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What Does Teaching Writing as a Process Really Mean?

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Abstract

For most teachers, teaching writing as a process consists of having students write a draft and requiring them to re-write it after peer editing. This write-rewrite process may benefit students who are already familiar with the rhetorical structure and linguistic characteristics of the expected text. But for students who are not, more systematic teaching of specific composing skills seems to be needed. This paper argues for a process approach that integrates the explicit teaching of specific cognitive processes involved in writing with a deliberate consciousness-raising of the social-cultural dimension of writing. Such a social-cognitive approach would first demonstrate, and then provide practice in, the decision-making operations in writing with reference to the social goals of writer and target reader. The underlying theoretical framework draws on cognitive models of writing as well as genre theory, particularly the notion of texts as situated in a discourse community's social practices. Some classroom research will be reviewed for evidence of the potential benefit of integrating the teaching of cognitive writing processes with the teaching of genre practices as socially situated discourse behaviours. The paper's penultimate section offers three principles for guiding the planning of lessons to teach the thinking and social interaction processes in writing.

Introduction

The process approach to teaching writing, advocated with evangelical zeal in the 1970s and 1980s by writing teachers (e.g. Brown & Mathie, 1991; Graves, 1983), is familiar to many English language teachers. As most teachers understand it, the process method has students writing a first draft, usually without any or much intervention from the teacher, followed by peer review or peer editing, and ending with students re-writing to produce, hopefully, an improved draft. The 2001 English language syllabus for Singapore schools[1], for instance, assumes the process method as the desired pedagogy when it stipulates that students are to be "taught the processes of planning, drafting and editing" at the primary level (Ministry of Education, 2001, p.8), and at the secondary level students are to "draft, revise and edit a text with peers/individually" (p.73).

Though teacher assistance in the writing, reviewing and re-writing process may sometimes be provided, there is generally no systematic intervention targeted at shaping students' thinking processes or their attitudinal approach to writing. In some classrooms, the teacher may conduct an idea-generation activity, such as brain-storming or group discussion, to

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[1] The 2001 English syllabus for Singapore schools is to be replaced by the 2010 syllabus which lists, in the writing section, specific language skills and cognitive strategies that students will be taught to enable them to produce the types of texts they are expected to write.

produce a collection of ideas as a solution to the problem of 'what to say' in the essay. However, students generally have to rely on their own resources for the selection and deployment of ideas available from the list generated with the teacher's help. In the process method, as commonly practised in schools, the assumption appears to be that "writing is essentially learnt, not taught", and as a result the teacher's role is to be "non-directive and facilitating" (Hyland, 2003, p.18) rather than interventional in the students' composing processes of meaning evaluation, selection, and organisation. The teacher may allocate class time for peer review of essays, for example, but may not provide any demonstration of the process of evaluating main points against the writer's rhetorical intention, the reader's expectations, or the requirements arising from the social context of the writing. As a result, most peer review is little more than a hunt for surface errors in grammar and spelling. It is not possible to identify with any certainty what thinking strategies or writer-reader interaction skills students have learnt or not adequately learnt through the process method of teaching, practised in a non-directive manner.

Although research has identified some of the cognitive processes underlying successful writing, such as global goal-directed thinking (Flower & Hayes, 1981, 1980) and knowledge transforming (Bereiter & Scardamalia, 1987), these processes are not explicitly taught in most process writing classrooms as "many teachers still favour less explicit forms of instruction" (De La Paz, 2007, p. 249). Less explicit instruction may arise from insufficient appreciation of the value of attending to students' thinking and attitudinal processes during writing, possibly because many teachers view poor writing as bad grammar or dearth of good ideas rather than as the result of ineffective decision-making or inappropriate attitudes towards audience and writer role. Vanderburg (2006) has argued for the need "to understand how helpful the understanding of cognitive deficiencies is for teachers" (p.375). Such an understanding would point teachers to the thinking strategies that need to be explicitly described and practised in writing lessons.

This paper proposes a social-cognitive approach to teaching writing that would address the above limitations of the conventional process method without abandoning a process orientation. The main thrust of the argument will be for an integration of explicit teaching of specific thinking processes with efforts at raising student awareness of the social-cultural context of a writing task and deploying elements of that context in exercising the thinking processes. Before this social-cognitive approach is presented, we should first inquire into the adequacy of the genre view of writing for pedagogical purposes since genre-based pedagogy is widely regarded as the answer to the shortcomings of the cognitive process approach (e.g. Hyland, 2007, 2003; Coe, 1994; Martin, 1993; Henry & Roseberry, 1998). This inquiry is the subject of the next section, which is followed by a review of research that supports the viability of a pedagogical approach that treats writing as a thinking activity and as a social interaction process at the same time. The section following the literature review offers three principles for guiding the translation of a social-cognitive view of writing into classroom activities.

Teaching Writing as Teaching Genre

Since the early 1990s the genre approach to teaching writing has been advocated by writing researchers and teachers (Cope & Kalantzis, 1993; Hyland, 2003; Martin, 1993; Coe, 1994; Veel, 2006) and applied in classrooms with reported success (Henry & Roseberry, 1998; Martin, 2006; Pang, 2002). Genre-based pedagogy has been advanced as a solution to the

shortcomings of the process approach which, as Bizzell (1992) points out, overlooks the fact that the thinking that generates writing "takes place in society, in interaction with other individuals, and this interaction modifies the individual's reasoning, … and writing within society" (p.76). Genre-based writing instruction is typically characterised by teacher-led deconstruction of texts to draw student attention to organisational and linguistic features conventional of a type of text (e.g. Pang, 2002), student-driven "textual discovery tasks" which have students analysing texts to discover generic moves and language forms regularly occurring in the genre (Cheng, 2006, p.282), and teacher-led scaffolded writing such as joint text construction with the teacher before students undertake independent writing (Rothery, 1996).

The provision of model texts, often with teacher-guided analysis of the models, may be limited in effectiveness if it is assumed that students can discover for themselves the thinking processes that lead to successful realisation of the moves and patterns of organisation in a genre. In a review of classroom-based studies of genre instruction, Tardy (2006) notes that in one study by Charney and Carlson (1995) "the availability of models did not seem to help the writers discriminate between necessary and unnecessary details" (p.90), a result that should not surprise us as genre-based pedagogy tends not to include explicit teaching of thinking processes such as those involved in vetting details. Gene-based instruction focuses primarily on the *what* rather than the *how*. Students learn what stages typically make up the organisation framework of a genre and what linguistic structures are recurrent, but not how to think their way through the selection of meaning and linguistic structures to construct the typical stages. Knowledge of typified structures does not easily translate into ability to write especially for students who have insufficient exposure to the required genre or are in need of teacher assistance in acquiring the cognitive processes underlying the production of generic features. In an investigation on the effect of genre instruction on writing in which the study of genre in reading lessons was followed by writing, one student told the teacher, "You must teach me how to write like that [like the genre studied]" (Sengupta, 1999, p. 307; cited in Tardy, 2006). Genre-based instruction may have more impact on students' writing if it incorporates explicit teaching of the thinking processes that generate the typified organisational and linguistic structures of a genre.

Without attention to the cognitive dimension of writing it is easy for teachers to slip into teaching a genre as if it were a template with labels for its different parts (e.g. 'setting', 'complication' for the story genre). Figure 1 shows an example of the potential of genre teaching, as practised in many classrooms, to result in "restricting freedom of expression" (Coe, 1994, p. 158) as some anti-genre critics have charged. The writer of the story in Figure 1, a Singapore primary school student, began his story with a setting that sought to capture the reader's interest with a dramatic incident (the protagonist reacting to a centipede bite). In his teacher's mental script for the story genre, however, the setting is restricted to the naming of location, characters and time (*My friends and I were at East Coast Park … at noon…*), hence the instruction to the student to move Paragraph 3 to the beginning of the story, although the student's original setting does introduce the protagonist as well as the event that sparked the rest of the story. Genre-based teaching, when founded on a template view of types of texts, can fail to recognise creativity such as that displayed by the Primary 6 student writer in Figure 1.

If the teaching of the genre conventions is accompanied by the teaching of socially-situated cognitive processes relevant to the genre, the outcome might be more positive for both

teacher and learner. If the teacher in Figure 1 had considered the student's opening paragraph in terms of the social purpose of stories and the writer-reader interaction in a story's setting stage (*How do stories entertain? What kind of events would awaken curiosity in a reader at the setting?*), he/she might have commended the student for a creative beginning, and the student would have felt encouraged to attempt further efforts at creativity. Teaching the organisation framework and linguistic forms of a genre without attention to the underlying thinking and social practices could lead to template-fixated, uninspiring writing especially among students who, unlike the student in Figure 1, are not fortunate enough to have already acquired the necessary cognitive skills and social-cultural knowledge for narrative writing.
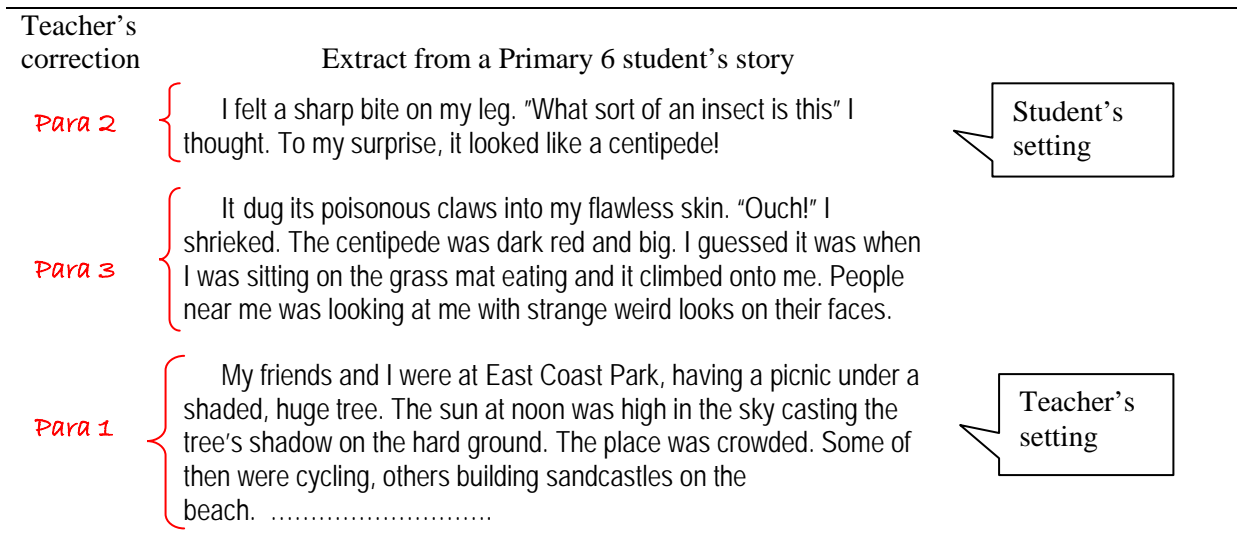
Teacher's correction	Extract from a Primary 6 student's story	
Para 2	I felt a sharp bite on my leg. "What sort of an insect is this" I thought. To my surprise, it looked like a centipede!	Student's setting
Para 3	It dug its poisonous claws into my flawless skin. "Ouch!" I shrieked. The centipede was dark red and big. I guessed it was when I was sitting on the grass mat eating and it climbed onto me. People near me was looking at me with strange weird looks on their faces.	
Para 1	My friends and I were at East Coast Park, having a picnic under a shaded, huge tree. The sun at noon was high in the sky casting the tree's shadow on the hard ground. The place was crowded. Some of then were cycling, others building sandcastles on the beach.	Teacher's setting

Figure 1: Genre-based teaching: Applying a story template
Note: Story has not been edited. Teacher's corrections within the text have been omitted.

While the process approach to teaching writing, as conventionally practised, fails to provide explicit guidance on the conventions of organisation and language use expected in the kinds of texts students are tasked to write, genre-based methods tend to provide descriptions of conventions without showing students how to think their way to the production of those conventions. An integration of the two approaches would give us a social-cognitive model from which to devise a more effective pedagogical approach to teaching writing. The next section explains how writing can be viewed as a synthesis of cognitive and social processes.

A Social-Cognitive View of Teaching Writing as Process

Like Flower and Hayes' (1981) cognitive process model of writing, a social-cognitive model would view writing as a thinking, decision-making, goal-setting activity. But unlike the cognitive process model where the environment of a writing task is conceived as just the "writing assignment" and "text produced so far" (Flower & Hayes, 1981, p. 370), a social-cognitive view sees the thinking, decision-making and goal-setting as always sited in a social-cultural context created by the conventional practices, beliefs and value systems that shape the roles played by writer and reader and the interaction between them. "Cognition is socially situated" says Kostouli (2005, p.18). Hence the mental strategies for deciding what to say or omit, how to organise propositions, and what words to use or avoid cannot be detached from "the genres and the communities within which these strategies operate and which they help

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construct" (Kostouli, 2005, p.18). The thinking operations in arguing a thesis in an essay, for example, must include reference to the valued verbal behaviours and tacit assumptions of the academic discourse community represented by the teacher-reader and assessor.

The notion of genre and the discourse community in which a particular genre is used is integral to a social-cognitive model of writing. To be useful as a concept in writing pedagogy, genres should not be regarded as inert structures made up of labelled stages and conventional linguistic features, this being "an incomplete and misleading view of genres" (Bazerman, 2004, p.317). Rather, genres should exist in the minds of teacher and students as living, evolving phenomena "embedded within structured social activities" (Bazerman, p.311) and imbued with the values, beliefs, and typical recurrent practices that govern the conduct of those social activities. Applied in writing classrooms, genre-inspired teaching must therefore go beyond the mere observance of a template of steps and linguistic structures to socialization of student writers into the practices and mindsets of the people who use a genre to interact with each other in social contexts associated with that genre.

There are cognitive processes at work whenever we participate in the social activities that create an instance of a genre, because "learning to carry off a literate practice or participate in a discourse community often depends on learning distinctive ways of thinking grounded in the social purposes of the practice" (Flower, 1994). The writing of an email requesting for action or information in a workplace setting, for instance, involves the cognitive operation of setting a rhetorical goal (e.g. *Convince the reader that the requested action is advantageous to her/him*), a cognitive process that must include attending to the social-cultural norms operating in the writer's/reader's context (e.g. norms governing interaction between participants of unequal status). Throughout the writing of a text, the mental operations of vetting propositions against the writer's rhetorical goal, addressing anticipated reader response, and selecting meaning and language have to be orchestrated with a view towards alignment of the resulting text with the social practices of the discourse community. Teaching writing as a process must therefore mean the teaching of the cognitive strategies, attitudes and mental postures that enable the student writer to enact the social practices mediated through the target genre. De La Paz (2007), in a review of studies on cognitive strategy instruction, concluded that "cognitive strategy instruction programs have consistently been found effective in promoting impressive gains in students' writing performance" (p.262). The next section provides some research evidence of the feasibility and efficacy of teaching genre-relevant cognitive processes.

Research Supporting a Social-Cognitive Approach

The term 'social-cognitive' seems an apt label for describing a process approach to teaching writing that acknowledges the role of social and cultural factors in the thinking operations that drive writing. The term is justified by the title of Flower's (1994) book, which reads in part: "A Social Cognitive Theory of Writing". In this book she argues the view of literate acts like writing as participating in social acts that require not only "knowledge of social conventions" but also "individual problem solving" (p. 22).

There are a number of studies that show us how a social-cognitive approach to teaching writing can be translated into classroom activities with beneficial results. These studies,

reviewed below, combine instruction in cognitive strategies for decision-making in writing with the explicit teaching of genre knowledge (e.g. Graham, Harris & Mason, 2005) or with socialization-type activities to raise awareness of key discourse practices in a genre (Reznitskaya, Anderson, & Kuo, 2007).

The integration of the social and cognitive dimensions of the writing process is generally achieved through describing or modelling the thinking operations leading to the production of the desired features of a genre. Dobson and Feak (2001) describe a method of cognitive modelling, employed "successfully with NNS undergraduate students ... at the University of Michigan" (p.189), whereby the teacher helped students to perform the complex mental procedures that experienced writers employ as they prepare a written critique. Students were nudged towards the target thinking activities through a set of questions that guided them to perform mental acts such as framing the issue in the article they had to critique, and evaluating the quality of the evidence the author provides to justify his/her conclusions on the issue. Performing such mental acts equipped students with the know-how to go beyond mere narration of the article's content, a common flaw in students' critiques, to the making and supporting of the student's own evaluative claims about the article and the synthesizing of competing claims – traits recognised in academia as characteristic of well written critiques. Cognitive modelling was supplemented with the provision of sample critiques "to demonstrate various topic-comment configurations" (p.196) which reflect a common practice in critique genres – the practice of first raising some aspect in the article and then commenting on it. Combining cognitive modelling with study of sample critiques socialized students into the academic discourse norms of their assessor-reader to the extent that the researchers noted that by the end of the study the students had become "aware of the kind of evaluative criteria … used by members of the academy" (Dobson & Feak, 2001, p.198).

The feasibility of teaching students specific cognitive processes and genre conventions is not limited to university students as Dobson and Feak's paper may lead us to believe. In a study of struggling third grade student writers, Graham, Harris and Mason (2005) report improvements in students' stories and persuasive essays after genre instruction combined with explicit teaching of cognitive operations for the production of the two genres. The genre-based part of the instruction consisted of teaching students the basic elements of stories and persuasive essays by showing them examples of each element and then having students identify those elements in good exemplars of the genre and in their own writing. The basic elements of the genre, presented in a graphic form to serve as a reminder to students, were incorporated into the teaching of the cognitive processes for writing the target genre. Explicit teaching of the cognitive processes included naming of the mental steps (e.g. for the persuasive essay, *Tell what you believe, give 3 or more Reasons*), and teacher modelling of the steps through "talking out loud" while composing and using the basic elements reminder to demonstrate how each element must be included (p. 217-218).

The improvements observed in students' writing in Graham, Harris and Mason's (2005) study must be regarded as impressive considering that the third grader participants had been identified as "at-risk in writing" (p. 213). The texts of the students in the treatment groups included a significantly higher number of basic elements of the genre (for both story and persuasive writing) than those of their counterparts in the comparison group. Holistic scoring of essays revealed significantly higher scores for essays in the treatment groups, leading the researchers to conclude that students in these groups "wrote qualitatively better stories and persuasive papers (the two instructed genres) than their peers in the comparison condition"

(p.231). The positive results indicate the effectiveness of integrating the cognitive and genre dimensions of writing in the writing classroom.

The promise offered in a social-cognitive approach may lie in its conceptualization of writing lessons as opportunities for the socialization of student writers into the conventional practices and ways of thinking of a genre. In a study on the teaching of argument conducted by Reznitskaya, Anderson, and Kuo (2007), fourth- and fifth-grade students were socialized into the genre practices of argument through participation in small group "collaborative-reasoning discussions" (p.456) on moral dilemmas featured in stories. Familiarity with the conventional argument practices was cultivated by having students identify and label propositions from their discussion according to an argument schema consisting of these elements: position. reasons for position with supporting facts. and objection with response to objection (Reznitskaya, Anderson, & Kuo, 2007, p. 453). The cognitive aspect of argument construction was not neglected as the teacher provided explicit guidance to direct students' thinking, prompting them for supporting reasons, modelling the function of evidence as support, and challenging students to respond to counterarguments.

In a post-instruction essay task the students who underwent collaborative reasoning discussion only had "significantly more argument-relevant propositions" in their compositions than their counterparts in the control group and the "explicit instruction group" (p. 464) who, in addition to participation in collaborative reasoning, had two scripted lessons explaining the argument schema, its component parts and the relations among them. It would appear from Reznitskaya, Anderson, and Kuo's results that explicit instruction had no significant effect on students' mastery of the thinking and genre practices of argument writing. However, it should be noted that students in the explicit instruction group received only two scripted lessons which merely explained the components of the argument schema and did not explicitly teach the mental strategies for realising the components in their own arguments. What Reznitskaya and her colleagues have demonstrated is that there is significant improvement in argumentative writing when "socialization into argumentative discourse in dialogic collective settings" (p.451) is accompanied by cognitive scaffolding in the form of teacher prompts to guide students' thinking during argument construction.

If the primary school students in Reznitskaya, Anderson, and Kuo's (2007) study benefited from genre knowledge and related cognitive guidance we would expect secondary school student writers to show improvement in writing after similar social-cognitive instruction. Two studies conducted in Singapore secondary schools suggest that this expectation is not unfounded. In both studies (Chandrasegaran & Yeo, 2006; Chandrasegaran, Kong, & Chua, 2007) the teaching of genre practices was combined with explicit instruction of the cognitive strategies for reproducing the genre practices. In the Chandrasegaran, Kong, & Chua (2007) study, Secondary 3 (Grade 9) students in a typical state school observed in various sample texts the main genre practices of expository writing: stating and supporting a position, providing reasons or evidence to support claims, and addressing counter-arguments. The teacher, through guided class discussion, also raised student awareness of the social contextualisation of meanings and organisation structure in the texts they studied, directing students to consider the writer's and reader's social roles in the context and the social-cultural shaping of ideational content in texts. Before students wrote their own expository texts they learnt, through teacher explanation and modelling, and then practised the thinking processes that would enable them to enact the genre behaviours they had observed earlier. The thinking processes modelled and practised included the setting of a whole-text rhetorical goal

specifying writer purpose and reader effect, selecting an appropriate support strategy, and anticipating opposing views. The teaching of these thinking skills was supported by a list of claim-support strategies, which included answering anticipated counter-arguments for which teacher and students could refer to another list of strategies for countering opposing views (e.g. playing down significance of opposing view, offering evidence to discredit an opposing view).

After 14 weeks of weekly writing lessons, the post-instruction essays of the 137 student participants showed improvements in quality, measured by number of different argument moves and occurrence of functional/non-functional topicality, non-functional topicality being topics brought into the essay that play no rhetorical role in developing the writer's overall stance or thesis. There was a significant increase in the mean number of stance (thesis) support moves, with significantly more moves in stating support claim, elaborating claim, and countering opposing views. There was a significant rise in functional topicality accompanied by a drop in non-functional topicality, which means that the incidence of irrelevance declined significantly. These results provide ground for concluding that knowledge of genre practices, awareness of the social context of a type of text, and training in the relevant cognitive processes can produce gains in expository writing ability. The same genre cum cognitive instructional approach led to improvements in Secondary 3 students' narrative writing in another Singapore study (Chandrasegaran & Yeo, 2006) in which explicit teaching of two character depiction practices in the story genre and training in the setting of reader-effect goals led to student generated stories with notable improvements, including a rise in the number of ideational tokens (expressions that evoke a character's personality or mood by describing a detail of behaviour or appearance, or creating an utterance).

The positive effects of a social-cognitive approach to teaching writing have been demonstrated not only in school-based writing in the English composition class, as in the studies reviewed above, but also in writing done by university students to meet requirements in an academic discipline (Carter, Ferzli & Weibe, 2004). Carter and his colleagues had university students in a biology course explicitly taught two types of cognitive processes: scientific reasoning (e.g. hypothesizing the relationship between variables in an experiment before conducting the experiment, and justifying their hypothesis), and the cognitive strategies for writing lab reports (e.g. delaying the writing of the introduction until they had made sense of their data and selected a visual representation for the data). The instruction in scientific reasoning is a means of socialising the biology students into the ways of thinking of their disciplinary discourse community. In addition, the conventions of lab reports were described in a step-by-step guide on writing each section of the report, (e.g. "do not include any interpretations…about the data in the Results" (p.416)). Not only were the lab reports of the treatment group rated significantly higher than those of the control group, treatment group students showed a significantly more positive attitude toward lab reports. Carter, Ferzli and Weibe's findings demonstrate the effectiveness of situating the teaching of thinking processes underlying a genre (the lab report, in their case) within the context of performing the social or professional acts of the community that uses the genre to mediate interaction among its members. This merging of cognitive and social models in teaching writing as a process would alert students to the fact that "disciplines have… their own ways of semiotically reconstruing, reasoning about, and participating in the world" (Ravelli, 2005, p.105), thereby motivating them to attend to different reader expectations when they are writing different genres in an academic course of study or in different academic courses.

The research reviewed in this section offers sufficient evidence of the efficacy of adopting a social-cognitive view of writing as a pedagogical approach. What appears to work is the explicit teaching of the mental postures and thinking processes associated with the social functions, values, and accepted practices of the discourse community that uses the genre students are asked to write. Writing teachers who deliberately shape students' cognitive processes towards audience-aware strategies of content and language choice that aligns with the social practices of their reader's community can be said to be really teaching writing as a process.

Applying a Social-Cognitive Approach in the Classroom

The previous section would have given some indication of how a social-cognitive inspired pedagogy would translate into teaching/learning activities in the writing classroom. It is neither possible, in a paper of this length, nor advisable, considering the endless permutations of student ability and instructional contexts, to describe a collection of classroom activities for teaching specific cognitive processes leading to genre practices in different types of texts. Instead this section will offer three principles for guiding lesson preparation and material design aimed at developing the mental attitudes and thinking skills students need for enacting required genre practices. The three principles are:

- Identify and name specific cognitive and social interaction skills to teach
- Provide contextualized practice targeted at specific cognitive strategies and social interaction acts
- Exploit students' social knowledge to raise their awareness of the social context of language use and choice of meaning in a writing task

Explicit teaching of thinking and social interaction skills is not possible without naming the cognitive and writer-reader interaction acts that construct texts. For example, when writing an expository essay entitled 'Marriage', cognitive and social interaction acts to teach may include those in Figure 2.

The double headed arrows in Figure 2 underline the inter-relatedness of cognitive and social processes in writing. It will be explained to students that every decision-making act in choice of content, organisation and language must take into account some aspect of the social-cultural context of the writing task, because writing is a channel through which writers attempt to influence the perceptions of readers, and an awareness of the social-cultural landscape of target readers and their community can increase the likelihood of success. Furthermore, it is best that the cognitive and social interaction acts to be taught be couched in what-to-do terms to focus student attention on the socio-rhetorical dimension of the writing task rather than on topic knowledge exclusively.

Decision-making (cognitive) act	Social interaction act
Set a global goal that includes writer purpose and reader effect ⟷	Convince Teacher-reader that I (Student) have a considered view on a current issue in the topic of marriage [e.g. a current issue in some Asian communities is society's concern that highly educated women are delaying or avoiding marriage].

| Anticipate and answer arguments/views opposed to that of the writer | ⟷ | Expect Reader to have concerns often raised in the community about the negative consequences of my point of view (e.g. that women delaying or avoiding marriage is not a significant social problem). Give reasons to persuade Reader that the negative scenarios may not occur. |

Figure 2. Examples of cognitive and social interaction acts

Naming cognitive operations and social interaction acts provides teacher and students a shared meta-language that empowers students to talk about their thinking processes and social awareness during writing and to monitor their own learning, thus giving them a sense of control over their development as novice writers. The meta-language and the manner of its presentation can be adjusted to suit the age and cognitive maturity level of students. For example, Graham, Harris, and Mason's (2005) used the mnemonic TREE (*T*ell what you believe, Give *R*easons, *E*xamine each reason, *E*nd it) to teach third-grade students the thinking strategies and schematic structure for persuasive writing. However, the explicit teaching of thinking and social skills for writing, with or without the aid of mnemonics or diagrams (like the house-shaped argument schema in Reznitskaya, Anderson, and Kuo's (2007) study), may not have the desired effect on writing if the focus of instruction remains at the level of labels for parts of a template. Students may then be able to recite the labels without the expected change in their attitudinal approach to writing and without changing their usual less effective cognitive behaviours during writing. It is the systematic effort at developing specific cognitive skills and writer-reader social interaction processes that distinguishes a social-cognitive approach to process teaching from the conventional write-review-rewrite approach.

The second principle for implementing a social-cognitive approach to writing is that to achieve change in students' composing behaviours, lessons must include contextualized practice exercises targeted at specific cognitive strategies and associated social interaction acts. Dobson and Feak (2001), in training students to write critiques, provided "focused practice on critical reading and evaluative writing" before students were given the critique assignment (p. 197). Focused practice gives students the opportunity to familiarise themselves with new ways of thinking during writing and, hopefully as a result, they will replace their less efficient composing behaviours with more rhetorical, audience-aware patterns of thought. For instance, exercises in goal- and context-referenced selection of meaning (i.e. vetting details/facts/ examples/propositions against writer purpose, reader expectation, etc. as exemplified in Chandrasegaran & Tang, 2008, p.44) could give students the confidence to adopt this method of content generation in place of the rather common student practices of knowledge-telling (Bereiter & Scardamalia, 1987) and associative writing – using topics in sentences already written or in the essay prompt to generate the next clause to grow the text (Bosher, 1998; Chandrasegaran, 1999). Practice in using socio-rhetorical goals and context awareness to direct content selection would sensitise students to making attempts at discovering reader expectations and discourse community values whenever they have to write, even when the genre is unfamiliar as may happen in workplace writing after they leave school.

Dedicated practice of specific thinking processes leading to valued discourse acts is more likely to have the desired effect if students are aware of the social-cultural context of their writing. The importance of social awareness in the writing process is the reason for the third principle for guiding the preparation of writing lessons: Exploit students' social knowledge to raise their awareness of the social context of language use and content choice in a writing task. When student thinking during writing includes consideration of social roles and conventional discourse behaviours of the participants in the unfolding text, meaning selection, organisation and language choice are more likely to be more appropriate (even if not totally free of surface error). Pang (2002) found that engaging in contextual analysis, involving the study of the social-rhetorical purpose, writer role, audience and register of a genre, resulted in writing that "included all obligatory moves" of the target genre (p.157). This positive outcome reported by Pang (2002) and other researchers (e.g. Cheng, 2006) who taught student writers to do similar text and context analyses suggests that knowledge of genre practices and awareness of the social-cultural context of a writing task facilitates the performance of the discourse moves associated with the target genre.

Students bring to the classroom some social knowledge about relationships between participants in everyday communicative situations, or what is known as "tenor" in systemic functional linguistics (Halliday, 1985, p.12; Macken-Horarik, 2002, p.24), and about the social situations that contextualize the kinds of texts commonly required in school writing tasks – complaint letters, expository essays, stories, and book or film reviews. Much of this knowledge, acquired through years of social interaction, is unarticulated and waiting to be activated by teachers through probes such as, using the film review as example: "If you want your friends to see a film that you enjoyed, what would you say about the film? Would you tell them how the film ends?" Activating students' tacit social knowledge would encourage them to approach writing as a social-rhetorical event rather than as an exercise in generating well-formed sentences saying what they know about the topic(s) in the essay prompt.

It has been observed, for instance, that secondary school students' informal argument practices in an online forum include counter-argument management moves that could, with some explicit teaching, be developed for use in expository essay writing (Chandrasegaran, 2008). Yet when writing expository/argumentative texts students tend not to consider counterarguments (Nussbaum & Kardash, 2005), or they merely state opposing positions without addressing them with the aim of maintaining their own position (Hinkel, 1999). The reason must be the tendency among students to view expository essay writing as a recount of topic knowledge (English, 1999) rather than as participation in an ongoing conversation in which they interact with readers to contribute their own point of view on a contested issue. Teachers can raise student awareness of the social-rhetorical dimension in a writing prompt by encouraging students to articulate their tacit social knowledge of their role and purpose with respect to the target reader, the reader's role in the context, and the underlying assumptions governing the writer-reader interaction in the given circumstances. Writing with a real sense of audience and situation would bring into play some of a student's socially acquired discourse behaviours appropriate for school writing, for example, withholding selected information to create suspense in a story or providing details of an unsatisfactory product to strengthen the writer's claim of having been inconvenienced in a letter of complaint.

Conclusion

In the light of current social constructivist views of writing, the 'process' in teaching writing as a process is a sequence of social interaction acts typical of the context in which writer and reader are situated in relation to each other. To enable students to perform the expected discourse acts, the teaching must include instruction in the cognitive processes underlying and leading to the realisation of the moves and organisational structure characteristic of the genre. Explicit instruction in the cognitive procedures and strategies would encourage intentionality during writing, thereby reducing the tendency towards mere mechanical observance of the sequence of stages constituting a genre, which is often the case when genre is taught as a template of stages and characteristic linguistic forms. By directing conscious attention to the thinking that impels moves at each stage of the social interaction between writer and reader, a social-cognitive process approach to teaching writing allows scope for students to exercise their creativity within the conventions of the genre. A social-cognitive process approach to teaching writing is "visible pedagogy" (Martin, 1993, p.163) that makes the writing process visible on two fronts: the ways of thinking that contribute to the construction of context-appropriate texts, and the verbal social-interaction behaviours that meet the expectations of the discourse community represented by the target reader.

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