ASSESSING LEARNING CONTROL OF ENGLISH HEDGES AMONG TERTIARY CANTONESE-SPEAKING EFL STUDENTS

Author name: SIU, Fiona Kwai-peng

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Abstract

This project was designed to try to investigate the difficulties EFL learners would have in learning to use hedging as a rhetorical device in academic writing. The participants were 136 native Cantonese-speaking EFL students who enrolled in the one-year course "English for Academic Purposes" offered by a language centre at a university in Hong Kong. Specifically, this paper aimed: 1) to examine whether there was a significant increase in the number of hedges used in the discussion essays written by students at the beginning of a one-year EAP course (the control group) and at mid-course (the experimental group), and 2) to determine whether, in a specific context, the subjects' use of hedges was appropriate. The measurements for the first purpose included a ranking of hedges. Such a ranking, admittedly being arbitrary, was modified from Halliday's (1994) ranking of modal verbs. The measurements for the second purpose entailed frequency counts of hedging errors. It was found that there were not significant differences across the two groups in the types of hedges and in the total number of hedging errors, although a significantly greater degree of hedging was found in the essays written by the experimental group. Both groups of subjects mainly used *may* to mitigate tone; they also used *will* copiously, seemingly unaware of the absolute certainty this modal denotes. On the contrary, the use of nouns to show possibility was relatively rare. The excessive use of the simple present tense and the use of "will" constituted the common types of hedging errors. The conditional use of *would* and the use of *could* to provide options appeared to confuse most students.

Keywords: Academic writing; English hedging; modality; argumentative essays; university EFL students

1. Introduction

Hedges, at least in American English, are considered to be markers of uncertainty (e.g., *Some of the apples are ripe, and possibly all of them are*) and politeness (e.g., *I don't think I can come*) (Prince *et al.*, 1982). Hedges also may increase the credibility of statements, in academic texts, for example, possibly because of the mitigating effects they can produce (Clemen, 1997, p.244). However, L2 learners of English often find it difficult to grasp the appropriate use of hedging (Holmes, 1982; Blum-Kulka & Levenston, 1987). L2 learners may leave their speech unhedged and focus only on conveying referential information, possibly because of a lack of awareness of the role of hedging (Nikula, 1997, p.188). Even L2 learners who have achieved an advanced level of proficiency in English may have difficulty using hedges appropriately, possibly due to the complexity of the meaning conveyed through hedges (Allison, 1995; Crompton, 1997; Hinkel, 2003; Hyland & Milton, 1997; Langton, 2002). Langton (2002), for example, through a three-stage analysis of the range and frequency of expressions of certainty and doubt by Hong Kong law students in answering a legal question, found that the participants tended to use a narrow range of epistemic modal verbs as well as various inappropriate expressions of certainty. A similar phenomenon has been observed in discussion and argumentative essays written by native Cantonese-speaking students studying in the English Language Centre (ELC) at the City University of Hong Kong (CityU). Those students did not seem to grasp the ability to employ epistemic hedging devices and strategies effectively. Even when hedges are present in their texts, the variety of hedges used tends to be extremely limited. Students studying in the ELC who have scored Level 3[1] in the Hong Kong Diploma of Secondary Education Examination (HKDSE) or Grade E[2] in the Hong Kong Advanced Level Examination (HKALE) in the Use of English, tend to depend almost exclusively on simple present tense and/or *will* as verbal auxiliaries when responding to an academic

[1] According to the explanatory notes on the overleaf of the Certificate of Hong Kong Diploma of Secondary Education Examination, there are five levels of performance (5, 4, 3, 2, 1) with 5 being the highest and 1 being the lowest. Level 5 candidates with the best performance will have their results annotated with symbols ** and the next top group with the symbol *. Achievements below Level 1 are unclassified and are not recorded on the certificate.
[2] In the HKALE, there are six grades of performance (A-F) with A being the highest and F being the lowest. Results below Grade F are designated as Unclassified.

written task. There may be several possible reasons for the limited use of hedges, and especially of modal verbs.

- First, native Cantonese-speaking students may not be aware of the need to use hedges in academic writing to suggest objectivity when making claims.
- Second, they may lack understanding of the function of epistemic modal verbs in English.

For example, students may not understand that the modal *would* denote a stronger possibility than is implied by the modal "might". This difference may exist because in Chinese[3] the word *ke3 neng2* (meaning "possible") denotes only one level of possibility; to the best of the present researcher's knowledge, there are no other Chinese terms having the meaning of the term *ke3 neng2* that also denote a stronger or weaker intensity to the sense of possibility. Possibly, as a consequence of the semantics of the Chinese term, the breadth of denotation that the English modals can denote is likely to pose a semantic limitation for many native Cantonese-speaking students in their attempt to learn the semantic implications of English modals. In Chinese, external particles are added to a sentence to achieve the strengthening or weakening of English modal tone. For example, in the case of strengthening the possibility of an event, the particle *shi2 fen1* (meaning "very") is added before as in *shi2 fen1 ke3 neng2* (meaning "very possible"). In the case of weakening the possibility of an event, the particle *bu4 tai4* (meaning "not really") is added before *ke3 neng2*, as in *bu4 tai4 ke3 neng2* (meaning "not really possible").

That L2 students might lack an understanding of hedging has also been mentioned by Markkanen and Schröder (1997), who suggest that the difficulties experienced by both L1 and L2 students might result from the lack of teaching of hedging (p.12). Markkanen and Schoröder pointed out two major reasons for the difficulty of teaching this function. First, it is only through context that the meaning of hedges can be obtained; second, the use of hedges is often connected with the beliefs, values and even the personalities of a speaker or writer (p.12).

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[3] The number attached to the Pinyin (e.g., *ke3 neng2*) denotes the tone of the Chinese word when pronounced in Mandarin. Spoken Mandarin has four tones to clarify the meanings of words. The four tones are: 1. High level; 2. Rising; 3. Falling rising; and 4. Falling. Pinyin uses either numbers or tone marks to indicate the tones.

Because of the difficulty native Cantonese-speaking students appear to have in using English hedges, the present study aimed to investigate the difficulties the subjects of this study had in using hedges appropriately in their discussion essays after having completed half of a one-year course on academic English. The subjects from the experimental group completed the first part of a one-year course entitled English for Academic Purposes (EAP). To the best of the knowledge of the present researcher, no study has investigated the learning of English hedges among tertiary native Cantonese-speaking ELF students possessing a relatively weak control of English proficiency, so this study is intended to bridge this knowledge gap in the literature. The EAP course taken by the participants in this study included two parts: EAP I (60 teaching hours) and EAP II (60 teaching hours). The successful completion of EAP I is a pre-requisite for enrollment in EAP II. Usually both EAP I and EAP II are on offer in any given semester. The collection of data for this study took place during the first two weeks of Semester B 2012-13, involving students taking EAP I and students taking EAP II. EAP I students, who were at the beginning of the course, had not received any formal instructions in academic English; thus constituting the control group. EAP II students had already received 60 hours of academic English instruction; thus constituting the experimental group. Specifically, the purposes of this present study were twofold:

1.) To see whether there would be any significant differences in the numbers of hedges and in the types of hedges appearing in the essays written by the participants at the beginning of a one-year EAP course and at mid-course;

2.) To determine whether in a specific context the participant's use of hedges was appropriate.

Ideally the findings would shed light on the difficulties facing the participants in this study in their attempt to use hedges appropriately in their writing.

2. Literature review

There are many ways in which the concept *hedge* has been define. According to Brown and Levinson (1978), "the semantic operation of hedging can be achieved in indefinite surface forms (p.151). Quirk, et al. (1985) regard the use of hedges as expressing "speaker's tentativeness over the truth value of the matrix clause" (p.1114). Schröder and Zimmer (1997) define a hedge either as one or more lexico-syntactic elements used to modify a proposition or as a strategy that modifies a proposition. The term *hedging* is defined as the "textual strategies of using linguistic means …in a certain context for specific purposes, such as politeness, vagueness, mitigation" (p.249). Nikula (1997) describes hedging as "a strategy by which speakers mitigate and soften the force of their utterances" (p.188). She distinguishes between two types of hedges:

> a) linguistic expressions (such as *perhaps, might, I suppose*) that "are closely connected to the concept of epistemic modality in that they signal speakers' assessment of the truth of the proposition as a whole", and
>
> b) expressions such as *sort of, kind of, somewhat, a bit* that "focus on a word or an expression to make the meaning more fuzzy and imprecise" (p. 191).

Markanen and Schröder (1997) regard the role of hedges in scientific texts as "modifiers of the writer's responsibility:

- for the truth value of the propositions expressed, or
- as modifiers of the weightiness of the information given, or
- the attitude of the writer to the information" (p. 5).

According to this extensive view of what constitutes hedges, the range of linguistic devices subsumed under the concept of hedges is wide and virtually limitless -- for example, the concept may include the use of certain pronouns, impersonal expressions, the passive voice, agentless constructions, modal verbs, adverbs, and particles. It may even include stylistic and rhetorical devices.

Cutting across the area of hedges is the notion of modality. Similar to the understanding of hedges, the notion of modality is also vague (Palmer, 1986, p.2). Palmer focused primarily on modal auxiliaries when discussing modality, whereas other researchers often use the term *modality* in a more general sense. Stubbs (1986), for example, treats *modality* as "a central organizing principle in language" (p.4). Halliday and Hasan (1989) and Halliday (1994) consider *modality* to be an important linguistic tool for realizing the interpersonal function and expressing the social roles between the speaker/writer and the hearer/reader. Schleppegrell (2004) regards *modalization* as a "linguistic resource for presenting propositions non-categorically," enabling the expression of degrees of probability (p. 60). The linguistic structures that can be subsumed under a comprehensive definition of *modality* are similar to those subsumed under Markanen and Schröder's (1997) concept of hedging. According to Markanen & Schröder (1997), the concepts of *modality* and *hedging* can be seen as overlapping depending on their definitions: either *modality* (largely of the epistemic type) or *hedging* may serve as an umbrella term and may subsume the other concept (p.7). The coding system used by Grabe and Kaplan (1997) shows a clear relationship between modals and *hedges*. They considered modal use, verbal hedging, non-verbal hedging, and emphatics as four distinct categories in their study of the patterns of linguistic variation across a range of expository text types (p.162). In each of the 50 texts in their corpus, they first identified modal verbs. Then each text was marked for the remaining three categories – namely: i) verbal hedging (i.e., hedging including main verbs incorporating sub-categories of verbs of reporting, mental verbs, and evaluative verbs), ii) non-verbal hedging (i.e., all markers of hedging), and iii) emphatics (all markers of lexico-syntactic structures). The first three categories in their coding system were adopted in the present study, while emphatic expressions were not included; in short, only hedges used to mitigate tone were examined in this study.

There has been substantial research into the use of hedges in academic/scientific writing (e.g., Barton, 1993, Butler, 1990; 1992; Crismore & Farnsworth, 1990; Hanania & Akhbar, 1985; Hinkel, 2003; Huddleston, 1971; Myer, 1989). The use level of modals and other linguistic devices typical of the

disciplines in focus were examined in the corpora collected in the studies. Myers (1989, 1992) examined commentaries introduced with reporting verbs indicating a degree of qualification. Crismore and Farnsworth (1990)'s study of hedging includes not only modality markers but also such other forms as evaluative markers (e.g., *it is regrettable that*) and commentaries. Butler (1990), Hanania & Akhbar (1985), and Huddleston (1971) all pointed out an interesting difference in the use of hedging and evaluative signals between writings in Physics and Biology: all three studies noted a higher use of modals in texts in Physics than in texts in Biology. Moreover, there was a much greater use of *can, could, would* , and *should* in Physics writing, whereas there was a greater use of *may* and *might* in Biology writing. Butler (1990) found that more modals were used in the introduction and discussions sections than in the results and method sections. Also he found that scientific texts did not use as many modals as may be found in other text types.

Another approach to the study of hedging involves interlanguage studies in spoken and written discourse. Emerging from these studies is the consistent finding that non-native writers of English tend to resort to more direct and unqualified statements than do their native-speaking counterparts. Concerning spoken discourse, Kasper's (1979) study reported that modality reduction took place in the speech of German learners of English. Her study showed that participants planned to use modality at the initial stage of speech act planning, but modality structures did not in fact appear in the surface realization. Farch and Kasper (1989) noted that L2 learners seem to prefer an explicit kind of modification to the implicit, perhaps due to the fact that such explicit expressions as *I think* are longer and more explicit in the content and in the illocutionary force they carry. Kärkkäinen (as cited in Markkanen & Schröder, 1997, p.13) found that the Finnish learners of English in their study used fewer epistemic modals than did other L1 learners of English, specifically. They used fewer types of expressions and clearly preferred expressions like *I think.* Similar findings were obtained in studies concerning written discourse. L2 learners of Finnish also demonstrated a tendency to rely on a few commonly used expressions of epistemic modality, employing fewer variants than did native speakers of English (Ventola & Mauranen, as cited in Markkanen & Schröder, 1997, p.13). Hinkel (2003) compared the academic argumentation in expository prose written by native and nonnative

writers of English. She found that amplifiers and emphatic adverbs were used much more frequently in L2 essays, resulting in a colloquial and a somewhat exaggerated tone in academic essays written by non-native speakers (NNS). Studies of the competence of Chinese L2 learners in expressing certainty and doubt, as compared with native speakers, also showed that NNSs tended to use more unqualified expressions, and a more direct, authoritative tone in addition to favoring stronger modals (Hyland & Milton, 1997). L2 learners also tend to use a narrower range of modality devices, restricting hedging expressions to modal verbs and adverbs (Hyland & Milton, 1997). This group of findings indicates that more experienced writers tend to produce more "hedged" writing (Abbuhl, as cited in Takahashi, 2009).

3. THE TEACHING OF HEDGING USING COURSE MATERIALS

The 60-hour course EAP I covered 10 units. On average, each unit was presumed to take 6 hours. Each unit started with a passage for reading comprehension, followed by exercises focusing on certain grammatical features of academic English (e.g., noun phrases). The topics of the ten reading passages were:

UNIT 1--Introduction to University Education;
UNIT 2--Technology as Trash;
UNIT 3--Constructing an Essay;
UNIT 4--A Good Education;
UNIT 5--Who Lives Longer;
UNIT 6--The Paradox of Happiness;
UNIT 7--Reporting Sources;
UNIT 8--Genetic Engineering: The Battle of foods
UNIT 9--Aspects of Love (Unit 9) and
UNIT 10)--Complex Noun Phrases.

The term *hedges* was mentioned in Units 1, 4, and 5, where the subjects were asked to identify the hedges used in the reading passages. In Unit 1, four individual sentences illustrating four categories of hedges – "modal auxiliaries", "adverbs", "verbs", and "quantifiers" -- were extracted from the passage and presented to the subjects as model sentences. After examining the examples, the subjects were asked to find more examples illustrating each of the four categories of hedging in the same text. In Unit 4, the subjects were required to complete the same task, identifying the four categories of hedges from

the reading passage. Students were instructed to find examples of hedges and of such various grammatical structures as *impersonal structures* and *complex noun phrases*, as well as various cohesive devices. In Unit 5, the same types of exercises were provided to permit the subjects to practice working with the new material.

More detailed instruction concerning hedging was provided in Unit 6, scheduled to be introduced during the sixth week of the course. Based on the number of exercises to be completed in this unit, may be estimated that about three hours was devoted to hedging. In addition, nine exercises testing students' reading comprehension, and seven exercises on hedges were included in this unit. The first exercise required subjects to distinguish between *hedges* and *boosters*; the second highlighted differences between *hedged* and unhedged reporting. In the second exercise, subjects were instructed to find in the designated sentences taken from the reading passage points denoting a strong mitigating force (e.g., *seem*). The third exercise required subjects to classify hedges into such categories as adjectives (e.g., *possible*), adverbs indicating degrees, quantity, frequency (e.g., *probably, some, often*), modal verbs (e.g., *might*), nouns (e.g., *possibility; suggestion),* and verbs (e.g., *appear; seem*). The fourth exercise required subjects to find compound hedges (e.g., *It seems possible)* in four sentences taken from the reading passage. The fifth exercise was a gap filler, requiring subjects to choose among several options denoting different forces of mitigation (e.g., *will/could/are certain to*).

4. METHODOLOGY

A total of 130 usable writing scripts were produced by a segment of the EFL students taking EAP I and EAP II in the second semester in 2012-13. About 78% (7 classes out of 9) of EAP I students, and 7% (6 classes out of 85) of EAP II students participated in the study.

The ideal maximum class size for both EAP I and EAP II was cited at 25 students, but actual class size varied. Subjects were informed that their essays would only be used for academic research and that all data would be analyzed anonymously. Subjects were also informed by the researcher that they would be

provided with feedback on their writing in return for their assistance in the research study. A total of 260 consent forms were received; 6 students did not agree to participate in the research study. To ensure the homogeneity of the two groups, only 130 usable scripts were generated out of the 254 scripts collected, based on the following criteria:

1.) The first language of a subject was Cantonese;

2.) The grade in the subject of English was E or F; subjects who scored Grade U, one grade below F, were excluded from the study;

3.) A script was at least 400 words long (an essay less than 400 words was regarded as being too short to reflect a writer's ability regarding the use of hedges);

4.) The subjects had taken either HKALE or the HKDSE in the subject Use of English. Subjects who had taken public language examinations other than the two specified examinations were excluded from the study.

EAP I students wrote a 500-word discussion essay at the beginning of the course as a diagnostic writing task; EAP II students, given the same writing instructions, wrote an essay of the same topic at mid-course. Both writing tasks were completed in class within the first two weeks of the two courses in Semester B. The writing instructions were as follows:

- Time allowed: 1 hr 10 mins
- You must write a 500-word academic essay on the following topic:

  It is proposed that terminally ill patients be given the legal option of ending their own lives.

  Discuss possible advantages and disadvantages of such a proposal.
- You must write at least 500 words.
- You must write in academic English.

5. DATA ANALYSIS

5.1. Framework of analysis

The framework of analysis in this study was modified from Grabe and Kaplan's (1997) study. In the present study, hedging devices were classified into three categories:

1.) epistemic modals,

2.) verbal hedges, and

3.) non-verbal hedges, organized into the following sub-categories:

i.) quantifiers, ii.) adverbs/adverbial phrases,

iii.) adjectives, iv.) passive voice (reporting verbs),

v.) nouns.

Table 1 illustrates and exemplifies the classification of hedging devices examined in this study:

Table 1: Hedging devices examined in the present study

Epistemic modals	e.g., will, shall
Verbal hedging involving main verbs	e.g., assert, argue
Non-verbal hedging	
a. Quantifiers	e.g., some of, many of, a few of
b. Adverbs/ adverbial phrases	e.g., always, often, sometimes, probably, possibly, to some extent
c. Adjectives	e.g., probable, possible, likely
d. Passive voice (reporting verbs)	e.g., be regarded as, be viewed as
e. Nouns	e.g., probability, possibility

5.2. Measurements for the first purpose

The measurements for the first purpose include a ranking of hedges (i.e., from those achieving the weakest mitigating effects to those achieving the strongest mitigating effects). Such a ranking, admittedly arbitrary, is based on Halliday's (1994) values of modal verbs:

Table 2: Modal verb values as assigned by Halliday (1994)

High Value	must, should, ought to, need to, has to, is to
Medium Value	will, would, shall
Low Value	may, might, can, could

Halliday (1994, p. 362)

The ranking of hedges assigned by the present researcher for the study is provided in Table 3. For the first research objective, only the hedges only the hedges taken as used correctly by the present researcher based on contextual clues were included for analysis. The ranking was assigned on a 4-point scale. A value of "0" means that the hedges achieve no mitigating effect; "1" means weak mitigating effect; "2" means moderate mitigating effect; "3" means strong mitigating effect; "4" means very strong mitigating effect.

Table 3: Degree of hedging assigned in the present study

Hedges	**Degree of hedging**
Epistemic modals	**Value of hedging assigned by the present researcher**
• will/shall	0 (no mitigating effect)
• would/must/should	1 (weak mitigating effect)
• may/could/may well/	2 (moderate mitigating effect)
• might	3 (strong mitigating effect)
Verbal hedging involving main verbs	
• assert/ argue	1 (weak mitigating effect)
• believe/assume	2 (moderate mitigating effect)
• claim/ suggest/mention	3 (strong mitigating effect)
• appear/seem/tend to	4 (Very strong mitigating effect)
Non-verbal hedging (other markers of hedging)	
a. Quantifiers	
• Most	1 (weak mitigating effect)
• Many / much *	2 (moderate mitigating effect)
• Some	3 (strong mitigating effect)
b. Adverbs/Adverbial phrases	
• Always/mostly/probably/arguably	1 (weak mitigating effect)
• often/usually/generally/to a large extent/ possibly/supposedly/perhaps/maybe/	2 (moderate mitigating effect)

• sometimes/to some extent	3 (strong mitigating effect)
c. Adjectives	
• probable/very likely	1 (weak mitigating effect)
• possible/likely/common	2 (moderate mitigating effect)
d. Passive voice (for reporting verbs)	
• Be regarded as/regarded as/viewed as	2 (moderate mitigating effect)
e. Nouns	
• Of possibility/likelihood/probability	2 (moderate mitigating effect)
4. Double/triple hedging (total value= sum of individual values)	
• Would + seem	variable effect depending on context
• generally + be regarded as	variable effect depending on context
• May + often	variable effect depending on context

* *Many* and *much* – Whether the use of these two quantifiers was counted as hedges depended on whether subjects intended to use the two words to emphasize or to mitigate the tone, or only to state a fact neutrally. For example, in:

- "*Many* resources have to be used to cure terminally ill patients" and
- "Such patients have to suffer from *much* pain",

the modals were regarded as emphatics in the context, and thus were not included in the data pool of hedges.

However, the two items *much* and *many* in the following instances are viewed as mitigating tone because they refer only to a portion of the people/things/feeling mentioned rather than to the whole population/quality:

- "*Many of* the terminally ill patients want to end their lives."

- "*Much of* the pain suffered by terminally ill patients is due to immobility as a result of being confined to beds."

Frequencies of hedges per 400 words of text were recorded. A subject discusses more ideas concerning the possible advantages and disadvantages of legalized euthanasia, thus creating a longer essay, as compared with a subject who writes a shorter essay. This creates an uneven distribution of hedges, making it necessary to turn the raw frequencies of hedges appearing in essays into "converted frequencies" allowing comparability across essays. One method used to achieve comparability is to count the frequencies of hedges per any given number of words of text (for example per 1000 words as recommended by Butler, 1990 and Crismore & Farnsworth, 1990). A glance at the essays written by the subjects in the present study showed that a majority of them wrote about 400 words, although some were able to write as many as 500 words and some as few as 250 words. The essay length norm for the subjects in this study being 400 words, frequencies of hedges per 400 words of text were recorded for data analysis.

Example of calculation of the total value of degrees of hedging (DH):

- "Most of terminally ill patients may wish to end their lives early."

Value of Most : 1 (see Table 3)

Value of May: 2 (see Table 3)

Total DH: 1 + 2 = 3

5.3. Measurements for the second purpose

Measurements for the second purpose involve frequency counts of hedging errors. Hedges that were judged as inappropriate by the present researcher were tabulated; five major types of hedging errors were identified:

1. Errors involving the wrong form of the verb appearing after an epistemic modal;
2. Errors exclusively pertaining to an epistemic modal;
3. Attaching an inappropriate hedge to an item that should be hedged;
4. Not attaching a hedge to an item that should be hedged;
5. Attaching a hedge to an item that cannot/should not be hedged.

6. Results

6.1. Results of Research Purpose One

Hedges that were grammatically correct were analyzed using the statistical program IBM SPSS 20.0. Independent-Samples T-Tests were run.

Table 4 shows the following differences significant at the 95% confidence level:

- The texts written by EAP II students showed a greater degree of hedging (EAP II; 17.74; EAP I: 13.06, $p \leq 0.05$) – see Table 4.
- EAP II students used a greater number of verbs that denote a stronger hedging force, e.g., *seem, appear, tend to* (EAP II: 0.58; EAP I: 0.25, $p \leq 0.05$) – see Table 4;
- EAP II students used a greater number of *may* (EAP II: 3.02; EAP I: 1.71, $p \leq 0.05$) – see Table 4;
- EAP II students relied less on adverbs of frequency, such as *always, sometimes*, (EAP II: 0.18; EAP I: 0.47, $p \leq 0.05$) – see Table 4.

Table 4: Hedges, showing significant differences between two subject groups at the 95% confidence level

	Group	**Mean**	**Standard Deviation**	**Sig. (2-tailed)**
Degrees of hedging	EAP I	13.06	8.212	0.007
	EAP II	17.74	11.090	
May	EAP I	1.71	2.396	0.010
	EAP II	3.02	3.276	
Adverb	EAP I	0.47	0.755	0.039
	EAP II	0.18	0.523	
Verbs that denote a stronger hedging force, e.g., *seem, appear, tend to*	EAP I	0.25	0.560	0.005
	EAP II	0.58	0.808	

Table 5 shows that there was no significant difference in the total number of errors committed by the two groups of subjects at the 95% confidence level (EAP II: 0.23; EAP I: 0.46, p=0.073). Additionally, no significant difference in the types of hedges used between the two groups was found of difference (EAP II: 1.91; EAP I: 1.74, p=3.325).

Table 5: Total number of errors and the types of errors

	Group	Mean	Standard Deviation	Sig. (2-tailed)
Total number of hedging errors	EAP I	0.46	0.867	0.073*
	EAP II	0.23	0.553	
Types of hedges	EAP I	1.74	1.050	0.325*
	EAP II	1.91	0.897	

*Not significant at the 95% confidence level

Table 6 shows that hedges used most often by the two subject groups were:

- *will* (EAP II: 1.98; EAP I: 2.06),
- *may* (EAP II: 3.02; EAP I: 1.71).

In addition, hedges used least often by the two groups of subjects were nouns denoting possibility, e.g.,

- *of possibility/likelihood/probability* (EAP II: 0.06; EAP I: 0.02), and
- *must* (EAP II: 0.02; EAP I: 0.06).

Table 6: Hedges used most often and least often by the two groups of subjects

EAP I		EAP II	
***Will**	**2.06**	***May**	**3.02**
***May**	**1.71**	***Will**	**1.98**
Would	0.71	Verbs	0.58
Adverbs	0.47	Would	0.38
Verbs	0.25	Adjectives	0.34
Passive	0.23	Passive	0.26
Adjectives	0.20	Adverbs	0.18
Could	0.09	Could	0.18
Might	0.09	Might	0.12
****Must**	**0.06**	****Nouns**	**0.06**
****Nouns**	**0.02**	****Must**	**0.02**

*Hedges used most often

**Hedges used least often

6.2. Results of Research Purpose Two

Hedges that were considered to be grammatically inappropriate were analyzed in the context of the second research purpose.

Since there was no significant difference in the total number of hedging errors made by EAP I and EAP II subjects at a confidence level of 95% (see Table 5), the essays written by both groups of subjects were grouped together into a single group consisting of 130 scripts for the analysis performed in the context of the second research purpose.

Percentages of the five categories of hedging errors are presented:

1. **Errors involving an incorrect form of the verb appearing after an epistemic modal: 8.8% (4/45)**

   Examples:

   * They *may not allowed* patients to choose to die.

   * It *may really hard* for them to repay the debt.

   * It *may led* some serious problems.

   * The patient *may causes* financial burden to their family

2. **Errors exclusively pertaining to an epistemic modal: 11.1% (5/45)**

   Examples:

   **May be* (appearing to mean "maybe") he does not want to live any more",

   * Terminally ill patients *will cannot* (appearing to mean "will not be able to") to survive the pain

   * Terminally ill patients *maybe give up* their live easily.

   * *They may do not want* to give any load to their family.

3. **Errors arising from attaching an inappropriate hedge to an item that should be hedged:** 24.4% (11/45)

   Examples:

   Terminally ill patients *will lose* hopes.

   If terminally ill patients are given the option to die, resources in treating them *will* be saved.

4. **Errors arising from not attaching a hedge to an item that should be hedged:** 35.6% (16/45)

   Examples:

   The illness *causes* a heavy burden on his family members.

   This argument *is* not true.

5. **Errors arising from attaching a hedge to an item that cannot/should not be hedged:**

20% (9/45)

Examples:

Would

The pain is unbearable, so patients *would* like to choose the legal option of ending their lives.

People *would* think it is kind of commit suicide.

I *would* discuss the possible advantages and disadvantages of such a proposal as below.

Could

The feeling of the patient and impact of society *could* not be ignored.

Cancer is one of the diseases that *could* not be healed completely in terminal period.

It is true that patient *could* not do the things they want.

7. Findings and Discussions

The EAP II subjects participating in this study seem to have benefited from taking the course EPA Part I in the sense that the essays written by EAP II students showed a greater ability to use hedging and the subjects were able to utilize a greater variety of verbs showing strengthened mitigation. The positive impression of the more frequent use of *may* by the participants in this study suggests that EAP II students were more aware of the need to mitigate tone when writing an academic essay, but the negative impression suggests that the significant difference in the degrees of hedging between two groups of students might merely be the result of the copious use of this modal verb rather than a general increase in the EAP II students' ability to use hedges. The excessive use of *may* by EAP II students is worth stressing, given the fact that the total number of hedging errors and the type of hedges used between the two groups of students were not significantly different across EAP I and EAP II. This finding agrees with the finding of a number of studies that L2 learners of Finnish demonstrated the tendency to use primarily some common expressions of epistemic modality showing less variation than those written by native speakers of English (Abbuhl, as cited

in Takahashi, 2009; Hinkel, 2003; Hyland & Milton 1997; Ventola & Mauranen, as cited in Markkanen & Schorder,1997).

As far as hedging errors are concerned, both groups of subjects in the study reported here seemed to use *will* and the simple present tense extensively without being aware that these grammatical structures denote absolute certainty.

Both groups of students seemed to be unaware of the epistemic meaning of *must* and of the use of nouns denoting possibility; an assumption that results from the fact that these hedging devices were least commonly used by the subjects in this study. While the minimal use of nouns denoting possibility is understandable for the abstractness of the notions involved, the infrequent use of *must* may result from the fact that the writing topic assigned did not naturally suggest the use of this modal verb. The writing topic required subjects to discuss the possible advantages and disadvantages of the proposal that terminally ill patients be given the legal option of ending their own lives. The use of *must* perhaps implied too strong an option for the discussion topic. According to Butler (1990), Hanania & Akhbar (1985), and Huddleston (1971), some modals appeared more frequently in texts relating to particular academic disciplines. For example, the frequencies of *can, could, would* and *should* were higher in Physics texts than in Biology texts; on the other hand, *may* and *might* appeared more frequently in Biology texts.

The most frequent type of hedging error appeared in failing to attach a hedge to an item that should be hedged (35.6%); the second most frequent type of error was to attach an inappropriate hedge to an item that should be hedged (24.4%). Attaching a hedge to an item that cannot/should not be hedged constituted the third most frequent type of hedging error (20%), with *would* and *could* being the modals most common in this type of error. Based on contextual clues, a close examination of the hedging errors involving these two modals suggested that students were confused about the use of "conditionals" (for *would)* and the use of "options" (for *could).* The various, yet subtle, functions these two modals can denote might have contributed to the confusion encountered by the participants.

8. LIMITATIONS

There are several limitations to this study:

First, the number of EAP II students available for this study might not be sufficiently representative of the general population of EAP II students. While about 78 % (7 classes out of 9) of EAP I students participated in the study, only 7 % (6 classes out of 85) of EAP II students were available for the study because only 4 EAP II teachers responded to the invitation soliciting their assistance in the study. Although the numbers of EAP I and EAP II students were roughly the same, the proportion of EAP II students participating in the study was significantly smaller and therefore possibly was not sufficiently representative of the EAP II students taking the EAP course in that semester.

Second, the judgment of the appropriateness of a hedge appeared to be based upon a subjective decision. However, the identification and judgment of the appropriateness of a hedge seems to be inherently subjective. As Grabe and Kaplan (1997) point out, even deciding whether a linguistic device falls into the category of a hedge or an emphatic appears to be "a fairly subjective decision in a number of cases" (p.155). Another possible factor further contributing to subjectivity in the data analysis was that only the researcher/author was engaged in the process. In view of this factor, extra measures were taken to ensure intra-marker reliability: the researcher analyzed the scripts a total of five times at an interval of two days to one week to ensure that the same framework of analysis was applied. For example, the phrase "would discuss" in the statement "I would discuss the problem below" was not included in the pool of errors in the first round of analysis, but it was decided that it should be included in the second round, so all the scripts that had already been analyzed were re-analyzed. During the re-reading, some hedges that had been overlooked were included.

The third limitation results from the exclusive use of epistemic modals in deciding on whether a hedge had been used inappropriately (i.e., the second research purpose); other hedging devices shown in Table 1 – that is, neither verbal hedging involving main verbs and nor non-verbal hedging devices -- were included in the analysis. For example, whether the use of the reporting verb *claimed* or the use of the adverb *often*

should be considered inappropriate in the context was not examined because of constraints on time and on manpower available in this small-scale research study. It takes a great deal of time to examine the appropriateness of hedges using contextual clues. In addition, the difficulty in the identification of hedges had also been raised by Mauranen (1997). She pointed out the crucial role textual context plays in the process of identifying hedges: "expressions which are typically used as hedges, have also other uses, and their potential for acting as hedges is only realized in some contexts, in interaction with other linguistic features" (p.119). Perhaps, a comprehensive analysis of all hedging devices could constitute an area for future research.

As a consequence of the third limitation that only modal verbs were judged in terms of the appropriateness in the context, three possibilities remained unexplored:

First, it is not certain whether other types of hedges used by the authors were appropriate.

Second, even regarding a modal verb appearing in an essay, whether the use of the modal is appropriate is merely speculative. For example, one writer used "will" in the structure "Terminally ill patients will die suffering pain endlessly"; it was possible that s/he was very certain about the future based on the experience of his/her family member or on the anecdotes reported in the news, so s/he used "will" purposefully. However, the present researcher took the use of "will" in that example as inappropriate because no evidence supporting the claim was available. This limitation seems to find support in Mauranen's (1997) study. Each of the revisers in her study commented "hedging is above all a matter of the writer's choice. It is up to the writer to decide the level of certainly he or she believes in appropriate" (p.124).

Third, the subjects might not know the meaning of the hedges they used. Lewin (2005) found that the choices of hedges made by the authors in her study did not coincide with definitions that were previously reported in the literature. Further, she found that the authors did not regard politeness as constituting the primary reason for using hedges. Because of possible uncertainty about the meaning of hedges among EFL learners, future researchers might wish to develop some measures to ascertain the intent of student writers when they use particular hedges. Requiring participants to write a reflective piece of writing explaining

his/her use of hedges might serve to ascertain the subjects' meanings. A less demanding task might be to construct a list of typical hedges (extracted from a random sample of texts) and to ask subjects briefly to define the intent of the examples. For example, "*The party was somewhat disrupted by the early/unexpected* (*somewhat*: adverb; intent: limiting effect).

9. CONCLUSIONS

There were no significant differences across the experimental and the control groups in the types of hedges and in the total number of hedging errors used in their essays, although a significantly greater number of hedges did appear in the essays written by the former. Both groups of subjects largely used *may* to mitigate tone; in addition, they used *will* copiously, seemingly unaware of the absolute certainty this modal denotes. On the contrary, the use of nouns to show possibility was relatively rare in the essays written by both groups of subjects. Concerning the types of hedging errors, the excessive use of the simple present tense and the use of "will" comprised the most common hedging errors. Attaching *would* and *could* to an item that cannot/should not be hedged constituted the third most common type of error. The conditional use of *would* and the use of *could* to provide options appeared to confuse most students.

While the findings should not be generalized beyond this small-scale study, the findings seem to suggest that, in the short term, the teaching instructions and related teaching activities provided in the course EAP I have been effective largely in merely raising the awareness of the native Cantonese-speaking EFL students to use hedges in academic writing. More advanced linguistic abilities, such as being able to use various types of hedges appropriately for achieving various rhetorical purposes, were not noticed in the essays written at middle of the one-year course. It follows that students possessing a low level of English proficiency will probably need to be significantly exposed to hedges used in contexts, which are both understandable and meaningful to the learners, to facilitate the satisfactory learning of the uses of hedges at a deeper level. Future research might be able to address what to teach, how to teach, and how much instructional time might be required to produce desirable learning effects for such perhaps more clearly defined categories of students.

To summarize, this report can be perceived as an entry into an area that has not been extensively explored. In the final analysis, this report can be perceived only as an entry-level speculation. Hedging is a major function in English text, oral and written, but it has been only tentatively explored. Part of the problem is the absence of useful definitions of the structures of hedging. A more serious problem arises from the absence of a minimum proficiency level for entry into a pool of subjects who might actually benefit from instruction. In short, this report can only be considered as opening the opportunity for serious investigation. In the present instance, the information gathered is not sufficiently rooted to be of much use other than as a means to urge further, better developed, more clearly designed, and more clearly defined objectives. One can only hope that the spread of this preliminary data impels other researchers to design and conduct research.

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