study, the findings revealed that more types of hedges were found in non-native students' essays than in those by native students, and the frequencies of usage

of the hedges were not dramatically different because hedging was commonly expressed in the language discourse for particular purposes of those non-native students, especially the Chinese, Japanese and Korean. Although Thais, who learn English as a foreign language (EFL), the same as Chinese, Japanese and Korean, are culturally considerate and cautiously use proper language with the right person and situation, the use of hedging devices was limited and less than that of native speakers of English. The reasons that Thai learners appeared to employ limited and less hedging devices in academic writing is probably because Thai learners are normally taught that the characteristics of good academic writing are to be clear, organized, and not too general or too specific. They therefore might not have a clear idea of when to express hedging or are uncertain how to reduce the self-commitment to claims appropriately. Another reason may be that Thai learners are likely to encounter problems relating to insufficient knowledge of language devices and the academic discourse community, as stated by Bloor and Bloor (1991) and Hyland (1996a).

Nevertheless, the use of epistemic modal verbs, epistemic adjectives, epistemic nouns, and It/There introductory phrases as hedging in the study could be best exemplified the point.

The meanings and the precise degree of certainty of modal verbs are rather complicated and difficult to interpret by non-native learners (Holmes, 1982). Each modal verb contains more than one meaning which academic writers need to know and use appropriately according to the text. In addition, the degree of certainty of the epistemic modal verbs is different. The use of items in past form indicates weaker propositions than the use of items in present form. For example, the use of *could* and *might* indicate more uncertain meaning than the use of *can* and *may* (Montgomery, 1982). Since the meanings of *may* and *might*, which are permission and possibility (Quirk et al., 1972), can be understood clearly, Thai authors tend to select these words to express hedging more frequently than other epistemic modal verbs. However, the use of *can*, *could*, *may*, and *might* to indicate permission in academic writing seems to be rare (Leech, 1987).

Apart from the frequent use of *can*, *could*, *may*, and *might* to express hedging in both the TH and NA corpora, the use of *would*, *should*, *be able to*, and *allow to* epistemically are found only in the NA corpus. *Would* is the past form of *will*, and indicates weaker probability for propositions than the use of *will*. However, Thai authors in the study did not use *would* as a device for expressing hedging. It could be that, for non-native learners, *would* contains rather complicated meanings: willingness, insistence, characteristic activity, hypothetical meaning in main clauses, and probability (Quirk et al., 1972). Interestingly, *should* is also used a great number of times in the selected RAs in the TH corpus, but none of them are used epistemically. This suggests that most Thai authors seem to employ *should* as deontic modality. In other words, the use of *should* of Thai authors tends to indicate what to or not to perform due to appropriateness and the ethical basis of society. In fact, this point agrees with one of the purposes of language use in Thai cultural communication, which is for teaching, stated by Nakornthap (n.d.) cited in Rungjang (1993) and Chanchaisakulwat (1994), who categorized communication in Thai culture according to the purposes of language use which are for teaching, communication, and creative purposes.

The limited use of epistemic adjectives and It/There introductory phrases expressing hedging in the study also implies that Thai authors have a limited range of hedging devices available. *Possible* is the only epistemic adjective used for hedging in the selected RAs written by Thai authors while various words such as *certain*, *appeared*, and *assumed* are found in native authors' works. Similarly, It/There introductory phrases used to express hedging in the NA corpus are more varied. *It...that* is the only pattern of the introductory phrase type found in Thai authors' works in the study while native authors also used *It...that*, *It...to*, *There...*, and *There...that*. Subsequently, apart from increasing their repertoire for expressing hedging in academic writing, Thai authors may need to focus more on word formation; adding prefixes and suffixes, to increase their options for their writing. The use of epistemic adjectives which were found only in the NA corpus: *appeared* and *assumed*, are identifiable as derivations of *appear* and *assume* respectively. Furthermore, the less frequent use of It/There introductory phrases by Thai authors to indicate hedging

in academic writing, especially the limited pattern, tentatively supports the implication for teaching suggested by Hewings and Hewings (2002). There seems to be structural problems concerning *to* or *that* after the It-phrase.

The findings of epistemic nouns used as hedging in the study which are *believing*, *indication*, *likelihood*, and *possibility* tend to emphasize that Thai authors may need more alternative means for hedging because it appears that all epistemic nouns expressing hedging in the study are employed by native authors only.

Furthermore, regarding the research findings, most Thai authors in the study tended to employ hedging in a simple style of writing. In fact, one or maybe two hedging devices (double hedges) were found in a sentence. In contrast, the hedging that occurred in a sentence written by native authors consisted of up to three devices (triple hedges). Therefore, it can be said that Thai authors are likely to employ hedging devices in a less complex way or to employ less compound hedging than native authors. This point might reflect Thai academic writing which generally should be conveyed by a simple, clear, concise, and well-arranged sentence (Changkhwanyuen, 2005).

In short, although both Thai and native authors in the study employed hedging in their work, Thai authors tended to have less varied items and means for expressing hedging in their RAs. Consequently, it is necessary for Thai learners to understand about hedging in academic writing, especially how and when to hedge properly in academic written discourse.

### **Occurrences of Hedging Found in the Corpora of RAs**

Apart from having less options for expressing hedging, Thai authors in the study appeared to employ hedging considerably less frequently than native authors in all characteristics of hedging in every section of an RA. The most commonly found hedging devices in the RAs of both Thai and native authors was epistemic modals. This point supports the studies of Butler (1990), Hyland (1994), Holmes (1982), and

Vassileva (2001). Although modal verbs have limited and certain forms, their frequency of occurrence in both spoken and written discourse in order to indicate doubt and certainty is more common and frequent than other grammatical forms. Holmes (1982) agreed with Coates (1980) that epistemic modals are more likely to be used in informal contexts rather than formal or impersonal contexts. Therefore, there is the possibility that writers spontaneously based their writing on informal spoken discourse or their experience.

In addition, the use of reporting verbs with first pronoun subjects *I* and *We* (explicitly designating the author), which is one of the characteristics of hedging proposed by Crompton (1997), in the corpora of RAs is evidently different. Thai authors seem hardly to employ *I* to represent themselves in writing RAs; but the use of *We*, to some extent, could be found. Conversely, native authors are likely to employ *I* in their work directly and more often than Thai authors. Generally, the use of first pronoun subjects alone would not be hedging; but in this case, *I* and *We* occurred with epistemic lexical verbs which are considered as hedging. That is, native authors appear to express their responsibilities to their uncertain or arguable propositions straightforwardly in RA writing.

Furthermore, it is interesting to note from the study that Thai authors tend to employ hedging in R section more often than I section, which is in contrast to the findings regarding native authors, the study of hedging in medical research papers and case reports of Salager-Meyer (1994), and other findings reported by Swales (1990). Native authors in the study tended to employ hedging in I section more often than R section of RAs. The frequency of occurrence of compound hedging in each RA section of the NA corpus in the study could also be taken as evidence to support this claim. Generally, I and D sections of RAs written by native authors are rich in hedging devices rather than R section which aims to report the findings objectively. Consequently, it is possible that Thai authors are likely to report findings of a study in R section of RAs more subjectively than I section which aims to explain the motivations, significances, and purposes regarding the research study. It could be

implied that Thai authors seem likely to include both the description and the discussion of the findings in R section.

In brief, epistemic modals are the devices most used as the means to express hedging in writing RAs of both Thai and native authors. However, the number of hedges occurring in the study of RAs written by Thai authors is noticeably less. Paradoxically, R section written by Thai authors seems to contain hedging more than I section which is opposite to their use by native authors, for whom hedging is found in I section more frequently than R section.

### **Characterizations of Hedging Proposed by Crompton (1997)**

Crompton (1997) pointed out that the responsibility or the commitment of the writer needs to be taken into consideration when identifying hedging in a research study. His proposed six characterizations of hedging, which are copulas other than 'be', epistemic modals, clauses relating to probability, adverbials relating to probability, reported propositions with author existence (which are subdivided into two categories: explicitly designated author, and implicit existence of author as the subject of the statement), and reported propositions with non-existent author, were employed as a framework of this study. That is, all hedging devices found in the corpora of RAs were classified by the six characterizations.

It is interesting to raise the point about the writers' commitment to the truth of the propositions in a study about hedging. Likewise, the study of Lewin (2003, 2005) revealed that the number of hedging devices identified by the writers of a text and the readers was considerably different. It is possible that the definition of hedging is broad and unclear to learners, and its form is changeable. Although non-native learners also employ hedging in English academic writing, there is a possibility that they do not really realize the need to express hedging, or the function of hedging. Indeed, non-native learners, especially postgraduate students, should understand about hedging and know how to use it in their writing properly since hedging is one of the

significant features in academic writing which could lead them to be more successful practitioners in a discourse community.

However, there seems to be a small point of two characterizations of hedging proposed by Crompton (1997), which are clauses relating to probability, and reported propositions with the implicit existence of author as a subject of the statement, that might be confusing for non-native learners. Regarding his examples, '*It is likely that the moon is made of cheese,*' exemplifies the characterization of clauses relating to probability. Another example of the characterization of reported propositions with the implicit existence of an author as a subject of the statement, '*It is therefore suggested that the moon is made of cheese,*' is very close to the previous example. The difference is that the reported propositions with the implicit existence of an author appears to express tentativeness by the use of an epistemic verb. However, if both examples were responsibly or purposively used as hedging by an author, it might somehow be distracting to classify them into the proposed characterizations because the second example '*It is therefore suggested that the moon is made of cheese*' might also be viewed as an *It...that* clause relating to probability. Therefore, it would probably be easier for non-native learners if these characterizations were combined as one characterization; that is, clauses relating to the probability of the statement.

### **Implications of the study**

As can be seen from the findings of the study, it may be concluded that how Thai authors employ hedging in academic writing is similar to how most second or foreign language authors use it; that is, their expression of hedging is limited and less than that of native authors.

The three possible reasons why second or foreign language learners do not hedge or find it rather difficult to utilize are explained in Bloor and Bloor (1991: 8) and Hyland (1996a: 482). Firstly, non-native learners may have insufficient knowledge of linguistic devices for hedging. Secondly, non-native learners may have insufficient knowledge or understanding of an academic discourse community.

Hedging is one of the vague pragmatic areas that might be complicated for a student learning English as a second or foreign language. Lastly, non-native learners may have false perceptions of social relationships and accompanying behavior to achieve success in a discourse community owing to cross-cultural differences.

Therefore, it is essential for non-native learners to know not only how and when to express hedging in academic writing properly, but also to know more linguistic devices for hedging (Lewin, 2003). Academic writing courses should place more emphasis on the knowledge of this linguistic resources which is considered to be one of the major problems found in non-native learners' work (Shaw and Liu, 1998: 248). Cross-cultural essay exchange projects as suggested by Daoud (1998) may be a useful addition to an academic writing course to help non-native learners to improve their academic writing skills, and to be more patient and open-minded regarding the target culture. In addition, it might be helpful to include some knowledge about hedging in pre-sessional courses for postgraduate learners apart from the knowledge about writing references and unintentional plagiarism. Non-native learners would then have more understanding of academic English writing in the discourse community. As Blue (1991) reported in his paper, pre-sessional courses could also help learners to improve their academic writing skills effectively. Furthermore, Wishnoff (2000) investigated the effects of instruction on the pragmatic acquisition of academic writing by learners of English as a second language, and discovered whether the training transferred to a less formal, less planned form of computer-mediated communication. The participants were divided into two groups. The treatment group received instructions to raise their awareness in the use of hedging devices. Another group, the control group, did not receive the instructions. The findings revealed that the use of hedging devices in the treatment group was considerably increased in the research papers and in the computer-mediated communication. It is likely that teaching about hedging in academic writing is one of the most effective methods to improve the recognition and use of hedging in communication.

However, it does not mean that the increase of hedging in RAs, particularly in I section, would be the way to make non-native learners' work more native-like. Still, non-native learners should be more cautious when making propositions in academic writing, and wherever possible, should extend the epistemic devices as means of expressing hedging.

After all, it is hoped that this study would encourage all practitioners to realize the importance of English academic writing, especially the feature of hedging. It might be necessary to consider instituting English academic writing as a compulsory subject or course for learners at school and university level. This could lead to dramatic improvement in academic English writing such that learners become more native-like.

### **Recommendations for Further Research**

Although the study of hedging has been conducted for more than ten years, only a few studies have been conducted by Thai researchers and none of them appears to focus on English academic writing in a social science discipline. Therefore, this study may be rather small and cannot bring about generalizations concerning hedging in academic writing. However, the researcher found that there are some points which would help further research be more valid, systematic, and contributory to the ESP community. Two main issues are taken into consideration here: further study and further methodology.

#### **Further Study**

The first suggestion for further research is to study other means of expressing hedging in academic writing apart from grammatical class forms. Due to numerous ways to hedge in writing, writers may also employ phrases in order to convey less commitment to the truth of a proposition. For example,

- Therefore it appears that, **at least from a learning perspective**, students perceive lectures as being least useful. (T6 P8)
- The main argument of this article is that, **at least for some purposes**, the native speaker can be an interesting point of reference without being an object of deference. (N9 P8)

Also, it might be necessary to study compound hedging and describe its pattern. For example,

- The fact that the questionnaire was distributed with the final examination paper **might somehow** have determined the low return rate. (T2 P3)
- This **suggests** that **it is possible to** define a construct by isolating specific skills that **might** be included in a broader definition of 'teaching ability'. (N8 P3)

The first sentence is taken from the TH corpus. It contains compound hedging 'might somehow' which is created by the use of an epistemic modal verb (might) and the use of an epistemic adverbial (somehow). The second sentence is taken from the NA corpus. It contains compound hedging through the use of an epistemic lexical verb (suggests), an It...to phrase (It is possible to), and an epistemic modal verb (might).

The second suggestion is to study identification of hedging through readers' interpretations. Most studies of hedging focus on readers' views to consider whether the texts are epistemically used or not. This may be because it is rather inconvenient to contact or consult the authors of texts, especially in the RA genre. Consequently, it could be interesting to study hedging through readers' interpretations in depth by comparing the differences between how non-native and native English readers identify hedging, and comparing the obtained data with the theory.

The third suggestion is to further study about modality. Since epistemic modal verbs are commonly and frequently employed to express hedging in written texts, it might be interesting to study about other areas of modal meanings (deontic and dynamic) in written or spoken discourse.

The fourth suggestion is to extend the study to cover hedging by Thais in other written genres such as theses/dissertations and term papers in different disciplines. Also, study of hedging in spoken communication between Thai and native speakers of English might be interesting and worth investigating.

### **Further Methodology**

Two native readers in the study suggested some interesting points which may bring about better further research methodology:

Firstly, the degree of hedging in this study was divided into three levels which are *strong*, *medium*, and *slight*. This classification could appear to be limited and subjective. In reality, there are more shades of meaning in hedging which makes it rather difficult to put a hedge into an exact group. However, it might be better to manage the degrees' order from *strong*, *medium*, and *slight* to *slight*, *medium*, and *strong*, and to specify the representation of the degree in each group in the hedging analysis tables. For example, *slight* represents where a small probability is expressed, *medium* represents where approximately equal weight is given to possible outcomes, and *strong* represents where great certainty or uncertainty is expressed. Since strong hedging means a very weak sentence, this opposition may create confusion for the readers.

Secondly, since the use of modality as hedging is sometimes ambiguous, it would be more beneficial, if possible, to consult with the writers to find out what s/he means. Also, the obtained examples from the data should be categorized into groups such as modality expressing a hypothesis, modality expressing an assumption, modality expressing the interpretation of data, and so forth.

Apart from these two points, the following suggestions may also be useful for further research methodology. Firstly, expansion of the size of the corpus could support and validate the research findings. Secondly, interviews with writers of the texts about their use of hedging, for instance, the reasons for using hedging in R section of RAs by Thai authors, would make the study more reliable and more qualitative. Thirdly, it would be less time-consuming if only doubtful epistemic items are selected and given to readers in the study to decide whether they are used as hedging or not; otherwise, there would be a large number of items in the hedging analysis tables. Lastly, researchers perhaps do not necessarily need to create hedging analysis tables, but rather reduce the size of the corpora and ask readers to read the entire documents. Readers will then see the whole contexts in which it would be easier for them to determine the hedged sentences.

On the whole, it is hoped that the suggestions for further research studies about hedging will be beneficial for ESP practitioners and facilitate a more effective research method which may possibly lead to valuable studies and acceptable generalizations for the ESP world.

## REFERENCES

- Asher, R. E. and J. M. Y. Simpson. (eds.). 1994. **The Encyclopedia of Language and Linguistics**. Vol. 5. Oxford: Pergamon Press.
- Bhatia, V. K. 1993. **Analysing Genre: Language Use in Professional Settings**. New York: Longman Publishing.
- Bloor, M. and T. Bloor. 1991. 'Cultural Expectations and Socio-pragmatic Failure in Academic Writing.' In P. Adams, B. Heaton, and P. Howarth. (eds.). **Socio-Cultural Issues in English for Academic Purposes**. Basingstoke: Modern English Publications and The British Council.
- Blue, G. M. 1991. 'Language Learning within Academic Constraints.' In P. Adams, B. Heaton, and P. Howarth. (eds.). **Socio-Cultural Issues in English for Academic Purposes**. Basingstoke: Modern English Publications and The British Council.
- Brown, P. and S. C. Levinson. 1987. **Politeness: Some Universals in Language Usage**. Cambridge: Cambridge University Press.
- Butler, C. S. 1990. 'Qualifications in Science: Modal Meanings in Scientific Texts.' In W. Nash. (ed.). **The Writing Scholar: Studies in Academic Discourse**. Vol. 3. London: Sage.
- Chanchaisakulwat, A. 1994. Culture in Thai Communication. **Journal of Learning and Teaching Competency** 5 (3): 12-15. (in Thai)
- Chandler, J. n.d. **Academic Writing** (Online). [http://lis.newport.ac.uk/Sz/publications/academic\\_writing.pdf](http://lis.newport.ac.uk/Sz/publications/academic_writing.pdf), February 12, 2007.

- Changkhwanyuen, P. (ed.). 2005. **Technique of Writing and Producing Textbooks**. 3rd ed. Bangkok: Chulalongkorn University Press. (in Thai)
- Crompton, P. 1997. Hedging in Academic Writing: Some Theoretical Problems. **English for Specific Purposes** 16 (4): 271-287.
- Cruse, A. 2004. **Meaning in Language: An Introduction to Semantics and Pragmatics**. 2nd ed. Oxford: Oxford University Press.
- Crystal, D. 1997. **English as a Global Language**. Cambridge: Cambridge University Press.
- Daoud, S. A. 1998. How to Motivate Learning and Teaching of Academic Writing by Cross-cultural Exchanges. **English for Specific Purposes** 17 (4): 391-412.
- Disterheft, D. 2004. **Advanced Grammar: A Manual for Students**. New Jersey: Pearson Prentice Hall.
- Dudley-Evans, T. and M. J. St. John. 1998. **Developments in English for Specific Purposes: A Multi-Disciplinary Approach**. Cambridge: Cambridge University Press.
- Hairston, M. C. 1992. **Successful Writing**. 3rd ed. New York: W. W. Norton and Company.
- Hamp-Lyons, L. and B. Heasley. 1993. **Study Writing: A Course in Written English for Academic and Professional Purposes**. Cambridge: Cambridge University Press.
- Hewings, M. and A. Hewings. 2002. "It is interesting to note that...": A Comparative Study of Anticipatory 'It' in Student and Published Writing. **English for Specific Purposes** 21: 367-383.

- Hill, S. S., B. F. Soppelsa, and G. K. West. 1982. Teaching ESL Students to Read and Write Experimental-Research Papers. **TESOL Quarterly** 16 (3): 333-347.
- Hinkel, E. 1997. Indirectness in L1 and L2 Academic Writing. **Journal of Pragmatics** 27: 361-386.
- Holliday, A. 2002. **Doing and Writing Qualitative Research**. London: Sage.
- Holmes, J. 1982. Expressing Doubt and Certainty in English. **RELC Journal** 13 (2): 9-26.
- \_\_\_\_\_. 1988. Doubt and Certainty in ESL Textbooks. **Applied Linguistics** 9 (1): 21-44.
- Hyland, K. 1994. Hedging in Academic Writing and EAP Textbooks. **English for Specific Purposes** 13 (3): 239-256.
- \_\_\_\_\_. 1995. **The Author in the Text: Hedging Scientific Writing** (Online). <http://sunzi1.lib.hku.hk/hkjo/view/4/400116.pdf>, February 9, 2007.
- \_\_\_\_\_. 1996a. Nurturing Hedges in the ESP Curriculum. **System** 24 (4): 477-490.
- \_\_\_\_\_. 1996b. Talking to the Academy: Forms of Hedging in Science Research Articles. **Written Communication** 13 (2): 251-281.
- \_\_\_\_\_. 1996c. Writing Without Conviction? Hedging in Science Research Articles. **Applied Linguistics** 17 (4): 433-454.
- \_\_\_\_\_. 2000. Hedges, Boosters and Lexical Invisibility: Noticing Modifiers in Academic Texts. **Language Awareness** 9 (4): 179-194.

\_\_\_\_\_. and J. Milton. 1997. Qualification and Certainty in L1 and L2 Students' Writing. **Journal of Second Language Writing** 6 (2): 183-205.

Jordan, R. R. 1997. **English for Academic Purposes: A Guide and Resource Book for Teachers**. Cambridge: Cambridge University Press.

\_\_\_\_\_. 2004. **Academic Writing Course: Study Skills in English**. 3rd ed. Essex: Longman.

Kedthed, B. 1991. **Language in Theses**. Bangkok: Sangsilp Printing. (in Thai)

Leech, G. N. 1987. **Meaning and the English Verb**. 2nd ed. Essex: Longman Group UK Limited.

Lewin, B. A. 2003. **Hedging: A Question with Probably No Answer** (Online). <http://www.tau.ac.il/~lewinb/uteli.html>, November 8, 2006.

\_\_\_\_\_. 2005. Hedging: An Exploratory Study of Authors' and Readers' Identification of 'Toning Down' in Scientific Texts. **Journal of English for Academic Purposes** 4: 163-178.

Lyons, J. 1977. **Semantics**. Vol. 2. Cambridge: Cambridge University Press.

Montgomery, M. 1982. **Study Skills for Colleges and Universities in Africa**. Essex: Longman Group Limited.

Myers, G. 1989. The Pragmatics of Politeness in Scientific Articles. **Applied Linguistics** 10 (1): 1-35.

Nakornthap, T. 1997. Thai Culture in Language Use. **Journal of Thai Culture** 35 (1): 30-34. (in Thai)

- Nakwatchara, J. 2002. Culture of Thought and Language. **Pacarayasara Magazine** 29 (2): 27-33. (in Thai)
- Negretti, R. 2001. **Needs Analysis: Academic Writing for International Graduate Students** (Online). <http://www.sls.hawaii.edu/ELIntranet/negretti.html>, November 8, 2006.
- Oshima, A. and A. Hogue. 1999. **Writing Academic English**. 3rd ed. White Plains: Addison Wesley Longman.
- Parrott, M. 2000. **Grammar for English Language Teachers**. Cambridge: Cambridge University Press.
- Prince, E. F., J. Frader, and C. Bosk. 1982. 'On Hedging in Physician-Physician Discourse.' In R. J. di Pietro. (ed.). **Linguistics and the Professions**. New Jersey: Ablex, 83-97.
- Quirk, R. *et al.* 1972. **A Grammar of Contemporary English**. London: Longman Group Limited.
- Recski, L. 2005. Interpersonal Engagement in Academic Spoken Discourse: A Functional Account of Dissertation Defenses. **English for Specific Purposes** 24: 5-23.
- Richards, J. C. and R. Schmidt. 2002. **Longman Dictionary of Language Teaching and Applied Linguistics**. 3rd ed. Essex: Pearson Education Limited.
- Ruby, L. and R. E. Yarber. 1983. 'Are All Generalizations False?' In M. J. Hogan. (ed.). **Words and the Writer: A Language Reader**. Illinois: Scott, Foresman and Company.

- Rungjang, A. 1993. Culture of Thai Language. **Journal of Humanities and Social Sciences** 11 (2): 22-33. (in Thai)
- Salager-Meyer, F. 1994. Hedges and Textual Communicative Function in Medical English Written Discourse. **English for Specific Purposes** 13 (2): 149-170.
- \_\_\_\_\_. 1998. Language is Not a Physical Object. **English for Specific Purposes** 17 (3): 295-302.
- Shaw, P. and E. T-K. Liu. 1998. What Develops in the Development of Second-language Writing?. **Applied Linguistics** 19 (2): 225-254.
- Skelton, J. 1988. The Care and Maintenance of Hedges. **ELT Journal** 42 (1): 37-43.
- \_\_\_\_\_. 1997. The Representation of Truth in Academic Medical Writing. **Applied Linguistics** 18 (2): 121-140.
- Swales, J. M. 1990. **Genre Analysis: English in Academic and Research Settings**. Cambridge: Cambridge University Press.
- \_\_\_\_\_. and C. B. Feak. 1994. **Academic Writing for Graduate Students: A Course for Nonnative Speakers of English**. Ann Arbor: The University of Michigan Press.
- \_\_\_\_\_. 2000. **English in Today's Research World: A Writing Guide**. Ann Arbor: The University of Michigan Press.
- Vassileva, I. 2001. Commitment and Detachment in English and Bulgarian Academic Writing. **English for Specific Purposes** 20: 83-102.
- Wales, K. 1994. **A Dictionary of Stylistics**. London: Longman.

Weissberg, R. and S. Buker. 1990. **Writing Up Research: Experimental Research Report Writing for Students of English**. New Jersey: Prentice-Hall.

Wishnoff, J. R. 2000. Hedging Your Bets: L2 Learners' Acquisition of Pragmatic Devices in Academic Writing and Computer-Mediated Discourse. **Second Language Studies** 19 (1): 119-148.

Yule, G. 1998. **Explaining English Grammar**. Oxford: Oxford University Press.

## **APPENDICES**

## **Appendix A**

An Example from the Selected RA Written by a Thai Author  
with Marked Sections and Epistemic Items

T1P1

PASAA

---

## Self-Directed Learning through the Internet and Intranet Pedagogy: A Choice for Language Teachers

---

### Abstract

This article proposes "Self-Directed Learning through the Internet and Intranet Pedagogy" as a choice for language teachers to use to enhance students' language skills, cognitive and academic abilities, computer literacy and self-actualization needs. Before introducing the method, information about students' needs and wants as well as computer background needs to be assessed. A questionnaire on "the Use of Computer in Teaching and Learning English" as an informal classroom inventory is provided.

**I** As the new millennium is just around the corner, language teachers are facing more responsibility. Apart from regular work, i.e., improving students' language skills, teachers have to prepare students to cope with the world of information technology, Internet communication, as well as enhancing their self-actualization needs. How can teachers accomplish so many things simultaneously? Self-Directed Learning through the Internet and Intranet Pedagogy seems to be an answer to language teachers. The advantages of the Internet have been mentioned by many educators. For example, Kim Gray (1997) points out that "the internet is such an

amazing, seemingly infinite collection of resources. With access to all this information, I and our teachers can be more creative, up-to-date, and 'cool'" (Spurling, 1997:11).

Regarding self-actualization needs, Disick (1975) suggests that it can be obtained by providing a variety of learning choices in the classroom: pace, content, method or style of learning and nature of testing. Being aware of the individual differences among the students, the teacher will be viewed as the person who helps them to discover ways to move toward self-actualization in their learning activities.

**I (Contd.)**

PASAA

**T1P2**

At university level, English is taught as a medium of communication. It is used as a tool to seek knowledge and share information. Chulalongkorn University Language Institute has adopted the philosophy of self-directed learning because of the fundamental belief that language learning is life-long education. The teacher is the facilitator who provides comprehensible input and gives feedback to the students' output. It is the students themselves who accomplish their own objectives through self-directed learning. The teachers' role is to help activate and enhance their esteem needs.

**M**

Before the implementation of Self-Directed Learning through the Internet and Intranet Pedagogy, the needs of the students must be assessed, i.e., their ability to use the computer, their needs and wants in using the computer, and their method or style of learning. Therefore, a questionnaire on the Use of the Computer in Teaching and Learning English was distributed to 28 first-year Economic students enrolled in Foundation English II in November 1997. There were 16 female students and 12 male students. The following questions were asked in the questionnaire.

1. Can you use a computer?

2. What do you use computers for?
  - a. playing games
  - b. practising English by using Computer-Assisted Language Learning (CALL) programs
  - c. typing reports
  - d. sending e-mail
  - e. getting information from the World Wide Web
  - f. getting information from CD-Roms
  - g. writing web pages
3. Do you want to use CALL programs?  
If yes, which skill do you want to practise?
  - a. listening
  - b. speaking
  - c. reading
  - d. writing
4. Which types of activities do you prefer?
  - a. individual work
  - b. pair work
  - c. group work
5. How many tasks do you want to perform?
6. What are the tasks that you want to do?
7. Should the tasks be graded?
8. If yes, what is a suitable score?

**R**

Regarding Question 1, 22 students (78.57%) answered that they could use the computer while six students (21.43%) said that they could not. Their answer for Question 2 is given in Table 1.

*R (Contd.)*

Table 1  
Students' Response on Their Use of the Computer

Activities	N	%	Rank
a. Playing games	22	28.21	2
b. Practising English by using CALL programs	2	2.56	6
c. Typing reports	24	30.77	1
d. Sending e-mail	6	7.69	5
e. Getting information from the World Wide Web	16	20.51	3
f. Getting information from CD-Roms	7	8.97	4
g. Writing web pages	1	1.28	7

A large majority of the students used the computer to type reports (30.77%), and play games (28.21%). Twenty-one percent used the computer to get information from the WWW while 8.97% used it to get information from CD-Roms. About 8% employed the computer to e-mail. Surprisingly, only 2.56% used CALL programs to practise English and

only one student (1.28%) was capable of writing web pages.

Although only two students used the computer to practise their English, this does not mean that they did not want to do it. Their desire to use the computer in this respect is presented in Table 2.

Table 2  
Students' Wants in Using the Computer to Practise Language Skills

Skills	N	%	Rank
1. Listening	17	25.76	1
2. Speaking	16	24.24	3
3. Reading	17	25.76	1
4. Writing	16	24.24	3

R (Contd.)

PASAA

T1P4

The students wanted to use the computer to practise English in four skills, i.e., listening, reading, speaking and writing. About 60% of the whole class ( $n = 17$ ) preferred listening and reading whereas 57% ( $n = 16$ ) wanted speaking and writing. Their answers suggest that they all wanted the four skills with the same proportion although the

percentage is not high. Presumably, this group of students probably wanted multi-skill activities.

As regards Question 4, "Which types of activities do you prefer?" Table 3 presents their responses.

Table 3  
Students' Preferable Types of Activities

Types of Activities	N	%
1. Individual work	-	-
2. Pair work	10	34.48
3. Group work	19	65.52

Nineteen students (65.52%) preferred group work activities while ten students (34.48%) liked pair work tasks. Surprisingly, none of them wanted individual work activities. We can imply from this that the

popular computer based language activities are those involving interactive communication.

When asked, "How many tasks do you want?" the students gave the following responses.

Table 4  
The Number of Tasks Wanted

Number of Tasks	N	%
1. One	1	4.76
2. Two	6	28.57
3. Three	10	47.62
4. Four	3	14.29
5. Five	1	4.76

PASAA

~~R (Contd.)~~

T1P5

The majority indicated that the appropriate number of tasks was three. The second rank was two tasks. Therefore, when planning a CALL syllabus we should consider that between two and three computer tasks

were such as most appropriate in the English class. Which tasks can the teacher provide for the students? Their responses in Table 5 probably give some guidelines.

Table 5  
The Students' Preferable Tasks

Tasks	N	%	Rank
1. Playing games	8	17.39	3
2. Practising English by using CALL programs	5	10.87	5
3. Typing reports	1	2.17	7
4. Sending e-mail	9	19.57	2
5. Getting information from WWW	12	26.09	1
6. Getting information from CD-Roms	5	10.87	5
7. Writing web pages	6	13.04	4

Twenty-six percent wanted to do the task involving getting information from WWW. About 20% wanted to e-mail their friends and 17% wanted to play games. These were the top three tasks. The rest were writing web pages (13.04%), practising English by using CALL programs (10.87%), and typing reports (2.17%), respectively.

The next question asked in the questionnaire is "Should the tasks be graded?" About 56% said that they wanted their tasks to be graded whereas 44% percent did not. As regards the last question, "If graded, what is the appropriate score?," Table 6 presents the students' points of view in this aspect.

R (contd.)

PASAA

T1P6

Table 6  
Students' Points of View on the Scores of the Tasks

Scores	N	%
1. Five	1	6.25
2. Ten	2	12.50
3. Fifteen	3	18.75
4. Twenty	8	50.00
5. Thirty	2	12.50

The appropriate score for the assigned tasks seemed to be twenty. The next one was fifteen. This may depend on the number of tasks given.

Even though the questionnaire was given to a group of Economic students, the results yielded the following fruitful information for language teachers who want to include computer tasks in their language teaching.

1. First-year Economic students at Chulalongkorn University know how to use the computer. Seventy-nine percent of an English class know how to use it so the majority of the students may not have problems if the teacher wants to add computer tasks to the language class.

2. Most of the Economic students used the computer to type their reports (30.77%), play games (28.21%) and get information from WWW (20.51%). Only three percent used CALL programs to practise English. This indicates that the use of computer in English classes is low.

3. The first-year Economic students examined in this study did not reject the use of computer in their English class. They showed interest in using it to practise the four language skills although the percentage was not high.

4. The students preferred pair-work and group-work activities to individual work. Group-work activities were ranked first while none of the students chose individual work.

5. The majority of the students wanted to do three computer tasks (47.62%). The second rank was two tasks (28.57%).

6. The top three preferable computer tasks were 1) getting information from WWW, 2) sending e-mail, and 3) playing games.

7. Whether the tasks should be graded is debatable because 56% wanted them to be graded while the rest did not. If graded, the total score of the assigned tasks should count as 20% of the total grade.

**D** After this information was obtained, the tasks that can combine language skills, academic and cognitive abilities, computer literacy and self-actualization needs of the

students were investigated. There are many activities that language teachers can employ in their English classes. However, the selected tasks reviewed below focus on Distance Education tasks since these projects are geared towards self-directed learning and correspond with the students' needs, abilities and interests. They are:

1. The Cities Project
2. English Through Internet
3. The Content-Based Approach to Internet Literacy

Regarding the first project, "The Cities Project" has been designed for high intermediate/advanced English level students. The writing requirement is minimum, only one e-mail entry per week. In the project, students work together within their class and with students in other classes from cities around the world. They explore different aspects of the society in which they live and share the information with their partners overseas. The students communicate mainly via e-mail although collections of artifacts from each city can be sent through snailmail! Video and discussion on specific topics are encouraged. At the end of the task, a final "cities" project is presented by each group consisting of students from each of the cities.

Hess (1998:1) mentioned that the project could benefit the students in the following aspects:

1. Students venture out and learn about their city.

2. Students learn about other places of interest, which increases their interest in the interaction between the classes.

3. Within structured writing options, students are free to write on whatever interests them.

4. Students (studnets?) learn Internet communication and researching skills and develop an awareness of how they can benefit from using the Internet in their lives.

The second example, "English Through Internet," is given by Mofet Institute in Israel. It is a special virtual course which aims to teach the Internet and at the same time improve reading and writing skills. The students have to complete assignments with different partners or key pals. The course is divided into a number of modules. Each module teaches a different aspect of the Internet and practices reading and writing skills at the same time. There are teaching notes for each module and extra readings. The course is a distance learning course which involves whole classes who work with their teachers in the classroom and with peers, instructors and mentors through the Internet.

The last example, "The Content-Based Approach to Internet Literacy," is proposed by Ward and Karet (1996) who suggest the use of the Internet to increase language proficiency through the content-based approach. According to this method, language learning is contextualized and purposeful because the student uses the language to pursue a specific goal and simultaneously acquires the language. He can gain mastery of the language

(procedural knowledge) as well as mastery of the subject (declarative knowledge) at the same time. The writers propose that the World Wide Web is an ideal teaching tool for any academic discipline since it gives opportunities for both procedural and declarative learning. The WWW provides a lot of comprehensible input while features of the Internet can facilitate and enhance learning.

The afore-mentioned examples correspond with the results from the questionnaire in that the students wanted to get information from the WWW and send e-mail in their preferable tasks. Although the Internet has many advantages, there are some drawbacks. The most serious one is its heavy traffic. An Intranet, an alternative to the Internet seems to help solve the problem. Weinstein (1996:50) pointed out the difference between the Internet and an Intranet, namely, "while the Internet is global in scope, open to everyone with no regard to content, an Intranet serves a well-defined and bounded user community." Similar to the Internet, an Intranet's main function is to read and display Hypertext Mark-up Language (HTML) files created by the teacher and student. E-mail and interactive programs are also functions of some Intranets.

Weinstein has tried Intranet pedagogy at Brookside School Upper Campus (Brooknet) and found many positive feedback. For example, individual class home pages have

helped create a sense of classroom community. The Intranet makes it easier for teachers to share academic units, projects, and curriculum ideas. Hot links to the Internet make the teachers more efficient. Besides, an Intranet allows for individualism and creativity. Storing multimedia student portfolios is also possible.

To make certain that the students can enhance their language skills, cognitive and academic abilities, Internet communication, as well as self-actualization needs, the teacher needs to learn about the students' computer background, language abilities, and their needs and interests. To ensure the students' responsibility and commitment to the tasks, the teacher should use the information from the questionnaire to provide a contract specifying desirable objectives: what they will do and how they are going to be evaluated. The students can learn how to survive in the new millennium and accomplish their individual goals in language learning at the same time.

In conclusion, Self-Directed Learning through the Internet and Intranet Pedagogy may be an alternative for language teachers who believe in the philosophy of self-directed learning, language acquisition and application of IT in language teaching because it offers choices in objectives, rate, content and place of learning.

## **Appendix B**

An Example from the Selected RA Written by a Native Author  
with Marked Sections and Epistemic Items

N1P1

## ***The treatment of ecological issues in ELT coursebooks***

*This article reports a study examining the presence of environmental issues in ELT coursebooks published since 1990. Seventeen randomly selected coursebooks were analysed in order to find the percentage of activities related to environmental issues. Such activities were then examined to establish whether they involved participation in environmental protection. The results are discussed in the light of teaching methodology and United Nations environmental education objectives.*

### **I** **Introduction**

As human damage to the environment has become a major international issue, environmental education is now a part of education around the world. The United Nations formulated these six objectives for environmental education (UNESCO-UNEP 1976):

- 1 Awareness of environmental problems.
- 2 Basic understanding of the environment and its problems, and humans' role in relation to the environment.
- 3 Attitude of concern for environmental problems.
- 4 Skills in overcoming environmental problems.
- 5 Ability to evaluate proposed solutions to environmental problems.
- 6 Participation in solving environmental problems.

We undertook the current study to investigate the treatment of environmental concerns in second language learning materials. Environmental education is conceived as being cross-curricular because the environment relates to all areas of study (Ghafoor-Ghaznawi 1995). Thus, language education, including second language education, has a role to play in helping people to learn about and participate in environmental protection. Indeed, ELT coursebooks and other ELT materials have for many years included environmental themes, such as recycling, alternative energy, and humane treatment of animals. In fact, a small number of ELT coursebooks are devoted exclusively to the environment (e.g. Brown and Butterworth 1998).

The inclusion of environmental issues in ELT coursebooks fits well with the trend in communicative language teaching towards theme-based and content-based instruction. Students, in at least some cases, seem to welcome environmental content. For instance, a preference for the

## I (contd.)

N1P2

inclusion of environmental topics was expressed by young adult East Asian students surveyed by Richards (1995) in preparation for writing a coursebook series.

Despite efforts towards environmental protection and some areas of improvement, we humans continue to devastate the planet at an increasing rate. Orr (1992: 3) puts this more concretely, and the distressing picture he painted nearly a decade ago is even more pressing now:

If today is a typical day on planet earth, humans will add fifteen million tons of carbon to the atmosphere, destroy 115 square miles of tropical rain forest, create 72 square miles of desert, eliminate between forty to one hundred species, erode seventy one million tons of topsoil, add twenty-seven hundred tons of CFCs to the atmosphere, and increase their population by 263,000.

Given that this rate of attrition cannot be sustained, it may well be felt that environmental education should be enhanced in ELT as elsewhere. In the current study, we investigated two questions regarding environmental education in recent international ELT coursebooks:

- 1 Do ELT coursebooks published from 1990 onward—written for an international audience rather than for students from one country—and aimed at teaching all four skills, rather than focusing on a particular skill or skills—contain topics related to environmental issues, and if so, to what extent?
- 2 Where those coursebooks do include environmental issues, are they dealt with in a way which encourages participation to protect the environment, in accordance with Objective 6 of the United Nations Environmental Programme (above)?

We focused on participation because we see this area as being of special importance, although it is still particularly lacking in environmental education materials. We worry that environmental education is being treated as just one more academic topic for students to study, with no real connection to their lives and the world beyond the classroom (Freire 1970). As the German philosopher Goethe put it some 200 years ago, 'Knowing is not enough; we must apply. Willing is not enough; we must do.'

M

**Method**

From 120 ELT coursebooks in the SEAMEO (South East Asia Ministers of Education Organization) Regional Language Centre's large collection that matched our criteria, 17 were selected using a table of random numbers. While random selection does not guarantee a representative sample, it is one well-established means of attempting to provide a fair sampling of the larger population. However, some well-known series were not examined, while some coursebooks that were included may not enjoy wide use. Another sampling approach, assuming the data is available, would be to examine best-selling coursebooks.

*The treatment of ecological issues in ELT coursebooks*

## M (Contd.)

N1P3

To answer the first research question, we began by counting the total number of activities in each of the coursebooks, following as closely as possible the demarcation system employed by the books' authors. Optional activities were counted, so that if students were asked to choose from one of three options, all three were counted. Review units and grammar practice activities at the back of a book or the end of a unit were counted, but tests were not. The coursebooks were then examined for the presence of environmental issues, defined as materials that dealt with environmental problems, such as endangered species, and environmentally friendly practices, such as using solar power. Even if the activity dealt with grammar or pronunciation practice, if the content was an environmental issue, the activity was included. For instance, we counted when Belgrave (1993: 30) presents a poster featuring 25 words that include the prefix 're' in describing actions to help the environment, such as 'reuse'. The task also asks students to employ dictionaries to determine for each word whether 're' is pronounced /ri:/ or /rɪ/.

The natural environment was considered, but not human-made environments, or descriptions of nature, although Lester and Hugh (1992: 15) have a paragraph describing the habitat of bowerbirds. Neither did we count materials that might generate hostile feelings toward nature, as when Lester and Hugh (1992: 9) refer to spiders found under toilet seats who '... hate people sitting on them. They also have a bite that can kill and a target that is difficult to miss.'

The inclusion of environmental issues was coded at three levels:

- 1 Activity in a unit
- 2 Element of an activity, for example when students are presented with a number of headlines, not all of which involve environmental issues, and have to say what they think each headline is about (Doff and Jones 1994: 65).
- 3 Option within an activity. Here students are asked to think of something they would like to change in another country; 'the killing of certain animals', for example, is a suggested change. Students are asked to compose a letter in English, send it to the head of the foreign country, and if a response is received, to report it to the class (Swan and Walter 1992: 65).

From this counting and coding, a percentage of activities with at least some environmental content was derived for each book, as well as a breakdown of the level at which the content appeared, e.g. as an element of an activity.

Next, to answer the second research question, each instance of the presence of environmental issues was coded according to whether participation is encouraged and, if so, what type of encouragement. Teachers' books, where they existed, were consulted. The categories used in the coding of types of participation were arrived at by the researchers after consulting two professors who teach environmental

## M (Contd.)

N1P4

education, and looking through environmental education materials from other parts of the curriculum, together with the coursebooks used in the present study. We do not claim that our coding system accurately and comprehensively captures this variable, since countless factors underlie human behaviour, but we do believe it offers some illumination. Furthermore, as described below, this system yielded a reasonable level of inter-rater agreement. The categories, with examples of some, are:

- 1 Self-reported: Students tell/write about their own or classmates' participation. This includes when students interview each other, for example, 'Work in groups. Find out how 'green' other students are. How do they try to help the environment? What do they do that's bad for the environment? Who's the 'greenest' person in the group?' (Doff and Jones 1994: 110).
- 2 Reported: Students report on the participation of others outside their class by gathering data or by remembering, for example, 'Which types of clean energy do you have in your country? Use an encyclopedia or geography book to find the information and write a paragraph about it' (Farrell *et al.* 1995: 103).
- 3 Read about/listened to: Students read a text or listen to a tape about how others participate or could participate. By itself, the fact that an environmental protection group such as the WWF, for example, is mentioned does not constitute participation, unless the group's activities are described.
- 4 Recommended: A text (not including instructions which accompany the text) urges students to participate, e.g. in Belgrave (1993: 29) students listen to an audiotape on which an environmentalist says 'And, when you've worn out the clothes, or you've got tired of the clothes or the toys . . . actually handing them on to someone else is a very good way of recycling and re-using, which is extremely environmental friendly . . .'
- 5 Simulated: students role-play typical situations, or imagine that they are in a position to participate in efforts to protect the environment. Graves and Rein (1990: 85), for example, ask students to pretend to be members of a committee working to elect their favoured candidate for mayor. One of their tasks is to select problems (pollution is one possibility listed) and say what actions their candidate will take to solve them.
- 6 Potential action: Students tell/write/choose what they or others will/could/would do. For example, a list of 'Five Things You Can Do to Help the Environment' is presented to students, who are asked to add another suggestion (Doff and Jones 1994: 107).

## M (contd.)

N1P5

7 Real: What students are assigned to do, or what is listed as an optional assignment. We saw such real participation as being of three possible types:

- a Educational: Students try to educate others, e.g. by making posters and displaying them.
- b Behavioural: Students do something that directly helps the environment. Of course, there are many controversies as to what does and what does not help the environment, as shown, for example, in the controversy over the value of recycling.
- c Exerting pressure: Students may send letters to companies and governments in an attempt to bring pressure on them to participate in helping the environment. For instance, Swan and Walter (1992: 65) include the following activity: 'Is there something you would like to change in another country—the killing of certain animals, or the making or testing of certain types of weapons or chemicals, for example? Work alone or with another student to write a letter to the head of the country in English. Find out where to send the letter by asking the consulate or embassy of that country. Send the letter. Report any answers to the class orally.' If an activity contained more than one type of participation, the main type was recorded. However, if it was divided equally, the score was divided among the various types of participation involved.

We measured inter-rater agreement for the following: (1) calculating total number of activities; (2) activities with environmental content; (3) whether the entire activity was about the environment, or whether the environment was only an element or option in the activity; and (4) whether or not participation was involved, and if so, what type of participation. This was done by having one of the researchers and another teacher independently rate about 10% of the data. Agreement was 93%, 95%, 100%, and 92% respectively.

R

**Results**

The 17 coursebooks contained a total of 6,167 activities (average = 363). Of these activities, 134 (2%), had environmental content (average = 8); 80 at the activity level, 50 at the level of element in an activity, and 4 as an option in an activity. Four of the books had an entire unit or lesson devoted to environmental issues. The percentage of activities with environmental content ranged from two books with none to one book with 8%. Both the books with no environmental content were for low-proficiency students. In general, coursebooks for beginners and high beginners had less environmental content, although one book for high beginners (Phillips and Sheerin 1990) had 5% environmental activities.

As for participation, 76 (57%) of the activities with environmental content were rated as not involving any type of participation on behalf of the environment, 3 (2%) asked about students' own or classmates' participation, 3 (2%) questioned students about participation by others besides themselves and their classmates, 22 (16%) asked students to

## R (Contd.)

N1P6

read or listen to accounts of participation by others, 8 (6%) involved reading about or listening to someone urge participation, 8 (6%) asked students to simulate participation, 12 (9%) called on students to describe how they could or would participate, and 2 (1%) asked for actual participation in environmental protection.

**D Discussion and conclusion**

The first research question considered the presence of environmental issues in ELT coursebooks. Based on the sample used in this study, such issues appear to be quite common. The fact that environmental issues seemed to occur less often in coursebooks for lower proficiency students might be attributed to materials writers believing that, at this level, students lack the language tools needed to interact on this topic.

Is 2% environmental issues content the right amount? Some might argue it is too much. The faculty adviser of a Singapore junior college's green club explained that students at his college did not participate in recycling because they had heard so much about the environment in secondary school that they had become sick of it. Along the same lines, in one of the coursebooks in this study (Lester and Hugh 1992: 17), in a unit entitled 'Are you green?', the authors ask, 'Do you think people talk too much about the environment?'

Jones (1993) feels that second language teachers give too much attention to social issues. She argues that instead of forcing social issues upon students, teachers should be concentrating on their job, i.e. teaching the language. Jacobs (1993) counters by arguing that language is often best taught through content, and that as educators we have a broader role to play, which includes helping students to become good citizens. Brown (1998) takes a similar position, stating that if we follow just four principles, as listed below, social issues can be included in content-based instruction without forcing students to think and act as the pawns of their teachers:

- 1 Allow students to express themselves openly.
- 2 Genuinely respect students' points of view.
- 3 Encourage both/many sides of an issue.
- 4 Don't force students to think just like you. (ibid.: 254)

Brown adds that even language itself is not neutral. He cites Halliday's (1993) point that treating elements of nature such as air, water, and oil as non-count may mislead us into seeing them as inexhaustible resources (see Goatly 1996 for further discussion of language and environment). Critical discourse analysis (for example, Fairclough 1992) argues that any text expresses an ideology, whether overtly or latently. Every text classifies phenomena in the world, takes an attitude to what it describes, and positions the reader socially. From this perspective, the idea that language can exist or be taught neutrally or without content or outside social interaction is a myth. Johnston *et al.* (1998) make a similar point about the moral significance of classroom routines and discourse.

*The treatment of ecological issues in ELT coursebooks*

## D (Contd.)

## NIP7

The second research question asked whether coursebook activities concerning environmental issues encourage participation towards resolving those issues. Learning for participation, not just to pass tests, is the focus of language teaching methodologists, such as Auerbach (1994), working in the tradition of Dewey and Freire. They propose a social transformative perspective that stresses language learning as a basis for action on social issues. This is best done by connecting the classroom with students' lives beyond school. Environmental issues certainly offer many opportunities for such connections, given that the effects of ecological problems are as close as the air we breathe.

With reference to participation, Brown's principles, which focus mainly on ideas, may need to be taken further. While we set examples of informed participation for our students, we should let them decide whether or not they wish to participate. For instance, in the activity described earlier (Swan and Walter 1992), which asks students to write a letter and send it, note that, while the instructions point the students towards environmental issues, they allow them to write about anything they would like to change in another country. In this case, teachers can set examples of informed participation by writing letters of their own, explaining why they wrote the letters, and showing them to students.

In the only other activity found in the study that involved students in real participation, they were asked to work in pairs to create an advertisement that would persuade people to become members of a conservation group (Phillips and Sheerin 1990: 62). This might seem to be a way of compelling students to agree with the coursebook's assumption that conservation is good. One way of dealing with this would be to inform students of organizations that take positions opposed to those of most conservation groups, such as those which maintain that global warming is just an unproven theory.

The fact that participation category 7—actual participation—accounted for the smallest number of activities deserves attention. Two explanations come to mind. First, that materials writers may feel that they are, after all, writing educational materials, and that it is beyond their mandate to tell students what to do in matters beyond language learning. This concern has already been addressed. Second, the books in this study were produced for the international market. As environmental issues take on very different forms between and within countries, it may be considered to be difficult, if not impossible, to propose actions that would be universally suitable. This concern suggests the need for teachers and students to develop their own materials or to adapt coursebooks, rather than following them slavishly. Along similar lines, project-based work (Richards 1995) allows students to take more initiative. Projects found in books on environmental education (for example, Greig *et al.* 1987) include auditing home energy use or waste creation, investigating and acting to reduce local pollution sources, carrying out community or school education campaigns, and developing and implementing ways to recycle or reuse materials.

In conclusion, we believe that environmental concerns should be retained as one of many social issues in the second language curriculum. Education in general, and about the environment in particular, needs to link learning with the world outside the classroom. And although environmental problems can seem overwhelming, we can draw inspiration from Helen Keller, who overcame blindness and deafness to become a social activist in the early 20th century:

*I am only one, but still I am one.  
I cannot do everything, but still I can do something.  
And because I cannot do everything, I will not refuse to do the something  
that I can do.*

## **Appendix C**

Ten Examples from Hedging Analysis Tables with  
Marked Decisions by Native Reader 1

**Does the use of "underlined word" indicate hedging?**

SECTION	CODE	SENTENCE	YES			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
D	TIP8	In conclusion, Self-Directed Learning through the Internet and Intranet Pedagogy may be an alternative for language teachers who <u>believe</u> in the philosophy of self-directed learning, language acquisition and application of IT in language teaching because it offers choices in objectives, rate, content and place of learning.				✓	
R	TIP4	We can <u>imply</u> from this that the popular computer based language activities are those involving interactive communication.		✓			
R	TIP6	Only three percent used CALL programs to practice English. This <u>indicates</u> that the use of computer in English classes is low.		✓			
R	TIP5	The majority <u>indicated</u> that the appropriate number of tasks was three				✓	
D	TIP8	The writers <u>propose</u> that the World Wide Web is an ideal teaching tool for any academic discipline since it gives opportunities for both procedural and declarative learning.	✓				
D	TIP7	The last example, "The Content-Based Approach to Internet Literacy," is <u>proposed</u> by Ward and Karet (1996) who suggest the use of the Internet to increase language proficiency through the content-based approach.				✓	
I	TIP1	Self-Directed Learning through the Internet and Intranet Pedagogy <u>seems</u> to be an answer to language teachers.	✓				
D	TIP8	An Intranet, an alternative to the Internet <u>seems</u> to help solve the problem.	✓				
R	TIP6	Table 6 presents the students' points of view in this aspect. The appropriate score for the assigned tasks <u>seemed</u> to be twenty.		✓			
R	TIP4	About 60% of the whole class (n = 17) preferred listening and reading, whereas 57% (n = 16) wanted speaking and writing. Their answers <u>suggest</u> that they all wanted the four skills with the same proportion although the percentage is not high.		✓			

Note: 'T' refers to a research article which is written by a Thai author.  
'P' refers to page.

Does the use of "underlined word" indicate hedging?

SECTION	CODE	SENTENCE	YES			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
R	T2P5	Five of the students <u>suggested</u> that a detailed schedule for each class, which clearly indicated who was going to teach what and when, would be of <u>great</u> help to them in their preparation for class...				✓	
R	T2P6	Finally, six students cautioned that the number of students in class should not be too large; otherwise, the instruction would not be as effective as it should, and could be. They also <u>suggested</u> that the number of the instructors should not exceed two as this could lead to confusion on the part of the students.				✓	
M	T2P3	Do you have any comments on the "team-teaching" technique, or do you have any <u>suggestions</u> that you think would improve the effectiveness of this teaching technique?				✓	
M	T2P3	The fact that the questionnaire was distributed with the final examination paper might <u>somehow</u> have determined the low return rate.	✓				
R	T2P6	However, although both teachers and students agree that participation in the team-teaching technique is a rewarding experience, the actual benefits they receive from such participation are <u>somewhat</u> dissimilar.			✓		
R	T2P5	Undeniably, the students' comments helped shed light on ways in which the instructors could improve the quality of the team-teaching method and thereby make instruction as effective as <u>possible</u> .				✓	
D	T2P9	Furthermore, <u>if and when possible</u> , the teachers should also explain to the students early on why this teaching method has been chosen and how it will be implemented.		✓			
R	T2P4	On the other hand, the other student <u>argued</u> that he or she liked to study in a small group because there was more opportunity for questioning.				✓	

Note: 'T' refers to a research article which is written by a Thai author.

'P' refers to page.

SECTION	CODE	SENTENCE	Does the use of "underlined word" indicate hedging?				NO	REMARK
			STRONG	MEDIUM	SLIGHT	YES		
D	T4P6	Teachers were likely not to click on the topics that were unfamiliar to them even though the topics were what they had reported they wanted to know.				✓		
D	T4P6	Therefore, links to pages containing Thai explanations may be added where it seems likely that teachers may have problems comprehending the English.		✓				
D	T4P6	Seeing that teachers are not likely to contact the CD designer when they experience difficulties in using the CD, auto-run should be implemented to allow teachers to start using the CD without problems.			✓			
R	T4P4	Nonetheless, these difficulties are unlikely to impede the teachers' use of WBC in the future because they said that, in spite of obstacles and limitations concerning computer literacy and accessibility, they hoped to implement WBC in ELT.		✓				
D	T4P5	Most teachers used the CD with colleagues so it is possible that teachers were not autonomous learners and lacked self-confidence in using the CD individually.	✓					
D	T4P5	Cole & Knowles (1998) found that, although self-study is a powerful vehicle for teacher education for professional development in teaching, teachers doubted whether self-study had a high exchange value in the eyes of institutional evaluations and assessments.				✓		
I	T4P1	Consequently, if teachers and students know how to make use of the Web, there are alternatives to enhance their learning of English beyond the classroom.				✓		
D	T4P5	Prioritize the topics that sound useful and familiar to teachers by putting things they want to know on the top, or in the most salient region on the page.				✓		
D	T4P6	Teachers were likely not to click on the topics that were unfamiliar to them even though the topics were what they had reported they wanted to know.				✓		

Note: 'T' refers to a research article which is written by a Thai author.  
'P' refers to page.

## Does the use of "underlined word" indicate hedging?

SECTION	CODE	SENTENCE	YES			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
R	T3P7	That complement clauses controlled by adjectives and to complement clauses controlled by adjectives <u>indicate</u> clearly that predicative adjectives are used as heads of that or to complement clauses, indexing an expression of the authors' stance.		✓			
I	T8P2	By the same token, size does not <u>indicate</u> representativeness and vice versa.				✓	
R	T8P8	Although present tense verbs help perform more than one underlying communicative function (e.g., Swales, 1990), the co-occurrence of present tense verbs with reference features helps <u>indicate</u> that a propositional information has been established by previous research studies.		✓			
R	T8P6	Since no generalization is assumed, this new information or finding remains to be substantiated or validated (as opposed to present tense verbs that <u>indicate</u> the established status of the proposition).				✓	
R	T8P8	In the latter case, the use of the present tense <u>indicates</u> that the propositional information is valid regardless of time.		✓			
R	T8P7	The adjectives that control that complement clauses are particularly likelihood adjectives (e.g., likely, possible, probable), attitudinal adjectives (e.g., interesting, acceptable, necessary), and factual/certainty adjectives (e.g., impossible, evident, obvious). This <u>indicates</u> that these co-occurring features index the authors' expression of their agreement, opposition, evaluation, and interpretation of propositions.		✓			
R	T8P8	The present tense correlates with these categorizations of verbs <u>indicating</u> general time or implying a lack of time restriction in scientific writing.					✓
R	T8P8	Therefore, the interpretive label 'Evaluative stance' is <u>proposed</u> for the functional dimension underlying this co-occurrence.		✓			
R	T8P6	As observed by Oster (1981), past tense usage in scientific discourse <u>reports</u> completed actions at the particular time frame.					✓

Note: 'T' refers to a research article which is written by a Thai author.  
'P' refers to page.

SECTION	CODE	SENTENCE	Does the use of "underlined word" indicate hedging?				NO	REMARK
			STRONG	MEDIUM	SLIGHT	YES		
R	T8P8	Taken together, the co-occurrence of present tense verbs and citations represent attributed knowledge, a crucial requirement in scientific discourse to situate and contextualize the study being reported, giving credence to the source of information.				✓		
R	T8P6	Text sample 2 has instances of two pointers and many past tense verbs. Pointers are tied to the results produced by the study being reported, providing visual accompaniments to the statement of results.				✓		
R	T8P6	The co-occurrence of passive verbs and pointers is functionally explicit. It reflects a focus on current findings produced by the study being reported.				✓		
I	T8P2	Size <u>seems</u> to be the first thing people think of in connection with corpora.		✓				
I	T8P2	A number of research works claim how big their corpora are. This criterion <u>seems</u> to out-prioritize other requirements.		✓				
I	T8P2	A number of research works <u>claim</u> how big their corpora are.		✓		✓		
R	T8P6	The co-occurrence of passives and past tense verbs <u>suggest</u> their primary pragmatic function is describing scientific research activities.		✓				
R	T8P8	The co-occurrence of reference with present tense verbs <u>suggests</u> that the latter of the two pragmatic functions of present tense is more relevant to the functional interpretation of this cluster of features—to index generalized background knowledge established by previous research in the field.		✓				
M	T8P5	Factor analysis is performed to identify the patterns of linguistic features that <u>tend</u> to occur frequently in the corpus.				✓		
M	T8P5	The objective of multidimensional analysis is to identify clusters or sets of linguistic features that <u>tend</u> to occur in a particular text by using factor analysis, taking the frequencies of these features as variables.				✓		
R	T8P5	The analysis reveals that passives and past tense verbs <u>tend</u> to occur quite frequently in biochemistry corpus.	✓					

Note: 'T' refers to a research article which is written by a Thai author.

'P' refers to page.

Does the use of "underlined words" indicate hedging?

SECTION	CODE	SENTENCE	YES			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
D	N2P6	First of all, these data <u>suggest</u> quite clearly that teachers' self-perceptions of their KAG, both in general terms as well as at specific points in lessons, have an impact on their work.		✓			
D	N2P7	Certain contrasts between Eric and Dave with respect to these facets of grammar teaching <u>suggest</u> some obvious relationships between teachers' behaviour and their confidence in their KAG.		✓			
D	N2P7	These data <u>suggest</u> that, even within one discipline, such as the teaching of English, teachers may develop separate strands of pedagogical expertise.		✓			
R	N2P2	As the students say the questions, the teacher writes these on the board, leaving blank spaces where the students' <u>suggestions</u> are incorrect.			✓		
R	N2P6	Dave <u>tended</u> to lack confidence, and this, too, was reflected in his work (i.e. minimizing grammar work, and deferring discussion).		✓			
R	N2P5	It started with a question about the difference between 'angry' and 'angered' (perhaps Dave saw this as vocabulary, and hence decided to proceed) and developed into a discussion of adverbs and adjectives.	✓				
D	N2P7	However, when he did feel confident, as he <u>probably did</u> with 'angry' and 'angered', he behaved uncharacteristically, and explained the grammar there and then.		✓			
I	N2P1	In one study, a teacher who possessed a well-developed understanding of literature, but who was <u>uncertain</u> of her understanding of English grammar, displayed strikingly different teaching behaviours during literature and grammar lessons: in the former she was interactive and learner-centred, while in the latter she was didactic and teacher-centred (Shulman 1987).			✓		
D	N2P6	Eric was generally confident, and this was reflected in his typical approach to grammar (i.e. encouraging in-pronuptu discussion, formulating rules on the spot); in contexts where he was <u>uncertain</u> , though, he modified his behaviour accordingly (i.e. providing direct responses, minimizing or deferring discussion, and generally hedging).			✓		
R	N2P5	There was little evidence of the <u>kind of</u> in-pronuptu language work evident in Eric's work, a difference which would seem to be at least partly related to the different levels of confidence these two teachers had in their KAG.			✓		

Note: 'N' refers to a research article which is written by a native author.

'P' refers to page.

SECTION CODE	SENTENCE	Does the use of "underlined word" indicate hedging?				NO	REMARK
		STRONG	YES MEDIUM	SLIGHT			
I N3P1	The points discussed here had their origins in the kind of problem faced by many teachers of writing: a student has produced a text which, while grammatically acceptable, fails <u>somehow</u> to fulfil the requirements of the writing task.		✓				
R N3P6	If, furthermore, the reader of such a text is an examiner having the kind of expectations summarized above, the writer who fails to meet these is <u>likely</u> to be disadvantaged.		✓				
D N3P7	How much information is it <u>feasible/sensible</u> to provide? For instance, if we give too much information, is this <u>likely</u> to be used against us in litigation—or in an examination answer, by receiving a lower grade? (Quantity)		✓				
I N3P2	Consequently, it is <u>possible</u> for the reader to derive quite different meanings from what the writer intended.	✓					
R N3P5	This is exemplified in the letter of adjustment, in which the writer presumably anticipates that her reader expects her to demonstrate sincerity by writing as much as <u>possible</u> , giving detailed reasons for failure, offering an apology more than once, and providing a solution.				✓		
M N3P3	Neither audience nor word length was specified, although, given the display requirement involved in the task, there tends to be an unspoken assumption, no doubt shared by students and teachers alike, that it is better to write as much as <u>possible</u> in order to demonstrate linguistic skill.				✓		
I N3P2	Furthermore, I believe that it is <u>possible</u> to perceive the ideology of the UDS in the taken-for-granted assumptions of what constitutes good, clear, communication in many assessment schemes.	✓					
I N3P2	Indeed, for unskilled writers, there is a <u>distinct possibility</u> that their intentions will be subverted by their inept or <u>unintentional</u> <u>outing</u> or violating of the maxims.	✓					
I N3P1	The points discussed here had their origins in the <u>kind of</u> problem faced by many teachers of writing: a student has produced a text which, while grammatically acceptable, fails <u>somehow</u> to fulfil the requirements of the writing task.			✓			
M N3P3	So neither teacher nor student was fully at home with the <u>kind of</u> writing which was required for this task.			✓			

Note: 'N' refers to a research article which is written by a native author.

'P' refers to page.

Does the use of "underlined word" indicate hedging?

SECTION	CODE	SENTENCE	YES				NO	REMARK
			STRONG	MEDIUM	SLIGHT			
D	N4P6	While Hird <u>reported</u> that the teacher was at the centre of the process, our journal entries showed not only that the teachers used pair work, but also that they encouraged the students to take the initiative in suggesting activities, and in the choice of what vocabulary to learn.				✓		
I	N4P1	They include 'no uptake', 'confusion', and 'adaptation and rejection', with only a few teachers <u>reporting</u> 'a fundamental change in their approach to teaching' (Lamb 1995: 78).		✓		✓		
D	N4P6	However, Hird's reference to the undervaluing of individual interpretations does not <u>seem</u> to be supported in our study.		✓				
R	N4P4	The teachers <u>seem</u> to have avoided the belief mentioned by Hird (1995), that CLT only emphasizes oral language.		✓				
D	N4P7	The 18.5% of the Cortazzi and Jin students who valued sociability, and learning from others, <u>seemed</u> to be reflected in the diary entries about co-operative learning.		✓				
D	N4P6	Like the teachers in Hird's (1995) study, they <u>seemed</u> willing to take aspects of CLT and incorporate them into their classrooms.		✓				
R	N4P6	Some teachers in our study encouraged their students to <u>suggest</u> activities and ask questions.				✓		
D	N4P7	The results <u>suggest</u> that teachers were applying what they had been introduced to, sometimes successfully, sometimes less so.		✓				
R	N4P5	Does this <u>suggest</u> that the word 'lively' can have negative connotations, as in 'out of control'?		✓				
I	N4P1	Holliday (1997) too, having examined six 'communicative' English language classes at universities in India and China, <u>suggests</u> examining classroom culture in terms of the wider culture to show the interrelationship between local, national, international, professional, and academic cultures.				✓		
I	N4P2	Hird (1995) <u>suggests</u> that there is of CLT a mismatch between what teachers believe CLT to be, and the way it has evolved over a quarter century. In summary, he says, people assume the following contrasts:				✓		
R	N4P5	The comments of these teachers <u>suggests</u> that they wanted, and worked towards encouraging an active attitude in their students.		✓				

Note: 'N' refers to a research article which is written by a native author.

'P' refers to page.

Does the use of "underlined word" indicate hedging?

SECTION	CODE	SENTENCE	YES			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
I	N4P2	Asked to express any concerns they might have had about implementing the ideas <u>suggested</u> in the course, teachers asked how a communicative approach could work in monolingual classes, and whether it was acceptable to include some traditional methods in CLT.				✓	
R	N4P5	However, in one comment the use of 'but' <u>suggested</u> that liveliness and happiness might not be the same thing.		✓			
R	N4P5	In his Vietnam study, Howe (1995) <u>suggested</u> that whether students were passive or active depends on the teacher's expectations.				✓	
D	N4P7	While Hird reported that the teacher was at the centre of the process, our journal entries showed not only that the teachers used pair work, but also that they encouraged the students to take the initiative in <u>suggesting</u> activities, and in the choice of what vocabulary to learn.				✓	
I	N4P2	For example, Howe (1993), with experience of teaching in Vietnam, addresses the commonly-held perception of passivity amongst Asian students, by <u>suggesting</u> that whether language learners are 'passive' or 'active' in class depends more on their teachers' expectations than on culturally-based learning styles.				✓	
D	N4P7	Perhaps this illustrates Howe's (1993) belief about the relationship between liveliness and teachers' expectations.	✓				
D	N4P7	A long-term study of these teachers' classrooms would probably be carried out more effectively by the local authorities, who have responsibility for the ongoing in-service programme.		✓			
I	N4P1	Hird sums up the teachers' <u>doubts</u> about CLT in relation to three factors: past traditions, current practices, and the way in which CLT has been interpreted.				✓	
I	N4P2	When they asked teaching Chinese students what was <u>expected</u> of a good student, the highest scoring category (43%) from the list of eleven points was 'hardworking', followed some distance behind by sociability/learning from and with others (18.5%).				✓	
I	N4P2	The value is on care and certainty rather than on quantity, and on experimenting with language. Output is <u>expected</u> to be error-free, and memorization is valued. The teacher is at the centre of the process.				✓	

Note: 'N' refers to a research article which is written by a native author.

'P' refers to page.

Does the use of "underlined word" indicate hedging?

SECTION	CODE	SENTENCE	YES			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
I	N6P1	This is not because it is the most widely spoken native language in the world, since by most estimates Mandarin has three times as many native speakers as English, but rather because of the growing number of speakers who are acquiring some familiarity with English as their second or third language.				✓	
R	N6P5	When asked how often they use group work in their classes (every class, 'sometimes', 'rarely', or 'never'), the majority of teachers in the survey (40) indicated they use it 'sometimes'.				✓	
D	N6P7	As Kranssch and Sullivan (1996) point out, an appropriate pedagogy for the teaching of EIL depends upon local ELT professionals thinking globally but acting locally. Chile <u>seems</u> to be one country in which this is happening.		✓			
D	N6P7	Finally, my interactions with Chilean English teachers suggest that Chilean teachers recognize the strengths they have as teachers because of their bilingualism, and their familiarity with the local cultural context.		✓			
I	N6P4	<u>Perhaps</u> one of the main reasons for many teachers' satisfaction with the reform is that all students in the public schools are given a textbook and cassette, called Go for Chile (Muggleston, Eisworth, and Rose 1999, 2000), which implements the objectives specified by the Ministry of Education reform.		✓			
R	N6P6	When asked who they would hire if they were a director of a private English language institute in Chile—native English speakers or Chileans—over half supported the hiring of Chileans, though teachers in semi-public and private schools were more likely to prefer native speakers, as shown in the following table.				✓	
I	N6P2	However, I would <u>argue</u> that just as the content of EIL materials must be separated from native-speaker models, so too must EIL methodology, by allowing a locally appropriate pedagogy to be implemented.			✓		
I	N6P1	Because of this fact, Cook (1999) <u>argues</u> for the need to avoid comparing bilingual speakers of English to native speakers, and rather to recognize the many strengths of bilingual users of English who have a rich linguistic repertoire to serve their communication needs.				✓	
I	N6P2	Smith's early call for a need to denationalize the use of English has more recently been emphasized by Kachru (1992), who <u>argues</u> that English must now be dissociated from the colonial past, and not necessarily be linked to 'westernization'.				✓	

Note: 'N' refers to a research article which is written by a native author.

'P' refers to page.

## **Appendix D**

Ten Examples from Hedging Analysis Tables with  
Marked Decisions by Native Reader 2

Does the use of "underlined word" indicate hedging?

SECTION	CODE	SENTENCE	YES			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
D	TIP8	In conclusion, <u>Self-Directed Learning</u> through the Internet and Intranet Pedagogy may be an alternative for language teachers who believe in the philosophy of self-directed learning, language acquisition and application of IT in language teaching because it offers choices in objectives, rate, content and place of learning.				✓	
R	TIP4	We can <u>imply</u> from this that the popular computer based language activities are those involving interactive communication.			✓		
R	TIP6	Only three percent used CALL programs to practice English. This <u>indicates</u> that the use of computer in English classes is low.			✓		
R	TIP5	The majority <u>indicated</u> that the appropriate number of tasks was three				✓	
D	TIP8	The writers <u>propose</u> that the World Wide Web is an ideal teaching tool for any academic discipline since it gives opportunities for both procedural and declarative learning.				✓	
D	TIP7	The last example, " <u>The Content-Based Approach</u> : to Internet Literacy," is <u>proposed</u> by Ward and Karet (1996) who suggest the use of the Internet to increase language proficiency through the content-based approach.				✓	
I	TIP1	<u>Self-Directed Learning</u> through the Internet and Intranet Pedagogy <u>seems</u> to be an answer to language teachers.					
D	TIP8	An Intranet, an alternative to the Internet <u>seems</u> to help solve the problem.				✓	
R	TIP6	Table 6 presents the students' points of view in this aspect. The appropriate score for the assigned tasks <u>seemed</u> to be twenty.				✓	
R	TIP4	About 60% of the whole class (n = 17) preferred listening and reading whereas 57% (n = 16) wanted speaking and writing. Their answers <u>suggest</u> that they all wanted the four skills with the same proportion although the percentage is not high.		✓			

Note: 'T' refers to a research article which is written by a Thai author.

'P' refers to page.

Does the use of "underlined word" indicate hedging?

SECTION	CODE	SENTENCE	YES				NO	REMARK
			STRONG	MEDIUM	SLIGHT			
R	T2P5	Five of the students <u>suggested</u> that a detailed schedule for each class, which clearly indicated who was going to teach what and when, would be of great help to them in their preparation for class...					✓	
R	T2P6	Finally, six students cautioned that the number of students in class should not be too large; otherwise, the instruction would not be as effective as it should, and could be. They also <u>suggested</u> that the number of the instructors should not exceed two as this could lead to confusion on the part of the students.			✓			
M	T2P3	Do you have any comments on the "team-teaching" technique, or do you have any <u>suggestions</u> that you think would improve the effectiveness of this teaching technique?					✓	
M	T2P3	The fact that the questionnaire was distributed with the final examination paper <u>might somehow</u> have determined the low return rate.			✓			
R	T2P6	However, although both teachers and students agree that participation in the team-teaching technique is a rewarding experience, the actual benefits they receive from such participation are <u>somewhat</u> dissimilar.					✓	
R	T2P5	Undeniably, the students' comments helped shed light on ways in which the instructors could improve the quality of the team-teaching method and thereby make instruction as effective as <u>possible</u> .					✓	
D	T2P9	Furthermore, if and when <u>possible</u> , the teachers should also explain to the students early on why this teaching method has been chosen and how it will be implemented.					✓	
R	T2P4	On the other hand, the other student <u>argued</u> that he or she liked to study in a small group because there was more opportunity for questioning.					✓	

Note: 'T' refers to a research article which is written by a Thai author.

'P' refers to page.

SECTION	CODE	SENTENCE	Does the use of " <u>underlined word</u> " indicate hedging?				REMARK
			STRONG	MEDIUM	SLIGHT	NO	
D	T4P6	Teachers were <u>likely</u> not to click on the topics that were unfamiliar to them even though the topics were what they had reported they wanted to know.			<del>✓</del>	✓	
D	T4P6	Therefore, links to pages containing Thai explanations may be added where it seems <u>likely</u> that teachers may have problems comprehending the English.		✓			
D	T4P6	Seeing that teachers are not <u>likely</u> to contact the CD designer when they experience difficulties in using the CD, auto-run should be implemented to allow teachers to start using the CD without problems.				✓	
R	T4P4	Nonetheless, these difficulties are <u>unlikely</u> to impede the teachers' use of WBC in the future because they said that, in spite of obstacles and limitations concerning computer literacy and accessibility, they hoped to implement WBC in ELT.				✓	
D	T4P5	Most teachers used the CD with colleagues, so it is <u>possible</u> that teachers were not autonomous learners and lacked self-confidence in using the CD individually.			✓		
D	T4P5	Cole & Knowles (1998) found that, although self-study is a powerful vehicle for teacher education for professional development in teaching, teachers <u>doubted</u> whether self-study had a high exchange value in the eyes of institutional evaluations and assessments.				✓	
I	T4P1	Consequently, if teachers and students <u>know</u> how to make use of the Web, there are alternatives to enhance their learning of English beyond the classroom.				✓	
D	T4P5	Prioritize the topics that sound useful and familiar to teachers by putting things they want to <u>know</u> on the top or in the most salient region on the page.				✓	
D	T4P6	Teachers were <u>likely</u> not to click on the topics that were unfamiliar to them even though the topics were what they had reported they wanted to <u>know</u> .				✓	

Note: 'T' refers to a research article which is written by a Thai author.  
'P' refers to page.

Does the use of "underlined word" indicate hedging?

SECTION	CODE	SENTENCE	YES			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
R	T8P7	That complement clauses controlled by adjectives and to complement clauses controlled by adjectives <u>indicate</u> clearly that predicative adjectives are used as heads of that or to complement clauses, indexing an expression of the authors' stance.				✓	
I	T8P2	By the same token, size does not <u>indicate</u> representativeness and vice versa.				✓	
R	T8P6	Although present tense verbs help perform more than one underlying communicative function (e.g. Swales, 1990), the co-occurrence of present tense verbs with reference features helps <u>indicate</u> that a propositional information has been established by previous research studies.				✓	
R	T8P6	Since no generalization is assumed, this new information or finding remains to be substantiated or validated (as opposed to present tense verbs that <u>indicate</u> the established status of the proposition).				✓	
R	T3P8	In the latter case, the use of the present tense <u>indicates</u> that the propositional information is valid regardless of time.			✓		
R	T8P7	The adjectives that control that complement clauses are particularly likelihood adjectives (e.g., likely, possible, probable), attitudinal adjectives (e.g., interesting, acceptable, necessary), and factual/certainty adjectives (e.g., impossible, evident, obvious). This <u>indicates</u> that these co-occurring features index the authors' expression of their agreement, opposition, evaluation, and interpretation of propositions.			✓		
R	T8P8	The present tense correlates with these categorizations of verbs <u>indicating</u> general time or implying a lack of time restriction in scientific writing.				✓	
R	T8P6	Therefore, the interpretive label 'Evaluative stance' is <u>proposed</u> for the functional dimension underlying this co-occurrence.				✓	
R	T8P6	As observed by Oster (1981), past tense usage in scientific discourse <u>reports</u> completed actions at the particular time frame.				✓	

Note: 'T' refers to a research article which is written by a Thai author.  
'P' refers to page.

SECTION	CODE	SENTENCE	Does the use of "underlined word" indicate hedging?				NO	REMARK
			STRONG	MEDIUM	SLIGHT	YES		
R	T8P8	Taken together, the co-occurrence of present tense verbs and citations represent attributed knowledge, a crucial requirement in scientific discourse to situate and contextualize the study being reported, giving credence to the source of information.				✓		
R	T8P6	Text sample 2 has instances of two pointers and many past tense verbs. Pointers are tied to the results produced by the study being reported, providing visual accompaniments to the statement of results.				✓		
R	T8P6	The co-occurrence of passive verbs and pointers is functionally explicit. It reflects a focus on current findings produced by the study being reported.				✓		
I	T8P2	Size seems to be the first thing people think of in connection with corpora.			✓			
I	T8P2	A number of research works claim how big their corpora are. This criterion seems to out-prioritize other requirements.			✓			
I	T8P2	A number of research works claim how big their corpora are.				✓		
R	T8P6	The co-occurrence of passives and past tense verbs suggest their primary pragmatic function is describing scientific research activities.				✓		
R	T8P8	The co-occurrence of reference with present tense verbs suggests that the latter of the two pragmatic functions of present tense is more relevant to the functional interpretation of this cluster of features—to index generalized background knowledge established by previous research in the field.			✓			
M	T8P5	Factor analysis is performed to identify the patterns of linguistic features that tend to occur frequently in the corpus.				✓		
M	T8P5	The objective of multidimensional analysis is to identify clusters or sets of linguistic features that tend to occur in a particular text by using factor analysis, taking the frequencies of these features as variables.				✓		
R	T8P5	The analysis reveals that passives and past tense verbs tend to occur quite frequently in biochemistry corpus.			✓			

Note: 'T' refers to a research article which is written by a Thai author.

'P' refers to page.

SECTION	CODE	SENTENCE	Does the use of " <u>underlined word</u> " indicate hedging?			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
D	N2P6	First of all, these data <u>suggest</u> quite clearly that teachers' self-perceptions of their KAG, both in general terms as well as at specific points in lessons, have an impact on their work.		✓			
D	N2P7	Certain contrasts between Eric and Dave with respect to these facets of grammar teaching <u>suggest</u> some obvious relationships between teachers' behaviour and their confidence in their KAG.		✓			
D	N2P7	These data <u>suggest</u> that, even within one discipline, such as the teaching of English, teachers may develop separate strands of pedagogical expertise.		✓			
R	N2P2	As the students say the questions, the teacher writes these on the board, leaving blank spaces where the students' <u>suggestions</u> are incorrect.			✓		
R	N2P6	Dave <u>tended</u> to lack confidence, and this, too, was reflected in his work (i.e. minimizing grammar work, and deferring discussion).			✓		
R	N2P5	It started with a question about the difference between 'angry' and 'angered' (perhaps Dave saw this as vocabulary, and hence decided to proceed) and developed into a discussion of adverbs and adjectives		✓			
D	N2P7	However, when he <u>did</u> feel confident, as he <u>probably</u> did with 'angry' and 'angered', he behaved uncharacteristically, and explained the grammar there and then.			✓		
I	N2P1	In one study, a teacher who possessed a well-developed understanding of literature, but who was <u>uncertain</u> of her understanding of English grammar, displayed strikingly different teaching behaviours during literature and grammar lessons: in the former she was interactive and learner-centred, while in the latter she was didactic and teacher-centred (Shulman 1987).				✓	
D	N2P6	Eric was generally confident, and this was reflected in his typical approach to grammar (i.e. encouraging impromptu discussion, formulating rules on the spot), in contexts where he was <u>uncertain</u> , though, he modified his behaviour accordingly (i.e. providing direct responses, minimizing or deferring discussion, and generally hedging).				✓	
R	N2P5	There was little evidence of the <u>kind</u> of impromptu language work evident in Eric's work, a difference which would seem to be at least partly related to the different levels of confidence these two teachers had in their KAG.				✓	

Note: 'N' refers to a research article which is written by a native author.

'P' refers to page.

Does the use of "underlined word" indicate hedging?

SECTION	CODE	SENTENCE	YES			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
I	N3P1	The points discussed here had their origins in the kind of problem faced by many teachers of writing: a student has produced a text which, while grammatically acceptable, fails somehow to fulfil the requirements of the writing task.				✓	
R	N3F6	If, furthermore, the reader of such a text is an examiner having the kind of expectations summarized above, the writer who fails to meet these is <u>likely</u> to be disadvantaged.		✓	✓		
D	N3P7	How much information is it <u>feasible/sensible</u> to provide? For instance, if we give too much information, is this <u>likely</u> to be used against us in litigation—or in an examination answer, by receiving a lower grade? (Quantity)		✓			
I	N3P2	Consequently, it is <u>possible</u> for the reader to derive quite different meanings from what the writer intended.		✓			
R	N3P5	This is exemplified in the letter of adjustment, in which the writer presumably anticipates that her reader expects her to demonstrate sincerity by writing as much as possible, giving detailed reasons for failure, offering an apology more than once, and providing a solution.				✓	
M	N3P3	Neither audience nor word length was specified, although, given the display requirement involved in the task, there tends to be an unspoken assumption, no doubt shared by students and teachers alike, that it is better to write as much as <u>possible</u> in order to demonstrate linguistic skill.				✓	
I	N3P2	Furthermore, I believe that it is <u>possible</u> to perceive the ideology of the UDS in the taken-for-granted assumptions of what constitutes good, clear, communication in many assessment schemes.		✓			
I	N3P2	Indeed, for unskilled writers, (there is a <u>distinct possibility</u> that their intentions will be subverted by their inapt or unintentional outing or violating of the maxims.		✓			
I	N3P1	The points discussed here had their origins in the <u>kind of</u> problem faced by many teachers of writing: a student has produced a text which, while grammatically acceptable, fails somehow to fulfil the requirements of the writing task.				✓	
M	N3P3	So neither teacher nor student was fully at home with the <u>kind of</u> writing which was required for this task.				✓	

Note: 'N' refers to a research article which is written by a native author.  
'P' refers to page.

## Does the use of "underlined word" indicate hedging?

SECTION	CODE	SENTENCE	YES			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
D	N4F6	While Hird <u>reported</u> that the teacher was at the centre of the process, our journal entries showed not only that the teachers used pair work, but also that they encouraged the students to take the initiative in suggesting activities, and in the choice of what vocabulary to learn.				✓	
I	N4P1	They include 'no uptake', 'confusion', and 'adaptation and rejection' with only a few teachers <u>reporting</u> 'a fundamental change in their approach to teaching' (Lamb 1995: 78).				✓	
D	N4P6	However, Hird's reference to the undervaluing of individual interpretations does not <u>seem</u> to be supported in our study.		✓			
R	N4P4	The teachers <u>seem</u> to have avoided the belief mentioned by Hird (1995), that CLT only emphasizes oral language.		✓			
D	N4P7	The 18.5% of the Cortazzi and Jin students who valued sociability, and learning from others, <u>seemed</u> to be reflected in the diary entries about co-operative learning.		✓			
D	N4P6	Like the teachers in Hird's (1995) study, they <u>seemed</u> willing to take aspects of CLT and incorporate them into their classrooms.		✓			
R	N4P6	Some teachers in our study encouraged their students to <u>suggest</u> activities and ask questions.				✓	
D	N4P7	The results <u>suggest</u> that teachers were applying what they had been introduced to, sometimes successfully, sometimes less so.		✓			
R	N4P5	Does this <u>suggest</u> that the word 'lively' can have negative connotations, as in 'out of control'?				✓	
I	N4P1	Holliday (1997) too, having examined six 'communicative' English language classes at universities in India and China, <u>suggests</u> examining classroom culture in terms of the wider culture to show the interrelationship between local, national, international, professional, and academic cultures.				✓	
I	N4P2	Hird (1995) <u>suggests</u> that there is of CLT a mismatch between what teachers believe CLT to be, and the way it has evolved over a quarter century. In summary, he says, <u>people assume</u> the following contrasts:				✓	
R	N4P5	The comments of these teachers <u>suggests</u> that they wanted and worked towards encouraging an active attitude in their students.				✓	

Note: 'N' refers to a research article which is written by a native author.

'P' refers to page.

Does the use of "underlined word" indicate hedging?

SECTION	CODE	SENTENCE	YES			NO	REMARK
			STRONG	MEDIUM	SLIGHT		
I	N4P2	Asked to express any concerns they might have had about implementing the ideas <u>suggested</u> in the course, teachers asked how a communicative approach could work in monolingual classes, and whether it was acceptable to include some traditional methods in CLT.				✓	
R	N4P5	However, in one comment the use of 'but' <u>suggested</u> that liveliness and happiness might not be the same thing.				✓	
R	N4P5	In his Vietnam study, Howe (1995) <u>suggested</u> that whether students were passive or active depends on the teacher's expectations.				✓	
D	N4P7	While Hird reported that the teacher was at the centre of the process, our journal entries showed not only that the teachers used pair work, but also that they encouraged the students to take the initiative in <u>suggesting</u> activities, and in the choice of what vocabulary to learn.				✓	
I	N4P2	For example, Howe (1993), with experience of teaching in Vietnam, addresses the commonly-held perception of passivity amongst Asian students, by <u>suggesting</u> that whether language learners are 'passive' or 'active' in class depends more on their teachers' expectations than on culturally-based learning styles.				✓	
D	N4P7	<u>Perhaps</u> this illustrates Howe's (1993) belief about the relationship between liveliness and teachers' expectations.		✓			
D	N4P7	A long-term study of these teachers' classrooms would <u>probably</u> be carried out more effectively by the local authorities, who have responsibility for the ongoing in-service programme.		✓			
I	N4P1	Hird sums up the teachers' <u>doubts</u> about CLT in relation to three factors: past traditions, current practices, and the way in which CLT has been interpreted.				✓	
I	N4P2	When they asked teaching Chinese students what was <u>expected</u> of a good student, the highest scoring category (43%) from the list of eleven points was 'hardworking', followed some distance behind by sociability/learning from and with others (18.5%).				✓	
I	N4P2	The value is on care and certainty rather than on quantity, and on experimenting with language. Output is <u>expected</u> to be error-free, and memorization is valued. The teacher is at the centre of the process.					✓

Note: 'N' refers to a research article which is written by a native author.

'P' refers to page.

SECTION	CODE	SENTENCE	Does the use of "underlined word" indicate hedging?			NO	REMARK
			STRONG	YES MEDIUM	SLIGHT		
I	N6P1	This is not because it is the most widely spoken native language in the world, since by most <u>estimates</u> Mandarin has three times as many native speakers as English, but rather because of the growing number of speakers who are acquiring some familiarity with English as their second or third language.				✓	
R	N6P5	When asked how often they use group work in their classes ('every class', 'sometimes', 'rarely', or 'never'), the majority of teachers in the survey (40) <u>indicated</u> they use it 'sometimes'.			✓		
D	N6P7	As Kramsch and Sullivan (1996) point out, an appropriate pedagogy for the teaching of EIL depends upon local ELT professionals thinking globally but acting locally. Chile <u>seems</u> to be one country in which this is happening.		✓			
D	N6P7	Finally, my interactions with Chilean English teachers <u>suggest</u> that Chilean teachers recognize the strengths they have as teachers because of their bilingualism, and their familiarity with the local cultural context.		✓			
I	N6P4	Perhaps one of the main reasons for many teachers' satisfaction with the reform is that all students in the public schools are given a textbook and cassette, called Go for Chile (Muggleston, Elsworth, and Rose 1999, 2000), which implements the objectives specified by the Ministry of Education reform.		✓			
R	N6P6	When asked who they would hire if they were a director of a private English language institute in Chile—native English speakers or Chileans—over half supported the hiring of Chileans, though teachers in semi-public and private schools were more <u>likely</u> to prefer native speakers, as shown in the following table.		✓			
I	N6P2	However, I would <u>argue</u> that just as the content of EIL materials must be separated from native-speaker models, so too must EIL methodology, by allowing a locally appropriate pedagogy to be implemented.		✓			
I	N6P1	Because of this fact, Cook (1999) <u>argues</u> for the need to avoid comparing bilingual speakers of English to native speakers, and rather to recognize the many strengths of bilingual users of English who have a rich linguistic repertoire to serve their communication needs.				✓	
I	N6P2	Smith's early call for a need to denationalize the use of English has more recently been emphasized by Kachru (1992), who <u>argues</u> that English must now be dissociated from the colonial past, and not necessarily be linked to 'westernization'.				✓	

Note: 'N' refers to a research article which is written by a native author.

'P' refers to page.

## **BIOGRAPHICAL DATA**

Name	Ms. Maneerat Sukhanindr
Date of Birth	March 7, 1982
Place of Birth	Bangkok, Thailand
Education	1999-2003: Bachelor of Arts (Thai), Srinakharinwirot University, Bangkok, Thailand