SCAFFOLDING LITERACY LEARNING: VYGOTSKY IN THE CLASSROOM

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ABSTRACT

Vygotsky's notion of the *zone of proximal development*, together with a number of the socio-cognitive concepts with which it inter-faces, has had a significant and widespread impact on the way we view language, literacy and learning. These ideas have yet to make any general impact in Malaysian classrooms however.

Taken up by Bruner, the idea of the zoped was developed into the associated concept of *scaffolding* and has been drawn upon by researchers and educationalists to support various pedagogical models and practices in literacy. In this paper, I wish to outline two curriculum models in which scaffolding plays a central role, and which colleagues and I have applied in literacy classrooms in Malaysia. The first describes the practice of 'shared reading' in preschool and primary English classes and the second outlines a genre-based teaching model applied in primary, secondary and tertiary contexts. Both models have the notions of the *zone proximal development* and *scaffolding* at their socio-cognitive cores and a functional model of language and language learning as their linguistic foundations.

Such curriculum genres hold the potential for more effective teaching and learning, and for the inclusion of non-mainstream learners in the mainstream literacy and learning practices of our schools.

Introduction

Lev Vygotsky, teacher and formally-untrained psychologist, created something of a revolution in his time, the repercussions of which have only recently begun to impinge on classroom practice. Unfortunately, Vygotsky's untimely death in 1934, at age 38, left many of his ideas as seeds and much of his work unpublished. Even his published works were banned in Russia for 20 years after his death. Nevertheless, his theories were a major force in Soviet psychology, and more recently have been finding their way into the mainstream of cognitive science, education and applied linguistics.

Vygotsky ran head-on into the behaviourist fortress of the period with his strong focus on consciousness, which he construed as socially meaningful activity mediated by psychological tools, particularly language. He was concerned to construct a theory of development which, as Bernstein (1993: xv-xvi) notes, was also a theory of education. His Marxist orientation is clear in both his

commitment to educational practice and change, and his belief that a powerful dialectic existed between social and cognitive processes.

In this paper I shall focus on a central concept in Vygotsky's work, the *zone of proximal development (zoped)*, and attempt to briefly outline two curriculum models in which the zoped plays a central role.

Scaffolding Across The Zoped

Educationalists have drawn on a number of Vygotsky's ideas since his work was first translated into English from Russian in 1962 (Vygotsky 1962). One major notion that has received much attention is the zone of proximal development. This concept relates cognitive, social and pedagogical perspectives on child development. Vygotsky explained the zoped as follows:

> "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers." (Vygotsky 1978: 86)

In relation to education, Vygotsky believed that "pedagogy should be oriented not toward yesterday, but toward tomorrow in child development" (Vygotsky 1982-1984: 251). What this means is that instruction should be directed toward what the child cannot do without expert help, rather than toward what he can. The negotiation of meaning through language that comprises such guidance takes place within the zoped.

These are very powerful ideas about the nature of learning, the role of teaching and the kind of interaction involved. Vygotsky, however, did not specify, beyond the general, the form this expert assistance to learners should take (Moll 1990: 21). It should not be surprising then that neo-Vygotskians from a variety of ideological communities have appropriated the zoped for constructing similarly various pedagogical discourses and practices (Bernstein 1993: xxii). In the area of classroom literacy, for example, both whole language and genre-based approaches construct their own interpretations of the zoped to support very different orientations to teacher-learner interaction (Rothery 1989).

Both Bruner and Painter, within broadly cognitive and linguistic frameworks respectively, have been very much concerned with the role and nature of expert-novice interaction, and their work helps to position the models I shall outline below.

Bruner draws upon a construction metaphor to characterise the expert adult role in leading the development of the child. The adult erects a *scaffold* to enable the child to enter and cross the zoped (Bruner 1986: 74-76). The expert models the possibility of the task, controls the focus of attention, controls the size and complexity of the task appropriately and sets up conditions for success. In Bruner's words:

> What the tutor *did* was what the child could *not* do. For the rest, she made things such that the child could do *with* her what he plainly could not do *without* her. (Bruner 1986: 75-6)

Painter lends a functional linguistic perspective to the role of scaffolding in learning language, learning through language and learning about language (Deriwianka, 1990: 3). Her investigation of

the language development of her own child, Hal, looked at both how children learn language, and *the manner* in which such learning is facilitated (Painter 1991).

Painter notes the role of the adult in expanding and extending the child's utterances and enabling the child to extend and expand his own meanings. In addition, the adult enables the child to move from the 'here and now' into generalisation and the reconstruction of experience, and to fulfill new purposes through language. She observes, with reference to Bruner, that as the child becomes more competent, scaffolding is gradually removed and the parent proceeds to 'up the ante' to create space for new challenges.

One important point made by Painter is that for scaffolding to be effective, meaning negotiations must take place in the context of shared experiences.

Vygotsky And Literacy In The Classroom

In this section I would like to outline two particular classroom literacy episodes - or curriculum genres (Christie 1989) which I have introduced to teachers in a number of institutions in Sarawak. The learners have ranged from pre-schoolers and primary pupils to secondary and tertiary students. Although I have been centrally concerned with English language literacy, I have emphasised the relevance of the curriculum genres to the learning of literacy in any language - and in any field. In the process, I have been able to monitor classroom teaching and learning, and to obtain feedback on progress, problems and adaptations.

Theoretically, the two curriculum genres are grounded in the work of psychologists Vygotsky and Bruner, and upon a systemic functional model of language and learning as developed by linguist Michael Halliday and the Australian genre theorists (e.g. Halliday 1978, 1985b; Halliday and Hasan 1976, 1985; Martin 1992; Matthiessen 1992). In terms of pedagogical practice, I have adopted and adapted the models as they have been developed by many of these same theorists, and others, in their roles as practitioners (Martin and Rothery 1980, 1981). The core principles that underlie both curriculum models are:

1. that language is a resource,- or system of resources, for making meaning (Halliday 1994: xvii);
2. that language is both individual and social (Vygotsky 1962: 94); and that language purposes and text types are socio-culturally determined and situated, and staged in relatively stable ways to achieve these purposes (Martin 1984);
3. that speech and writing are fundamentally different - they have different purposes, structures and grammars (Halliday 1985a) [c.f. Vygotsky's 'everyday' and 'schooled' concepts (Gallimore & Tharp 1990: 193; Vygotsky 1962: 180-182)];
4. that in order to teach children explicitly how written language works, a language for talking about language, or metalanguage, is needed (c.f. Vygotsky 1962: 182, Vygotsky's concept of 'metacognition', e.g. in Frawley 1997: 135-141). Halliday's functional grammar (1994) provides such a set of meaning-oriented tools, and
5. that the structures of language are the way they are because of the meanings they have evolved to construct (Haffiday 1994: xx).

Both curriculum genres have been formalised as cycles of episodes or stages. I would like to organise my comments on the role and workings of scaffolding around macro (inter-stage) and micro (intra-stage) perspectives.

Shared Reading for Young Learners

The focus of the first is the development of emergent reading processes in young learners, and is known as a 'shared reading' or 'big book' approach to developing children's literacy competencies. The approach can be traced back to the work of Don Holdaway in New Zealand (Holdaway 1979) and comes under the umbrella of 'whole language' approaches to literacy.

Holdaway was interested to discover why certain children were already confidently successful in school literacy practices on entry to the first year of school. Were there lessons to be learnt for classroom practice? He found that there were a number of home literacy events and practices which characterised the language experience of successful children. Two of the major findings were that, firstly, many had favourite stories read to them, and with them, repeatedly; and secondly, gradually the child was encouraged to take over more and more of the responsibility for making sense of the text himself.

That adult experts talk around familiar texts with children - rather than read to them - and gradually pass on the responsibility for making meaning to the apprentice, clearly suggests that a form of scaffolding is at work. The adult is scaffolding the reading experience for the child so that the child is expected to, and can, take over the task when he is ready. The move is from caretaker reading, to joint reading to independent reading; and all the while the focus is on making sense of the text through the negotiation of meaning in a non-threatening and 'joyful' manner (Holdaway 1992: 2).

In attempting to apply such insights to classroom reading lessons, the question arose, of course, as to how to scaffold the negotiation of meaning with a big group of children. Holdaway's answer was 'big books'. Holdaway talks of the teacher shifting from the role of skilled, dramatic demonstrator to that of invisible, validating audience. In the process, the skilled and the inept engage in a 'dance' involving the negotiation of meaning, as the expert verbalises and shares her cognitive and affective processes (Holdaway 1992: 7).

In applying some of the principles of a functional model of language, learning and literacy as social practice (see above), I found it necessary to adapt this model somewhat by providing for the following:

  a. an explicit focus on text purpose and structure (genre);
  b. an explicit focus on language form and function;
  c. the use of metalanguage to talk about the different ways in which different texts work to achieve their purposes;
  d. talk about the essential differences between speech and writing, and
  e. meaningful, shared contexts to motivate effective meaning negotiations around the text.

While such provisions owe much to genre-based theorists and practitioners, Vygotsky's ideas are clearly present: his concern for making the tools of language explicit (Moll 1990: 9-10) and for the role of metaconscious awareness (e.g. Frawley 1997: 121-174) for example. The new model rejects the extreme cognitive / affective orientation of the original and seeks to endorse Vygotsky's insights regarding the dialogical, social nature of learning (Vygotsky 1979: 30). This move to incorporate the social dimension of cognition reflects a growing concern in the field of cognitive science that cognition cannot be automatically assumed to be concerned solely with the individual or intra-mental (Wertch and Smolka 1993: 70).

In practice, scaffolding is erected and dismantled through (macro) and within (micro) the following stages:

1. teachers introduce the reading activity for a purpose - either for shared amusement, as part of a project or for recounting a shared experience, such as a trip;
2. teachers prepare high quality 'Big Books' which are relevant to the purpose and which reflect the variety of genres important to schooling and social life; teachers read to the pupils with minimal interruption, tracking words, phrases or lines as they go;
3. teachers repeat the reading - this time while encouraging pupils to join in wherever and whenever they wish. The focus is on the joint construction of meaning, the 'dance' around the text, and the shunting between 'everyday' and 'written language' as appropriate (see appendix). 'Interruptions' are therefore an integral part of the process. These repeated readings continue within and across sessions (the growing familiarity usually to the delight of the children, if not the teacher!);
4. in later readings, the teacher guides the focus of attention and discussion to four major formal and functional aspects of the text:
    a. the purpose, genre and generic structure;
    b. the features of print, including letter names, letter-sound correspondence and punctuation;
    c. the meanings of the text (comprehension) as coded in the choice of words and structures, and
    d. the world beyond the text and the child's experience with these meanings;
5. if small versions of the text are available, children take the books home to read independently.

The model has been used by small groups of teachers of pre-school through to primary three in Sarawak with varying degrees of success. The major problems seem to be:

- the reluctance of teachers to give up control of the process;
- inappropriate evaluative questioning techniques, and
- a predilection for the direct teaching of words and structures.

Taking over Control: a genre-based approach to literacy and learning

The second curriculum genre is adapted from models developed by Australian systemic linguists and educationalists (particularly Martin and Rothery 1980, 1981; Christie 1984, 1990; Hammond et alia 1992). Scaffolding is central to the teaching cycle and is again played out on both macro and micro levels. While being grounded in concerns for literacy development, the model promotes the scaffolding of the full range of language skills at all levels of schooling and in all disciplines. The sketch I present is necessarily light and sparse.

As with the Big Book model, this cycle begins by clearly establishing a purpose for the written text which will eventually be constructed. A context is set up where there is a clear need for a certain type of language, that is, a particular genre and a particular register. This could be anything from a science experiment, visit or project to an e-mail information request or a birthday.

Following this, the field (content area) of focus is introduced and explored. Activities at this stage are varied and may include the sharing and discussion of experiences (both individual and collective, e.g. through hands-on activities in the classroom and class trips), the use of multi-media resources for

collecting information, and a focus on field specific language functions, forms (including vocabulary) and strategies (e.g. reading and note-taking).

It is at this stage that socio-cultural content knowledge is expanded and developed, and that the discourses at play are identified, critiqued and deconstructed (e.g. sexism). Oral language is foregrounded as the teacher scaffolds the students' understandings and language, and shunts contributions between oral and more 'written' modes.

The focus of the next stage is the modelling of the genre. This is done, firstly, through the reading and deconstruction of model texts. Texts are analysed as 'crafted objects' (Hammond et alia 1992: 20) and text purpose, characteristic structure (generic structure) and lexico-grammatical features are identified as meaning-making resources. In addition, the teacher models the writing process by vocalising her strategies and choices as she constructs her own text on the board. Language choices are justified and alternatives considered.

What follows is the key stage for micro-scaffolding the writing process both cognitively and linguistically - the joint construction of a text. Here the teacher acts as scribe as she scaffolds student contributions to the construction of a class or group text (the luxury of an O.H.P. is a definite advantage here). Again, she guides and supports student input and shunts language between spoken and written modes. Generic structure, register and appropriate lexicogrammatical patterns are attended to explicitly.

In order to do this, a language to talk about language choices - a metalanguage - is employed. Halliday's functional grammar (1994) is a rich source of metalanguage, and students and teachers quickly become comfortable and capable with the terms and their potential for focusing attention on salient aspects of the meanings and structures of texts.

Effective scaffolding requires that the teacher formulate appropriately guiding and timely questions, and apply a range of guidance strategies before, during and after question-answer sequences (Hunt 1994:7).

This stage is recursive and only when the teacher judges that control for constructing the text has passed largely to the students will she move on to the final stage.

Now that the learners have been set up for success, the independent construction stage sees the teachers' role change to that of consultant as students work independently to construct a text. Having built up linguistic knowledge of the genre, the field and the written mode, learners can now confidently apply this knowledge. Texts are drafted and crafted, worked and reworked with feedback and assistance being available from the teacher and classmates as required. There will still be weaknesses of course, and a new cycle of exploration and learning with the same genre should not be far away.

Teachers' concerns with this model are numerous and need to be addressed. Apart from the difficulties many experience in moving out of traditional ways of dealing with issues of language, learning and literacy, more particular obstacles include:

- coming to grips with necessary theoretical understandings and the learning of a new grammatical metalanguage;
- confidence in their ability to model their own writing;

- a reluctance to move away (however temporary) from the scheduling dictates of the omniscient texthook, and
- a sometimes formulaic approach to the teaching of genres.

Conclusion

The two models outlined in this paper provide theoretically informed alternatives to current, traditional, literacy practices in Malaysia, which assume that learners have to master word and sentence level decontextualised skills before being given responsibility for making meaning with whole texts (Nesamalar 1994: 103). Vygotsky's zone of proximal development and its elaboration by others, and support for this notion from recent linguistic research, centrally inform the practices described.

The models also emphasise a variety of purposes and text-types, and a metalanguage for demystifying the way in which we make meaning with texts. Such emphases, within a framework which scaffolds learners across the zoped, function to provide access to a range of texts and purposes. In explicitly teaching learners how to deconstruct and construct such texts, teachers are better able to include non-mainstream learners from different language use and literacy backgrounds (e.g. Wells 1989: 254-256) in successful school reading and writing practices.

The literacy-teaching genres described rest on clear understandings of cognition and language as essentially social phenomena. In fields such as cognitive science, it is essential that an individual-societal dualism not be allowed to take root. While information-processing and computational models of cognition have proven productive, they are limited by their socially sterile frameworks. If the work of cognitive scientists is to be relevant to pedagogical practice and the concerns of teachers and students as they grapple with ways to make sense with written text, social and socio-linguistic processes in learning cannot be ignored; similarly, I would argue, educationalists cannot afford to ignore the work of Vygotsky.

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