Teachers’ professional knowledge in scaffolding academic literacies for English language learners

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ABSTRACT
‘Broadbanded’ concerns about mainstream literacy standards ignore English as a Second Language (ESL) students’ need for language support and development; for example, schools expect learners to write about narratives but provide little systematic attention to the language needed. This article presents the collaborative efforts of an ESL professional and a mainstream classroom teacher, drawing attention to their sophisticated design of a unit of work, a novel study, that scaffolds ESL (and non-ESL) students’ content and language development.

Mohan’s ‘Knowledge Framework’ (Mohan 1986, 2001) was used as a heuristic tool to analyse and discuss the ‘what’ of the unit – that is, the language and content demands – and the neo-Vygotskian Early and Hooper model (Early and Hooper 2001) was used to analyse the ‘how’. The teachers integrated language and content by creatively extending and varying these basic heuristics, systematically relating meaning in discourse to wording, at the macro-level of activity/social practice, at the micro-level of written and oral expression, and points in between.

Introduction
Literacy has never received such prominent coverage in the global mainstream media. As national and international leaders increasingly equate high literacy attainment with national well-being in globalised, information-saturated worlds, organisations ranging from the United Nations to local school boards seek ways to report and compare the performance of educational institutions engaged in literacy education.

Interestingly, at the very time that multiliterate, multilingual citizens are most valued, the education of ESL students, who by the nature of their globalised experiences bring tremendous knowledge capital to classrooms and societies, appears to be receiving less of the support and resources that contribute to their academic success. This article will address one aspect of
this situation that is likely to make it even more severe: that there is an increasing failure to recognise and value the pedagogical expertise that ESL teachers have developed to support successful multilingual, multicultural classrooms.

While no coherent national profile exists of ESL education in Canada, where the education of Kindergarten to Year 12 (K–12) children falls under provincial jurisdiction, recent efforts to establish a pan-Canadian profile by educators (Early, Garnett and Ungerleider 2005) suggest that there exists considerable variation in the resources devoted to immigrant children. For example, while the province of British Columbia provides funding for an ESL student for up to five years, the province of Nova Scotia earmarks no funds for ESL. Ontario recently increased funding from three to four years, yet it is clear that many valuable programs and services have been either lost or reduced in recent years as a result of budget cuts (Duffy 2004). Ontario is not alone. Informal discussions with ESL professionals in major urban centres suggest that ESL students more and more are being served in classrooms where the focus is on system-wide literacy. To the extent that specialised resources are available to ESL students, the British Columbia Teachers’ Federation notes a disturbing emerging trend:

[...] the convergence of specialist support teacher roles, so that many specialists who used to work only as ESL or Learning Assistance or Special Education teachers now find their roles combined. (BCTF 2005)

The continuing subsuming of ESL students’ needs to ‘broadbanded’ pedagogical concerns about mainstream literacy, numeracy standards or about learning difficulties as outlined by Hammond and Gibbons (2005) is contrary to the needs of a significant minority of students formally categorised as ESL in major urban Canadian centres (more than 30 per cent in the Lower Mainland of British Columbia) and, arguably, to the even larger number of students who speak English as an additional language. School systems’ decisions regarding the organisation of teachers and their work appear to be ignoring students’ need for teachers with pedagogical expertise in ESL. Our local situation, then, fits with the common pattern that Hammond and Gibbons (2005) report across English-speaking countries, where the specific needs of ESL students are essentially redefined as literacy needs, special education needs or, more generally, needs related to socioeconomic status. Like the contributors to a previous issue of Prospect (Vol. 20, No. 1), working within a sociocultural orientation, we seek to demonstrate that the praxis of ESL education is not ‘irrelevant’ in our schools and classrooms; rather, it has much to contribute not only to ESL
programs but to the development of sound pedagogical principles for teachers’ work in the mainstream.

In this article, we present an example of the collaborative efforts of an ESL professional and a mainstream classroom teacher, drawing attention to their sophisticated design of a unit of work that scaffolds ESL (and non-ESL) students’ content and language development (that is, systematic relation of discourse meanings to wordings). First describing the theoretical bases of the teachers’ praxis, we delineate the research context in which teachers expanded their professional knowledge and which supported their developing performative expertise in the immediacy of the classroom. We provide samples of students’ achievements at various points in the unit, providing a basis for our argument that the enacted expertise of teachers plays a critical role in the achievement of ESL students. Finally, we hope through these examples to illustrate the importance of qualified ESL teachers’ professional knowledge for student attainment.

The theoretical perspective

Since the mid-1980s, schools in the province of British Columbia have been encouraged to implement a content-based approach to teaching ESL students (Early, Thew and Wakefield 1986; BC Ministry of Education 1999), most commonly an approach based on Mohan’s ‘Knowledge Framework’ (KF) (Mohan 1986; 2001). The KF, which underpins the teachers’ praxis reported in this article, works within the general perspective of systemic functional linguistics. It provides a perspective on language as a medium of learning that is different from but complementary to the genre approach. The KF is a view of language as discourse in the context of social practice/activity (Ochs 1988; Halliday 1994). In Mohan’s view, social practice is conceptualised as a combination of knowledge (theory) and action (practice). The theory/knowledge component of an activity typically includes such ‘Knowledge Structures’ (KS) as classification, principles and evaluation. The action/practice component of an activity typically includes such KS as description, sequence and choice. As a simple example, in a teaching unit on ‘cooking muffins’, the theory aspect of the activity might include the classification of ingredients, the principles of mixing the ingredients and cooking the muffins, and the evaluation on whether the muffins were ‘good’ or ‘bad’. The practice aspect of the activity may include description of the ingredients and utensils, following the steps in the recipe and the choices of ingredients to be added. These generic KS are defined semantically (Mohan 1986: 40) in ways that set them apart structurally from each other, yet each is also realised linguistically in ways specific to the
situational context. In addition, Mohan argues that each of these KS can be presented graphically by one or more key visuals (graphic organisers), which make visible the underlying content (see Mohan 1986, 2001 for a more complete account).

It is important to understand the KF as a heuristic tool for the analysis of discourse in social practice: it is not a teaching methodology. As a heuristic tool, the KF explicitly facilitates teachers’ and students’ meaning-driven examination of language-in-social practice so as to increase the language resources available to the learner to learn language, to learn through language and to learn about language. In our example, we will explore how teachers employ the KF to creatively and skilfully design classroom tasks, tasks in which knowledge is co-constructed in children’s development.

The teachers we worked with were encouraged to use a social constructivist pedagogy. Following Vygotsky, we understand children’s development to be intentional; to be shaped by the systems within which they are attempting to derive meaning; and to occur through the links between the child, the people with whom the child interacts, and the social history which represents the links between individuals across time (Vygotsky 1978). Modelling learning under these constructs requires opening opportunities for social interaction.

Based on neo-Vygotskian discussions of scaffolding, a teaching and learning model was designed for use in complement with the KF, wherein scaffolding proceeded through three recursive stages:

1) Building background knowledge by assisting students to articulate and connect prior knowledge to the activity at hand while affording teachers opportunities to determine the zone in which the child can perform unassisted and/or assist in the others’ performance.

2) Thinking and discoursing through the topic or activity, where teaching ‘awakens and rouses to life those functions … which lie in the zone of proximal development’ (Vygotsky 1956: 278) to scaffold the learners to interact with task information (both language and content) socially, collaboratively and critically.

3) Reconstructing and realising knowledge to scaffold students to organise and consolidate new understandings, and to realise them linguistically, beyond simple lexis and grammar, into coherent patterns of subject-area-appropriate extended discourse.

Teachers were encouraged to allocate times and domains in which students, highly challenged but well supported, worked at the ‘outer limits’
of their zones (ZPDs). (See Early and Hooper 2001 for a more detailed account of the teaching and learning model and its application in teacher professional development.)

The research context

The work reported here is part of a long-term action research initiative conducted for over a decade in Vancouver schools, ending in the 1990s due to significant school board budget shortfalls. Serious staffing reductions and the disbandment of the ESL support team resulted, arguably leading to the needs of ESL students being essentially redefined as ‘literacy needs’ common to all students. The following description of the research context, then, harks back to a time when K–12 teachers were explicitly apprenticed in a body of professional knowledge for designing and implementing activities to support the linguistic and academic needs of their English language learners.

The research project explicitly paired teacher professional development with action research and a meta-analysis of the ways in which teachers brought theory to bear in their practice. Recurrent district-wide and/or school-based in-service training interwove topics such as the relationship between KS, the multiple uses of key visuals and issues in task/activity design. In sum, we used the KF as a heuristic tool to analyse and discuss the ‘what’ – that is, the language and content demands of the project or unit of instruction to be designed – and the neo-Vygotskian Early and Hooper model to facilitate the ‘how’ – that is, the recursive and scaffolded cycle of instruction.

Teaching and learning practices congruent with the theoretical frames underpinning ESL instruction were consciously modelled in all professional development work with the teachers, with tasks designed to be interactive and to travel through the recursive cycle of building background knowledge, thinking through the topic and reconstructing new knowledge. Each session addressed one or more topics/subject areas through a particular Knowledge Structure, explicitly considering the linguistic and visual realisations of the KS in text and graphic forms. In-depth discussion of how the texts were realised lexically, syntactically and semantically to construct a genre in appropriate register was a key component of the development activities. Teachers then returned to their classrooms to conduct action research, applying the KF and teaching model to their context. Findings and new understandings were reported back to the group by teachers at subsequent sessions, which were held one afternoon per month.
In selected schools, researchers conducted in-depth studies of teachers’ changing practice, conducting classroom observations, interviewing students and teachers, and collecting samples of teacher and student lesson materials. The procedure was an ongoing dialogic inquiry where theory was informed by practice and vice versa and where there were ongoing two-way knowledge flows between teachers and university researchers and between teachers and teachers.

The work was geared towards ESL and mainstream teachers and was developed for use in both ESL classrooms and in mainstream classroom with ESL students in them. The case study classroom is one of the latter.

The classroom from which the data was drawn is located in an ethnically and linguistically diverse elementary school in East Vancouver. Seventeen of the 22 Grade 6 students spoke a language other than English at home, Cantonese being the most common. Other home languages spoken by the children included Spanish, Vietnamese, Mandarin and Tagalog. The unit of work, a novel study based on *The lion, the witch and the wardrobe* (Lewis 1950), was collaboratively planned and taught by the ESL resource teacher and the Grade 6 classroom teacher. The transcripts are characteristic of the way teachers within the project worked with the theoretical ideas discussed above to intentionally support the learners’ content and language development.

**Academic literacies in social practice: A Grade 6 novel study example**

These teachers worked with three social practices: (1) reading/interpreting a story, (2) writing about the story and (3) reflection about point of view in a story. The teachers’ enactment of the theory, evidenced in their fusion of the heuristic potential of the KF with the dynamic instructional cycling integral to Early and Hooper’s model, was evident in the planning, instruction and extension of the unit. Teachers scaffolded language and content development across, as well as within, tasks.

**PLANNING**

In their initial planning, the teachers focused on the social practice of reading a novel, recognising the relation of traditional story elements to parts of the novel (characters and settings to description, plot sequence to sequence, problem/dilemma/conflict to choice) and realising through their analysis the complex language demands for which the students required scaffolding to ensure their eventual success. Later the teachers related traditional patterns of writing to the KF (comparison/contrast of *descriptions, choice of opinion* backed by reasons).
One of the more obvious ways in which students’ learning was supported was the careful, thoughtful manner in which the goals of the novel study unit were planned. Collaborative exchanges between the two teachers reveal their conscious decision-making.

RT: Is there one particular area of the novel study that you want to focus on, characterisation, as you seemed to do that in the other one?

CT: I think that this particular story or chronicle lends itself well to two things … one, good or evil and that’s a theme I’d really like to stress in class and, two, it does lend itself to characterisation.

However, the teachers realised that focusing on characterisation would not limit the students to the language of description. Understanding the role of characterisation in novel development would require students to explore the interaction between plot, setting and character in the main theme of the novel, in this case the age-old saga of the triumph of good over evil. This exploration required students to engage with multiple KS, both in the nature of the tasks required to think and discourse through the topic and in the tasks that would reveal their understandings at the end of the unit. Ten tasks were planned and designed for this unit according to the KS that underpinned the task. The tasks ranged from the definition and categorisation of new lexical items to describe the characters to the culminating task of writing an essay demonstrating how setting, plot and characters contributed to the main theme, an understanding central to appreciation and critique of a book. In the planning, the tasks were sequenced cognisant of the need to identify and connect to the child’s background knowledge and to scaffold understanding through social interaction/discourse through the text.

In addition, in the recursive process evident throughout the planning sessions, the teachers followed a four-step cycle of selecting a goal, designing an activity to support students in meeting the goal, analysing the activity for language and content demands through the heuristic of the KF, and then designing pedagogical tasks to optimise and scaffold learning. In designing each task, the teachers used the KS of the KF as analytical tools to think and talk explicitly about the language and content demands inherent within it. Here are a few, from many, examples from the planning sessions:

RT: So this is an evaluation and choice activity, we’ll want them to give a reason. What language will that require? (Planning session 4)
RT: I think they definitely need compare/contrast language.

CT: Yes, I agree they need compare/contrast language. They would say stuff like … (Planning session 7)

CT: Right, so let’s think about what language do we want. Do we want opinion, do we want summary or is it sequence that we want? (Planning session 10)

The KF, then, was used to consider the possible (and potentially most likely) set of linguistic resources from which an individual might draw in order to realise their ideas/knowledge situated in a specific task context. In conjunction with the Early and Hooper three-stage model, tasks were sequenced such that language and content encountered in previous tasks scaffolded a deeper and richer exploration of the novel.

INSTRUCTION

The task of orally comparing and contrasting a character’s good and evil characteristics, in this case Mr Tumnus, a mythical faun (half-goat/half-man creature), with specific reference to textual evidence allows examination of use of the KF in task design. The task’s content and language demands were considered in creating a structure to scaffold learning and to optimise possibilities for collaborative interaction. The task’s content (that is, meaning in text) objectives were for students to understand the character’s attributes and locate and interpret detail to support their characterisation. The language objectives, the language over which students needed to demonstrate control to achieve the content objectives, included the language of description (for example, descriptive adjectives and stative verbs) and comparison and contrast (for example, comparative adjectives and conjunctions). In the task, students worked in groups to generate a list of adjectives that could be used to describe Mr Tumnus, thus ensuring all students would have vocabulary with which to successfully realise their ideas. The task also offered students the possibility of locating language within the text, requiring their attention to the placement and use of descriptive language. This possibility required a more complex linguistic understanding, one that the teachers could scaffold through the questioning strategies employed as the teachers circulated among the groups. However, students were not required at this point to examine the text, allowing students to function at a level concordant with the current level of their linguistic ability as it might be realised with the interactive scaffolding of teacher and peers.

After generating a list of descriptors, the teachers had students work in pairs to create T-charts, listing good characteristics on one side and evil
characteristics on the other. Students then teamed up with another pair and played a ‘matching game’, using the lists and explaining to each other the meaning of a word if it was new to a group member. Students, again in pairs, were given two character webs to fill in, one for Mr Tumnus’ ‘good attributes’, the other for his ‘evil attributes’. For each attribute, a specific example from the book was to be given to provide evidence for the opinion. Individually, students had to orally generate descriptive sentences for an attribute and elaborate. As a final task, students built on this by completing the following chart (see example in Table 1). While such graphic organisers are familiar, they are almost never used, like here, in a sustained and systematic plan to relate content to language. This chart visually scaffolds the reading process, and visually represents comparison-contrast and cross-classification. Note the opinion + reason pattern of the sentences.

**Table 1**

<table>
<thead>
<tr>
<th></th>
<th>Good</th>
<th>Evil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characters</td>
<td>Aslan is good because he killed Jadis</td>
<td>Jadis is evil because he tried to kill Edmund</td>
</tr>
<tr>
<td></td>
<td>Lucy is good because she breaks the spell of Narnia</td>
<td>Dwarf is evil because he helps Jadis</td>
</tr>
<tr>
<td>Plot events</td>
<td>Kids meet Aslan is good because he can free Mr Tumnus</td>
<td>Jadis killed Aslan is evil because if Aslan die then he can’t help the kids</td>
</tr>
<tr>
<td></td>
<td>Kids meet Beavers is good because he can help them to find Aslan</td>
<td>Edmund meet Jadis is bad because she will capture Lucy, Peter and Susan</td>
</tr>
</tbody>
</table>

In the culminating task, writing an essay comparing characters, plot events, settings and emotions for their qualities of good and evil, students used their charts, now completed, as a visual scaffold for a second time, putting into words the organisation implicitly conveyed by the visual layout of the charts. Here is the opening of one student’s first draft:

In the novel ‘The Lion The Witch and the Wardrobe’ we are comparing and contrasting some things like character, events, emotions and places for good and evil.

Firstly, in my opinion, Mr Beaver and Mrs Beaver are good. As proof, they can help them to find Aslan. However, I feel that Edmund is evil. To substantiate, he wants to turn Lucy, Peter and Susan into stones.

Notice how the second paragraph talks about the novel but the first paragraph talks about the writing process, that is, gives a meta-commentary on the text structure and content. This essay, then, suggests how the
teachers have supported this student not only to read the story but also to write about the story. It suggests that the teachers have worked effectively with reading and writing as two distinct but related social practices, applying the Knowledge Framework to each. And it shows how the teachers have helped the student work with KS in each practice: with the classification of good and bad in reading, with comparison and contrast, and with reasoned choice in writing.

UNIT EXTENSION
In the context of teaching the novel study, the teachers became aware that their students need support to develop some other significant aspects of literary criticism; so, in a second part of the unit, they sought to achieve the dual objectives to (a) support their students’ understanding of point of view in literature and (b) promote critical literacy. Here the student activity of writing a comparison and contrast and offering opinion + reason will remain much the same but there will be a shift from the practice of reading narrative to the practice of reflecting on point of view when reading narrative.

In order to support their students’ understanding of point of view and to promote critical readings of texts, the teachers worked with a comparison of two versions of the fairy tale of the ‘Three Little Pigs’ (one traditional, the other a modern tale told from the wolf’s perspective). The ESL resource teacher read the modern application. She introduced her reading with the following:

As I read this story I want you to think of three things: how is this story different to the one Mr E has read? I want you also to think about all the parts that are different and the specific ways these two stories are different. And then I want you to think about whether you believe the wolf … for as you will see this story tells the wolf’s side of things …

The following segment, which occurred after both stories had been read, illustrates some of the features of teacher interaction in this context:

T2: Now do you believe the wolf?
S: Yes … believe the wolf was made look bad …
T2: Why? Why do you say that? Why do you believe the wolf?
S: Umm … because … he’s not bad, he [inaudible] … he had a sneeze and house was built so bad …
T2: So you thought he was just going to borrow a cup of sugar for his dear sweet grandma … but he had a cold … so when he, eh … sneezed he brought the badly built house down. Okay
In this example, the teacher scaffolds the students’ language development by using the classic initiation, response, feedback exchange. As has been pointed out by others (Wells 1999; van Lier 2004), however, the third move in this exchange has the potential to open up the conversation in ways that lead to more dialogic exchanges, which is how this lesson proceeds. In addition, the teachers recast the students’ utterances into extended and more syntactically complex discourse, thus modelling and making available to the students language that was potentially within their ZPD. The lesson continued in this fashion with the teacher eliciting more reasons from those students who believed the wolf’s version of events and scaffolding extended student contributions by such means as requests for clarification, repairs, restatements and invitations to offer further commentary. It ended with a written assignment to compare and contrast the two stories, concluding with a declaration of which version they believed and why.

If we look at this example from the point of view of KS, we can see how the students’ work with comparison and contrast, and with opinion and reason, is part of a larger pattern of continuity at the macro-level of the unit. Looking forwards, the students will move from constructing these structures orally with the teacher in the classroom to constructing them independently in writing. Looking backwards, their work builds on the earlier writing task frame scaffolded visually by Table 1, which also asks for comparison and contrast and an opinion based on reasons.

If we look at this example from the point of view of social practice, we can see how the earlier work has been creatively extended to another level of social practice by asking the learners to apply the Table 1 task frame to a different topic, the two versions of the ‘Three Little Pigs’ story, and to consider whether they believe the wolf’s version. Where the earlier work had the students writing about a narrative, the teachers have now positioned the learners to write about their critical reflections on point of view in a narrative. Thus, as the learners talk or write, they are handling three levels: the events of the ‘Three Little Pigs’ story, the wolf narrating, and themselves saying whether they believe the wolf.

**Insights**

Schools expect learners to write about stories but provide little systematic attention to the language needed. By contrast, the project teachers’ approach appears to have successfully provided teachers with an elegant and relatively straightforward method of supporting student learning of content
and of language. Vital and central to this is the importance of a heuristic tool and metalanguage for planning, sequencing and designing tasks in ways that were clearly intentional but allowed for a wide range of diversity amongst the students.

We will comment on this unit from two perspectives: a knowledge framework perspective and a scaffolding perspective.

From a framework view, the teachers worked through three social practices (story reading, writing about the story and reflecting on point of view in a story), building them onto each other coherently. In each case the teachers used KF analysis creatively to link content to language demands (for example, traditional story elements like character were linked to description). Within practices, the teachers used KF analysis to build tasks cumulatively. Thus the teachers built up the target task of writing an essay about the novel by developing its component KS parts, for example, starting by describing Mr Tumnus, contrasting his good and evil attributes, and finally comparing and contrasting all the characters with respect to their good or evil attributes based on textual evidence. Similarly across practices, when the teachers extended the unit and asked the learners to write about whether they believed the wolf’s story, they built upon the compare/contrast and opinion plus evidence ‘shape’ of the previous written essay. Such tasks were cumulative in content but also cumulative in language, recycling and extending previous language learning opportunities.

Turning to the scaffolding perspective, learning was scaffolded by building on the students’ background knowledge, designing tasks that clearly and explicitly linked students’ background knowledge to well defined unit/task objectives, ensuring task design ‘that provides a scaffold to assure that the child’s ineptitudes can be rescued by appropriate intervention’ (Bruner 1983: 60). At the micro-level of oral interaction, most familiar to analysts, the teachers supported learning by what van Lier (2004) calls ‘contingent scaffolding’. In the teachable moments the teachers ‘picked up’ the students’ utterances and recast and reformulated them by a variety of means including requests for clarification, repairs and restatements. At the micro-level of written work, less familiar to analysts, visual scaffolding of all kinds – T-charts, tables, Venn diagrams, illustrations in books – was used to support the students’ learning and give additional clues to meaning. At the more macro-levels of the unit, the teachers carefully sequenced tasks to ensure that each scaffolded learning for the next task. Students were also supported by the consistency of the classroom’s practice routines, so that lessons and tasks in some measure ‘held their shape’ and provided a stable base for increasingly demanding language and content. Active learning,
'deep understanding' and student engagement were also central tenets of the approach taken. In short, explicit and careful attention to students’ needs, big and small, was evident at both macro- and micro-levels of instructional design and practice (see also Hammond and Gibbons 2005).

Teaching ESL learners curriculum content is challenging, and requires a deep understanding of the demands of language as a medium of learning. Creatively extending and varying basic heuristics, the teachers in our example integrated language and content, systematically relating meaning in discourse to wording at the macro-level of the activity/social practice, the micro-level of written and oral expression, and points in between. As they did so they followed a process consistent with Vygotskian principles. Broad approaches to literacy fail to provide anything like this resourceful and imaginative attention to language. School systems must, we believe, acknowledge the need for qualified ESL teachers with a professional expertise in language, in the representation of knowledge in language, and in the design of units and tasks that simultaneously scaffold students’ development of language, conceptual and communicative expertise. We hope the examples in this paper drive home the point.

REFERENCES
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