Chalmers Publication Library

Fostering metacognitive genre awareness in L2 academic reading and writing: A case study of pre-service English teachers

(article starts on next page)

Fostering metacognitive genre awareness in L2 academic reading and writing:
A case study of pre-service English teachers at a major Swedish university

Abstract

   Although the concept of metacognition has received considerable attention for its impact on learning across disciplinary areas, it has not been sufficiently discussed in the context of L2 academic reading and writing. In this paper, we bring together two theoretical frameworks, genre analysis and metacognition theory, and discuss the concept of metacognitive genre awareness. Drawing on the analysis of the data collected from a group of pre-service English teachers at a major Swedish university, we examine the process of building this awareness within ESP genre-based academic reading and writing instruction and show how it influences L2 students' ability to interpret and compose academic texts. All study participants have developed declarative (what) and procedural (how) metacognitive knowledge of genre-relevant aspects of academic texts, but only a few have demonstrated conditional (when and why) knowledge of the genre in their reading analyses and writing assignments. Thus, using a metacognition framework to study L2 academic writing provides us with new theoretical insights and practical applications for L2 instruction.

Keywords:

L2 academic writing, L2 academic reading, genre analysis, metacognition, English for academic purposes

Introduction

   Describing the state of the ESP art, Belcher points out that despite "numerous studies of academic and professional genres, the ESP gaze has been focused more often on … products rather than processes." (2006, p. 149), and warns that being an ESP instructor calls for "knowledge of genre theory, corpus tools, scaffolding techniques, as well as metacognitive and metadiscoursal awareness-building strategies" (2010, p. 11). In this paper, we address some of the issues raised by Belcher, namely the process of building metacognitive awareness within ESP genre-based academic reading and writing instruction. Although the concept of metacognition has received considerable attention for its impact on

learning across disciplinary areas (Khun & Dean, 2004), including writing (MyHill & Jones, 2007), it has not been sufficiently discussed in the context of ESP and L2 academic reading and writing. In fact, the very words "process" and "cognitive" (although not "metacognitive") have acquired a rather negative connotation, largely due to their association with process-oriented writing instruction. In recent years, genre-based approaches have become "the main institutionalized alternative to process pedagogy" (Atkinson 2003, p. 11; e.g. Hyland, 2002, 2003, 2004, 2007; Hyon, 1996; Johns, 2002; Paltridge, 2001; Ramanathan & Kaplan, 2000). However, we believe that in L2 writing, which Leki (2003, p. 103) defines as "oddly insular" and in need of disciplinary cross-fertilization, using metacognition as a theoretical concept can help us answer key questions such as: How do L2 students use metacognition to analyse and make sense of the underlying rhetorical, discoursive nature of academic texts? In what ways does a genre-based approach foster metacognition in L2 writing?

Genre-based pedagogies emerged as a response to process-oriented writing instruction, which was perceived as asocial, self-centred, and largely used in L1 contexts governed by mainstream values (Hyland 2003a, Ramanathan and Atkinson 1999). Contrary to process-oriented approaches, genre-based pedagogy draws on the wider social context of writing, taking into consideration notions such as the target discourse community and purpose of the text. There are currently several genre theories and pedagogies they have inspired, which have been widely discussed in the literature (e.g. Belcher, 2004; Hyland, 2004, 2007; Hyon, 1996; Paltridge, 2001). In the context of L2 academic writing, the ESP School has been very influential, particularly in teaching specialist varieties of English to graduate students (e.g. Swales, 1990, 2004; Swales & Feak, 2000, 2004). In this paper, we focus on

undergraduate learners studying English at a major university in Sweden and, among other things, show how ESP genre-based instruction can be beneficial at a lower level of university studies.

In a "post-process era" (Atkinson 2003, Timbur 1994), the cognitive aspects governing reading and writing processes were largely neglected. In this paper, we argue that the dichotomy between the discovery-oriented and "inner-directed" (Bizzell 1992) cognitive approaches to writing and the more socially informed and outward-looking genre pedagogies is an artificial one. Drawing on the results of a case study conducted among pre-service L2 teachers of English at a major university in Sweden, we claim that genre awareness ties closely with metacognitive knowledge. By analysing students' responses to the activities and tasks carried out during a course in Academic Reading and Writing, inspired by the ESP genre school, we trace the development of students' genre awareness (Devitt, 2004) of research-based writing and interpret this process using the framework of metacognition theory. Although concepts such as "academic discoursal consciousness" (Belcher & Braine, 1995, p. xv) and "rhetorical consciousness raising" (Hyland, 2007, p. 160) seem to point towards metacognitive knowledge of discourse and genre, the question remains of how this consciousness is developed, how it translates into writing strategies and choices, and how it ultimately determines students' ability to write effectively for academic audiences. The body of research on metacognition, its underlying processes, and its influence on students' ability to learn and gauge performance, can help answering the questions above. Specifically, the framework of processes described under metacognitive knowledge can help us understand how awareness of genre, discourse, and rhetoric comes into play when students read and write texts that are situated in different contexts. In this

article, we will use the term "metacognitive genre awareness" to indicate the metacognitive processes that have as their object knowledge of genre, discourse, and rhetorical aspects of academic texts. It is shown how the extent in which L2 learners develop metacognitive genre awareness impacts their ability to understand the target genre and to exploit this knowledge in their own writing.

Metacognition and L2 academic writing

Metacognition, the ability to reflect upon one's knowledge and control one's thinking, supports writers in perceiving relevant aspects of a writing task and influences their ability to make effective communicative, rhetorical, and stylistic choices. Flavell (1979) distinguished four classes of phenomena: metacognitive knowledge, metacognitive experiences, goals (tasks) and actions (strategies). Current theoretical definitions of metacognition agree on the distinction between two components: 1) metacognitive knowledge of cognition, or metacognitive awareness, referring to learners' awareness of their knowledge, of the task, and their thinking/learning strategies, and 2) metacognitive regulation, referring to how learners use metacognitive awareness to regulate their own thinking and learning (e. g. Brown, 1987, Schraw & Dennison, 1994). Metacognition is considered an essential aspect of learners' ability to monitor their performance and successfully regulate their learning across disciplinary areas (Zimmerman & Schunk, 2001, Veenman, 2004). What is the relevance of metacognition for a highly communicative, socially situated, genre-based activity such as academic writing?

Academic writing combines individual, cognitive-oriented facets and social, communicative and discourse-oriented features. Flower and Hayes (1980, 1981) proposed a theory of the cognitive aspects entailed in writing, identifying cognitive behaviours

occurring at any time in the composing process. Ironically, their theories led to process-oriented pedagogies of writing that focused on the very aspects they attempted to undermine, that is the notion of a linear writing process based on stages of completion. Not surprisingly, the process-oriented approach received several critiques, among which its "egocentrism" and lack of attention to the social, contextual, and rhetorical aspects of writing (e. g. Atkinson, 2003).

Notwithstanding the validity of these critiques, two aspects of their theory are worth considering: first, the important role the rhetorical situation, or "task environment" (Flower & Hayes, 1981), plays in writers' ability to monitor their strategies and evaluate their choices; secondly, writers' understanding of the rhetorical situation conditions their ability to write effectively. They use the words "rhetorical problem" to explain how writers' perceptions of the rhetorical and contextual elements of the writing situation affect their ability to "solve" the rhetorical problem, by influencing every choice they make. These two points invoke metacognitive aspects of writing, suggesting that interpreting and composing academic texts, directed towards specific discourse communities, entails metacognitive knowledge of genre-relevant features of the "rhetorical problem" and metacognitive decisions in terms of content, organization, and style.

Gombert's (1993) definition of metapragmatics provides a key to further understand this relationship. He points out the special nature of metacognition in regards to anything that is communicative. Writing mobilises metacognitive knowledge characterised by the nature of the information processed (language), including metacognitive knowledge of the pragmatic aspects of language use as tied to a communicative context or, in our case, to genre. It seems then that fostering students' metacognitive knowledge of genre-relevant aspects

helps them adapt their reading and writing strategies to the "pragmatic", situated aspects of academic communication. Research points out that metacognition plays a role in every stage of the writing process, from the analysis of the task and the rhetorical problem, to the linguistic choices involved in the process of putting thoughts into words, to the self-monitoring and revising processes occurring during and after the act of writing (Bereiter & Scardamalia, 1987; Kellogg, 1994, Breetvelt, Van den Bergh & Rijlaarsdam, 1994; Myhill & Jones, 2007). Negretti (2009) highlights how metacognitive awareness of rhetorical and genre-relevant aspects such as appropriateness of topic, purpose of the text, audience expectations and effectiveness of argumentation, imbues every moment of the writing experience and helps students develop a personal, agentive approach to writing academic papers. Research on L2 learners of academic English has pointed the key role metacognition plays in their ability to develop language proficiency both in reading and writing (Baker and Boonkit, 2004, Hong-Nam & Leavell, 2006).

Metacognition provides a way to reconceptualise "the social/cognitive binary" in L2 writing, as Atkinson (2002) advocates. Looking at how students use metacognition in reading and writing academic texts sheds light on how they develop "a conscious understanding of target genres and the ways language creates meanings in context" (Hyland 2003, p. 21). A genre-based approach fosters metacognitive development in ways that help students self-regulate in reading and writing academic texts. Genre analysis points to students which elements of the "problem" (the academic text) they should direct their attention to, and why. A genre-based approach encourages students to develop metacognitive habits that focus on relevant aspects, such as the target discourse community, the rhetorical motives of stylistic choices, and the underlying purpose of the

written text. As mentioned by Hyland, "Genres help unite the social and the cognitive because they are central to how writers understand, construct, and reproduce their social realities" (2003, p.24).

This study investigates how a genre-based approach can foster metacognitive genre awareness, and how this awareness influences L2 students' ability to interpret and compose academic texts that are rhetorically and stylistically situated in disciplinary discourses, as they prepare for a professional future as English educators. Our research questions are the following:

How does genre analysis contribute to raising metacognitive awareness in L2 students?

How does this metacognitive genre awareness translate into reading strategies of academic texts?

How does this metacognitive genre awareness translate into students' own writing?

Research design

Course rationale and participants

The course in Academic Reading and Writing was designed in response to a need to improve the standards of academic writing of pre-service teachers studying in the Department of English. It was observed that, due to differences in the number of courses and contact hours, these students had more difficulties when writing their BA papers in English. Academic writing often presents a challenge for undergraduate students, and university instruction at that level focuses primarily on formal aspects such as syntax, paragraph structure, and style. Likewise, reading is largely limited to textbooks or fiction for literary courses. Genre and interdisciplinary differences in academic writing are not usually addressed at the undergraduate level. In this context, the main aims of the course

were to expose participants to research-based writing, particularly research articles from three different branches of English studies, i.e. linguistics, literature, and English language teaching, and to analyse the differences in the rhetorical organisation of, and stylistic variation in these texts in light of the ESP genre approach (Swales 1990). There was deliberately no textbook for the course, but students were asked to read selected sections of Swales (1990), which was meant not only to familiarise them with the main concepts of genre analysis but also to provide further exposure to professional academic prose. The underlying pedagogical rationale was that this cross-disciplinary genre analysis would contribute to raising genre awareness and would better prepare students to write their own research-based essays.

Since the students had to analyse papers from three different branches of English studies (the list of articles can be found in Appendix A), there was little danger that they would perceive the genre of the research article as a kind of mould into which content is poured (a common criticism, e.g. Dixon 1987, Raimes 1991). On the contrary, the differences in the rhetorical organisation (e.g. IMRD versus topic-based) and in argumentation patterns used by authors would highlight the underlying purpose and target audience of a given text. Academic Reading and Writing was an intensive course taught over a period of three weeks, with the total of twelve contact hours and weekly online tasks. The teaching involved a scaffolding approach (cf. Vygotsky, 1978, Hyland 2003), with more guidance from the teacher at an initial stage, and more peer collaboration and independent analysis at a later stage.

The eight study participants composed a largely homogeneous group of Swedish students in their third semester of university studies, which involve taking courses in pedagogy,

English, Swedish and other electives, offered by at least three different departments. Study participants shared the same cultural background, had Swedish as their L1, and presented similar levels of proficiency in English making them comparable in terms of L2 writers' characteristics (Silva, 1993).

Method

The research adopted a case study methodology, using participant observation, students' reflections on seminar activities, and a text analysis of online tasks and final assignments. The investigation explored a specific situation within a specific context, what Creswell (2007) calls a *bounded system*, and involved longitudinal, in-depth data collection through multiple sources. The lack of a-priori assumptions about the results characterizes the research as an exploratory case study. The methodology aligns with the purpose of the study, which is to investigate how a genre-based approach helps students develop metacognitive strategies in reading and writing academic texts. The data comprises all the students' online reflections and analyses in response to the weekly assigned task (see Appendix A), a final anonymous survey on the course, and the students' final written comparative analyses of two academic texts from different disciplinary areas. The data ranges from informal, reflective posts on the e-learning platform to a more formal, structured written assignment. We believe it is important to take into account all the possible sources of information, especially in light of the contextual limitations of the study.

Data analysis

Both researchers analyzed the data independently and collaboratively. The resulting findings are thus the fruit of discussion, reflection, and questioning. The interactive nature

of data analysis provided the opportunity to explicitly articulate assumptions, question interpretations, and reflect possible different avenues of explanation, a sort of collaborative "reflexivity" that is so important for the trustworthiness and "goodness" of qualitative research (Jones, Torres, & Arminio, 2006).

The data were analyzed in several stages. The beginning stage involved writing detailed observations about each student and type of data sources. These "analysis memos" were then compared and discussed to glean common themes and significant differences among students over time. These themes were then the focus of the second stage, which entailed a holistic revision of the data to confirm or disconfirm evidence. This approach allowed a deeper understanding of the complexity of the case and ensured validity of interpretation (Creswell, 2007). As interpretation framework, we adopt Schraw and Dennison's (1994) conceptualization of metacognitive awareness, involving three sub-processes: declarative awareness, or knowledge of concepts and strategies as relevant to the task or learning situation; procedural awareness, or knowledge about how to apply these concepts and strategies; and conditional awareness, or knowledge about when and why to apply concepts and strategies. This distinction of metacognitive knowledge helps understanding variation in students' approach to reading and writing. Our observations are reported in the following section; students appear under fictitious names.

Findings

Reflections

Table 1 summarizes salient features of the students' reflections from the first to the last week of the course. It illustrates how metacognitive awareness of genre-relevant aspects developed in each student. First all students except Gunn and Ingrid display changes in

declarative awareness, i. e. which genre-related concepts are important to understand and to write academic texts. Although notions such as genre, audience, purpose, and structure are mentioned from the beginning, they move towards more specific features of academic communication, such as the influence of audience and purpose on the rhetorical moves of an introduction (Jonas, Helen, Nina), the use of hedging and referencing styles (Anna, Helen, Lena), and style/language choices (Anna, Marta, Helen, Lena). Similarly, most students show a tendency to develop procedural awareness: in various degrees, they attempt to transfer this knowledge into strategies for reading and writing. Most of them also refine these strategies, showing awareness of how certain concepts could be applied (see Anna, Helen, and Lena, for instance).

The differences among students are equally revealing. Variations concern the extent to which they were able to apply metacognitive genre awareness to specific purposes. Whereas most of the students can translate these notions into reading and writing strategies (procedural knowledge), only a few managed to develop the metacognitive ability to apply these notions and strategies in different ways for different texts (conditional knowledge). Also, whereas some students seemed to have this metacognitive ability from the beginning (Anna, Lena), some developed it during the course (Helen, Nina). The trends described so far are better illustrated through the following quotes from the students' reflections. The three students quoted below represent three facets of metacognitive genre awareness and how it develops through a genre-based approach.

Marta displays a "budding" awareness of genre. Her initial reflection shows declarative awareness of how writing styles should be tailored to different "audiences and targets", but does not elaborate further. She seems to make a shift in her conceptualization of genre.

Relevant concepts such as audience and structure are now seen in light of their communicative value and as potential strategic tools to interpret and write academic texts. Still, these concepts do not seem to translate into specific strategies that can be applied purposefully in different writing situations.

> I have learned that there is so much more behind a text depending on what words or structure you use and who you want to reach. Before I thought a text was just a text, and somebody wanted to tell you something. Now I realize that they can really persuade you, manipulate or affect you in many ways without the reader even knowing it which is very interesting and that I will keep in mind in the future when reading or writing texts. (Marta, week 3)

Nina moves from declarative knowledge of genre to procedural (strategic) genre awareness. In her initial reflection, she displays knowledge of relevant notions such as the rhetorical triangle: texts are produced with intentionality for a specific audience and purpose. She understands the value of transferring this knowledge into specific strategies, but not how to do it:

> An awareness of the triangle ought to facilitate for me when I write my BA paper later this year as it can help me structure my paper properly. (Nina, week 1)

However, her second reflection shows a metacognitive shift. Concepts are now perceived in light of their strategic value. For instance, she uses the concepts of audience and purpose to interpret and "unpack" the stylistic and linguistic features of academic texts:

> The target audience and purpose of an article can affect the structure, as well as the linguistic features of that article in terms of hedging and choice of words etc. (Nina, week 3)

This knowledge is also translated into strategic aspects of writing:

> Not only did I . . . fully understand the CARS-model, I also learnt a lot about what to include (and what not to include) in the results and discussion sections etc., which will be very helpful to me when writing essays henceforth. (Nina, week 3)

Lena's reflection represents conditional metacognitive genre awareness. From the beginning, she applies genre-relevant notions such as discourse community and audience in a strategic and contextualized fashion (writing across domains): "a deeper understanding

for discourse communities and the importance of considering ones audience when writing

any type of paper". Also, she seems to have awareness of how language and style are bound

by the discoursive nature of genre, and how this concept translates into strategic learning:

> The idea of being familiar with the specific terminology used within communities makes sense. I can see the value of continuously developing my own understanding of the terms and concepts encountered within literature on teaching and education. (Lena, week 1)

Also, Lena shows metacognitive awareness of writing as a discourse and community bound

activity, and the relevance of this notion for writing:

> I gained an increased understanding for the idea that a shared purpose goes hand in hand with specific conventions that a writer needs to understand and apply in order to be "qualified" and partake in the community. These conventions can vary between communities and also within communities. (Lena, week 1)

In her second reflection, Lena further elaborates on the strategic significance of genre-

related concepts to interpret different types of academic texts (conditional awareness):

> Many aspects in addition to the "moves" need to be considered in order to get a thorough view of a text's purpose and structure. For example, to analyze the language overall (hedges, verbs etc) and consider who the audience might be of a text. Basically, it was helpful to get some clear ideas on what to analyze (i.e. moves, audience, structure, language etc) since, as a novice, it is sometimes hard to know what to actually look for! (Lena, week 3)

Her final remark explicitly points to the usefulness of a genre-based approach in fostering

L2 students' metacognitive behavior in reading (and writing).

Analysis of the introduction of a research article

  Students' analyses of the introduction of an academic article (Ellis, 2006) illustrate how

metacognitive genre awareness translates into strategies for interpretation. The students

who provided a more in-depth analysis of the text are those who are able to apply their

awareness conditionally, as tied to the purpose of the text.

As far as declarative awareness of genre is concerned, students seem to share an

understanding of several rhetorical moves. The most common are "describing purpose",

"claiming centrality", "indicating a gap", "occupying the niche", "referring to other authors", "reviewing previous research", and "counter claiming". However, the different ways in which this awareness becomes a tool for interpretation is revealing. The following examples, in which students reflect on the structure of the introduction and the motive of the first sentence, can illustrate the degree of metacognitive depth with which these concepts are used. Starting from a superficial understanding of the CARS model:

> To my opinion, he follows the CARS model quite well, in his very first sentence he is immediately claiming centrality, "This article identifies and discusses… (Jonas)

> The analysis of this introduction showed that Ellis does not follow the CARS model when structuring his introduction. Ellis begins his paper by describing what the article is about: "This article identifies and discusses. (Gunn)

To a more refined perception of the rhetorical moves:

> I found that the author has chosen to structure his introduction in, perhaps, a rather unconventional way. This, as he start his introduction by outlining his purpose, using the deictic reference "this" (Lena).

Similarly, students make illuminating observations about the use of citation styles and verbs for rhetorical purposes. Whereas some limit themselves to noticing these features (declarative knowledge) in relation to Swales' framework:

> In the "Defining Grammar Teaching" part, he uses move 2, step 1d, in the first sentence (Traditionally, grammar teaching is viewed…) Throughout this text he does some namedropping as well, so he goes back to move 1, step 3. (Marta)

> He uses integral referencing but in the second paragraph he moves over to non-integral referencing, and in the third he combines integral and non-integral referencing. In the third paragraph he is also counter-claiming previous research, (Move 2, step 1A). In the end of the paragraph the author is announcing his principal findings, (Move 3, step 2). (Helen)

Others translate concepts into interpretation strategies (procedural knowledge):

> He uses verbs such as "suggest" and "argue", which are relatively strong verbs, but can be used with the intention to distance oneself from the researcher's findings. Furthermore, he alternates between using the past and the present tense, which can be a way for the author to distance himself from the findings (past tense) or to point to a generalized fact (present tense). (Lena)

Finally, some students develop metacognitive awareness a step further, to analyze *how and why* certain rhetorical features are used by the author (conditional knowledge):

> Ellis gives his own standpoint; he *counter-claims the previous research*. It is very interesting to *look at the way this is done*. He uses verbs and phrases such as "argued," "were interpreted as showing," and "concluded". These all being in the *past tense distantiates the author from the views of the other researchers*, and especially the phrase quoted above shows that Ellis is critical towards these studies and does not believe them to have been interpreted correctly. When going *into his own beliefs*, Ellis consistently *uses the present tense, giving the notion that these ideas are facts* and general things that everyone nowadays knows. He also *uses the word "evidence" five times, which shows that he wants this viewpoint to come out as credible and, well, evident*. (Anna, emphasis added)

Written comparative analysis of academic texts

The analysis of students' final assignments confirms the trends observed in the previous sections. These pieces show how metacognitive genre awareness translates into the interpretation of academic articles and the students' own texts. All the students attempt to use their metacognitive genre awareness in a strategic way, albeit in varying degrees. Whereas all of them are sensitive towards the importance of discourse community and purpose as manifested in the text structure, style, and rhetorical moves, some are still struggling to apply this knowledge strategically, and only a few can metacognitively apply this awareness to interpret the differences of academic texts and to their own writing (conditional awareness). The differences and similarities among students are better illustrated by comparing two, who represent respectively budding metacognitive awareness of declarative and procedural nature, and refined conditional metacognitive genre awareness.

Ingrid displays declarative and procedural awareness of genre; her text (both in form and content) shows an acquisition of key concepts and the attempt to transfer these concepts into strategies for reading and writing. She represents a common trend across students: the

increasing awareness of the importance of the introduction and its key rhetorical moves across academic texts. This awareness is displayed in her own introduction claim:

> In this essay I want to show that the introductions are bond to reveal the claim of the article and, more or less, are bond to the CARS-model no matter what genre.

As all the other students in the course, she also displays awareness of concepts such as audience as a genre-defining aspect of academic writing, and the rhetorical value of language:

> I have chosen the articles Ellis, Nunan and Westerman, because of the simple reason that they all are directed to different audiences.

However, her awareness is very bound to the contents of the course, such as the CARS model, and indeed she chooses to use the "level of bondness each article have towards the CARS model" as the key for interpreting the similarities and differences among the texts. Ingrid makes considerable effort in transferring this knowledge into strategies for interpreting written texts, but she still struggles with understanding *why* certain texts present different rhetorical features. For instance, the introductions are compared in light of the CARS model, but their differences and similarities are not interpreted rhetorically:

> The introduction of the Ellis article has a clear structure and resembles the CARS-model.
>
> The Nunan article is also very well-structured and the introduction also has many similarities to the CARS-model, though not as many as the Ellis article.
>
> The Westerman article is the only one compared to the previously two articles, which has the least similarities to the CARS-model.

Similar surface observations recur throughout the text. In her second paragraph, about language—which, by the way, overlooks Ellis' article—she mentions:

> The language of these three articles is very similar, yet very different. The Westerman article is the one with the most personal language in comparison to the other two articles.
>
> Westerman also uses the help of some peoples that has authority to win some trust from the audience.

Yet, she makes an attempt at interpreting *why* certain rhetorical features are present:

> The Nunan article is full of hedges in its conclusion . . . This can mean that the author's presents his results a bit carefully and conservatively. In the beginning of the article is he more secure of presenting his investigations.

Other meaningful aspects of the text are noticed, but not explained. Another illustrative example is her statement about the impact of audience on the style of the three texts. Although she can *see* that differences exist and that are related to audience, she cannot yet *explain* the ways in which audience determines style:

> It is interesting to see how the different authors' tries to build up a bond to the audience in terms of rhetorical moves, these three authors, especially Westerman and Nunan are very different when it comes to this point.

Interestingly, her own text seems to reflect her metacognitive genre awareness. The structure of her own introduction closely follows the CARS model (introducing a topic, presenting relevant existing knowledge, stating a claim and a purpose). However, the remaining paragraphs of the text lack a clear rhetorical purpose, as difference and similarities are simply listed under two paragraphs (structure of the introduction and language). Ingrid's concluding remark, then, remains general and does not quite match her initial claim:

> In conclusion, the Ellis article and the Nunan article follow the CARS-model rather strictly, in comparison to the Westerman article. . . . Since the Westerman article is a literature article it is more likely that it is a bit more different from the other two. That can also be a reason why they follow the CARS-model more than the Westeman article.

These examples show that Ingrid has not yet developed a conditional metacognitive genre awareness, which allows tailoring concepts and strategies to the specific discoursive and genre-bound purpose of each text. Although Ingrid offers many pointed observations about rhetorical features and differences among the three articles, she does not elaborate on their significance.

Conversely, Anna's analysis displays what Gombert (1993) calls "metapragmatic knowledge". She is able to translate metacognitive genre awareness in a refined tool to interpret the situated, discourse and context-bound purpose of each text. Furthermore, this awareness is translated into her own writing, which displays rhetorical strategizing and adaptation of the "research article" model to the specific purpose of the assignment. The difference from Ingrid is visible first of all in the concepts Anna decides to use as key for analysis: words and style. Her choice is not so tied to the course content, but is deliberate and personal, as in her introductory statement of purpose:

> It's only words, and words are all I have, to take your heart away," say the lyrics of a well-known song written by the Bee Gees. Though words may be "all I have", they are nonetheless powerful and may well "take your heart away" or influence you in different ways . . . The authors of research articles use words deliberately to create the style of their texts and to influence their intended audience (or what Swales (1990) calls the discourse community (24) and achieve their purpose.

The aspect that stands out in Anna's text is her ability to connect her observations about language and style to the specific, disciplinary and contextual purpose of each text. She follows a similar pattern for each article: pointing out characteristics of language and style, highlighting how they reflect the discourse community the author is addressing, and elaborating on the rhetorical purposes of the author's choices. About Carless, she says that:

> His style is rather practical, using adjectives and adverbs like "practical", "reasonably", and "relevant . . . These word choices support Carless' purpose of suggesting implications for teaching and make his article practical and easily accessible to his intended audience of teachers, who are familiar with the terms used and are likely to connect with his practical language for the classroom.

Similarly, she makes pointed observations about Shaw's use of language and its connection to the discourse community:

> Shaw's style is scientific. He uses a large amount of terms specific for the discourse community . . . his use of adjectives and adverbs is that most are used together with a specific word; that is, they are all necessary in order to explain what kind of thing it is. Two examples are "synchronous media" and "non-standard spellings" (42). They

are used to describe facts and actual situations, rather than to add a certain tone to the article. This also contributes to the scientific style.

About Westerman's literary article, Anna perceives the author's use of language as embodying the expectations of a specific audience and the conventions of a discipline:

> While using some terms specific for the discourse community her style is narrative and descriptive . . . Using the present tense, she retells the story of the butler and at the same time gives her interpretation of it and argues for her claim. . . This narrative and descriptive style also corresponds very well with an intended audience that is into literature; an audience that enjoys being drawn into a story. In the same way that they were drawn into The Remains of the Day (of which Westerman writes) they are drawn into the article about it.

As in the case of Carless and Shaw, she focuses on adjectives and adverbs, and again she questions the underlying rhetorical purpose that determines the different choices authors make:

> Words such as "painful emotional life", "an enormous mistake", "awkwardly", and "unhappy" create vivid images of the situation in the reader's head, set the tone of the article, and support its claim. Westerman thus uses words very deliberately and creatively to pull the reader into her argument and to add feelings to the text, in a way that neither Carless nor Shaw does.

Her final reflection thus contextualizes stylistic and rhetorical choices:

> These three articles have different purposes and different intended audiences, but they share the attempt to use words in a way which serves the purpose and targets their audience. . . . It is clear, then, that word choice, adjectives and adverbs, and the use of tense may play great parts in writing for a specific discourse community and in achieving a purpose with an article.

To sum up, Anna's observations illustrate *conditional* metacognitive awareness of genre. This student was able to translate genre awareness into an understanding of how concepts of genre and rhetoric as manifestations of the situated, purposeful communicative nature of each text.

Discussion

The limited time span of the project mandates caution in the interpretation of the differences encountered among students. Nevertheless, we believe the metacognitive

framework helps in understanding how genre awareness actually translates into learning and writing for L2 students. Also, it provides a better sense of how a genre-based approach fosters L2 students' ability to participate in academic discourse.

In response to our research questions, from the very beginning, a genre-based approach fostered students' metacognitive awareness of genre-specific features of academic writing. Evidence of metacognitive awareness of rhetorical aspects of academic texts can be traced throughout the data, which indicates that students also apply this awareness into metacognitive regulation, both in reading and writing. Thus, we will review our results in light of the initial research questions.

How does genre analysis contribute to raising metacognitive awareness in L2 students?

Notwithstanding individual differences among students, our observations confirm that a genre-based approach helps L2 students develop metacognitive knowledge of genre-relevant aspects of academic communication. Students demonstrate both declarative and procedural metacognitive awareness, and all developed an understanding of concepts such as discourse community, purpose, audience, rhetorical moves and structure of a text as manifestation of purpose, as well as the relevant role language and style play in academic communication. In different degrees, they also translate this knowledge into metacognitive strategies applicable to the reading of academic English texts of different disciplines.

How does this metacognitive genre awareness translate into reading strategies of academic texts?

Our observations about the differences among students point to the ways in which metacognitive genre awareness transfers into reading strategies. In order to become an

effective learning tool, L2 learners must develop an ability to translate their knowledge of concepts into strategies to read and write texts as "situated" in the immediate communicative context (conditional awareness). They must develop metacognitive awareness of the "pragmatic" aspects of the text such language, style, and rhetorical choices as responses to the underlying purpose of the text and the intended discourse community. Specifically, we observed differences in the *type* of features they have awareness of, and in the *degree* in which they interpret the relevance of these features.

For instance, whereas some students focus on superficial genre-related features, such as structure, use of references, and type of rhetorical moves as defined in Swales (1990), others develop more complex metacognitive behaviors. They focus for instance on identifying the main claim of the author, and thus use metacognitive strategies to understand a text's structure in light of its argumentative development. Some also apply metacognitive strategies to capture the rhetorical purpose of key sections of the texts, and deliberately question the underlying message tied to the author's choices in regards to language, style, references, and hedging, to name a few.

How does this metacognitive genre awareness translate into students' writing?

The comparison of students' final papers shows that metacognitive genre awareness transfers into deliberate writing choices. All the students incorporate elements discussed in the course into their own text, indicating a metacognitive attempt at following the conventions of English academic writing. However, their texts also reflect different underlying metacognitive processes. Students with budding declarative and procedural awareness tend to follow the "typical" patterns as described in the course, such as the CARS model for structuring an introduction. Also, they display careful linguistic choices,

as manifested in their statement of purpose and use of hedging. This in itself is a positive accomplishment, we believe. However, students who also develop conditional awareness are able to adapt their knowledge to their personal purposes, as demonstrated by their ability to select key concepts to frame their arguments, or by their modification of the typical rhetorical moves and structural features of academic texts.

Considerations for further research and L2 teaching

The implications of our observations are many, yet this study can only attempt to shed an exploratory light in a dark cave. Many aspects of this study invite further research. First of all, it would be interesting to investigate more in detail how metacognitive genre awareness is manifested in specific metacognitive behaviors in writing, from planning to revision, and how it influences students' monitoring of their choices in terms of argumentation, style, referencing, and language. Another potential avenue for research is the role metacognitive genre awareness plays in the writing process of L2 students of different academic disciplines and levels. Does it translate into better writing? Finally, the design of the course, which effectively entailed analysis and comparison of different disciplinary genres, poses the issue of how best to support students in applying metacognitive genre awareness in specific situations and discourses. As pointed out by Grabe (2003), our study highlights that the connection between reading and writing in L2 instruction needs to be strengthened, and calls for further research focusing on the impact of reading on L2 writing in academic contexts.

Concluding remarks

Bakhtin (1986) argues that writers must be able to control the genres they use before they can exploit them. Our study explains how L2 students can gain this control over academic

genres in English. Whereas all study participants have developed declarative (what) and procedural (how) knowledge of genre-relevant aspects of academic texts, such as purpose, audience, rhetorical moves, and structure as manifestation of purpose, only a few have demonstrated conditional (when and why) knowledge of the genre in their reading analyses and writing assignments. Thus, in order to be able to employ their knowledge of generic features and transform it into effective reading and writing strategies, students need to acquire metacognitive awareness of language, style, and rhetorical choices as responses to the underlying purpose of the text and its intended audience. As far as reading is concerned, we have identified differences in the type of generic features noticed by students and the degree to which they interpreted their relevance. The comparison of students' writing has shown the extent to which their metacognitive genre awareness translates into deliberate writing choices. Those with budding declarative and procedural knowledge of genre were able to follow the typical patterns as described in the course, while students who developed conditional knowledge could manipulate generic features to suit their own purposes (e.g. select key concepts to frame their arguments, modify the typical rhetorical moves and structural features).

Thus, our findings show that L2 students need to develop conditional metacognitive awareness of genre to understand and write texts in different discoursive contexts. A genre-based approach can help L2 students develop metacognitive abilities that reconnect the individual, cognitive act of reading and writing to the social, discoursive nature of academic communication. Using a metacognitive framework (Schraw & Dennison, 1994) allows us to explain *how* "rhetorical consciousness raising" (Hyland, 2007) translates into effective reading and writing strategies. We have tried to show that focus on the learner and

the processes governing the acquisition of generic competence brings a new perspective to genre-based instruction and enhances our understanding of why some learners benefit from it more than others. Drawing a borderline between genre pedagogies and cognitive approaches to writing appears to be counterproductive in this case. We have also shown that the concepts of genre awareness and rhetorical consciousness are largely metacognitive, and that using the metacognition framework to study L2 academic writing can provide us with new theoretical insights and practical applications for L2 instruction.

References

Atkinson, D. (2002). Toward a sociocognitive approach to second language acquisition. *Modern Language Journal, 86*, 525-545.

Atkinson, D. (2003). L2 writing in the post-process era: Introduction. *Journal of Second Language Writing, 12*, 3–15.

Bakhtin, M. (1986). *Speech genres and other late essays*. Austin: University of TexasPress.

Baker, W., & Boonkit, K. (2004). Learning strategies in reading and writing: EAP contexts. *Regional Language Centre Journal, 35*, 299-328.

Belcher, D. & Braine, G. (1995). Introduction. In D. Belcher & G. Braine (Eds.), *Academic writing in a second language* (pp. xiii-xxxiv). Portsmouth, NH: Boynton/Cook.

Belcher, D. (2004). Trends in teaching English for Specific Purposes. *Annual Review of Applied Linguistics, 24*, 165–186.

Belcher, D. (2006). English for Specific Purposes: Teaching to perceived needs and imagined futures in worlds of work, study, and everyday life. *TESOL Quarterly, 40*, 133-156.

Belcher, D. (Ed.) (2010). *English for Specific Purposes in Theory and Practice*. Ann Arbor: University of Michigan Press.

Bereiter, C., & Scardamalia, M. (1987). *The psychology of written compositon*. Hillsdale, NJ: Lawrence Erlbaum.

Bizzell (1992). *Academic discourse and critical consciousness*. Pittsburgh: University of Pittsburgh Press.

Breetvelt, I., Van den Bergh, H., & Rijlaarsdam, G. (1994). Relations between writing processes and text quality: When and how? *Cognition and instruction, 12*, 103-123.

Brown, A. L. (1987). Metacognition, executive control, self-regulation, and other more mysterious mechanisms. In F. Weinert & R. Kluwe (Eds.), *Handbook of child psychology: Vol. 3 Cognitive Development* (pp. 263-340). New York: Wiley.

Creswell, J. W. (2007). *Qualitative inquiry and research design*. Thousand Oaks, CA: Sage.

Devitt, A. J. (2004). *Writing genres*. Carbondale, IL: Southern Illinois University Press.

Dixon, J. (1987). The question of genres. In I. Reid (ed.), *The place of genre in learning: Current debates* (pp. 9-21). Deakin, Australia: Deakin University Press.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new era of cognitive-developmental inquiry. *American Psychologist, 34*, 906-911.

Flower, L., & Hayes, J. R. (1980). The cognition of discovery: Defining a rhetorical problem, *College Composition and Communication, 31*, 21-32.

Flower, L., & Hayes, J. R., (1981). A cognitive process theory of writing. *College Composition and Communication*, *32*, 365-387.

Gombert, J.E. (1993). Metacognition, metalanguage and metapragmatics. *International Journal of Psychology, 28*, 571-580.

Grabe, W. (2003). Reading and writing relations: L2 perspectives on research and practice. In B. Kroll (Ed.), *Exploring the dynamics of second language writing* (pp. 242-262). New York: CUP.

Hyland, K. (2002). Genre: language, context, and literacy. *Annual Review of Applied Linguistics*, 22, 113–135.

Hyland, K. (2003). Genre-based pedagogies: A social response to process. *Journal of Second Language Writing 12*, 17-29.

Hyland, K. (2004). *Genre and second language writing*. Ann Arbor, MI: The University of Michigan Press.

Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing, 16*, 148-164.

Hyon, S. (1996). Genre in three traditions: implications for ESL. *TESOL Quarterly, 30*, 693–722.

Johns, A. M. (2002). *Genre in the classroom: Multiple perspectives*. Mahwah, NJ: Lawrence Erlbaum.

Jones, S. R., Torres, V., & Arminio, J. (2006). *Negotiating the complexities of qualitative research in higher education: Fundamental elements and issues*. New York: Routledge.

Kellogg, R., (1994). *The psychology of writing*. New York: Oxford University Press.

Leki, I. (2003). Coda: Pushing L2 writing research. *Journal of Second Language Writing*, *12*, 103-105.

Kuhn, D, & Dean, D. Jr. (2004). Metacognition: A bridge between cognitive psychology and educational practice. *Theory into Practice, 43*, 268-273.

Myhill, D., & Jones, S. (2007). More than just error correction: Student's perspectives on their revision processes during writing. *Written Communication, 24*, 323-343.

Negretti, R. *Metacognitive awareness in developmental writing students*. Doctoral dissertation. University of Hawai'i at Manoa: Department of Educational Psychology.

Paltridge, B. (2001). *Genre and the language learning classroom*. Ann Arbor, MI: The University of Michigan Press.

Raimes, A. (1991). Out of the woods. Emerging traditions in the teaching of writing. *TESOL Quarterly, 25*, 407-430.

Ramanathan, V., & Atkinson, D. (1999). Individualism, academic writing, and ESL writers. *Journal of Second Language Writing, 5*, 21-34.

Ramanathan, V., & Kaplan, R. B. (2000). Genres, authors, discourse communities: theory and application for (L1 and) L2 writing instructors. *Journal of Second language writing, 9*, 171–191.

Silva, T. (1993). Towards an understanding of the distinct nature of L2 writing: The ESL research and its implications. *TESOL Quarterly, 27*, 657-677.

Schraw, G., & Dennison, R. S. (1994). Assessing metacognitive awareness. *Contemporary Educational Psychology, 19*, 460-475.

Schunk, D. H., & Zimmerman, B. J. (2007). Influencing self-efficacy and self-regulation of reading and writing through modeling. *Reading & Writing Quarterly, 23*, 7-25.

Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: CUP.

Swales, J. M. (2004). *Research genres: Explorations and applications*. Cambridge, UK: Cambridge University Press.

Swales, J. M., & Feak, C. B. (2000). *English in today's research world: A writing guide*. Ann Arbor, MI: University of Michigan Press.

Swales, J. M., & Feak, C. B. (2004). *Academic writing for graduate students: Essential tasks and skills. (2nd ed.)*. Ann Arbor, MI: University of Michigan Press.

Timbur, J. (1994). Taking the social turn: Teaching writing post-process. *College Composition and Communication, 45*, 108-118.

Veenman, M. V. J., Wilhelm, P., & Beishuizen, J. J. (2004). The relation between intellectual and metacognitive skills from a developmental perspective. *Learning and Instruction, 14*, 89-109.

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Zimmerman, B. J., & Schunk, D. H. (2001). *Self-regulated learning and academic achievement: Theoretical perspectives*. Mahwah, NJ: Erlbaum.

Appendix

Course reading materials

Carless, D. (2002). Implementing task-based learning with young learners. *ELT Journal*, *56*, 389-396

Douglas, C. (2006). What The Bluest Eye Knows about Them: Culture, Race, Identity. *American Literature*, *78*, 141-168

Ellis, R. (2006). Current Issues in the Teaching of Grammar: An SLA Perspective. *TESOL Quarterly*, *40*, 83-107

Nunan D. (2003). The Impact of English as a Global Language on Educational Policies and Practices in the Asia-Pacific Region. *TESOL Quarterly*, *37*, 589-613

Shaw, P. (2008). Spelling, accent and identity in computer-mediated communication. *English Today*, *24* , 42-49

Westerman, Molly (2004). Is the butler home? Narrative and the split subject in The Remains of the Day. *Mosaic*, *37*, 157-170.

Course tasks used for analysis:

Week 1: On our web forum, post a brief reflection on the concepts learnt today.

Week 2: Jot down a brief analysis of the intro of the Ellis article, and post it on our web forum.

Week 3: Post your reflection on today's activities on our web forum.

Final course assignment:

Submit a 1,000-word essay based on the comparative analysis of three journal articles from the six discussed in class (one literary, one linguistic, and one ELT). In your comparative analysis, pay close attention to intended audience, structure, introduction, rhetorical aspects throughout the article, and style. Your essay should have an introduction, body outlining your main points, and conclusion. Your essay should also have a clear thesis: your claim about the comparative analysis of these three pieces. What is the point you are trying to get across? What do the articles' differences and similarities suggest?