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# GRADUATE STUDENTS' USE OF HEDGING DEVICES

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**ABSTRACT**

Hedging, or the mitigation of claims, is often regarded as a significant rhetorical strategy in academic writing. Writers' inability to make claims at an appropriate level may result in a failure to be accepted in the academic discourse community. The current study compiled a corpus of student writing and investigated graduate student writers' hedging behavior, with a specific focus on epistemic modality markers. A comparison of graduate student and expert writers' hedging practices shows that students use a greater number of hedging devices than expert writers. In addition, they rely on a limited range of epistemic items to hedge their writing, while epistemic nouns are noticeably under-used. In terms of epistemic commitment, these graduate student writers use more certainty than tentative markers. The results may imply a need for awareness raising among graduate students about hedging functions in academic writing.

Key words: academic writing, epistemic modality, graduate student writing, hedging

## INTRODUCTION

Hedging, or the mitigation of claims, is often regarded as a significant rhetorical strategy in academic writing (Hyland, 1998; Salager-Meyer, 1994; Vold, 2006). The term hedging was introduced by Lakoff (1972, cited in Hyland, 1996a) to describe "words whose job it is to make things more or less fuzzy" (p. 477). Subsequent research has since explored the concept and sought to understand the functions it serves in academic writing. On the other hand, English for Academic Purposes (EAP) researchers have noticed the complicated nature of hedging and L2 learners' difficulties with making claims at an

appropriate level (Hyland, 1996a; Hyland & Milton, 1997). They have also called for the inclusion of hedging instruction in EAP programs (Hyland, 1994; Skelton, 1988). Notwithstanding this observation, little is known about how students, in particular new graduate students, use hedging devices in their writing. This study therefore examined the use of hedging in a corpus of graduate student papers, with a specific focus on epistemic modality markers. To shed more light on the data, the study also compared findings from the student corpus with those reported in the published literature.

#### Functions of Hedging in Academic Writing

In the everyday usage of the word, hedging is defined as an attempt to "avoid answering a question or committing [oneself] to a particular action or decision" (Collins, 1995, p. 784). Similarly, in academic writing the most frequently cited use of hedging is to indicate the author's lack of commitment to the proposition reported in writing. However, an increasingly large body of research conducted over the years has revealed the complicated nature of hedging use in academic writing. Using Brown and Levinson's (1987) theoretical framework, Myers (1989) explains hedging as a negative politeness strategy. He argues that when making a claim, scientists are invariably imposing one's opinion on others. To avoid this face-threatening act, scientists need to present the claim as being "provisional, pending acceptance in the literature, acceptance by the community" (p. 12). Therefore, hedging may reflect more a relation between the writer and the readers than the degree of probability of a statement.

While Myers (1989) emphasizes the interpersonal aspect of hedging behavior, other researchers identify a range of functions served by this linguistic resource. Vold (2006) distinguishes between two types of functions: real and strategic hedges. The former refers to linguistic devices used to convey real uncertainty, particularly when "the nature of the research findings does not allow the author to make strong claims or draw clear conclusions" (p. 81). On the other hand, strategic hedges are employed in a context when writers anticipate potential criticism or when they wish to tone down claims and to reduce the risk of being challenged.

Varttala (1999) differentiates between the textual and the interpersonal functions of hedging. Textual hedges are normally utilized when "exact references or precise numeric expression is unobtainable or

unnecessary in view of the needs of the audience" (p. 191). Another context to employ textual hedges is when authors wish to indicate that the explanations advanced should not be taken as the only possible interpretation. While recognizing the negative politeness aspect of hedges, Varttala, in light of his findings from a study of popular scientific texts, identifies a further dimension in interpersonal hedges: hedges as expressions of positive politeness. He contends that writers of popular scientific texts seek to "enhance the readership's self-image" (p. 193) by using hedging, a form of expressions normally associated with specialist-to-specialist, rather than specialist-to-layman communication as in the case of popular scientific articles. The readers feel respected and their positive face is consequently satisfied.

While Vold (2006) and Varttala (1999) make a binary distinction of various uses of hedging, Hyland (1996a) enumerates three functions of hedging in science:

1. Hedges provide means of "stating uncertain scientific claims" and allow writers to express propositions with greater precision, as in "*X* may cause *Y*";
2. Hedges allow writers to speculate and, at the same time, to avoid direct personal responsibilities for their statements that may be proved wrong later;
3. Hedges help writers develop a relationship with the reader, and show deference and respect for colleagues. (pp. 478-479)

If we compare the three researchers' theories of hedging functions, we can see that they cover roughly the same range of purposes, though possibly with different emphasis. For example, Vold's (2006) real hedges are similar to those dealing with Hyland's "uncertain scientific claims," but Hyland highlights the advantage of "precision" that can be achieved in such hedging behavior. Like Hyland, Varttala (1999) includes a positive politeness dimension to his interpersonal hedges, but seems to restrict this aspect to popular scientific texts, while Hyland does not appear to distinguish between scholarly and popular scientific writing.

While acknowledging these different uses of hedging, we also need to bear in mind that there are often overlaps between these functions when any particular instance of hedging is employed (Hyland, 1996b). Furthermore, Lewin's (2005) study of authors' and readers' conceptions of hedging alerts us to the possibility of readers recognizing as instances

of hedging where authors do not intend to "tone down" their claims. Lewin also found that when authors express uncertainty, they are not necessarily motivated by politeness, as commonly perceived in the hedging literature. Furthermore, Lewin's authors confirm an interest in being precise, rather than avoiding personal responsibility for their statements. These findings have demonstrated the multifaceted and elusive nature of the hedging behavior.

An area of controversy in the research of hedges is taxonomies of hedging devices. Hedging is most frequently expressed by lexical verbs (e.g., *appear*, *believe*), epistemic adverbs (e.g., *probably*, *apparently*), epistemic adjectives (e.g., *likely*, *possible*) and modal verbs (e.g., *may*, *should*) (Hyland, 1996b). Apart from these lexical devices, hedging can also be realized by introductory phrases (e.g., *to my knowledge*) and *if* clauses (Salager-Meyer, 1997). Furthermore, writers can qualify their commitment through the use of discourse-based strategies, such as reference to experimental weaknesses, limitations of the model, theory or method used, and admission to a lack of knowledge (Hyland, 1998, Lewin, 2005). In fact, Hyland (1994) suggests that hedging can take such "unpredictable forms" (p. 243) that an exhaustive taxonomy of hedging devices may not be attainable. Still, epistemic modality markers have been recognized as the most conspicuous hedging phenomenon in scientific writing (Hyland, 1998; Vold, 2006). In Hyland's 75,000-word corpus study of journal articles, for example, 85% of the hedging cases were realized by epistemic lexical verbs, adjectives, adverbs, nouns and modals (Hyland, 1998). In view of this, the discussion shall now turn to epistemic modality.

#### Epistemic Modality

Epistemic modality is primarily concerned with the degree of commitment evidenced in a piece of writing (McEnery & Kifle, 2002). Apart from modal verbs, which are most frequently associated with an epistemic function, different parts of speech, including lexical verbs, adverbs, adjectives and nouns, have also been identified as linguistic devices that can convey a writer's tentativeness or attitude toward the stated proposition (Quirk et al., 1985). Vold (2006) defines epistemic modality markers as "linguistic expressions that qualify the truth value of a propositional content" (p. 65). Thus, these expressions indicate to the reader the level of trust one can place on the proposition.

The indication of the truth value can range from total uncertainty to

absolute certainty (Le Querler, 1996, cited in Vold, 2006). The following examples shall illustrate this:

a) Earthquakes *may* cause tsunami.
b) Earthquakes *probably* cause tsunami
c) We *know* that earthquakes cause tsunami.

In these examples the same proposition is marked by different lexical devices in (a) as a possibility, in (b) a probability, and in (c) a certainty. Although studies like Vold (2006) focus only on the uncertainty categories (possibility and probability), the current research shall take a broader view and consider realizations of both certainty and uncertainty ends.

**L2 Writers' Difficulty with Hedging**

The ability to hedge appropriately is generally regarded as a complicated task to native and non-native writers alike (Mauranen, 1997). However, non-native writers have been observed to encounter considerable difficulty with appropriate levels of directness and concession in academic writing (Bloor & Bloor, 1991). In particular, this problem is acutely felt in the research world because researchers' inability to make claims for their research "with the appropriate amount of force" (Flowerdew, 1999, p. 256) can affect the chance of publication, thereby obstructing their academic career. Hyland (1998) observes that L2 writers' difficulty with hedging devices can be caused by several reasons. For example, hedging devices can simultaneously convey several meanings and epistemic meanings can be realized in a number of ways. Moreover, most EAP textbooks do not seem to provide adequate information in this aspect. In fact, they sometimes advise writers to "avoid hedging altogether" (p. 8).

L2 writers' difficulty with hedging devices has been further confirmed by corpus-based studies such as Hinkel (1997) and Hyland and Milton (1997). Hyland and Milton (1997), for example, compared the expression of doubt and certainty in essays written by L2 high school graduates and native speakers of similar age and educational level. The analysis showed that L2 learners seemed to depend more on modal verbs, and used a more limited range of epistemic devices, with the ten most frequent epistemic markers accounting for 75% of the total. In addition, L2 essays that scored a higher grade tended to use more hedging devices

and displayed a greater similarity to L1 usage. In other words, non-native writers' ability to use epistemic devices seemed to relate positively to their proficiency level.

A number of studies have been conducted on Taiwanese writers' use of hedging devices. Chen (2005) compared epistemic devices used in two applied linguistics corpora. One (referred to as TQ corpus in Chen's study) consisted of articles written by academics labeled as "professional authors" and published in *TESOL Quarterly*, an internationally known journal in the field of language teaching. The other corpus (referred to as ETA corpus) collected research papers written by Taiwanese linguists (presumably non-native writers) and published in two conference proceedings. The analysis showed that, overall, professional authors used more epistemic devices than Taiwanese linguists, although in many of the aspects examined, the latter's use of epistemic markers was similar to that of the former. On the other hand, Chen also found that Taiwanese scholars used more assertive than tentative markers. In other words, they seemed to hedge less than professional authors.

Lau (2001) compiled a corpus of journal articles written by Taiwanese PhD students and investigated their hedging behavior. Results indicated that these students sometimes used epistemic devices to assert, rather than to hedge their claims. In some cases they failed to produce "modally harmonic" sentences (Lyons, 1977, cited in Hyland & Milton, 1997) when they combined several epistemic devices together in the same clause. For example, more tentative *suggest* and more assertive *should* might occur together in the same sentence, sending out conflicting and therefore confusing messages.

The above discussion has shown the importance of an appropriate use of hedging in academic writing. It has also revealed that L2 writers, even those who are relatively experienced in research writing, often encounter problems in this area. Nevertheless, there seems to be little research addressing new graduate students' hedging behavior, although one may hypothesize that the concept of hedging may be even more elusive for them. In this study a small corpus of research texts written by graduate students was thus compiled and analyzed to explore their hedging behavior.

## CORPUS AND METHODOLOGY

The corpus compiled for the current study consists of 18 term papers

written by first-year graduate students enrolled in an in-service TESOL master's program at a national university in southern Taiwan. These graduate students were certified teachers in primary or secondary schools. About two-thirds of them majored in English in college, while the others graduated with a degree in education or other humanities fields. These students had limited experience with research writing. At the time of the study, they were taking a one-semester required course, "Research Methods," which aimed to introduce students to the basics of academic research in the field of language learning and teaching. In addition to introduction of various research methods and techniques, a considerable portion of the course was devoted to developing students' research writing skills. A textbook, *Academic Writing for Graduate Students* (Swales & Feak, 1994), was assigned for reading. Chapters and tasks from the book, including a section on hedging, were selected for class discussion to raise students' awareness of research writing conventions. At the end of the course, the students were required to submit for assessment a research paper based on a small-scale study of their own research design. These papers generally followed the IMRD (Introduction-Methods-Results-Discussion) organizational pattern introduced in Swales and Feak (1994). Details of the student corpus are provided in Table 1.

Table 1. Details of the Student Corpus

| **No. of texts** | **Length of texts** (in words) | **Average length of texts** (in words) | **Total size of corpus** (in words) |
|---|---|---|---|
| 18 | 2,334-4,229 | 3,119 | 56,138 |

As suggested previously, hedging can assume numerous forms at both linguistic and discourse levels. The present study focuses primarily on epistemic modality markers, which have been recognized as the most important and most frequently used hedging devices (Hyland, 1996a; Varttala, 1999; Vold, 2006). A list of 75 frequent epistemic items in academic writing was prepared, based on Hyland and Milton (1997). Instances of these epistemic items were captured with *WordSmith tools 4.0*, a concordance program developed by Scott (1996). The results of the concordance search were then subjected to qualitative examination to eliminate instances where lexical items did not act as epistemic markers. A note has to be added here that difficulties occasionally surfaced when I

attempted to determine if captured cases served epistemic functions, as modal auxiliaries were polysemous, with the epistemic sense being only one of the different meanings conveyed by the particular item (Hyland, 1998; Vold, 2006). At times, students' less than perfect command of the language further complicated the judgment process. Nevertheless, these problematic cases were resolved by reanalysis and a careful reading of the linguistic contexts. Finally, the total number of hedging devices was adjusted from an original 1,242 to 841.

In order to better understand the frequency and range of hedges used by these graduate students, comparisons were made between the present corpus and the findings in Hyland and Milton (1997) and Chen (2005). Both the studies and the current research investigated the same set of frequent epistemic items, lending further validity to this comparison. Furthermore, Hyland and Milton focused on native and non-native high school graduates, while Chen focused on international and Taiwanese academics. My research on non-native graduate students may therefore serve to fill the wide gap left by the two previous studies.

## RESULTS AND DISSCUSSION

### Overall Frequency of Hedging Devices

Table 2 shows a comparison of hedging devices used in the present student corpus, Hyland and Milton's (1997) two corpora, and Chen's (2005) two corpora. A total of 841 lexical devices used to express epistemic meanings were identified in the student corpus, at an average of 14.98 per 1,000 words, a much larger number than Chen's Taiwanese and international academics' use frequency (10.87 and 12.25 respectively). An explanation for this interesting finding is that academics do not rely solely on epistemic modality markers when hedging. As shown in Hyland (1998), hedging can also be expressed with means other than lexical hedges. In fact, the discourse-based hedging strategies found in Hyland's study (1998)—"reference to limiting experimental conditions," "reference to a model, theory or methodology," and "admission to a lack of knowledge," accounted for as much as 15% of all hedges in his journal article corpus. The novice researchers in my study, in contrast, may not have mastered these discourse-based hedging strategies, and therefore tended to rely on lexical devices when hedging their writing.

Table 2. Comparison of Hedging Device Use Frequency

| | **Graduate student corpus** | **ETA** (Chen, 2005) | **TQ** (Chen, 2005) | **L2 school graduates** (Hyland & Milton, 1997) | **L1 school graduates** (Hyland & Milton, 1997) |
|---|---|---|---|---|---|
| Tokens per 1,000 words | 14.98 | 10.87 | 12.25 | 18.3 | 18.2 |

Another possible explanation is that these graduate students may have deliberately assumed an even more tentative tone than academics when advancing their claims. Considering that most of these students were making their first attempt at research writing, they may have chosen to hedge and qualify their claims due to a lack of confidence in the soundness of their research design or in the interpretation of results.

While the graduate students in my corpus employed more lexical hedges than both Taiwanese and international academics, a comparison with Hyland and Milton's corpora (1997) of L1 and L2 school graduates reveals that the latter two corpora contained an even larger number of hedging devices (18.2 and 18.3 respectively) than graduate research texts in my corpus. This variation may in part be attributed to the nature of the writing tasks. Hyland and Milton's (1997) corpora consisted of timed examination writings of high school students on expository and argumentative topics. These school essays may not be readily comparable with the current corpus of research texts aiming to present and interpret empirical study results.

Furthermore, Hyland and Milton (1997) found that their high school graduates tended to mix informal spoken and formal written forms and to "transfer conversational uses to academic genres" (p. 192), as demonstrated in a regular occurrence of verbs such as *think* and *know* (12.7 and 4.5[1] per 10,000 words respectively) in their corpora. On the other hand, the graduate students' use of the two epistemic verbs in my corpus is much more restricted (0.5 and 3.2 respectively). This difference further confirms that my student corpus and the two corpora in Hyland and Milton (1997) may not be directly comparable. For this reason, the following discussion will not consider Hyland and Milton's high school corpora.

#### Grammatical Distribution of Hedging Devices

The analysis also shows that these graduate students used 61 out of

75 epistemic devices investigated in the study. A comparison of the ten most frequent epistemic markers in these three corpora reveals a marked difference between these graduate students' and the academics' hedging behavior. As shown in Table 3, in both Chen's corpora, an identical set of four frequent modal verbs was used by Taiwanese and international academics (though in a different ranking order), while in my student corpus as many as six modal verbs were found in the frequent list. This finding indicates that these graduate writers relied heavily on a single part of speech, i.e., modal auxiliary, to express various levels of commitment to stated propositions. As modal auxiliaries are most frequently associated with epistemic meaning, the fact that six modal auxiliaries ranked high in the top ten list could suggest that these students were relatively limited in their linguistic repertoire.

Table 3. The Ten Most Frequent Epistemic Devices in Three Corpora

| | **Student corpus** | | **ETA (Chen, 2005)** | | **TQ (Chen, 2005)** | |
|---|---|---|---|---|---|---|
| Rank | Items | Frequency per 10,000 words | Items | Frequency per 10,000 words | Items | Frequency per 10,000 words |
| 1 | **may** | 13.0 | **may** | 13.68 | **may** | 25.5 |
| 2 | **should** | 11.8 | **should** | 9.8 | likely | 8 |
| 3 | seem | 11.0 | **will** | 9.7 | **will** | 7.07 |
| 4 | **will** | 9.6 | **might** | 8.25 | often | 6.33 |
| 5 | **could** | 9.4 | frequently | 6.5 | **might** | 6.05 |
| 6 | **might** | 8.4 | possible | 4.66 | **should** | 4.93 |
| 7 | **would** | 7.3 | often | 4.46 | possible | 4.56 |
| 8 | indicate | 5.5 | always | 3.4 | evidence | 4.28 |
| 9 | suggest | 5.0 | generally | 3.01 | indicate | 3.72 |
| 10 | certain | 4.8 | likely | 3.01 | clearly | 3.44 |

*Note*. Modal verbs are shown in bold.

Among the six modal auxiliaries occurring frequently in the student corpus, four of them (*may*, *should*, *will*, *might*) were also used recurrently by academics in Chen's data—Taiwanese and international alike. Nevertheless, the students' preference for another two modals, *could* and *would*, merits further exploration. A close examination into the linguistic contexts of *could* and *would* reveals that about half of the sentences with the two epistemic auxiliaries occur in the discussion sections of the student texts, particularly when limitations of the study

are discussed. For example,

(1) The difficulties of the quiz papers *could* be different, and the differences might lead to the different results of the quizzes.[2] (S3)
(2) Understanding the systems *would* be helpful to know more about how process of writing learning be evaluated. (S8)

In these two examples, drawn from the final sections where limitations are discussed, students employed *could* and *would* respectively, and expressed a sense of speculation in (2) and tentativeness in (3).

Apart from modal verbs, these graduate students very frequently used three lexical verbs (*indicate*, *suggest*, *seem*) among the epistemic markers, while only one lexical verb (*indicate*) appeared in Chen's TQ frequent list. In total, 9 out of 10 students' frequent epistemic devices fall into two grammatical categories: modal verbs and lexical verbs. Although this finding may suggest that the students relied almost exclusively on modal verbs and lexical verbs, a further analysis (shown in Table 4) reveals that the total number of epistemic adverbs in the student corpus actually exceed that of epistemic lexical verbs (39.9 vs. 37.4 per 10,000 words), though the difference is small. Table 4 also shows that students generally used more modal verbs and lexical verbs than academics in Chen (2005), but the same pattern is not followed by adverbs and adjectives, whose use frequencies among the three corpora is similar. On the other hand, an under-use of nouns is found in the student corpus, echoing Chen's observation (2005) of Taiwanese academics' corpus.

Table 4. Grammatical Distribution of Hedging Devices in Three Corpora

| | **Student corpus** | | **ETA (Chen, 2005)** | | **TQ (Chen, 2005)** | |
|---|---|---|---|---|---|---|
| Part-of-speech | Raw no. | Frequency (per 10,000 words) | Raw no. | Frequency (per 10,000 words) | Raw no. | Frequency (per 10,000 words) |
| Modal verbs | 336 | 59.9 | 484 | 47 | 520 | 48.39 |
| Adverbs | 224 | 39.9 | 368 | 35.7 | 425 | 39.55 |
| Lexical verbs | 210 | 37.4 | 146 | 14.16 | 187 | 17.4 |
| Adjectives | 58 | 10.3 | 195 | 10.19 | 119 | 11.07 |
| Nouns | 13 | 2.3 | 18 | 1.75 | 65 | 6.05 |
| **Total** | 841 | 149.8 | 1,121 | 108.8 | 1,316 | 122.46 |

**Categories of Epistemic Commitment**

As discussed in the literature review section, epistemic devices can mark the truth value of a proposition and the indication of the truth value can range from total uncertainty to absolute certainty. In order to understand how students used these epistemic modality markers and to compare the use among the three corpora, epistemic categories of certainty, probability, and possibility were established, following Hyland and Milton (1997) and Chen (2005). Table 5 displays the frequency distribution of epistemic devices in the three categories of commitment.

Table 5. Frequency Distribution of the Degrees of Epistemic Meaning in Three Corpora

| | **Student corpus** | | **ETA (Chen, 2005)** | | **TQ (Chen, 2005)** | |
|---|---|---|---|---|---|---|
| Categorical Meaning | Raw no. | Frequency (per 10,000 words) | Raw no. | Frequency (per 10,000 words) | Raw no. | Frequency (per 10,000 words) |
| Certainty | 351 | 62.5 | 389 | 37.7 | 420 | 39.1 |
| Probability | 158 | 28.1 | 179 | 17.4 | 268 | 24.9 |
| Possibility | 201 | 35.8 | 300 | 29.1 | 433 | 40.3 |

As can be seen in Table 5, a rather marked difference between Chen's two corpora lies in the possibility category. It appeared that the professional authors in her study used more tentative devices than Taiwanese applied linguists (40.3 vs. 29.1 per 10,000 words). However, an even more conspicuous difference among the three corpora is a far more prevalent use of certainty devices by the L2 graduate students. They employed more assertive devices than either of Chen's two groups (62.5 vs. 37.7; 62.5 vs. 39.1 per 10,000 words). In fact, students' use of modality markers denoting certainty also outnumbers that of probability and possibility devices in the same corpus (62.5 vs. 28.1; 62.5 vs. 35.8 per 10,000 words). This finding agrees with Hyland and Milton (1997), which concludes that non-native students, particularly those with poorer language proficiency, tend to make stronger statements in their writing.

A close examination of the students' use of certainty markers reveals that *should* and *will* (66 and 54 instances respectively) top the certainty category. These two modal auxiliaries are generally considered to be more assertive than tentative, as in (3) and (4):

(3) According to the result of this study, if teachers can slower down their speech rate, students *should* be able to comprehend better. (S3)
(4) These kinds of questions *will* doubtlessly require attention. (S11)

The earlier discussion has pointed out that these students, as a whole, employed more epistemic devices than more experienced writers. This may partly explain why the students' use of epistemic markers in all three categories outnumbers that in Chen's corpora, except in one particular area. That is, these student writers adopted fewer *possibility* markers than professional writers in Chen's study (35.8 vs. 40.3 per 10,000 words).

Next, this study examines the students' use of usuality items in academic writing. The usuality continuum can run from strong (*always*, *never*) to weak (*sometimes*). Table 6 shows the most frequently used usuality items in the three corpora.

Table 6. Most Frequent Items in the Usuality Category in Three Corpora

| **Student corpus** | | | **ETA (Chen, 2005)** | | | **TQ (Chen, 2005)** | | |
|---|---|---|---|---|---|---|---|---|
| Item/Rank | Raw no. | F. per 10,000 words | Item/Rank | Raw no. | F. per 10,000 words) | Item/Rank | Raw no. | F. per 10,000 words) |
| *1. often* | 21 | 3.7 | *1. frequently* | 67 | 6.5 | *1. often* | 68 | 6.33 |
| *2. usually* | 17 | 2.3 | *2. often* | 46 | 4.46 | *2. frequently* | 26 | 2.42 |
| *3. frequently* | 13 | 2.1 | *3. always* | 35 | 3.4 | *3. sometimes* | 24 | 2.23 |

As shown in Table 6, overall, these student writers employed fewer usuality markers than more experienced writers. In addition, they used more indeterminate markers like *often* and *usually*, than definite expressions such as *always* and *never*. In fact, *always* occurs 12 times in this student corpus, a number equal with another two usuality items on the weaker end, *generally* and *sometimes*. This indicates that students generally refrained from using absolute terms such as *always* and *never* when making remarks about frequency. Then, a further examination into the linguistic contexts of *always* yields an interesting finding. It seems that the use of *always* in this corpus is often related to a statement of the students' observation of the immediate teaching contexts, i.e., English teaching in Taiwan. For example,

(5) Due to the test-oriented instruction, students in Taiwan's junior high schools are *always* taught a single skill in classes. (S8)
(6) Oral performance, as one of the productive skills, has *always* been a tremendous challenge for a great number of EFL learners in Taiwan. (S15)

Thus, students' use of *always* may be interpreted as an assertion of their insider knowledge of the teaching contexts. It should be reminded that the papers included in this corpus were all written by graduate students in an in-service program. All of them were experienced teachers at primary and secondary school levels, most with over five years of teaching experience. It is thus speculated that these graduate students might feel qualified and confident to make assertive remarks signaled by a definite marker, *always*, when the chance surfaced for them to make comments on the teaching contexts that they felt familiar with.

## CONCLUSION

This study has investigated L2 graduate students' use of hedging devices and compared it with the findings reported in the hedging literature, in particular Hyland and Milton (1997) and Chen (2005). The results of the study have revealed both similarities and differences among the corpora. The graduate students in my study used, overall, a greater number of hedging devices than academics, possibly due to a lack of confidence in their argument. Their dependence on modal auxiliaries is also more apparent. It has also been found that these graduate writers used more modality markers at the certainty end, a feature already reported in studies on non-native writing (Chen, 2005; Hyland & Milton, 1997; Lau, 2001). However, students did not seem to overuse definite markers on the usuality scale. Many instances of *always*, a more assertive marker to denote frequency, were found in statements where students commented on the local teaching contexts, suggesting that students may sometimes intend to signal, rather than to avoid, their commitment to the stated propositions through the use of epistemic devices.

As the students in the corpus were relatively inexperienced in writing for research purposes, it may not be surprising to find that their use of hedging devices exhibits a divergence from academics'

manipulation of this linguistic element. However, as has been argued in the literature, writing is a form of interaction between the writer and the readers (Myers, 1989) and a failure to adopt an appropriate stance can potentially lead to ineffective communication. Yet, it is generally believed that the skill of being appropriately vague can and should be taught to students (Hinkel, 1997; Hyland, 1996a, 1998; Wishnoff, 2000). In view of this, pedagogical tasks and exercises are suggested as follows. To begin with, tasks can be given to sensitize students to this linguistic feature in academic writing (Hyland, 1996a, 1998; Myers, 1989). Students can be made to compare texts with and without hedging items so as to alert them to the significance of these devices.

As found in the current study, students may tend to use more assertive than tentative markers. To help students indicate an appropriate truth value to a proposition, instructors can design tasks and invite students to compare and determine the amount of force conveyed by modality markers in different epistemic categories: certainty, probability and possibility. This is again an awareness raising task that intends to instill in students an appreciation for the complexity of epistemic meanings that vary among markers in different contexts.

Apart from recognizing hedging devices in academic writing, students should also be encouraged to apply this newly acquired knowledge to their own writing. Since epistemic lexical devices have been found to be most familiar to student writers, their incorporation into instruction will prove to be a more profitable undertaking and can provide students with a basic tool, with which they can start to express the subtlety of research claims. Communicative writing tasks with a clear purpose, enhanced by instructor guidance, can further help students develop the competence to evaluate the socio-rhetorical contexts and to employ hedging devices accordingly (Hyland, 1996a).

As this is an exploratory study focusing on graduate students' use of epistemic lexical devices, more research is certainly needed in order to understand if and how students employ other means to express personal attitudes, commitment and detachment. An ethnographic study may also shed light on students' belief of the contributions of various hedging strategies in academic writing. This knowledge may further our understanding of student hedging behavior and aid the effectiveness of instructor guidance on this linguistic feature.

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## NOTES

1. These numbers were calculated by the researcher using the raw numbers of occurrences and the size of the L2 corpus provided in Hyland and Milton (1997).
2. All the example sentences from student papers remain unedited.

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