

Teaching academic reading: some initial findings from a session on hedging

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ABSTRACT

In academic English, hedging devices mark the writer's attitude(s) to both proposition (i.e. content) and audience and are thus an important and pervasive feature in academic discourse. However, second language learners seem to have some difficulty assessing qualification and certainty in the writer's commitment to a claim and sometimes fail to notice hedges (Hyland 2000b). The present paper presents data from a session on hedging, part of an academic reading course in an Agricultural college in Portugal. Conscious-raising activities were designed to encourage learners to be aware of hedges as ways of modulating propositional content. It is suggested that becoming familiar with hedging as a writing convention of academic English may possibly facilitate reading of academic texts.

1 INTRODUCTION

The ability to read academic English is becoming more important for researchers, lecturers and students at tertiary education, since after World War II English increasingly became the lingua franca in science and technology, that is, the international language of research (e.g. Graddol 1997). Those who do not possess this skill are seriously hindered in gaining access to most information and, consequently, in progressing in their field of study and/or research. Furthermore, researchers who do not publish their research in English may have their work ignored by the international community (Crystal 1997) because of "the predominance of English as the language of published academic discourse" (Hyland 1998a: 246). In higher education, both lecturers and students should make extensive use of academic texts in English if they want to compete not only with their native English speaking counterparts but also with all those who are proficient in English as a second or foreign language. In other words, they should be able to read research published in English by the discourse community¹ of their particular research area. In fact, reading academic texts (such as textbooks and research articles) seems to be the greatest requirement for students in most higher education situations where English is taught and/or used as a foreign language (e.g. Jordan 1997). Obviously, agriculture is no exception.

¹ The term "discourse community" is used in the sense Swales (1990: 24-27) defines it.

This situation prompted me to consider how to develop the reading ability in English of Portuguese students and lecturers of Agriculture. This interest arises from the present situation at my work place – Escola Superior Agrária do Instituto Politécnico de Castelo Branco, Portugal (the College of Agriculture of the Polytechnic Institute of Castelo Branco, Portugal). With the specific situation and constraints of the students and lecturers at the college in mind, a reading course was designed to meet participants' needs² which attempted to raise awareness both of English language discourse conventions (i.e. at the level of lexico-grammatical features and text-patterning) and the rhetorical structure of English academic texts (i.e. structural interpretation of the text-genre). Thus, the course combined tasks using both top-down (e.g. awareness of the rhetorical structure of journal articles or identifying topic sentences) and bottom-up (e.g. attention paid to linguistic cues provided by the text) processing. In other words, both the "macropropositional" and the "micropropositional" levels of the text were taken into account (Urquart and Weir 1998). In addition, the course tried, to a certain extent, to raise awareness of the relationship between text form (i.e. language conventions of different academic genres), writer's purpose(s), audience and social context. It seems that the awareness of contextual sociocultural schemata such as context for different academic genres or reader/writer roles, are also considered fundamental for successful reading (Johns 1997).

Another reason for paying attention to text linguistic cues or devices is that the use of a metalanguage in the analysis of the language itself may facilitate access to the propositional content and construct meaning. Finally, science students, in my teaching experience, tend to prefer an approach to textual analysis that draws upon concrete points taught, if possible, in an explicit, rational and objective way.

In the present paper, I will focus solely on the session which dealt with hedging devices which are a common strategy for mitigating and modulating academic discourse. An academic writer uses hedges³ to express underlying attitudes and strength of commitment and/or claim which means that hedges can be used to avoid opposition to a proposition. This opposition may be both to the content itself or to the readers' negatability of the claim(s) proposed (Hyland 1998a, 1996a). Lack of awareness of the use of expressions of tentativeness and the need to mediate claims in academic texts may possibly hinder or even distort comprehension. It is also important to raise awareness of the fact that "one function of hedges is to contribute to a relationship by alerting readers to the writer's perspective towards both propositional information and to the readers themselves" (Hyland 1998a: 5). In short, hedges are used to express the writer's attitude(s) to both proposition (i.e. content) and readers (i.e. peers).

Firstly, I will give a brief overview of the literature on hedging in academic writing and possible differences between English and Portuguese. Next, I will describe

² A target situation analysis (i.e. the students and lecturers' needs at the end of the reading course) was carried out by means of two questionnaires completed by both lecturers and 3rd and 4th students in December 1999 and January 2000.

³ The term "hedge" is used as defined by Hyland (2000a: 87-88): "Hedges ?...? like *possible*, *might* and *perhaps* ?...? represent explicit qualification of the writer's commitment. This may be to show uncertainty, and indicate that information is presented as an opinion rather than accredited fact, or it may be to convey deference, modesty or respect for colleagues' views."

the participants and the methodology used on the reading course. Finally, I will discuss the results of the session on hedging.

2 HEDGING IN ACADEMIC WRITING

Hedging has received some attention in the literature as a feature of spoken discourse mostly in casual conversation (Hyland 1998a: 255) as a way of “qualifying categorical commitment and facilitating discussion” (Hyland 1996a: 433). In recent years research has also been concerned with the study of the use of hedging in different academic genres such as research articles (Hyland 1999a, 1998a, 1998b; Salager-Meyer 1994; Myers 1989; Skelton 1988a); scientific letters (Hyland 2000a chap. 5); medical case reports (Salager-Meyer 1994); textbooks (Hyland 2000a chap. 6; 1999b, 1994; Myers 1992) and book reviews (Hyland 2000a chap. 3). Studies also compare different academic genres written either by the same author (Curnick 2000) or by different authors (Varttala 1999).

Hyland (1998a chap. 8; 1994) has recently analysed the adequacy of a range ESP and EAP textbooks (a corpus of 22 textbooks) in providing students with information on hedging and argues that there is a neglect in covering this topic. Hyland (1998a: 230) comments: “Generally the presentation of hedges in published texts is poor, with information scattered, explanations inadequate, practice material limited, and alternatives to modal verbs omitted. This failure to adequately represent hedges therefore gives misleading information to students concerning both the importance of the concept and the frequency of different devices.”

Hedging appears to be an area which L2 students find problematic (Hyland 2000b, 1996b; Hyland and Milton 1997) and often a neglected area in teaching (Curnick 2000; Hyland 2000b; 1996b). Literature has also analysed how hedging could be used pedagogically for teaching academic writing (Hyland 1998a chap 8; 1996b; Skelton 1988b) and some studies refer to pedagogical implications from the research carried out (Hyland and Milton 1997; Hyland 1996b; 1996c; Salager-Meyer 1994; Skelton 1988a; Makaya and Bloor 1987). However, there is little attention to how it should be used in teaching academic reading and hedging is mainly referred to in connection to writing (Hyland 1998a chap 8). As hedging is seen as an important way of modulating the propositional content and expressing the writer-reader relationship it seems useful to raise learners’ awareness of its presence in academic texts.

In addition, two recent studies by Hyland (2000b) and Low (1996) suggest that hedges often seem to be unnoticed by both L2 and L1 readers respectively which Low has labelled the “Lexical Invisibility Hypothesis”⁴. Thus, learners often appear to be unaware both of hedges as a constitutive feature of scientific writing and of the functions they play in the interaction between writer, reader, context and language conventions of academic genres and discourse communities. It seems that hedges are a pervasive discursive resource in academic writing and they should therefore receive more attention in the teaching of English for academic purposes. Or as Hyland (2000b: 193) comments:

⁴ Low (1996) suggests that questionnaire respondents do not notice (i.e. do not respond to) intensifiers (i.e. boosters) and hedges in most survey questions. Low has labelled this phenomenon as the “Lexical Invisibility Hypothesis”.

“A clear awareness of the pragmatic impact of hedges ‘...’, and an ability to recognise them in texts, is crucial to the acquisition of a rhetorical competence in any discipline.”

3 POSSIBLE DIFFERENCES IN THE USE OF HEDGES IN ENGLISH AND PORTUGUESE

The use of English as the lingua franca in academic discourse and the consequent increase of published research by non-native speakers raises the issue of “whether the structures of scientific knowledge are invariant and, in particular, whether the discourse features of academic writing are universal or culture-specific” (Hyland 1998a: 219).

Before selecting the course topics I carried out a tentative contrastive textual analysis which compared texts using two different languages, English and Portuguese, as means of expression. A corpus of 16 journal articles, 8 in English and 8 in Portuguese⁵, were analysed out of a total of 30 journal articles selected by the librarian of the college. The reason for analysing articles from the Agriculture College library is two-fold. First, most articles in the sample had been ordered by lecturers and, are, therefore, relevant either for their own research or teaching (some possibly recommended to students). Second, they may be considered representative of the academic texts usually read by lecturers and possibly students. The reason for reducing the number of articles included in the corpus was an attempt to have a corpus in which there would be a certain similarity in firstly, rhetorical organisation (i.e. abstract, introduction, materials and methods, results and discussion), secondly, type of journals, and thirdly, article length. Moreover, English articles were selected from journals which are published in English-speaking countries or have an English title (i.e. the journals are probably published entirely in English). However, the sample still has several limitations. First, articles range widely in topic and relatively in type of journal, making it impossible to match Portuguese and English articles for comparison. Second, some articles were not very recent. Third, some of the authors of the English articles may not have been native speakers of English. Finally, as only a rough estimate of the text length was made, a small bias in comparison may have been introduced. In spite of these limitations an exploratory analysis was attempted. The aim of this analysis was to discover whether there are differences and/or similarities between language conventions in academic writing in both languages.

The conclusions from the contrastive analysis gave some insights into the selection of topics to cover in the course. This paper will discuss one of the linguistic features chosen: hedging. The results obtained indicate that hedging devices in English articles are almost double those in Portuguese articles, although this feature is also highly variable. This may suggest that there is a greater need to modulate discourse by being tentative, flexible and polite (i.e. hedging used as a negative politeness strategy) in English than in Portuguese. In other words, the structure of discourse of English articles may partly dictate the use of hedges. This may imply a more reader-oriented attitude too. In short, this analysis tentatively suggests that English tends to use more hedges than Portuguese. Moreover, although the journal article genre requires a relative uniformity, it

⁵ Due to lack of space the articles of the corpus will not be listed. A copy of the corpus references is available from the author if needed.

appears that language conventions can vary between writers with different cultural backgrounds.

4 THE STUDY

The present paper analyses only the data pertaining to one of the nine sessions (session 7) of the nine-week reading course⁶. This session, as mentioned above, focused on the use of hedging devices both as ways of modulating the propositional content that is being conveyed (content-oriented hedges) and of establishing a relationship with the readers (reader-oriented hedges). The latter is an attempt to gain the audience's acceptance/ratification of the claim thus avoiding its rebuttal (Hyland 1998a: 81-93). However, no attempt was made to classify hedges as content and or reader oriented, since only one session was allotted to the topic and often these functions overlap or are not easily identifiable. Thus, it is expected that by becoming familiar with hedging, as one relevant discourse convention in academic writing, reading of academic texts might be facilitated.

4.1 Subjects

The participants were 20 Portuguese students and 15 lecturers from the College of Agriculture of the Polytechnic Institute of Castelo Branco in Portugal. All but two students were in the final year of studies (5th year). The students belonged mainly to two courses: Forestry and Natural Resources Management. There was only one student of the Agrarian Sciences Course – Branch Animal Production. The lecturers belonged to different scientific areas ranging from mathematics and computer science to agronomy and veterinary medicine. The participants were divided into four groups: two groups of students (each with 10 students) and two groups of lecturers (one with 10 and another with 5 participants). This group division was solely based on timetable availability.

All the participants were volunteers which accounts for the wide range of proficiency levels among them. In this study, the construct proficiency in English as a foreign language was measured by test scores in a cloze test⁷.

The reason for having both lecturers and students was twofold. First both felt the need to read in English. In two questionnaires completed in December 1999/January 2000 (see footnote 2) both lecturers and students acknowledged that they read in English. 65% of the lecturers read textbooks while only 19.7% of the students did. As far as journal articles were concerned, the difference was even greater with 72.5% of the lecturers answering that they read English text regularly while only 15.2% of the students did so. Thus, overall lecturers tended to read not only more but also with less difficulty. In addition, the interest in attending a reading course was very positive. 30 out of the 40

⁶ The other topics covered were the following: journal articles and textbooks; reviews, previews, and action markers; connectors; discourse structuring words; decoding noun chains; nominal style; reporting verbs and thesis statements and topic sentences.

⁷ The complete testpack with the placement test in the form of a cloze test was kindly lent by the Edinburgh Project on Extensive Reading (E.P.E.R.), IALS, University of Edinburgh (1990, 1995) which gives reliability and validity to the results obtained.

lecturers, who completed the questionnaire, showed an interest and 93 students out of 275 who answered the questionnaire were also willing to attend the course. However, these numbers reduced greatly at the beginning of the course eleven months later. Second by having two different groups with different background knowledge and experience of academic reading an element of comparison could be introduced. It would be expected that lecturers would have less difficulty in reading due to their scientific background knowledge and reading habits and would probably show more improvement than students.

4.2 Data and Procedure

All the course sessions had a similar structure as follows: 1. Warm up: Activities A (20 min.); 2. Session (60 min.) consisting of three parts - Checking the answers to Activities A, the session handout, distributed and briefly commented on and Activities B; 3. Follow up: Activities C (20 min.) and 4. Short questionnaire (5 min.).

Both the warm up tasks (Activities A) and the follow up tasks (Activities C) were individual, while the tasks during the lesson (Activities B) were individual, pair work, group work or even penary. The feedback questionnaire at the end of the session was also individual.

This structure was explained to participants at the beginning of the course. However, for purposes of validity the participants did not know the topic of the session in advance (only after having completed Activities A). Each two-hour session started with a 20-minute diagnostic task to ascertain what participants knew about the topic of the session (Activities A).

The diagnostic tasks were corrected and discussed and a topic presentation and discussion followed. At this stage, a handout on the topic was distributed. The possible differences or similarities between the writing conventions of English and Portuguese were also highlighted. The participants looked for evidence of the session topic in texts they gathered themselves and/or were given during the session (Activities B). The session ended with a task (Activities C) similar to the one done at the beginning of the session (Activities A). The comparison of both tasks will be discussed below in the results and discussion section.

In the session on hedging both Activities A and Activities C consisted of 3 tasks each (A1.1, A1.2, A2 and C1.1, C1.2, C2). Tasks A1.1 and C1.1 consisted of a group of 8 extracts from different journal article abstracts and participants were asked to decide how committed the writer(s) was/were in expressing their thoughts by marking sentences as either committed or tentative as shown in the two examples below:

Activities A

4. Economic analyses of data suggest that growers can significantly increase profit/hectare by optimizing spacing and populations with Atlantic 'a potato variety' and seedpiece populations in Superior 'another potato variety?'.⁸

⁸ Creamer, N. G., C. R. Crozier and M. A. Cubeta. 1999. Influence of seedpiece spacing and population on yield, internal quality, and economic performance of Atlantic, Superior, and Snowden potato varieties in Eastern North Carolina. *American Journal of Potato Research*. 76: 257.

Activities C

4. We conclude that market structure is an important determinant of farm structure and environmental regime, and that adoption of pollution control technologies is not equivalent to environmental performance.⁹

An example was provided to clarify what subjects were expected to do. Next, in tasks A1.2 or C1.2 participants were asked to identify the words that helped them to make their choice in tasks A1.1 and C1.1 respectively and record them in a table. Lastly, in either task A2 or C2 subjects were asked to read two versions of part of the same discussion section and decide in which version the writers were more committed to their utterances and in which the writers modulated their claims or statements.

Activities B from which no data was collected consisted of the following tasks:

1. Reading an adapted version discussion section of a conference paper from which all hedges had been removed. Participants were invited to suggest some possible ways of hedging the phrases highlighted in the text and comment on how that changed the meaning of the sentence (plenary task).
2. Reading the notes on the results and discussion of a short communication and attempting to write two short versions of the abstract sentence(s) referring to the results and discussion: one hedged and one not hedged (pair work).
3. A text either brought by each participant or given by the teacher was read and hedges underlined (individual or pair work). Participants briefly discussed in pairs the use of hedges in their texts.

The texts used on the course (taken from a wide range of academic genres) were selected as being both possibly relevant in topic and of potential interest for both students and lecturers in the fields of agriculture and environment. However, due to the heterogeneity of participants and the different scientific background (especially of lecturers) this aim was not always achieved.

Lastly, a very short feedback questionnaire was completed at the end of each session in order to gather qualitative attitudinal data¹⁰. The questionnaire consisted of five statements on subjects' perception of the following: 1. novelty of the topic (i.e. hedging); 2. usefulness of topic; 3. usefulness of topic awareness; 4. topic use for purposes other than reading; 5. need of more teaching of the topic.

Participants were required to mark each statement according to their perception: yes, no or unsure. If they answered yes to 4 and/or 5 they were asked to explain their choice. They were also invited to state what topic strategies/knowledge they might use next time they read (question 6). Comments were also possible (question 7).

5 RESULTS AND DISCUSSION

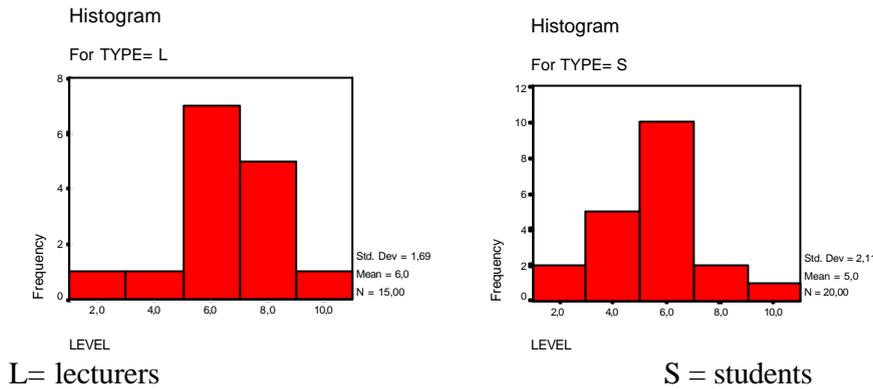
The results presented below refer to the following data: 1. cloze test; 2. warming up tasks: Activities A; 3. follow up tasks: Activities C; 4. end of session feedback questionnaire.

⁹ Welsh, R. and B. Hubbell. 1999. Contract hog production and environmental management in the Southern United States. *Agronomy Journal*. 91. 6: 883.

¹⁰ A copy of the feedback questionnaire is available from the author if needed.

As mentioned above, the participants completed a cloze test before the course in order to assess their level of proficiency at the beginning of the treatment. 73% of the lecturers scored at the levels 6 and 7 (i.e. intermediate and high-intermediate) while 60% of the students scored at levels 4, 5 and 6 (i.e. pre-intermediate, low-intermediate and intermediate). Thus, lecturers were not only more homogeneous in the scores but also showed a slightly higher proficiency in English than students (see Figure 1).

Figure 1. Histograms of cloze test scores.



Level	Level description	Level	Level description	Level	Level description	Level	Level description	Level	Level description
1	Beginner	3	Low pre-intermediate	5	Low-intermediate	7	High-intermediate	9	(ungraded) advanced
2	False or near beginner	4	Pre-intermediate	6	Intermediate	8	Upper-intermediate	10	Proficiency

Students presented the most extreme outliers (S1 and S11 at the lowest values and S5 at the highest value). Both this lack of homogeneity and the low level in English among students was quite surprising, bearing in mind that students had been clearly told that the reading course would deal with academic texts and thus was not a course for beginners. Due to the fact that participants were volunteers, it did not seem ethical nor appropriate to exclude any participant from the course. Students tended to come with their friends and this may partially account for some students' low level of proficiency. In general most participants ranged between a low intermediate and high-intermediate level (see Appendix 1).

From the results of both tasks A1.1 and C1.1, participants did not seem to have much difficulty identifying hedged and non-hedged sentences. The scores were slightly higher in C1.1 (see Appendix 2). But this difference might have been due to the fact that most participants (i.e. 85% students and 69% lecturers) misunderstood the meaning of the verb "postulate" (in task A1.1) for which a cognate noun in Portuguese may have acted as a false friend. The incorrect perception of the meaning of the sentence could be due to L1 interference. Alternatively, it could indicate a lack of understanding.

In tasks A1.2 and C1.2, in which participants were asked to identify the words that helped them to make their choice in tasks A1.1 and C1.1 respectively, learners seemed to be more aware of the effect of hedges on the statements after the session and

were thus able to mark more target devices (i.e. hedges and boosters¹¹) and marked less incorrect words than in A1.2. The results of tasks A1.2 and C1.2 thus indicate that there was more improvement in these tasks than in tasks A1.1 and C1.1. This is possibly because, although participants could grasp the general idea of whether the sentences were hedged or not, they were not aware why it was so.

In tasks A2 and C2, where subjects had to choose between a hedged and a non-hedged part of a discussion section, most participants were able to identify the hedged both before and after the instruction (see Appendix 2). Three students chose the wrong version in A2 and one of those three, who has a low proficiency level, also chose the incorrect option in C2.

Even before instruction, participants were able to recognise whether there was writer commitment or not both in short and long texts (tasks A1.1 and A2). However, instruction seemed to be necessary to identify the words that signal commitment and tentativeness. That is to say, participants marked more wrong words in task A.1.2 than in task C1.2 after instruction. It also seems helpful as an interpretation skill to understand that different hedges will signal different degrees of commitment.

It is not clear whether participants would have noticed hedges and boosters while reading if they had not been asked to, since in the feedback questionnaire completed at the end of the session 80% of the students and 66.7% of the lecturers answered that the topic was new to them. It is possible that both students and lecturers only perceived a writer's commitment because they were explicitly asked to do so. Although there was an increase in the number of hedging words identified, participants still showed a tendency not to notice some of the target devices.

This may be partly due to the fact that hedges do not occur as often in the hard knowledge disciplines as in the soft disciplines. In a study comparing research articles from different disciplines Hyland (1999a) found that although hedges occurred across disciplines, they were twice as frequent in some of the soft-knowledge papers. As Hyland (1999a: 111-112) observes, the higher proportion of hedges in the soft knowledge papers "suggested greater orientation to readers and more sensitivity to the possible subjective negation of their claims. Typical hedges in the soft areas appeared to carry a strong interpersonal element." This is further reinforced by the fact that in hard knowledge discipline research articles a higher proportion of hedges were modal verbs which "are less specific in attributing a source to a view point". Moreover, "hard disciplines are predominantly concerned with quantitative model-building and the analysis of observable experience to establish empirical uniformities. Explanations principally derive from precise measurement and systematic scrutiny of relationships between a limited number of controlled variables." (Hyland 1999a: 114). Finally, it should also be noted that agriculture journals seem to be fairly liberal in accepting non-standard grammatical expressions (Hyland 2000a: 178).

If we are to understand why participants paid attention to hedges in the sentences and the discussion sections both in Activities A and C, one explanation might

¹¹ The term "booster" is used as defined by Hyland (2000a: 87): "... boosters are communicative strategies for increasing ... the force of statement. ... Boosters (e.g. *clearly, obviously, of course*) allow writers to express their certainty in what they say and to mark involvement and solidarity with their audience, stressing shared information, group membership and direct engagement with readers."

be the task effect. In fact, these results may only suggest that participants marked the correct lexical items because they were explicitly asked to look for those particular markers of writers' attitudes. This task effect may account for the fact that this study seems to have a higher proportion of participants noticing hedges than Low¹² (1996) and Hyland¹³ (2000b) who studied the way that L2 and L1 learners reacted respectively in the presence of hedges and boosters.

On the other hand, it should be noted that in the discussion that followed the topic presentation (Activities B) many lecturers and learners were surprised to hear that hedging devices played such an important role in academic discourse and had a pragmatic impact on academic writing, as this is apparently not the case in Portuguese (see section 3 above).

It should be mentioned that the results of the session feedback questionnaire to elicit participants' perception of the topic seem to confirm Low's (1996) and Hyland's (2000b) results that readers are largely unaware of hedges as most of the respondents (80% of the students and 66.7% of the lecturers) answered that the topic was new to them (see Appendix 3).

60% of the lectures and 65% of the students agreed that being aware of hedges would be useful in reading English academic texts. In the open-ended question (question 6), they were invited to state what, from the information learned, they would use next time they read. To this open-ended question 66.7% of the lecturers and 40% of the students replied that they would pay attention to the writer's commitment and/or attitude. However, only one student referred to the writer-reader relationship: "Some forms of hedging – and how it can be used to lead readers in one direction or the other (but not mis-leading) being more or less «sure»" (sic). This may indicate, as noted above, that interpersonal relations in hard knowledge disciplines are not seen as being as relevant as in soft sciences. One student mentioned the importance of paying attention to and being aware of cultural differences in writing, as this was briefly discussed after the topic presentation (Activities B).

60% of the lecturers and 15% of the students believed they would use the content of the session for purposes other than reading. Among these, 46.7% of the lecturers and 10% of the students referred to hedges as being helpful in writing. This suggests that participants see a connection between what they have learnt in their reading course and their writing. One possible reason for this percentage difference may be the fact that lecturers need to write in English (i.e. abstracts in journal articles written in Portuguese or journal articles) while students are seldom required to do so.

In tasks 1.1 and 2 lecturers had a higher percentage of correct answers than students (see Table 1). Furthermore, in task 1.2 lecturers not only chose more correct words but also marked less incorrect words (32 in A1.2 and 7 in C1.2 incorrect words) than students (54 in A1.2 and 19 in C1.2 incorrect words). Two possible reasons for this

¹² Low (1996) conducted a think-aloud study with NS undergraduate students to find out how they reacted to the presence of 6 intensifiers (i.e. boosters) and 2 hedges in a questionnaire. The results suggested that half or more of the subjects attended to most boosters while hedges seemed to be more "invisible".

¹³ Hyland (2000) carried out a retrospective think-aloud study with NNS undergraduate students to find out how they reacted to the presence of boosters and hedges in an academic text. The results indicated that subjects attended to most boosters while hedges appeared to be "invisible".

difference may be a higher English proficiency level and a longer exposure to texts in English, as lecturers have to read English academic texts for both their work and teaching. In fact, in the post-course questionnaire, fewer lecturers (46.7%) than students (80%) answered they would read more after the course. All but one of the 7 lecturers who made this response had a low level of proficiency. In sum, lecturers tended to have slightly higher results overall in every task.

Table 1. Mean percentages per task

		Task 1.1	Task 1.2		Task 2		
					A2	C2	
Lecturers	% mean	88%	99%	63%	67%	100%	100%
	St. Dev.	10%	4%	11%	13%	0%	0%
Students	% mean	83%	95%	50%	57%	85%	95%
	St. Dev.	14%	9%	14%	14%	37%	22%

These results need to be treated with caution due to the small number of subjects and the fact that they were self-selected subjects and may not therefore be representative of the population. The results suggest that participants had an implicit knowledge of hedges but needed to be made aware of it in order to notice it while reading. Thus, the fact that they are now able to notice some hedges and in the post-questionnaire considered the topic as useful suggests the possibility of a lasting learning. Moreover, it seems that the issue of hedging should be addressed in second language teaching, namely in academic reading courses, by raising the awareness of this discourse feature of English academic writing.

References

- Crystal, D. 1997. *English as a global language*. Cambridge: Cambridge University Press.
- Curnick, L. 2000. The use and distribution of hedges in scientific discourse. Using modals as models. *The ESPecialist, São Paulo*. 21. 1: 1-21.
- Graddol, D. 1997. *The future of English?* London: British Council.
- Hyland, K. 1994. Hedging in academic writing and EAP textbooks. *English for Specific Purposes*. 13. 3: 239-256.
- Hyland, K. 1996a. Writing without conviction? Hedging in science research articles. *Applied Linguistics*. 17. 4: 433-453.
- Hyland, K. 1996b. Talking to the academy forms of hedging in science research articles. *Written Communication*. 13. 2: 251-281.
- Hyland, K. 1996c. Nurturing hedges in the ESP curriculum. *System*. 24. 4: 477-490.
- Hyland, K. 1996d. "I don't quite follow": making sense of a modifier. *Language Awareness*. 5. 2: 91-99.
- Hyland, K. 1998a. *Hedging in scientific research articles*. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Hyland, K. 1998b. Boosting, hedging and the negotiation of academic knowledge. *Text*. 18. 3: 349-382.
- Hyland, K. 1999a. Disciplinary discourses: writer stance in research articles. In Candlin, C. N. and K. Hyland (eds.) 1999. *Writing: texts, processes and practices*. London and New York: Longman: 99-121.
- Hyland, K. 1999b. Talking to students: metadiscourse in introductory course books. *English for Specific Purposes*. 18. 1: 3-26.

- Hyland, K. 2000a. *Disciplinary discourses: social interactions in academic writing*. London: Longman.
- Hyland, K. 2000b. Hedges, boosters and lexical invisibility. Noticing modifiers in academic texts. *Language Awareness*. 9. 4: 179-197.
- Hyland, K., and J. Milton. 1997. Qualification and certainty in L1 and L2 students writing. *Journal of Second Language Writing*. 6. 2: 183-205.
- Johns, A. M. 1997. *Text, role, and context: developing academic literacies*. Cambridge: Cambridge University Press.
- Jordan, R. R. 1997. *English for academic purposes: a guide and resource book for teachers*. Cambridge: Cambridge University Press.
- Low, G. 1996. Intensifiers and hedges in questionnaire items, and the lexical invisibility hypothesis. *Applied Linguistics*. 17. 1: 1-37.
- Makaya, P. and T. Bloor. 1987. Playing safe with predictions: hedging, attribution and conditions in economic forecasting. In Bloor, T. and J. Norrish (eds.) *Written language*. British Studies in Applied Linguistics no. 2. London: CILT/BAAL: 55-69.
- Myers, G. 1989. The pragmatics of politeness in scientific articles. *Applied Linguistics*. 10. 1: 1-35.
- Myers, G. A. 1992. Textbooks and the sociology of scientific knowledge. *English for Specific Purposes*. 11. 1: 3-17.
- Salager-Meyer, F. 1994. Hedges and textual communicative function in medical English written discourse. *English for Specific Purposes*. 13. 2: 149-170.
- Skelton, J. 1988a. Comments in academic articles. In Grunwell, P. (ed.) *Applied linguistics in society*. British Studies in Applied Linguistics 3. London: CILT/BAAL: 98-108.
- Skelton, J. 1988b. The care and maintenance of hedges. *ELT Journal*. 42. 1: 37-43.
- Swales, J. M. 1990. *Genre analysis: English in academic research settings*. Cambridge: Cambridge University Press.
- Urquhart, A. H. and C. J. Weir. 1998. *Reading in a second language: process, product and practice*. London and New York: Longman.
- Varttala, T. 1999. Remarks on the communicative functions of hedging in popular scientific and specialist research articles on medicine. *English for Specific Purposes*. 18. 2: 177-200.

Appendix 1: Cloze test results

Results were analysed using SPSS version 10.0

	TYPE		Statistic	Std. Error
Level	L(lecturers)	Mean	6.00	.44
		Std. Deviation	1.69	
Level	S(students)	Mean	4.95	.47
		Std. Deviation	2.11	

Stem-and-Leaf Plots

Level Stem-and-Leaf Plot for type = L			Level Stem-and-Leaf Plot for type = S		
Frequency	Stem	and leaf	Frequency	Stem	and leaf
2.00	Extremes	(=<3.0)	2.00	Extremes	(=<1.0)
1.00	5	0	2.00	3	00
.00	5		3.00	4	000
6.00	6	000000	6.00	5	000000
.00	6		4.00	6	0000
5.00	7	00000	1.00	7	0
1.00	Extremes	(>=9.0)	1.00	8	0
			1.00	Extremes	(>=10.0)
Stem width:	1		Stem width:	1	
Each leaf:	1 case		Each leaf:	1 case	

Appendix 2: Activities A and C results

Results were analysed using SPSS version 10.0. Frequency tables of all participants

Task A1.1	Frequency	Percentage
Valid 2	1	2.9
4	1	2.9
5	25	71.4
6	8	22.9
Total	35	100.0

Task C1.1	Frequency	Percentage
Valid 5	2	5.7
6	3	8.6
7	30	85.7
Total	35	100.0

Task A1.2	Frequency	Percentage
Valid 5	3	8.6
6	1	2.9
7	5	14.3
8	4	11.4
9	2	5.7
10	7	20.0
11	4	11.4
12	8	22.9
13	1	2.9
Total	35	100.0

Task C1.2	Frequency	Percentage
Valid 8	1	2.9
9	1	2.9
10	5	14.3
11	5	14.3
12	3	8.6
13	3	8.6
14	3	8.6
15	3	8.6
16	5	14.3
17	2	5.7
18	2	5.7
19	1	2.9
20	1	2.9
Total	35	100.0

Task A2	Frequency	Percentage
Valid 0	3	8.6
1	32	91.4
Total	35	100.0

Task C2	Frequency	Percentage
Valid 0	1	2.9
1	34	97.1
Total	35	100.0

Appendix 3: Feedback questionnaire results

1. The topic of the session was new to me				
		Yes	No	Unsure
Lecturers	Count	10	2	3
	%	66.7%	13.3%	20.0%
Students	Count	16	2	2
	%	80.0%	10.0%	10.0%

2. I think I have learnt something useful in this session				
		Yes	No	Unsure
Lecturers	Count	14	0	1
	%	93.3%	0%	6.7%
Students	Count	19	0	1
	%	95.0%	0%	5.0%

3. Being aware of the topic of the session will be useful in reading academic English					
		Yes	No	Unsure	Missing
Lecturers	Count	9	1	5	0
	%	60.0%	6.7%	33.3%	0%
Students	Count	13	1	5	1
	%	65.0%	5.0%	25.0%	5.0%

4. I will use the content of the session for other purposes than reading English				
		Yes	No	Unsure
Lecturers	Count	9	2	4
	%	60.0%	13.3%	26.7%
Students	Count	3	4	13
	%	15.0%	20.0%	65.0%

5. I would benefit from learning more on this topic					
		Yes	No	Unsure	Missing
Lecturers	Count	1	3	9	2
	%	6.7%	20.0%	60.0%	13.3%
Students	Count	2	3	15	0
	%	10.0%	15.0%	75.0%	0%

4. I will use the content of the session for other purposes than reading English	
Coding	Total of participants
1. Reading any text	2
2. Writing scientific articles	3
3. Writing in English	3
4. Writing in any language	1
5. Writing academic English	1
6. Writing abstracts	1

6. What I have learnt from this session that I will use next time I read...	
Coding	Total of participants
1. Reading scientific articles	2
2. Noticing writer's commitment / attitude	18
3. Being polite	4
4. Understanding texts better	5
5. Noticing differences between textbooks and research articles	1
6. Being able to contradict a point of view	1
7. Useful for: degree research project	1
8. Searching information in textbooks or articles	2
9. Noticing cultural differences	1
10. Leading readers	1