MODALITY IN APPRAISAL IN STUDENTS’ ESSAYS – A STUDY OF THE EFFECT OF GENRE-BASED INSTRUCTION

Abstract
This paper presents results of an analysis of changes in students’ use of linguistic features to express modality in Appraisal after genre-based instruction in expository writing. Appraisal is a system of interpersonal meanings to evaluate, adopt stances, and express attitudes, alongside resources for amplifying and engaging with these meanings (Martin, 2000). Instruction was aimed at raising student awareness of the socio-cultural context of a writing task and explicit teaching of socio-rhetorical thinking processes associated with expository genres. Pre- and post-instruction essays were analysed using Halliday’s (2004) functional grammar, drawing on the work in Appraisal by Martin (2000). Comparison of Appraisal in pre- and post-instruction essays shows positive changes in the latter in number and range of lexico-grammar for expressing modality.

Introduction and Objectives
The work described in this study is part of a larger research designed to test an interventional approach to improving expository essay writing in Singapore secondary schools. This larger research is aimed at teaching students the cognitive decision-making procedures and generic discourse behaviours associated with expository genres of writing tasks. This paper presents results of an analysis of changes in students’ expression of an aspect of interpersonal meaning – modality in expository essays after intervention.

The questions to be addressed in this study are:
1. Does genre-based instruction in expository writing result in more instances of expression of modality in Appraisal in students’ essays?
2. Is there a change in the language resources student writers use to express modality in post-instruction essays?

Appraisal is a system of interpersonal meanings to evaluate, adopt stances, and express attitudes, alongside resources for amplifying and engaging with these meanings (Martin, 2000). When one appraises, he or she indicates either a positive or negative assessment of people, places, happenings or states of affairs. In an expository writing where the main objective is to put forth the writer’s particular value positions or stances on the topic of discussion to persuade the reader to accept that view (Arena, 1975; Maclean, 1985; Martin & Peters, 1985; and Martin, 1989), one can expect Appraisal to feature recurrently. An important strand in Appraisal is the notion of modality. Modality is a resource for presenting the degree of probability, usuality, obligation and inclination. It sets up a semantic space between “yes” and “no” – the intermediate ground between positive and negative polarity (Halliday, 1994, 2004). It is used when writers signal or shape their attitude towards the ideational or propositional content of his text (Butt, Fahey, Feez, Spinks & Yallop, 2000).

Theoretical Framework
This study draws on Halliday’s (1994, 2004) systemic functional theory and Martin’s (2000) work on Appraisal. In these two frameworks, the nature of attributing
interpersonal meaning is studied. They explain how vital it is for the writer to establish and maintain an interpersonal relationship with the reader (Butt, Fahey, Feez, Spinks & Yallop, 2000; Lemke, 1992; Martin, 1995) in writing. Halliday (2004) observes that a writer constructs interpersonal relationship with the reader by adopting for himself (writer) “a particular [textual] role. In so doing, he (writer) “assigns a complementary role which he (writer) wishes him (reader) to adopt in his (reader) turn” (p. 106). The interpersonal meanings created by the writer build up a particular image of himself and opens a discursive space where readers can either agree with or dispute his propositions.

Certain grammatical and lexical features can be identified to construe interpersonal meanings. One of them is modality. Modality consists of a range of options for modifying the force of proposition from a definite polarity (yes and no) to the grey area between yes and no. Halliday (2004) distinguishes two types of modality – modalisation and modulation. Modalisation expresses the writer’s assessment of the states of knowledge. The two key systems – probability (how sure?) and usuality (how often?) enable the negotiation and orientation of propositions which give (statements) or demand (questions) information. Modulation represents the writer’s assessment of one’s commitment to action. The two key systems are inclination (how willing?) and obligation (how obliged?). Modulation characterizes the relationship between the participant to the process – e.g. his enthusiasm and responsibility to carry the task out. Table 1 is an outline of the semantic realizations of modality:

Table 1 Semantic realizations of modality

<table>
<thead>
<tr>
<th>Kind of Modality</th>
<th>Congruent realizations</th>
<th>Metaphorical realizations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finite</strong></td>
<td>Adjunct (mood)</td>
<td>Mental clause</td>
</tr>
<tr>
<td>Probability</td>
<td>Can/could, may/might,</td>
<td>I guess …</td>
</tr>
<tr>
<td></td>
<td>will/would, should,</td>
<td>I think …</td>
</tr>
<tr>
<td></td>
<td>ought to, must</td>
<td>I know …</td>
</tr>
<tr>
<td>Usuality</td>
<td></td>
<td>It is possible…</td>
</tr>
<tr>
<td></td>
<td>sometimes, usually,</td>
<td>It is probable…</td>
</tr>
<tr>
<td></td>
<td>always…</td>
<td>It is certain…</td>
</tr>
<tr>
<td>Obligation</td>
<td>necessarily…</td>
<td>I’m willing for…</td>
</tr>
<tr>
<td></td>
<td>be allowed to, be</td>
<td>I expect…</td>
</tr>
<tr>
<td></td>
<td>supposed to, be</td>
<td>I want…</td>
</tr>
<tr>
<td></td>
<td>obliged to</td>
<td>(him to leave)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It is permitted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It is expected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It is necessary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(…for him to leave)</td>
</tr>
<tr>
<td>Inclination</td>
<td>willingly, eagerly…</td>
<td>be willing to, be keen to, be determined to be able to</td>
</tr>
</tbody>
</table>

Adapted from Martin, Matthiessen & Painter (1997, p 70)

Bybee and Fleischman describe modality as the “semantic domain pertaining to elements that [speakers or writers] use to express the addition of a supplement or overlay of meaning to the most neutral semantic value of the proposition [or Appraisal]” (Bybee & Fleischman, 1995, p. 2) of a sentence. Expository essays should contain a high number of modality expressions (Reilly, Zamora & McGivern, 2005). Mastery of the “situationally appropriate expressions of modality enables the writer or speaker to address the intended audience with skill and exhibit a professional interpersonal competence” (Hyland, 1998, p. 440) which influences the effectiveness of expository writing (Ni, 2004). If the writer understands the importance of using modality in expository writing, we can expect a high number of modality expressions in the essay to reflect an intention to influence the reader to be well disposed of it.

While expression of modality is recognized to be central for effective Appraisal in expository essays, they are generally acknowledged to be difficult for learners to acquire. Many studies observe that both L1 and L2 students experience problems with choosing the appropriate linguistic form to represent interpersonal meaning, even after many years of schooling (see Hyland & Milton, 1997; Schleppegrell, 2004). This is especially true in non-native contexts. Using Halliday’s (2004) systemic functional grammar (SFG), this study aims at evaluating the effect, on modality in Appraisal in students’ essays, of explicit instruction of cognitive decision-making procedures and generic discourse behaviours associated with expository writing.

The aptness of using SFG as an interpretive tool for analysing school-based writing has been acknowledged by many scholars (e.g. Martin, 1997; Schleppegrell, 2004). Systemic functional linguistics studies language in relation to social context and adopts a social view of language where every instance of writing is “an interactive event, a social exchange of meanings” (Halliday & Hasan, 1985, p.11). van Dijk (1997) observes that written discourse is a means of participating in social interaction and social action. The lexico-grammatical items that make up a text are resources for performing discourse acts, realizing social intentions, and constructing social contexts. Adopting systemic functional linguistics allows us to analyse the lexico-grammatical features in a text in terms of what the writer intends to do and mean (Halliday, 1994).

Hence, the results of a functional analysis of students’ writing would not be a mere listing of linguistic forms. It would tell us, for instance, whether a student writer is able to use appropriate lexis and grammatical structures to declare his or her degree of certainty, or level of commitment to the issue he or she is commenting on, and whether the student’s linguistic resources project a matured level of thinking, or a simplistic one.
Methodology
The research design was a test-instruction-test design, with the test being an expository essay writing task. In this paper, essays were analysed to detect any improvement in frequency and lexico-grammar for expressing modality. The method of analysis is described below after information on the student participants and the instructional activities.

The students
The data came from 36 Secondary Three students in the Normal Academic (NA) course in two government-aided schools in Singapore. They were randomly selected from all NA students who participated in the research project. The NA course is one that caters to the lower-achieving students who are placed into the course after taking the national Primary School Leaving Examination. Because English is the medium of instruction in Singapore, students participating in this study had studied and used English for at least 9 years. They could write understandable, though not error-free sentences. Students in the NA course usually have the most problems with the English Language, and are the ones who need most help in upgrading of the language.

Initial interviews with secondary school teachers involved in this study revealed that students’ who are less proficient in English have problems with modality. Other than not knowing the Standard English forms to express modality because of the influence of Singaporean English, students also lack argumentation and thinking skills needed for expository essay writing. The teachers further explained that often when a student writes, he does not place the essay in a social situation and has no macro goal on how he wants the reader to think or act after reading the essay. Because of that, the student does not know how to make use of modality to position and negotiate with his reader, and has no control over the modality in his writing.

The effect of instruction is likely to show up more prominently in students with low English proficiency level than students who are fairly proficient in English. This is because students with average or above average proficiency in English might already have mastered the use of modality to the extent that the effect of instruction might not be so pronounced.

The design adopted here was not the classic experimental-control group design. Having an experimental-control group design was not appropriate in many circumstances in schools because of “ethical issues” and “the inherently open and messy system that schools are” (McNaughton, 2004, p.10). To ensure that changes in pre- and post-instructional tests can be attributed to learning resulting from the instructional activities and lessons, rather than to any kind of instruction, close reading and analysis of essays were done, and more than one coder was engaged to work on the analysis.

Procedure and materials
Prior to instruction, students were asked to write a 350-500 word expository essay based on the following topic:
“Ban weekend homework.” This suggestion was made by a parent. Write an essay to say what you think of the suggestion.

Writing took place in class during a regular English lesson of 80 minutes. Following the pre-instructional test, 14 weekly lessons were conducted to teach the thinking processes and genre practices associated with stance-taking and development in expository essay writing, and some grammatical forms for realizing the thinking strategies and genre processes.

Instruction took the form of the following types of teaching/learning activities:

- Study of sample texts to observe the social context of the writer and reader of a piece of writing, conventional discourse practices in exposition, cognitive strategies for developing stance, and appropriate patterns of language.
- Decision-making activities requiring students to select and justify their selection of stance-developing strategies, ideational meanings, or language in a given writing context (e.g. select or reject ideas as support for a given writer position).
- Interactive activities involving role play to practise specific thinking and communicative strategies (e.g. to practise anticipation of opposing views, students role-play personalities with an interest in a given issue and likely to object to the writer’s position on it).
- Writing exercises to practise specific cognitive processes and high level goals of information packaging, meaning and language or grammar selection (e.g. Plan support strategy for justifying student’s position statement on a given topic), discourse acts (e.g. writing a position statement for the essay introduction to address the issue in the essay question), and use of language for realising specific discourse acts (e.g. practise sentence structures for bringing up an anticipated opposing view).

In terms of course content, the lessons taught the following skills: constructing the social context of a writing task or essay topic; forming and articulating one’s position or stance on the issue or question in an essay topic; deciding support strategy; selecting information/topic content knowledge using stance and support strategy as reference points; selecting language (e.g. modals, formal vs informal expressions, tense choice, general vs specific words for a given position and context of situation).

Following instruction, students wrote another 350-500 word essay to respond to a prompt requiring the expression of a stance on a disputable topic. The topic, different from the pre-instruction topic, was:

“Examinations should be replaced by project work.” Some students and teachers think this is a good idea. What do you think?

**Method of analysis**

Essays were analysed to detect differences, if any, in modality. It is of no doubt that different writers will produce different amounts of text (in number of clauses) and
different numbers of modality in writing. It is logical to predict that the more number of clauses produced, the more expressions of modality would be found. It would not be fair to compare the simply the raw number of modality items produced by the students. To make the comparison fair, results will be reporting data as average number per clause.

The following were of interest:
(a) Average number of modality per clause per writer
(b) Language resources used to express modality

The procedure for analysing modality was as follows:

Step 1: Clause boundaries were identified and determined using Halliday’s (2004) framework on identifying clause. Only sentences that had clausal structures were selected for analysis.

Step 2: The essay was read to discover the student’s stance on the topic in question. Subsequent close readings of the essay used this stance as the reference point for deciding if meanings expressed served a rhetorical function in stance development.

Step 3: Clauses expressing meanings that contribute to the maintenance and development of stance were identified. As explained earlier, they contain Appraisal meanings. These meanings correspond respectively to topics introduced into the essay (persons, events, acts, etc), the writer’s comment on or attitude towards the topics, and the relations between topics with reference to each other and between topics and the writer’s overall stance in the essay.

Clauses that serve a rhetorical purpose in the essay were tallied under the category of stance-enhancing clause, while clauses with no discernable a rhetorical purpose were counted as non-functional. Clauses falling into the latter category were mainly ‘out of point’ topics and comments that could not be interpreted as clarification of or reasons for the student’s stance and may also included extraneous information in rambling introductions or unintelligible words or stretches of writing that contributed nothing to reader orientation to the upcoming stance or argument. These non-functional clauses were excluded from the analysis in Step 4, and were not included in the total clause-count. As Pelsmaekers, Braecke and Geluykens (1998, p. 194) explain, a text should always be “defined in terms of writers’ goal and intended effects on the reader”. Study of the written text should take the ‘goal’ and ‘intended effect’ as a point of departure and work any linguistic analysis from there. Parts of text that are not meaningfully related to the central goal would not be regarded as having rhetorical relations to the central purpose and hence would be excluded from the analysis.

Step 4: Each stance-enhancing clause in the essays was scanned for expression of modality. The number of modality expressions was added up for each essay, and the average number of modality per stance-enhancing clause for each essay was calculated. Each student then had two sets of modality indices, one for pre-instruction and the other for post-instruction.
Step 5: The language resources employed to express modality were then determined for each essay.

Table 2 illustrates the method of identifying stance-enhancing clauses, non-functional clauses, and modality. Modality expressions are underlined.

<table>
<thead>
<tr>
<th>Extract from student essay</th>
<th>Analysis of modality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic:</strong> “Ban weekend homework.” This suggestion was made by a parent. Write an essay to say what you think of the suggestion.</td>
<td><strong>Stance-enhancing clauses</strong></td>
</tr>
<tr>
<td>Weekend homework is a good thing. As weekend homework could help students be prepared for tests and be better at their studies. As businesses are now employing workers with diplomas rather than workers with brute strength. I think that we should not ban weekend homework. If there was no weekend homework most of the students would be lazing around at home instead of studying. [Student AY32, pre-instruction essay]</td>
<td>Weekend homework is a good thing. As weekend homework could help students be prepared for tests and be better at their studies. I think that we should not ban weekend homework. If there was no weekend homework most of the students would be lazing around at home instead of studying.</td>
</tr>
<tr>
<td><strong>Total number of modality</strong></td>
<td>4</td>
</tr>
</tbody>
</table>

Analysis of the 36 pairs of essays was done by two coders using the procedures described above. One coder was trained in functional grammar. The other coder, who had no formal training in functional grammar, was briefed and asked to read on functional grammar and modality. Coders were not told if the essays were pre- or post-instruction efforts. Correlation between the decisions of the two coders was significantly high for both modality (Pearson $r = .73$, $p<.01$ (2-tailed)) and non-functional clauses ($r = .70$, $p<.01$ (2-tailed)).

At the same time, essays were scored holistically by two teachers, each with more than 10 years of teaching experience in Singapore secondary schools. Scoring was guided by
an assessment scheme that directed the assessor to look for a consistent, clear, and well-supported stance in an essay. The average of both teachers’ scores for each essay was used in computing the pre- and post-instruction mean essay scores. The teachers were also not told which essays were pre-instruction and which post-instruction. In 29 out of the 36 pairs of essays, they were in agreement as to whether a post-instruction essay was better or worse than the pre-instruction effort or had not changed.

**Results**
The mean number of modality per clause increased from 0.548 in pre-instruction essays to 0.650 in post-instruction. A paired-samples t-test conducted shows that there was a significant increase in modality items from pre-instruction (SD = 0.120) to post-instruction (SD = 0.117), t(N-1) = -4.101, p < 0.05. The eta squared statistic 0.325 indicated a large effect size.

Of the 36 students whose essays were analysed, 23 students (or 63.9% of the students) used a wider range of language resources to express modality in the post-instruction essays. Improvement varies between students. Some students showed a marked improvement, while some were less explicit in their improvement. Due to space constraints, we examined five single cases here – students BY8, BY24, AY2, AY21 and AY27. Table 3 shows the language resources used by these five students in their pre– and post-instruction essays.

**Table 3 Language resources used to express modality pre and post instruction**

<table>
<thead>
<tr>
<th>Student</th>
<th>Language resources to express modality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-instruction essay</td>
</tr>
<tr>
<td>AY2</td>
<td>- Modal finite</td>
</tr>
<tr>
<td></td>
<td>- Interpersonal grammatical metaphor</td>
</tr>
<tr>
<td>AY21</td>
<td>- Modal finite</td>
</tr>
<tr>
<td></td>
<td>- Interpersonal grammatical metaphor</td>
</tr>
<tr>
<td></td>
<td>- Mood adjunct</td>
</tr>
<tr>
<td></td>
<td>- predicator constituent</td>
</tr>
<tr>
<td>AY27</td>
<td>- Modal finite</td>
</tr>
<tr>
<td></td>
<td>- predicator constituent</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>BY8</td>
<td>- Modal finite</td>
</tr>
<tr>
<td></td>
<td>- Mood adjunct</td>
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<td></td>
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</tbody>
</table>
Discussion

The primary question that motivated this study was whether explicit instruction in the thinking processes and socio-rhetorical practices of expository writing would result in improvement in the expression of modality in Appraisal in students’ essays. The answer is affirmative, going by the increase in frequency of modality expressions per stance-enhancing clause, and more than half (63.9%) of the students used a wider range of lexico-grammatical structures to express modality. This suggests that students are more engaged in the issue of the essay topic. Because of this greater engagement, students could use more modality items and more lexico-grammar to explicitly announce the area of meaning between ‘yes’ and ‘no’. Modality could be brought into discussion because the students acknowledge that some degree of difference or disagreement is present or at least possible with their readers. In other words, the students may concede that there could be alternative positions to their current proposition, and are negotiating the arguability of the proposition.

There are reasons to believe that the improvement in quality of the post-instruction essays in terms of modality is due to greater awareness among students of the rhetorical goal of expository writing. This can be seen from the scores awarded by the two assessors who scored the essays based on the consistence and clarity of the stance, and support arguments. Mean essay scores rose from 56.3, pre-instruction, to 63.6 post-instruction. A paired-sample t-test conducted on the means of essay scores yielded a t of -6.939, which is significant at beyond the 0.05 level. This indicates that the students improved in stance development (stance-taking and stance-support). It should be noted that assessing the essays in terms of modality and score are two independent measures of essay quality. To have an improvement in essay score suggests that students are better at:

(1) identifying the demands in the situational context of an expository writing task
(2) responding to the demands by setting whole-text level goals relating to writer role, communicative purpose and reader or audience effect
(3) using high level goals to guide information packaging, meaning and language or grammar selection

Because of a greater awareness in the discourse practices of the exposition genre, students may understand the important role in conveying the extent of their commitment or the definiteness of their assessment to the propositions, and may avoid making categorical statements. Coirier, Andriessen and Chanquoy (1999) believe that modality is a natural and mandatory discourse act in expository writing which requires one to adopt a specific stance [and engage in Appraisal] to persuade readers to accept the stance. To employ modality, one must first have a desire to achieve a rhetorical goal in writing the essay and must have a specific stance in mind (Coirier, Andriessen, & Chanquoy, 1999). To be able to articulate the point of view using modality is evidence of socio-cognitive
skills to negotiate and debate the position with readers (Golder & Pouit, 1999), and invoking the audience into the discussion of the topic. Hence, there is evidence to indicate that students’ improvement in their use of in modality can be attributed to the fact that they have greater awareness of the social context and cognitive demands of expository writing tasks.

In the instruction, the use of modality is not explicitly taught in the instruction, the improvement in frequency and language resources used to express modality, displayed in the students’ post-instruction essays suggests that students have innate linguistic repertoire to express modality. It may also indicate that students have the potential to achieve greater improvement if they were taught and trained explicitly on the uses of modality. The absence of these in the pre-instruction essays may be due to their not knowing how to use them correctly. If we can demonstrate to them that they are capable of using more complex language resources to express modality, their confidence as writers who can attribute rational strength to the Appraisal expressed might be raised.

**Educational Significance of Study**

The study reported in this paper investigated the expression of modality of a group of students with a low level of proficiency in English. Results suggest that students’ expression of modality in Appraisal can be improved through explicit instruction in genre practices and cognitive procedures for performing the discourse acts of expository writing. The analysis makes a significant contribution to the data for determining the effect of the instructional materials on students’ writing ability. This may indicate the potential viability of genre-based instruction in teaching English in a non-native classroom and give a better understanding of the new educational standards and demands of teaching English in a non-native environment.

In analysing whether there is a change in the language resources students use to convey modality after instruction, the linguistic repertoire students have or lack for expression of modal meanings are revealed. This contributes to understanding the lexico-grammar that students have acquired or have yet to master fully for the expression of modal meanings, thereby providing a reliable basis for planning and informing future instructional materials and methods for designing and teaching expository essay writing courses. With greater awareness in the functions and forms for expression of modality, students will gain control and confidence in their lexico-grammatical choices in writing. When reading and deconstructing a text, they will better appreciate how authors have constructed the text to incorporate interpersonal meanings through their lexico-grammatical forms.
References


