Influencing Teachers’ Theoretical Orientation through Instructional Material Design

Antonia Chandrasegaran
National Institute of Education
Nanyang Technological University

Abstract

Research has established that teaching methods tend to reflect teachers’ theoretical orientations (Johnson, 1992). Given this relation between teachers’ pedagogical methods and their theoretical orientation, it may be possible to enhance the effectiveness of teaching by attempting to change teachers’ theoretical view of their subject and its instruction. This paper explores the question of whether English language writing teachers can be influenced, through instructional material design, to shift from a predominantly product-centred approach to a socio-cognitive orientation, currently acknowledged as a more valid model since it represents writing as requiring not only “knowledge of social conventions” but also “individual problem solving” processes (Hayes, 1994, p. 22). Teachers’ initial theoretical orientation towards the teaching of writing was obtained by means of a questionnaire and an interview. Through teacher guides accompanying the materials and discussion sessions with the researcher, teachers were familiarised with the socio-cognitive view of writing instruction. Analysis of teacher talk and classroom practices during lessons suggests that instructional materials can, to some extent, shift teachers’ theoretical orientation in the teaching of writing. The observed changes in orientation are discussed with reference to factors that may assist or hinder development in teacher beliefs in the desired direction.

Keywords: teaching writing; teachers’ beliefs; instructional materials

Introduction

Teachers’ classroom practices reflect their theoretical view of the subject matter and of the learning process involved in achieving mastery of that subject (Johnson, 1992). In a review of the literature on teacher learning and teacher knowledge, Freeman (2002) notes that from the 1980s there has been increasing recognition of the role of teachers’ “mental lives” in their decisions on what and how they teach (p. 1). Johnson (1995), for instance, noted that teachers’ theoretical beliefs were filters through which “instructional judgements and decisions” were made (p. 33). It follows that any attempt to improve teaching methods through the implementation of innovative approaches may be thwarted if teachers’ theoretical orientations do not change to align with the philosophy underlying the new pedagogy (Sato & Kleinsasser, 1999; Turnbull, 1999).

One way to influence teacher beliefs may be through the design of educative curriculum materials, that is, instructional materials “intended to promote teacher learning in addition to student learning” (Davis & Krajcik, 2005, p. 3). Davis and Krajcik argue that the principled development of educative curriculum materials “can promote changes in teachers’ knowledge and practice” (2005, p. 3). Therefore, the
Influencing teachers’ theoretical orientation through instructional material design

question addressed in this paper is whether instructional materials designed according to the principles of a certain theoretical framework would shift teachers’ theoretical orientation to their subject in the direction of alignment with the theoretical model underpinning the materials.

This paper grew out of a research project (Project CRP5/04 AC funded by the National Institute of Education, Singapore) that investigated a method of intervention in students’ expository essay writing in two secondary schools in Singapore, where English is the language of instruction from primary school to university. As the project progressed, it was observed that the same lesson materials and teachers’ guides influenced teachers’ classroom practices differently, suggesting that there can be wide variation in the impact of the same instructional materials on teachers’ mental lives. It was my reflection on the differential impact, which seemed too striking to ignore, that raised the question of whether the instructional materials had influenced a change in the teachers’ orientation towards the teaching and learning of writing. My main objective here is to explore the factors that appear to promote or hinder change in teachers’ theoretical orientation, with the expectation that the tentative conclusions reached may contribute a writing researcher’s perspective to further discussion on the role of teacher orientation in the successful implementation of curricular changes.

The next section will argue two underlying theoretical assumptions, first that teachers’ mental models of their teaching subject can be identified through self reports and classroom observations, and second, that curricular decisions such as those shaping instructional materials have the potential to influence teachers’ theoretical orientations. The methodology section that follows will describe the teachers involved in the study, and the method of shaping and identifying their theoretical orientation to writing. The section entitled Observations reports behaviours, which may be interpreted as reflective of the teachers’ theoretical orientation towards the teaching of writing, during the development and use of the writing project’s instructional materials. The discussion section examines the observations to explore the factors that could influence the effect of instructional material design on teachers’ theoretical orientation.

Teachers’ Theoretical Orientation to the Teaching of Writing

The assumption that beliefs can be inferred from an individual’s words and observable behaviours has driven previous research on teachers’ beliefs (Pajares, 1992; Johnson, 1994). In a study of pre-service ESL (English as a second language) teachers’ beliefs, Johnson (1994) demonstrated that it would be possible to identify teachers’ perceptions about teaching and learning through analysing narrative data from sources such as interviews and through observing teaching behaviours in the classroom. The study reported here starts from the same assumption that it is possible to infer, from interview data and classroom observations, whether teachers’ perception of writing is dominated by a focus on well formed sentences, impressive words and topic knowledge (a product centred orientation) or by a focus on the thinking processes and social context awareness that are involved in the creation of texts (a socio-cognitive orientation). These orientations will be briefly explained before we examine the genesis and development of teacher beliefs.
A product-oriented approach to teaching writing focuses on achieving “structural well-formedness” (Kern, 2000, p. 180) in students’ compositions through exhorting students to be original, helping them to generate topic content, and correcting grammatical errors. The process approach to writing instruction, as understood by most English language teachers in Singapore (Ministry of Education, 2001, p. 8), aims to focus students on the composing process by requiring them to write and peer edit drafts before submitting to the teacher a final draft. Although the development of the process approach was influenced by Flower and Hayes’ (1981) cognitive model of writing as decision-making and problem solving, the teaching of specific cognitive processes underlying effective decision making during composing, in what Faigley (1986) refers to as the cognitive view of process, has not become a widespread practice in Singapore writing classrooms where process tends to be interpreted as improvement of topic content and language form in the final product through peer or self editing. Faigley’s cognitive view of process points to the desirability of teaching the decision making operations that lead to effective writing. However, since the thinking that generates writing “takes place in society, in interaction with other individuals, and this interaction modifies the individual’s reasoning” (Bizzell, 1992, p. 76) a socio-cognitive model seems superior to a merely cognitive one.

A socio-cognitive approach to writing sees the cognitive processes in text generation as socially shaped by the discourse practices regularly enacted in the socio-cultural context of different types of texts or genres (Kern, 2000). In this approach teaching writing would therefore involve making explicit the thinking processes underlying composing decisions and showing how these processes and decisions accomplish social goals in the situations where the genre operates (Chandrasegaran, 2011). For instance, teaching the writing of a letter of complaint would involve explicit description of the thinking processes underlying the decision to project the writer as reasonable and restrained so as to maximise the chances of achieving the social goal of persuading the reader to perform the desired action (e.g., apology and compensation).

Related to the notion of teachers’ theoretical orientation is the question of how teachers’ perceptions of their subject and of its teaching are formed. One source of teachers’ perceptions of any school subject is their own accumulated experiences as students (Johnson, 1994). The treatment of a subject in the textbooks teachers used as students, and the concerns prioritised in their teachers’ instructional methods, including methods of responding to students’ texts in the case of teaching writing, all contribute to the formation of teacher beliefs about the teaching and learning of the subject.

In addition to the influence of experiences accumulated through the years of schooling, the school curriculum plays a significant part in shaping teachers’ beliefs about their subject (Assaf, 2008; Cavagnetto, 2008). The school curriculum comprises the instructional materials for the subject, the pedagogical practices promoted by those materials or advocated by the education authority or teacher educators in professional development workshops (e.g., Cavagnetto, 2008), and the learning outcomes explicitly set out or implied in the curriculum or stipulated by an authority (e.g., high-stakes state tests in Assaf’s (2008) study). Cavagnetto (2008) reports that the requirement to apply a method of teaching science, known as the Science Writing
Heuristic, to promote scientific reasoning resulted in modifications in a science teacher’s classroom behaviours and a "shift towards a student-centred lens of learning” (p. 45) accompanied by a change in her perception of the students’ role in control of learning. Cavagnetto’s finding suggests that instructional materials, by setting out teaching activities aligned with a certain theoretical model of the school subject, may lead to a shift in teachers’ beliefs about the subject and how it is learnt.

Assaf’s (2008) study of a reading teacher provides evidence of the power of curricular decisions to shift teachers’ professional beliefs with respect to the teaching of their subject by influencing them to adopt certain instructional practices. Pressure from the school district to improve student performance in reading in a state-imposed high-stakes test caused the teacher “to waver in her beliefs” about nurturing “confident and life-long readers” (p. 245). Assaf observed that the teacher acted out her shift in belief by adjusting her instructional practices which aimed at cultivating students’ interest and confidence in reading to practices that focused on skills-based instruction targeted at preparing students to pass the test. The shifts in teacher belief reported in Cavagnetto (2008) and Assaf (2008) suggest that curricular decisions have the potential to influence teacher perceptions about teaching and learning, giving us reason to expect that instructional materials incorporating pedagogical methods aligned with a particular theoretical orientation may, over time, influence teachers towards that orientation.

**Methodology**

This section begins with information on the four teachers selected for this theoretical orientation study before describing the method of shaping and identifying their theoretical orientation to the teaching of writing.

The four teacher participants from two schools were trained teachers with a bachelor’s degree in English or a social science subject and a postgraduate diploma in education from the National Institute of Education, Singapore. A profile of their background and teaching experience is given in Table 1.

**Table 1**

*Profile of the teachers*

<table>
<thead>
<tr>
<th>Teacher</th>
<th>School</th>
<th>Gender</th>
<th>Teaching experience (years)</th>
<th>Educational background (Bachelor degree major)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rani*</td>
<td>N</td>
<td>F</td>
<td>2</td>
<td>BA (sociology &amp; English literature); PGDE**</td>
</tr>
<tr>
<td>Lan</td>
<td>N</td>
<td>F</td>
<td>2½</td>
<td>BBA (Business administration); PGDE</td>
</tr>
<tr>
<td>Huay</td>
<td>L</td>
<td>F</td>
<td>Less than a year</td>
<td>BA (English literature); PGDE</td>
</tr>
<tr>
<td>Guy</td>
<td>L</td>
<td>M</td>
<td>Less than a year</td>
<td>BA (Political science); PGDE</td>
</tr>
</tbody>
</table>

*Teacher’s names replaced by pseudonyms  **Postgraduate Diploma in Education

The circumstances of the teachers’ participation in the project differed for the two schools, which may subsequently have influenced teacher response to the project’s instructional materials and hence are reported here. In School N, teachers Lan and Rani initiated contact with the research team to express interest in the
project’s materials for teaching expository writing in their school. The teachers were familiar with the socio-cognitive approach to writing instruction because in the previous year they had attended a 12-hour in-service course on teaching expository writing, organised by their school and conducted by the researcher. The involvement of teachers Huay and Guy from the second school, however, was the result of their English department head’s interest in hosting the expository writing project in her school. The head’s interest in experimenting with alternative ways of writing instruction may not have been shared by her teachers.

Teachers’ beliefs about writing and the development of students’ writing ability were identified from three sources: a questionnaire that teachers answered at the beginning of the writing project, interviews with the researcher on their responses in the questionnaire, and notes of lesson observations and teacher response to the instructional materials. The questionnaire provided a window into the teachers’ theoretical perspective on writing by asking for their views on their students’ difficulties in expository writing and inviting suggestions on how students’ writing could be improved. In individual interviews that followed the completion of the questionnaire, researcher and teachers had informal conversations centred around their answers to the questionnaire, thus giving teachers the opportunity to elaborate on their views.

Besides completing the questionnaire and attending the interviews, the four teachers agreed that the researcher could sit in at one of their lessons to observe their students’ response to the instructional materials. Since maintaining teacher goodwill was important to secure a favourable disposition towards the instructional materials and its socio-cognitive approach, it was necessary to minimise the intrusiveness of the researcher-observer in the classroom. Observation was therefore limited to one lesson per teacher; teachers were given advance notice, and no videotaping or audio taping equipment was used. The researcher-observer sat as unobtrusively as possible in a corner of the classroom and made notes of observable teacher behaviours and classroom talk. The classroom observation notes, together with notes of the teachers’ response to the new materials at different stages of the project, served as an additional mirror reflecting their beliefs about the teaching and learning of writing.

Efforts were made to influence the teachers’ theoretical orientation towards a socio-cognitive view of writing by involving them in the planning of the instructional materials (lesson texts, exercises, powerpoint slides, and teachers’ guides), which were meant to be educative for teachers in the sense, as defined by Davis and Krajcik (2005), of being directed at promoting changes in teachers’ knowledge and practice. Five units of materials for Grade 9 (known as Secondary 3 in the Singapore system) were written with input from the teachers for explicit instruction of the genre practices and associated thinking skills shown in Table 2. Through the semester researcher and teachers regularly met to view new units of materials and discuss problems with units already taught, thus giving teachers the opportunity to see how the objective of teaching socially situated thinking skills translated into writing exercises and other forms of practice activities such as role play. The researcher’s explanations given in answer to teachers’ questions at these meetings provided teachers with further exposure to the socio-cognitive view of writing.
Influencing teachers’ theoretical orientation through instructional material design

Another effort at influencing the teachers’ theoretical orientation towards a socio-cognitive view of writing was to incorporate in the instructional materials cues to the teacher to direct their classroom talk to focus on cognitive processes and raise awareness of the social context of decision-making during writing. For example, in the unit that taught students to select support strategies that strengthen their position (thesis) in an essay, the instructions to students included cues to the content of teacher talk, as in this instruction to students after they had studied support strategies in a film review:

The teacher will ask some group spokespersons to present their group’s answers. As you listen to the answers, note that when writers choose support strategies, they think about their social situation—as what the reader knows, the purpose of a type of text (like the film review) in our society, and so on. (from Unit 2. Choose support strategy)

By drawing students’ attention to the social situatedness of thesis support strategies, the materials cued the teacher to comment on students’ answers with reference to not only appropriateness to the writing task but also to the social context of values, knowledge and practices shared between the writer and the readers.

To summarise this section, attempts were made during the semester to steer the teachers towards a socio-cognitive orientation in writing, while at the same time indications of their theoretical orientation were noted in multiple data sources—questionnaire, interview transcript, and observation notes—so that any shift in theoretical approach could be detected. Table 3 shows sample data from the three sources and the theoretical orientations manifested.

Table 2
Cognitive processes and genre practices taught in the writing project

<table>
<thead>
<tr>
<th>Unit</th>
<th>Cognitive processes</th>
<th>Genre (social) practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Decide/formulate macro-level socio-rhetorical goal (writer social role &amp; position, reader effect)</td>
<td>Announce/indicate writer position in opening paragraph of essay</td>
</tr>
<tr>
<td>2</td>
<td>Select, evaluate support strategy with reference to macro goal</td>
<td>Justify position with supporting arguments</td>
</tr>
<tr>
<td>3</td>
<td>Select details with reference to macro goal and chosen support strategy</td>
<td>Construct adequate supporting argument, starting from claim and providing grounds for the claim</td>
</tr>
<tr>
<td>4</td>
<td>Anticipate objection/opposing view; plan countering strategy</td>
<td>Counter anticipated opposing view/forestall reader objection</td>
</tr>
<tr>
<td>5</td>
<td>Recall macro goal; check that link between support and overall position is evident to reader</td>
<td>Maintain reader attention on writer’s position with relational statements linking support arguments to writer’s position</td>
</tr>
</tbody>
</table>
Table 3

Theoretical orientations manifested in a sample of the data

<table>
<thead>
<tr>
<th>Excerpt from data source</th>
<th>Theoretical orientation to writing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>From questionnaire/interview</strong></td>
<td></td>
</tr>
<tr>
<td>… inadequate use of modals, conjunctions … I notice that in good essays the linking words are usually correct. [Rani, explaining why students cannot write well]</td>
<td>Form/product focused</td>
</tr>
<tr>
<td>… reinforcement of grammar and sentence structure [Guy, on how students’ writing can be improved]</td>
<td>Form/product focused</td>
</tr>
<tr>
<td><strong>From classroom observation notes</strong></td>
<td></td>
</tr>
<tr>
<td>Huay showed the class model answers to Q.1 from the teachers’ guide; doesn’t comment on students’ own answers to point out how they reflect local beliefs and practices regarding alternate medicine. [Q.1 is meant to raise awareness of the social situation (assumptions, beliefs) that attend any writing task. Teacher guide suggests questions and directions to draw student attention to the social context of the texts studied.]</td>
<td>Form/product focused</td>
</tr>
<tr>
<td><strong>From questionnaire/interview</strong></td>
<td></td>
</tr>
<tr>
<td>I always encourage them to speak up and telling them that in expository writing … no right and wrong answers. It’s how you justify … [Lan, on how students’ writing can be improved]</td>
<td>Social/rhetorical (genre practice)</td>
</tr>
<tr>
<td><strong>Classroom observation notes</strong></td>
<td></td>
</tr>
<tr>
<td>Lan introduces a writing topic [her own, not from the materials] saying “It’s an end of year class party; you hope others will listen to your suggestion; anticipate their objections and questions …”</td>
<td>Social/rhetorical and cognitive</td>
</tr>
</tbody>
</table>

Observations of Theoretical Orientation

The question addressed in this paper is whether instructional materials designed within a socio-cognitive framework can influence writing teachers to adopt a similar theoretical orientation in their classroom practices. In answer to this question this section presents observations that the researcher noted of teachers’ approach to writing indicated in interview and questionnaire responses, and their classroom behaviours and the theoretical orientation to writing possibly reflected in these behaviours. The observations were a by product of the main study on the effect of a socio-cognitive approach to teaching expository writing on students’ expository essays. Hence the conventional heading of Findings may be too presumptuous and is therefore substituted with Observations.

In both schools N and L, more indications of a product centred approach were noted at the beginning of the project. Remarks relating to students’ knowledge of topic content and mastery of grammar repeatedly surfaced in the questionnaire responses and interview transcripts. The following description of teaching methodology is representative of the teachers’ view of the centrality of topic content in the teaching expository writing:

… what I normally do is I’ll bring them to the [computer] lab to do their research on the Internet, then I’ll print everything out for them, then during their
writing, they will use the content and they will just write. [Lan, interview transcript]

The expression “just write” reflects the commonly held assumption among the teachers that having topic content to write about would somehow draw out from their students the socio-cognitive processes of influencing readers to be positively disposed towards the writer’s stance on the topic. In addition to the concern with students’ having topic knowledge, there were repeated mentions in both interviews and questionnaire responses of students’ need for improvement in grammar, including the use of conjunctions, sentence structure and modals, and teachers’ attempts to raise accuracy in these areas. There was no hint, however, of intentions or attempts to develop students’ thinking processes or awareness of the social context during composing a text.

As Table 4 shows, more indications of a socio-cognitive orientation were noted in School N than in School L after the teachers began using the project’s instructional materials. Similarly, indications of a product-focused orientation fell more sharply in School N than in School L.

**Table 4**
*Indications of theoretical orientation*

<table>
<thead>
<tr>
<th>Theoretical orientation</th>
<th>School N</th>
<th>School L</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before project</td>
<td>During project</td>
</tr>
<tr>
<td>Form &amp; product focused</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Socio-cognitive</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

Vignettes extracted from the lesson observation notes are presented in Table 5 to show the kind of teacher talk and instructional behaviours that reflect a socio-cognitive approach to teaching writing. Of the four lessons observed, Lan’s had the highest count of socio-cognitive oriented teaching behaviours: 7 instances against the 2 or 3 in the other teachers’ lessons. Lan’s indications of socio-cognitive orientation were also the most convincing as they unequivocally reflect an intention to teach writing as socially contextualised thinking. The next paragraph explains how the vignettes demonstrate the teachers’ attention to the social and cognitive dimensions of writing.

**Table 5**
*Teacher behaviours indicating a socio-cognitive view of writing*

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teacher talk/behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lan</td>
<td>Advises students to think along the lines of support strategy, then instructs them to identify support strategies in texts that she prepared to supplement the project materials [Revising Units 1 and 2]. Later in the same lesson after students have read a text in Unit 3, she asks “What’s the support strategy?”</td>
</tr>
<tr>
<td>Rani</td>
<td>Asks class to indicate, by show of hands, which position they support (on the issue of whether girls should do national service). Then tells students, working in groups, to address the counter arguments to their position [capitalising on Singaporean students’ interest in the topic as, at age 15, they are close to national service age].</td>
</tr>
</tbody>
</table>
Guy (School L)  Begins lesson on Unit 2 by recalling lesson Unit 1, saying “Writing is a social activity like chatting with a friend”

Huay (School L)  Explaining concept of social goal in Unit 1, asks “What’s Adi’s goal?” to draw student attention to social goal in an example. Uses the idea of “a continuing conversation” to explain the social interaction nature of writing.

Lan’s focus on support strategy in her lesson (Table 5) reflected her aim to guide her students’ thinking during writing towards different strategies (e.g., example, reason, and hypothesised outcome) that could be used to justify claims. The social aspect of Lan’s teaching approach is her method of text deconstruction which has students examining instances of the expository genre to identify a genre practice, that of stance support. In the conventional product centred lesson, students would typically receive comments on whether they adequately supported their thesis in the essays. The vignette from the observation notes on Rani’s lesson shows the teacher’s effort at directing the students’ thinking towards the cognitive processes of anticipating and addressing counter arguments as means of defending a writer’s position. By having students work on the rebuttal of counter arguments in groups, Rani was engaging students in collaborative meaning making, underlining the socially constructed nature of writing. As for the vignettes from the lessons of Guy and Huay, they plainly portray to students the act of writing as a social interaction activity. In addition, Huay drew students’ attention to the goal setting process that contributed to the writer’s (Adi’s) construction of his text.

Another indication of change of theoretical orientation was evident in the supplementary exercises written by Lan and Rani. The exercises provided training in recognition and enactment of specific cognitive composing processes, such as identifying and naming support strategies (mentioned in Table 5). Other exercises written after the teaching of Unit 1 of the materials required students to point out evaluative and interpretive discourse acts in expository texts. Rani acknowledged in an email to the researcher that these exercises for teaching the cognitive processes and genre practices of expository essay writing were “quite different from the usual ones” she and her colleague had written before the research project. The pre-project exercises they wrote were mainly designed to provide practice in surface language structures “used by [good] writers … in formal writing,” to quote from Rani’s questionnaire response describing materials she had prepared to raise the quality of her students’ expository essays. The exercises aimed at correct production of grammar forms such as modals and linking words; no connection was made to the discourse acts and writer intentions expressed by the form. Compared to these form focused exercises, the instructional materials produced by Rani and Lan during the research project suggest a shift from a product orientation to writing to a view that incorporates the cognitive operations and social practices underlying text production.

The efforts of Rani and Lan to adopt a socio-cognitive approach to teaching writing reflected a positive attitude towards the writing project in School N. School N teachers readily offered suggestions of topics and activities their students would be interested in, and participated enthusiastically at meetings with their department head and the researcher, raising pedagogical issues and providing feedback on the materials already taught. Their willing participation in the implementation of a socio-cognitive model of writing must have been motivated by such a keen interest in improving their students’ writing that they were ready to try an approach to teaching writing different
from the product focused one they were used to. During the materials development phase of the project, Rani and Lan were given time off for a two-week work attachment with the researcher at NIE (National Institute of Education) for the purpose of contributing to the planning and writing of the instructional materials. While the writing that could be accomplished in two weeks was not substantial, the teachers reported that the process of writing, reviewing and discussing the pedagogical objectives of lesson materials clarified their understanding of what it means to teach writing as thinking and as genre practice. At the end of the attachment they acknowledged that the short stint at collaborative writing developed in them an appreciation of the benefit to students of a socio-cognitive approach to teaching writing. A year after the project ended at a chance meeting Rani remarked to the researcher that her whole approach to teaching writing changed as a result of her involvement in the writing project and her view of writing as thinking situated in social contexts. “I had never seen writing that way before,” she said.

While Guy and Huay made attempts to teach the thinking skills and genre practices set out in the project’s materials, some of their classroom procedures and teacher talk suggest that they may not have fully subscribed to a socio-cognitive model of writing but were only showing a “surface behavioural change” (Smith, 2001, p. 221). Guy’s statement at the beginning of his lesson that “Writing is a social activity like chatting with a friend” (see Table 5), for instance, may reflect a nascent belief in a socio-cognitive model of writing. However it could also be mere mouthing of the content of Unit 1 of the project materials (Unit 1 tells students that writing “is just like talking to friends”). The reason for seeing only a nascent belief is that following the opening reminder about writing being a social activity, Guy spent 15 minutes doing a line by line explanation of words and meanings in the Unit 2 demonstration text, an extract from a film review, without drawing students’ attention to the link between the author’s selection of meaning and the social purpose of film reviews. Guy’s focus on word meaning suggests the persistence of a product-centred model of teaching writing even when the teacher is possibly attempting to adopt a different model.

Like Guy, Huay made a serious attempt to present writing as a social activity by comparing it to “a continuing conversation” aimed at achieving a social goal (Table 5) and illustrating it in a text which teacher and students were jointly deconstructing. However, this explanation was followed by a series of teacher-student exchanges about the text following this pattern: teacher question, student answer, teacher evaluation of answer (Right/Good), and next question. At the end of the series of such exchanges, Huay displayed the desired answers. The teachers’ guide had advised that the suggested deconstruction questions were not to be used like reading comprehension questions to extract one “correct” answer, but were meant to encourage students to articulate their social knowledge of friendly correspondence (e.g., what friendly letters usually talk about; why people write and read friendly letters/email). The guide also advised that students’ responses be treated as representations of the range of social situations in which friendly letters are written and read rather than as right or wrong answers. The fact that Huay could not, or did not, implement the teaching guide suggests a nascent mental model of writing as a socially situated activity.
Although School L teachers, including Guy and Huay, were serious in their efforts to teach from the project’s materials, the level of committed engagement seen in School N was less evident. Instead there seemed to be an undercurrent of resistance expressed in the tardiness with which the teachers responded to emailed requests for suggestions of ideas for the materials, and the difficulty with which meetings were arranged to clarify the use of the materials in upcoming lessons and discuss feedback on previous lessons. It transpired later that there was tension between the teachers and their head of department for reasons not shared with the researcher. It could not be established how much of the resistance to the project materials was an expression of unhappiness with their head and how much was due to rejection of the socio-cognitive orientation to teaching writing. At a meeting after the materials of the first two lesson units had been distributed, the teachers gave feedback that was a mix of positive comment on the lesson content and negative criticism of the layout of the printed lessons for students. The positive comment indicated that the students were learning something new and that was “good.” The negative criticism related to insufficient white space on the printed page, too much text for students to read, too much explanation (of thinking operations and genre practices), and conflicting opinions on the difficulty level. However, no profound rejection of explicit teaching of thinking and genre practices was communicated to the researcher directly or through the department head, who had agreed to participate in the writing project. The culture of Singapore school management, which generally reflects a preference for consensus and avoidance of confrontation, may have hindered open expression of disagreement with authority particularly when a teacher’s career advancement and performance bonus can be affected by the department head’s appraisal report. Quiet resistance was probably the wiser option for teachers when they did not approve of curricular decisions made by or apparently sanctioned by the department head. In such a climate it was difficult to ascertain the state of teachers’ real theoretical orientation in School L, including that of Guy and Huay.

Discussion

This paper originated from the question of whether instructional materials designed within a socio-cognitive framework could shift teachers’ theoretical orientation in the teaching of writing towards a socio-cognitive approach. The observations reported in the preceding section seem to point to the potential of instructional materials to influence teachers’ orientation in the direction of the model that informed the design of the materials. The more frequent manifestation of a socio-cognitive orientation in the lessons, in contrast to its rarity in the initial interviews (Table 4), suggests that it may be possible to some extent to influence teachers’ theoretical orientation through educative curriculum materials.

The more convincing displays of a socio-cognitive orientation by School N teachers point to factors that appear to promote change in teacher orientation and thereby could raise the chances of success of implementation of curricular or pedagogical innovations. One factor seems to be teacher participation in the planning and writing of the instructional materials to be used in the intervention. As the experience of Lan and Rani appear to attest, collaborating with the researcher in constructing learning activities can be an opportunity for engagement with the principles of the theoretical model, an engagement that may lead to a deeper appreciation of the social nature of writing tasks and the cognitive operations involved.
Influencing teachers’ theoretical orientation through instructional material design

These two teachers’ two-week stint at materials writing with the researcher appear to have had an enduring effect judging from Rani’s remark a year later that prior to the project she “had never seen writing” as socially situated practice. Other research on teacher learning has found that teacher involvement in the development of instructional materials, such as assessment tools for writing (Parr, Glassell, & Aikman, 2007), can lead to changes in teachers’ understanding of how their subject can be better taught by developing, in the study of Parr and her colleagues, an appreciation for a more focused and specific approach to teaching the subject. The supplementary exercises Lan and Rani wrote during the project showed evidence of an approach aimed at developing student writers’ cognitive composing processes and social context awareness, possibly the result of their involvement in materials writing with the researcher.

However, participation in materials design based on an unfamiliar theoretical model may not be readily forthcoming in the absence of a perceived need for improvement in existing pedagogical methods. The different circumstances under which Schools N and L joined the writing project suggest that the second factor likely to promote change in teachers’ beliefs is a willingness to learn or, at least, to explore alternative approaches to teaching in the hope of improving pedagogical outcomes. In the case of School N, the decision to be involved in the writing project was spurred by a desire to improve students’ expository writing through trialing new teaching methods, a desire that found expression in the previous year in the school’s organisation of a 12-hour course on teaching expository writing. The recognition of a need to improve writing pedagogy in School N may have created greater receptivity to a new theoretical orientation to writing among its teachers.

The circumstances in which School L joined the research project point to collaborative leadership as the third factor that may facilitate shift in teachers’ theoretical orientation in a direction supported of desired changes in curriculum or pedagogy. Unlike School N, School L’s participation in the writing project was decided on by its English department head on behalf of teachers who may not have shared her interest in exploring new methods of teaching expository writing. It was not a collaborative decision and may have produced an undercurrent of resistance expressed through silence as response to emailed requests for information and suggestions, and tardiness in attending meetings or unexplained absence. Research has established a relation between collaborative leadership and school conditions that support teaching and learning and enable professional learning among teachers (Hallinger & Heck, 2010).

The fourth factor that may affect a teacher’s receptivity of a new theoretical model could be length of teaching experience, which may have accounted for Guy and Huay’s less enthusiastic reception of the socio-cognitive model. They had been teaching for less than a year compared to Rani and Lan who had been teaching for two and two and a half years respectively. Guy and Huay’s mental model of writing pedagogy would have inclined towards a product centred model since, as Johnson (1994) has noted, teachers’ own accumulated experiences as students are a likely source of their perceptions of a school subject. Without the benefit of some length of classroom experience, they would not have had the opportunity to discover the ineffectiveness of a product centred teaching approach, and would therefore be less appreciative of the need to change theoretical orientation. Rani and Lan, on the other
A. Chandrasegaran

hand, having been teaching for a longer period, expressed eagerness, before the project started, to try a different approach to teaching expository writing. In their interview with the researcher they reported dissatisfaction with the results of focusing on topic content and language.

Conclusion

This paper raised the question of whether instructional materials written to observe the principles of a particular theoretical model would influence teachers to align their theoretical orientation with that model. Observations of one group of teachers in an interventional study of writing seem to indicate that instructional materials can influence teachers’ theoretical orientation. This conclusion is necessarily tentative as the number of teachers involved and lessons observed is too small to warrant a confident generalisation. Another limitation of the study was that limited access to the teachers did not allow for a post-project interview to confirm or throw into doubt the shift in theoretical orientation observed in their classroom behaviours. Future research might track more systematically subtle changes in teachers’ beliefs and theoretical assumptions about their subject as new instructional materials are implemented in the course of a semester. The tentative conclusion from the current study might serve to alert course coordinators, instructional material writers, and curriculum designers to give due consideration to teachers’ beliefs with the philosophy underlying new pedagogical materials or methods that teachers are expected to adopt whole-heartedly. Attention to teachers’ mental lives could well make the difference between success or failure in any attempt to implement innovative approaches to teaching.

References


