

# Designing Literacy Pedagogy: scaffolding asymmetries

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## **1. Learning how to mean**

Context is important – not just for the texts we study but also for the research we undertake. And functional linguists who have played a part in literacy oriented action research projects in Australia have done so in the fortunate context of Halliday's ground-breaking work on language development (1975, 1993, 2004), and its ongoing elaboration by various scholars, especially Painter (e.g. 1984, 1989, 1996, 1998, 1999, 2000, 20003a,b, 2004). Painter 1986 in particular documents the understanding of language learning in the home which inspired Joan Rothery's design of literacy pedagogy for primary and secondary school<sup>1</sup> (Rothery 1989, 1996, Martin & Rothery 1990). From Halliday and Painter, Rothery took the notion of 'guidance through interaction in the context of shared experience', a principle which turned out to resonate strongly with (but was not initially influenced by) neo-Vygotskian notions of 'scaffolding' (Mercer 1994, 1995, 2000; for mediation across Vygotskian and SFL perspectives see Hasan 1995, 2001, 2004a,b). Indeed, Applebee & Langer 1983 refer directly to Halliday's work in their influential popularisation of Bruner's term scaffolding (originally coined in Wood et al. 1976); and Wells (e.g. 1999) has further developed the connections between Halliday's linguistics and cultural historical activity theory (CHAT).

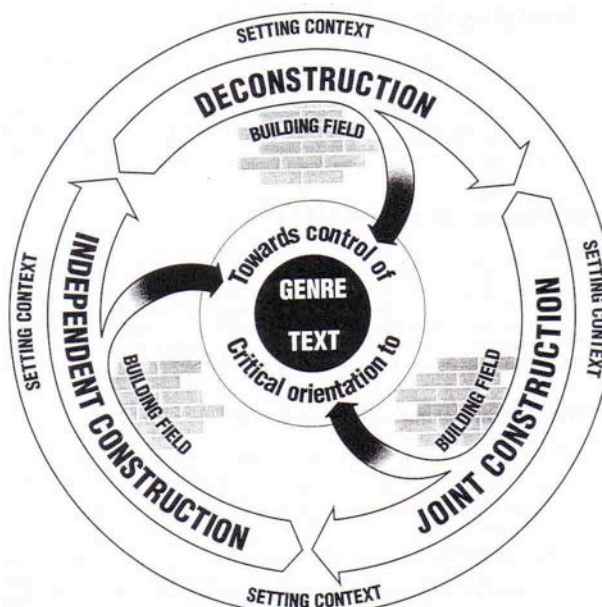
In this paper we will briefly review the teaching/learning cycle developed by Rothery and her colleagues, which focussed mainly on writing.<sup>2</sup> We will then describe how this pedagogy has been extended and refined for teaching both reading and writing in work by David Rose and colleagues (Rose 2004a, in press, Rose et al 1999, Rose et al 2004). This extension involves the re/design of both global and local patterns of interaction between teacher and students. Bernstein's work on pedagogic discourse in relation to social class functions for us, as it has for Halliday, as the most relevant informing sociology for this work (Bernstein 1975, 1990, 1996).

## **2. Genre-based literacy teaching**

The teaching/learning cycle, which evolved in the context of the Disadvantaged Schools Program in Sydney's Metropolitan East Region, has produced various imagic representations; the version in Figure 1 comes from Rothery's 1994 secondary school English materials. It features three main phases of activity, named Deconstruction, Joint Construction and Individual Construction. The Deconstruction phase foregrounds modelling, establishing one genre or another as the goal for the cycle as a whole; the Joint Construction phase involves scribing another example of the genre based on suggestions from students; and the Individual Construction stage hands over responsibility to students for writing a further text in the genre on their

own. As the model indicates, building field and setting context is critical to each phase of the cycle, where these are interpreted as a range of activities through which students build up content for the genre and learn more about the contexts in which it is deployed. And the ultimate goal of the cycle is both control over and a critical orientation to how authors construct the genre (Macken-Horarik 1998).

Figure 1: Genre pedagogy cycle



As can be seen from even this brief overview, the model brings various aspects of 'guidance through interaction in the context of shared experience' to the writing process. Shared experience is engendered by establishing clear generic goals, building field and setting context; interaction is built into teaching and learning, in the design of various field building activities and the Joint Construction phase in particular; and the teacher is regularly placed in an authoritative position as far as guidance is concerned – whether modelling the genre, recontextualising spoken student discourse as writing when scribing or scaffolding field building activities.

The principled way in which the model positions teachers and learners can be further unpacked by drawing on Bernstein's well-known notions of classification and framing, where classification "refers to the degree of boundary maintenance between contents" and framing "to the range of options available to teacher and taught in the *control* of what is transmitted and received in the context of the pedagogical relationship" (1975: 88-89). For Bernstein (1975:119-120) weak classification and framing characterise what he calls an invisible pedagogy (such as that associated with progressive education); whereas strong classification and framing characterise a visible pedagogy<sup>3</sup> (such as that associated with traditional education):

An **invisible** pedagogy is created by:

- (1) implicit hierarchy;
- (2) implicit sequencing rules;
- (3) implicit criteria.

The underlying rule is: '**Things must be put together.**'

A **visible** pedagogy is created by:

- (1) explicit hierarchy
- (2) explicit sequencing rules
- (3) explicit and specific criteria.

The underlying rule is: **'Things must be kept apart.'**

Our aim was to develop a model which drew on the strengths of both these pedagogic stances, shifting in emphasis from one phase or another of the teaching/learning cycle. The Deconstruction stage for example begins with weak classification and framing as teachers facilitate activities which start where students are at, in order to open up the field and context of the genre; framing and classification values strengthen when a model text is introduced, as the teacher authoritatively makes visible the structure and purpose of the text (including as much critical deconstruction as deemed appropriate). Joint Construction begins with weak classification and framing as students open up a new field, researching and brainstorming new ideas for the text, before strengthening these values as the teacher guides them while organising the material; when jointly constructing text, the framing values split according to field (in which the students have more control, proffering content) and genre (in which the teacher has more control as a literacy guide). Independent Construction again opens with weak classification and framing as students explore another field, and then weak framing but relatively strong classification of the field and genre, as they write a text on their own; the final stages of the cycle have always been designed to weaken this classification as students are encouraged to experiment creatively with the genre, or on the basis of deconstructing its politics to recontextualise it for alternative needs (see Martin 1998 for examples). These waves of classification and framing are outlined in Table 1.

Table 1: Waves of classification and framing through the teaching/learning cycle

	FRAMING	CLASSIFICATION	[comments]
<b>Deconstruction</b>			
- setting context/field	-F	-C	starts where learners are at, including valuing their voice
- modelling	+F	+C	authoritative visibilising, including critical literacy
<b>Joint construction</b>			
- setting context/field	-F <sup>^</sup> +F	-C <sup>^</sup> +C	weaker for gathering ideas, stronger for sorting them
- negotiating text	+/-F	+C	learners controlling content, teacher controlling genre
<b>Independent construction</b>			
- setting context/field	-F	-C	return to learners' contexts, if possible beyond simulation
- writing	-F	+C...-C	control/evaluation... then interested renovations

Key: - weaker, + stronger, ^ sequence.

Implementation of the teaching/learning cycle as outlined above was complicated by two factors. One was the cost of introducing a metalanguage to teachers for deconstructing texts; our early initiatives were limited to knowledge about genres and

their staging, and attempts to introduce functional grammar to the curriculum have met with mixed success. The other was the ability of students to read the texts used in research and modelling phases. Recent work on recontextualising the genre-based literacy pedagogy, by David Rose and colleagues, addresses both these issues. This project focuses on teaching students to read texts across the curriculum at primary, secondary and tertiary levels, and to use what they have learnt from reading in their writing. In the process, teachers and students develop a metalanguage that targets deconstruction of discourse semantic patterns, without first needing to acquire a technical grammar.

### **3. Focusing on reading**

The intention of the genre-based pedagogy was to provide all students with access to resources for writing texts that would be successfully evaluated by their teachers and examiners. The focus in other words was on writing, since that was the primary medium through which students were assessed at each stage of schooling, and so became our immediate target for redistributing success across the student population. On the other hand, implicit within each phase of the writing pedagogy was supported practice in reading, in jointly researching the field, in the deconstruction of model texts with teacher support, and in independent research enabled by the preceding phases. Crucially, students were learning to read not just the subject matter of pedagogic texts, but more importantly their language patterns, focusing particularly on generic structures but also including various discourse and grammatical features.

Nevertheless, while reading with ‘guidance through interaction’ was the medium for acquiring control of genres, it was marginal to the central goal of learning to write for assessment. Yet for learning in school, reading is certainly central, as Bernstein points out, “beyond the book is the textbook, which is the crucial pedagogic medium and social relation” (1990:53). While writing may play a part in reinforcing knowledge acquired through reading, we consider its primary function is to assess that acquisition. Furthermore, there were significant groups of students for whom genre writing pedagogies did not provide sufficient support to read and use model texts in their own writing. These particularly included students from oral cultural backgrounds, such as many Indigenous Australian students, for whom reading was not a significant component of primary socialisation in the home, in contrast to children from literate middle class families who may spend an average of 1000 hours in parent-child reading before starting school (Bergin 2001).

It is possible to discern a literacy development curriculum that underlies the sequence of schooling, that consistently advantages the latter group, through each phase from the home to primary, secondary and tertiary study, while disadvantaging others (see Rose 2004a for discussion of this sequence, and Williams 1999, 2001, 2004 for description of parent-child reading practices). Its consequences are constantly felt across the student population, typically referred to as ‘ability levels’, which teachers and schools attempt to cope with in various ways, such as individuating work according to students’ literacy assessments. What is less often explicitly attempted is to teach all students in a class to read texts appropriate to their age, grade and curriculum area, and so to independently learn from reading such texts, and successfully write assessment tasks. To do so requires an expansion of

the genre pedagogy to adequately support all students to practise at the same high level, and reconsideration of the ways that Halliday's functional language model is applied to analysis and teaching of pedagogic texts.

### **The systemic functional language model and reading**

Theories of reading in early schooling tend to be polarised between those that advocate immersing learners in whole texts (e.g. 'whole language'), versus those that advocate explicit teaching of sound-letter correspondences, followed by words, phrases and sentences (e.g. 'phonics'). In Halliday's stratified model of language, this polarisation dissolves into different perspectives on the same phenomenon, from the stratum 'above' of text or discourse semantics, and from the stratum 'below' of phonology and graphology (Halliday 1996). It is the stratum between, of wording or lexicogrammar, that appears to commonsense as what we are reading, since the written page consists of words organised into sentences. The acrimony in reading theory is over whether it is primarily 'decoding' sequences of letters, or 'predicting' sequences of meanings, that enables us to read words. The answer flowing from the systemic functional model is of course both.

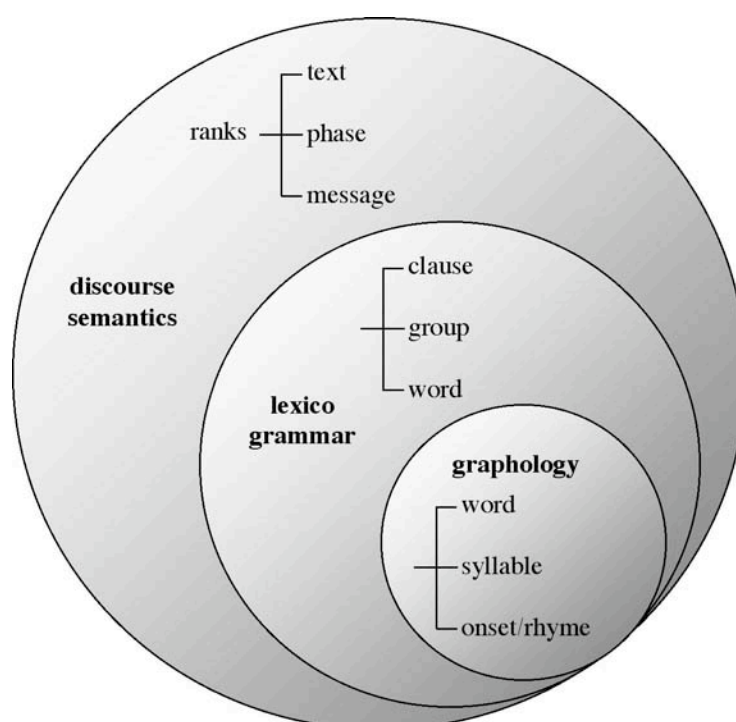
The medium of expression, of phonology versus graphology, is an obvious difference between speaking and writing, so explicit teaching of reading has traditionally started with teaching the graphic medium. But Halliday (1989) has also shown us significant grammatical differences between spoken and written modes of meaning, between the 'recursive' structures typical of speech and 'crystalline' structures typical of written sentences. Essential for recognising these differences is his model of grammatical ranks, which shows that lexical 'content' tends to be sparsely strung out at clause rank in speech, but densely packed into word group rank in writing. While a written sentence may appear visually as a string of words, it is also organised in intermediate ranks of word groups and phrases.

Likewise, a word may appear as a string of letters, but these are also organised in intermediate ranks of syllables and their components. A layer of organisation above the letter is acknowledged in phonics approaches to reading, as letter 'blends' that are taught in paradigms of sound-letter correspondences. But phonics theories have two major gaps that render them ineffective for many if not most learners: one is that the sounds associated with letter patterns in English (Mountford 1998) vary with the particular word in which they occur (the 'ough' pattern is one obvious example), and the other is that the great variety of letter patterns in the English spelling system depend on their structural position in the syllable, as onset (e.g. 'thr-') or rhyme (e.g. '-ough'). That is there are two parallel systems of letter patterns at syllable rank: the system of onsets and the system of rhymes, and both depend on the context of particular words. The entire English spelling system is thus very complex but, like all language systems, consists of regular predictable contrasts. These can be learnt, not simply from displaying paradigmatic oppositions as phonics programs attempt to do, but only from recognising recurrent instances in meaningful discourse, as we learn all other language systems at other ranks and strata in speaking and writing.

But it is not through processing letter patterns alone that we recognise written words; while the spelling system is complex, the systems of meaning that words realise are immeasurably more so, and it is equally our experience of these systems that

enables us to read. Again there are intermediate layers of structure in the discourse semantic stratum, between the sentence and the text, in particular the stages that different genres go through to achieve their goals, as well as shorter phases of meaning within each stage that are more variable, but are nevertheless predictable within particular genres and registers. And aside from such segments, there are other kinds of structure at the discourse stratum of written text, including chains of reference to people and things, strings of lexical elements that expect each other from sentence to sentence, and swelling and diminishing prosodies of appraisal, all packaged within smaller and larger waves of information.<sup>4</sup> Fluent reading involves recognising and predicting meanings unfolding through all these structures, without which it would be impossible to make sense of written text. Layers of structure in strata and ranks are represented schematically in Figure 2.

Figure 2: Complexity of the reading task by strata and rank



### **A pedagogy for all learners to read and write across the curriculum**

Given the extraordinary complexity of the task of reading outlined here, of continually recognising, predicting and recalling patterns at each stratum of graphology, lexicogrammar and discourse, teaching reading must somehow involve simplifying the task. Phonics and related approaches attempt to do so by treating the language system as though it were 'bricks-&-mortar',<sup>5</sup> building up from smallest to larger units, from letters to blends to words, then through hierarchies of 'basal' reading books, from single words to word groups to sentences. Whole language approaches attempt to avoid complexity by treating texts as undifferentiated lakes of meaning for learners to immerse in. But Halliday's model of language, complemented by genre and register theory, and observations of parent-child reading in the home, enables us to decomplexify the reading task systematically. The methodology we have developed to do so is known as *Learning to Read: Reading to Learn*, outlined as follows.

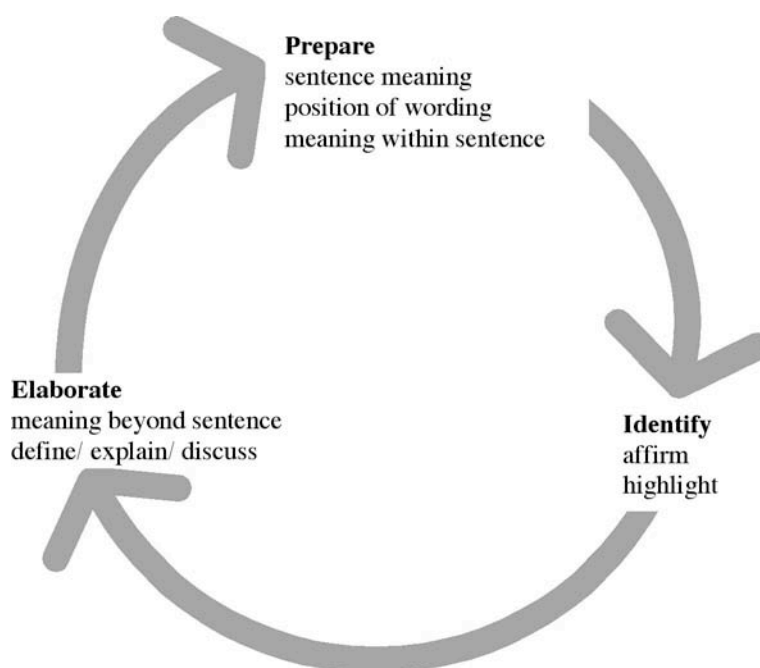
For a start, for learners to comprehend a text, they need to recognise its genre and field, and to have enough experience to interpret the field as it unfolds through the text. Depending on the level of technicality it can be very easy to orient learners to the genre and field of a text before reading it, and this is in fact what parents often do while reading to their children, particularly in literate middle-class families (cf Cloran 1999, 2000, Hasan 1990, 1991). Since the field of children's written stories is frequently wildly outside of their experience, parents may spend considerable time talking them through the field, using the illustrations, before they even begin to read. Essentially the same strategy can be used at any level, by summarising the sequence of a text's field as it unfolds through its generic phases, in terms that learners can readily understand. The reading task can then be further decomplexified by simply reading the text aloud to the class. This means that weak readers need not struggle, either to work out what is going on in each phase, nor to recognise words from their letter patterns, but can attend easily to the words as they are read aloud. This phase of the Reading to Learn process is known as *Preparing before Reading*.

Students' understanding of the overall meanings of a text provides a sound context for recognising the more detailed meanings within each sentence. At this stage of the pedagogy, students can begin to read the wordings for themselves, but the complexity of this task can be alleviated by doing so a little at a time, and again providing adequate support to recognise wordings from the perspective of meaning. This involves three preparation cues: firstly a paraphrase of the meaning of the whole sentence in commonsense terms, together with its relation to the context or preceding text, secondly a position cue that tells learners where to look for the wording, and thirdly the meaning of the wording in general or commonsense terms. Students then have to reason from the meaning cue to the actual wording on the page.

Once they have successfully identified a wording, students are prepared for an elaboration of its meaning, by defining technical or literate wordings, by explaining new concepts or metaphors, or by discussing students' relevant experience. In general the distinction between the meanings used for preparing to identify wordings, and the elaborations that follow, is between meaning within and meaning beyond the clause. In this way students are given access to the total complexity of language patterns in the text, but in manageable steps. This phase of the pedagogy is known as *Detailed Reading*. The interactive process of Detailed Reading allows every learner to read a text that is appropriate to their age or grade, with fluency and comprehension, no matter how weak their independent reading skills may be.

We have termed the three move cycle of Prepare, Task and Elaborate a **scaffolding interaction cycle**, diagrammed for Detailed Reading in Figure 3. This cycle formally describes the micro-interactions involved in parent-child reading (further discussed Rose 2004a), and in the genre writing pedagogy. The formal description enables teachers to carefully plan a discussion around the language features in a text, to think through which language features will be focused on at each step, how the teacher will prepare students to identify them, and how they will elaborate on them.

Fig 3: Detailed Reading interaction cycle



The scaffolding cycle resembles the ‘triadic dialogue’ or ‘IRF’ (Initiation-Response-Feedback) pattern, described by Sinclair & Coulthard (1975), Nassaji & Wells (2000) and others, as endemic to classroom discourse. But there are three crucial differences between this pattern and scaffolding interactions. Firstly the initial scaffolding move is not simply eliciting a response, but is carefully planned to *prepare* all learners to respond successfully; secondly the followup move is rarely simply feedback that evaluates or comments on the response, but is consistently designed to *elaborate* shared knowledge about text features; and thirdly the feedback is always affirming, whereas student responses that are inadequately prepared in everyday classroom discourse are frequently rejected. Rejection of responses includes not only direct negation, but is more often implicit in teachers’ qualified acceptance, rephrasing, or ignoring. In any class, it is only a minority of students who consistently give successful responses, a fact that is often missed in analysis of class transcripts, but is the daily reality for all teachers and students (further discussed in Rose in press a). In contrast, the scaffolding interaction cycle is designed to enable all students to always respond successfully.

Once they can read the text accurately, students are then prepared to use its language patterns to construct a new text. As the detailed reading provides more intensive support for text deconstruction than does the genre writing cycle, so it is also possible to provide greater support for text construction, by using the language patterns of the original text in greater detail. This dimension of the *Reading to Learn* pedagogy varies between writing narrative and factual texts. Both involve replicating the genre, but writing stories initially uses the same discourse and grammatical patterns of the original with a new field, while writing factual texts initially borrows the field and discourse patterns of the original with a shift in mode.

After Detailed Reading of a narrative passage, students gain sufficient control over its discourse and grammatical patterns to be able to attend to creating a new sequence

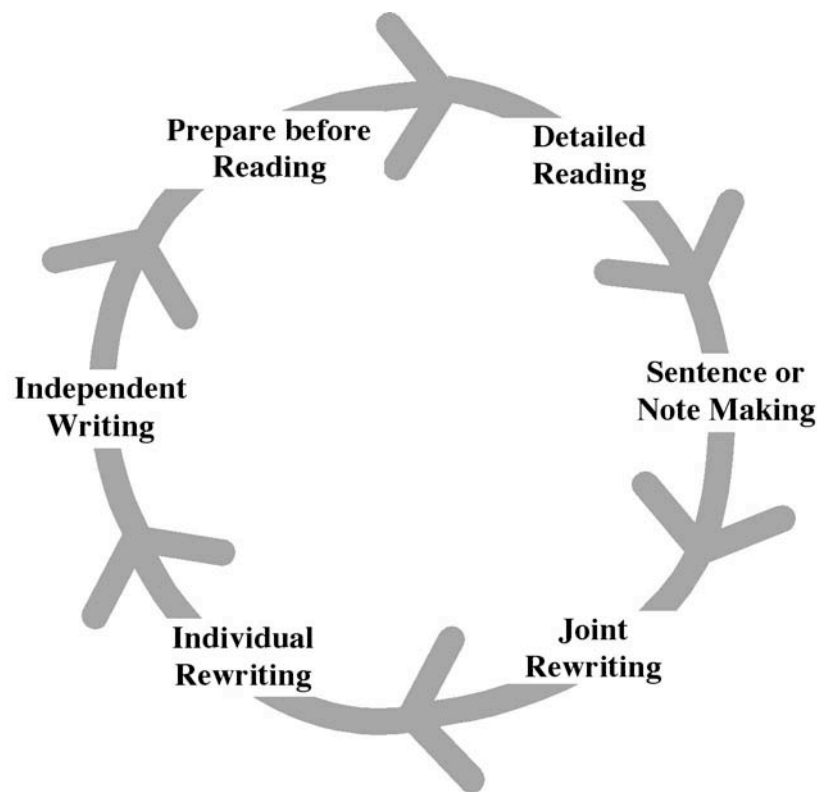


of activities, with new characters, locations and descriptive lexis. The text they produce will be at the same level, using the same literate language devices as the accomplished author that they have been reading. As with the genre writing cycle, the teacher initially guides students to use the original patterns as a framework for a *Joint Rewriting*, before they attempt independent writing. This Joint Rewriting phase may also be preceded by *Sentence Making* activities, in which a paragraph from the reading text is written on cardboard strips, cut up and manipulated by students in groups. Sentence Making activities can intensify reading practice, prepare for writing through manipulation of familiar wordings, and lead to spelling practice. Following Joint Rewriting of a story, additional support for independent writing can be provided by students' *Individual Rewriting*, again using the same language patterns but with their own events, characters and so on.

After Detailed Reading of a factual text, students have sufficient control of its field and discourse patterns, to translate its highly written wordings into patterns they are more likely to use themselves, that is towards a more oral mode. And again this begins with a teacher supported Joint Rewriting followed by independent writing of the same text. With factual texts, Joint Rewriting starts with a *Note Making* phase, in which students scribe the wordings they have marked in Detailed Reading, on the board as notes. These notes then provide the content for Joint Rewriting of the text, using new wordings with the same genre, field and discourse patterns. Again Joint Rewriting can be followed with *Individual Rewriting*, in which students use the same notes to write a text of their own, before going on to independent writing of new factual texts.<sup>6</sup>

The sequence of activities outlined above is diagrammed in Figure 4, and intensifies and extends the support provided by the genre pedagogy as follows. Firstly, support for text *Deconstruction* in the genre cycle is intensified in two steps in the Reading to Learn cycle, *Preparing before Reading* and *Detailed Reading*. Secondly, support for *Joint Construction* phase is intensified in two steps, first with *Sentence Making* or *Note Making* and then *Joint Rewriting*. And thirdly, *Independent Construction* is further supported with an initial step of *Individual Rewriting* before *Independent Writing*.

Fig 4: Reading to Learn cycle



The Reading to Learn pedagogy for factual texts is illustrated with the following transcript of a lesson conducted with Year 10 students in the South African township of *Sobantu* (Rose 2004b). These students are generally articulate in English but even the brightest students' literacy skills are hampered by a lack of reading books and past neglect of teacher training; currently only about 2% of such students from black township schools matriculate into university. The text in Example 1 was selected for the lesson from a recent history textbook, *From Apartheid to Democracy: South Africa 1948-1994* (Nuttal et al 1998:117).

Example 1:

### **Revolutionary days: The 1984 to 1986 uprising**

In the mid-1980s South African politics erupted in a rebellion in black townships throughout the country. The government's policies of repression had bred anger and fear. Its policies of reform had given rise to expectations amongst black people of changes which the government had been unable to meet. The various forces of resistance, which we outlined in the previous section, now combined to create a major challenge for the government.

The townships became war zones, and in 1985 the ANC called on its supporters among the youth to make these areas 'ungovernable'. The army occupied militant township areas. The conflict was highly complex and violent; it involved not only clashes between the security forces and the resisters, but violence between competing political organizations, between elders and youth, and between people who lived in shantytowns and those who lived in formal townships.

This text is an instance of a genre common in history and social sciences, that we have called **factorial explanation**, since it explains multiple factors leading to an event (Martin & Rose to appear). In this case, the *1984 to 1986 uprising* is explained as the result of two contradictory government policies and the combining of resistance forces, and is then described in more detail. The text is well beyond what most students in the class could read with full comprehension. Its language features include complex metaphors such as *politics erupting*, *breeding anger and fear*, and *giving rise to expectations*, together with many examples of abstract or technical wordings derived from nominalising processes, such as *rebellion*, *policies of repression and reform*, *expectations*, *forces of resistance* and *creating a major challenge* (Halliday 1998, Halliday & Martin 1993, Rose in press b, Simon-Vandenberg et al 2003). Furthermore, the logical structure of the explanation is left largely implicit for the reader to infer, including causal relations between the rebellion and the government's policies, and between these policies and the forces of resistance combining to challenge the government. Where causal relations are explicit they are realised metaphorically as *policies breeding anger and fear* and *giving rise to expectations*.

### Preparation before Reading

Preparing before Reading begins with discussion of the background to the events of the text, that is the overall field of which it is a part. This is followed by a summary of its topic, and the sequence in which the field unfolds through the text. In this summary its phases are paraphrased in commonsense terms, its logic is made explicit, metaphors are unpacked, and abstract nominalisations may be re-expressed as people involved in actions. Example 2 illustrates this with an extract from the Sobantu lesson:

#### Example 2:

The particular time we're going to look at is this one here, the mid-1980s, so it's 1984, 1985, 1986. Now this is when the next student uprising started in townships like Sobantu. This little part of the textbook, this little story, is about why the violence started in the townships at that time, and what happened, and who was involved.

But it starts off telling us that the rebellion started in the black townships, and there were two reasons for this. Because the government, on one side they had a policy to keep the people down, to repress the people with the police and the army. And of course this made the people very angry and frightened. So they had this policy on one side of keeping people down, but on the other side, they promised to make things better for the people. But then they didn't give the people enough money to actually make things better. So people expected things to get better and they didn't. So these two things combined to make the people very frustrated.

And when the trouble blew up, the ANC called on all the young supporters in the townships to make it so difficult, to make so much trouble, like these guys here, that the government couldn't come in and control them. But there were a lot of sides to this rebellion because there were so many different people involved. So on the one hand you had the police and the army against the protestors. On the other hand you had organisations like ANC, and what's the other one? [students] IFP. - IFP! And they were fighting with each

other, right? [students] Yes. – And you had old people arguing with young people. And you had people who lived in townships like Sobantu, and other people who lived in the squatter camps, and they had different ideas about what should happen. So there's a lot of sides to it.

The text is then read to the class, although competent student readers may also take turns to read aloud.

### Detailed Reading

The scaffolding interaction in Detailed Reading of the first few sentences is transcribed in Example 3. Here each student has a photocopy of the text, the teacher prepares, students identify and highlight wordings in their copies, and the teacher then affirms and elaborates. In each preparation move, the teacher first paraphrases the meaning of the sentence and reads it aloud, then gives the position and meaning cue for each wording in turn, and asks the students to find the wording in the text. Two types of meaning cues are used. One type gives a general experiential meaning, using 'wh' items such as *who*, *when*, *where*, *which*, so that students must identify the particular person, time, place, class and so on, in the wording on the page. The other type gives a commonsense paraphrase of a technical or literary wording which students must identify in the text. Crucially, these preparations are usually given as statements; questions are not used to assess students' understanding, as in typical classroom discourse, but only as prompts to identify wordings. In the transcript, types of preparation cues and elaborations are analysed in square brackets.

Example 3:

#### First sentence

Prepare [sentence meaning] Now the first sentence tells us that the trouble blew up in the townships, and that the people were rebelling against the government. (Teacher reads sentence as students read along to themselves.) *In the mid-1980s South African politics erupted in a rebellion in black townships throughout the country.*

Prepare [position] Now that sentence starts by telling us [general meaning] when they rebelling. Who can see the words that tell us when?

Identify In the 1980s.

Affirm Is she right? (engaging all students to check and affirm) OK.

Elaborate Let's all do mid-1980s (expanding student's response).

Prepare [position] Then it tells us that [commonsense meaning] South African politics blew up. Can you see the word that tells us South African politics blew up? [position] South African politics...? (empty tonic)

Identify Erupted.

Affirm Erupted! Is he right? [students] Yes. - Can you see the word that says erupted? Lets do that one, erupted (repeating pronunciation).

Elaborate [unpack metaphor] The reason they use the word erupted is because that's what volcanoes do. Have you heard that before? [students] Yes. - A volcano erupts? [students] Yes. – So what were the townships like? They were like...? [students] Volcanoes. – Exactly right, they were like a volcano, and there was all this pressure inside, waiting to blow up and

erupt, with all this anger the people were feeling about the government's repression.

- Prepare OK, South African politics erupted [position] and then it tells us [commonsense meaning] that people were rebelling. Can you see the word that means people were rebelling? [position] South African politics erupted in a...?
- Identify Rebellion.
- Affirm Rebellion! Is he right? [students] Yes. – OK, everybody do rebellion.
- Prepare [position] Then it tells us [general meaning] where that rebellion happened.
- Identify In townships.
- Elaborate Exactly right. Which townships did it happen in?
- Identify In black townships.
- Affirm OK! Let's all do black townships.
- Elaborate So it happened in townships like Sobantu. So it was your parents that were involved in this. Is that right? [students] Yes. - Have they told you stories about that time? [students] Yes.

### Second sentence

- Prepare [discourse connections] Now the next sentence tells us the reasons that you had this rebellion; [sentence meaning] because the government had a policy of keeping people down, of repressing people, and this made the people angry and frightened. Now everybody look at the sentence and I'm going to read it to you, OK. *The government's policies of repression had bred anger and fear.*
- Prepare [position] Now this sentence starts by telling us [commonsense meaning] which policy it was. It was a policy that repressed people. Can anybody at this table tell me what that policy was? [position] The government's policies of...?
- Identify Repression.
- Affirm Repression! Is that right? [students] Yes.
- Elaborate [define term] OK, repression means you're keeping people down, you're repressing them. Do the whole lot, *government's policies of repression*.
- Prepare [commonsense meaning] The government's policies made the people angry and frightened. And who can tell me the words that mean angry and frightened. [position] They had bred...?
- Identify Anger and fear.
- Affirm OK! Anger and fear. Let's all do that...Have we all got that? OK, beautiful.
- Elaborate [discourse connections] OK, we're on to the next sentence. So that was one policy they had, to keep people down, to repress them.

Here 'wh' cues include 'when' for *In the mid-1980s*, 'where' for *in black townships*, and 'which townships' for *black townships*. Commonsense cues include 'blew up' for *erupted*, 'people were rebelling' for *rebellion*, 'keeping people down, repressing people' for *repression*, and 'made the people angry and frightened' for *bred anger and fear*. As students actively reason from the meaning cues to the wordings on the page, they learn to automatically recognise types of language patterns as they read. Some of these patterns are shared with spoken modes, such as places, times and so

on. Others are more written, such as layered metaphors like *politics erupted* and nominalisations like *policies of repression*. These high level reading tasks are made easy by giving the context of the sentence in commonsense terms, and the position of the wording, as the sentence is worked through in sequence. The detailed focus on particular wordings never becomes a mechanical exercise, as they are continually contextualised in preparations and elaborations, in the field of the text and the flow of discourse.

With this support all students are able to read each wording with understanding. Although not apparent in the transcript, each preparation is directed to a different student to respond, and the whole class is then asked to check and affirm. Successfully recognising a wording enables them to understand and participate in elaborating its meaning, such as defining terms like *repression*, explaining metaphors like *erupting* or discourse relations such as the logical contrast between *policies of repression and reform*, or contextualising the field in students' experience. The framing varies between stronger and weaker as the teacher prepares and then hands over control to identify and discuss their experience. Over time, such supported practice in reading and interpreting high level texts enables all students to independently read comparable texts (evaluated in McRae et al 2000).

### Rewriting from Notes

The next step in working with factual texts is for students to scribe the wordings they have identified and highlighted in the text, onto the class board as notes. As the Detailed Reading has given them a strong command over the field of the text, the framing is weakened in the Note Making phase for them to take control of the activity. The class directs the scribe in the words to write and how to spell them, affording opportunities for the whole class to actively attend to spelling patterns as their vocabulary expands. Notes produced by students in the Sobantu lesson are shown in Example 4.

Example 4:

#### 1984-1986 uprising

- mid-1980s - rebellion - black townships
- government's policies of repression - anger and fear
- policies of reform - expectations of changes - unable to meet
- forces of resistance - combined - major challenge for the government
- townships - war zones
- 1985 - ANC - supporters among the youth - make 'ungovernable'
- army - militant township
- conflict highly complex violent
- clashes - security forces - resisters - political organizations - elders and youth
- shantytowns - formal townships

In Joint Rewriting teacher supports the class to jointly construct a new text from the notes, but before doing so, prepares them by pointing out discourse patterns and other key elements in the notes. This preparation before writing gives students the general framework of genre and field within which to rewrite the text. Here the teacher supports students to recognise patterns they have already encountered, by pointing to the notes and reiterating the Detailed Reading discussion. The scaffolding

interaction cycle is used again for Joint Rewriting, but now the teacher prepares students to imagine new texts, by drawing attention to notes, suggesting alternative wordings, and further discussing the field. Instead of identifying literate wordings from commonsense cues, students select more commonsense paraphrases for the literate wordings in the notes. Then the teacher may elaborate by rephrasing the selection, supporting them to check issues such as grammar, punctuation or spelling, and encouraging critical discussion of the way the original author constructed the field, and how they may reconstruct it. Such high level critical analysis is possible because of the supported practice in deconstructing and reconstructing meanings at all levels of the text. The framing in this phase thus oscillates between stronger and weaker as the teacher prepares and then hands over control to students for selection and scribing. This cycle is illustrated with an extract from the Sobantu lesson in Example 5.

Example 5:

### First sentence

- Prepare [alternative lexical item] So what we've done is we've used the word *rebellion* already, so we'll have to use another word that means the same.
- Select Uprising.
- Affirm OK.
- Prepare [alternative sentence structure] And we'll change the order around. Instead of starting with *the mid-1980s*, let's start with this part (*rebellion*). I'll tell you what I would do, I would say *There was* [teacher scribes]
- Select There was an uprising.
- Affirm An uprising? Good.  
[student scribes *an uprising*]
- Prepare [locate in time] And when was this? Will we do this? (*mid-1980s*)
- Select An uprising in the mid-1980s.
- Affirm in the mid-1980s  
[student scribes *in the mid-1980s*]
- Prepare [locate in place] Whereabouts?
- Select At the black townships
- Elaborate OK. [critique ethnic classification] Do we have to say the black townships?
- Select No. In South African townships. (These students consider themselves a 'New Generation' that need not accept the ethnic classifications of apartheid.)
- Affirm In South African townships.  
[student scribes *in South African townships*]
- Prepare [sentence structure] Is that the end of the sentence?
- Select Ya, that is the end of the sentence.
- Elaborate [punctuation] What do we need at the end of a sentence?
- Select Full stop. [scribes]

### Second sentence

- Select The government's laws. Policy's like a law, isn't it?
- Elaborate [explain field] Well, they make laws from their policies. Policies are more like the ideas that they have. But that's OK, we can use the word policies.
- Prepare [unpack nominalisation] Let's think about another way of saying repression. So what did the government do to the people?
- Select Repressed them.

- Affirm That's right, the government repressed the people.
- Prepare [logical connections] And what did it cause?
- Select Anger and fear.
- Elaborate [unpack nominalisation] So we could say it made them angry and frightened.
- Prepare [make logic explicit] Here's an idea, we can start off by saying *Because*. How's that?
- Select Because what? Because the government.
- Affirm The government, yeh.  
[student scribes *Because the government*]
- Prepare [unpack nominalisation] And who did they repress?
- Select The people.
- Affirm The people, yes.  
[student scribes *repressed the people*]
- Prepare [logical connections] How did the people feel?
- Select They were frustrated and frightened  
[student scribes *they were frustrated*]
- Elaborate [spelling letter patterns] F-R.
- Select Frus! [scribes *frustrated and frightened*]

### Third sentence

- Prepare [parallel grammatical structure] We can start off the same way. See those two sentences had the same pattern (in original text).
- Select Because.
- Prepare Again, who was promising?
- Select Because the government.  
[student scribes *Because the government*]
- Elaborate [spelling] Watch when you're spelling government. It's got an N in the middle.
- Prepare [unpack nominalisation] So what did the government do?
- Select The government had promised...had promised changes.  
[student scribes *had promised changes*]
- Prepare [logical connections] OK, so what did the people want?
- Select The people expected
- Elaborate OK! [punctuation] Maybe you should put a little comma there, after changes.  
[student scribes *the people expected*]
- Select Changes that people expected.
- Elaborate [specify lexical item] Well, we can't just say changes again. Did they expect things to get worse?
- Select No. Expected things to get better.  
[student scribes *things to get better*]
- Prepare [explicit concession] But! But what happened? What happened with the government?
- Select Instead the government couldn't provide those changes.
- Elaborate Yeh, [alternative conjunction] you can keep it in the same sentence and just use *but* here.
- Select But the government couldn't provide.  
[student scribes *but the government couldn't provide*]



Prepare [complete figure] But the government couldn't provide...?  
 Select Provide their needs.  
 Affirm Oh, provide their needs. That's great.  
 [student scribes *their needs*]

In this Joint Rewriting phase students are practising a wide range of language features at the levels of discourse, lexicogrammar and graphology, supported by the teacher and their command of the field in the notes. One of the key activities in this context is practice with translating abstract nominalisations back into processes involving people and things. Continual practice in both directions – from commonsense cues to abstract wordings in Detailed Reading, and from abstractions to commonsense wordings in Joint Rewriting – supports students to control grammatical metaphor in the context of its text building functions. The text produced through this Joint Rewriting is presented as Example 6.

Example 6:

*The Rebellion of 1984-1986*

*There was an uprising in the mid-1980s in South African townships. Because the government repressed the people, they were frustrated and frightened. Because the government promised changes, the people expected things to get better, but the government couldn't provide their needs. So all the parties resisting apartheid came together and started serious trouble for the government.*

*It was like a war in the townships. In 1985 the ANC called the young people to cause so much chaos that they could not be controlled by the government. The army moved into the townships with the most chaos. The police and the army clashed with protestors, the ANC and Inkatha competed violently, elders and young people argued, and people in townships fought with those in the squatter camps.*

Such negotiated joint construction is a step towards students writing their own texts using the same notes, which is in turn a further supportive step towards independent research and writing in this and other fields and genres. Semiotic mediation, from Vygotsky's (1981) 'inter-psychological categories' to 'intra-psychological categories' (Hasan 2004b), is thus accomplished in a series of manageable steps, deconstructing not just the text, but the tasks of reading and writing. At each step, learners take control of new elements of both the tasks and the language patterns of the text, and the scaffolding support is gradually withdrawn.

The reading focused activities outlined here thus complement and enhance the writing focused teaching/learning cycle outlined in Figure 1, providing more intensive scaffolding support for learners to adopt literate language patterns from authors of model texts. This more intensive support benefits both weaker and stronger students: all students learn to consciously recognise and use discourse patterns that are well beyond their independent competence. Over time, the scaffolding process in both models involves the gradual introduction of knowledge about language (Carter 1990, 1996, Schleppegrell 2004), drawing students' attention to key linguistic phenomena. This can be done using various degrees of technical metalanguage, depending on the expertise of teachers and the readiness of students. For younger students or weaker readers, we begin with commonsense metalanguage such as the 'wh' items

used in Detailed Reading. Technical terms for discourse and grammar features can then be introduced in steps as they gain control over the language and field of texts. For more advanced learners, technical metalanguage can be introduced from the beginning, and expanded as patterns of discourse are explored in a text. Elaboration moves are a key resource for introducing such technical terms, and these can be reinforced and expanded as a lesson cycle unfolds, and from one lesson sequence to the next.

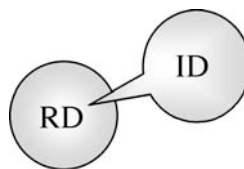
#### 4. A language based theory of learning

In the design of our reading and writing pedagogies, both Halliday's model of language in context, and Bernstein's notion of pedagogic discourse have been fundamental. Bernstein saw pedagogic discourse as a principle whereby an instructional discourse (ID) of "specialised skills and their relationship to each other" is 'embedded' in a regulative discourse (RD) a "moral discourse which creates order, relations and identity" (1996: 46), for which he used the formula:

ID/RD

We have used Halliday's term 'projection' for the relation between instructional and regulative discourses (Martin 1998a, Christie 2002). Briefly, in this view the regulative is the set of pedagogic relations, activities and texts (oral and written), through which the instructional is projected, as a locution is projected through the voice of its speaker. This projecting relation is schematised in Figure 5.

Fig. 5: Instructional projected by regulative discourse

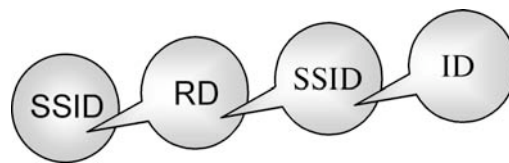


In Bernstein's formulation, the regulative is the dominant discourse and the two are inseparable; as a locution has no existence other than through its speaker's voice, so there is no instruction other than through regulation. We see the latter as the entire set of practices that differentially provide access to instructional discourse to different groups of students. Where the social order is stratified, pedagogic discourse will tend to create unequal relations of 'ability' between students, and identities as successful or unsuccessful learners. Since our aim is a more equitable social order, we need a pedagogic discourse that produces a more equal distribution of 'ability', and learner identities that are equally successful. A popular liberal approach to the latter goal is to modify the difficulty of learning tasks, so that all learners can feel successful at their own 'ability level'. This is often legitimated as acknowledging 'difference' and offering 'choice', but the outcomes in terms of social order and relations remain just as stratified. Our approach has been to develop and disseminate the tools that teachers need to support all their students to successfully practise at the same high level.

These tools are derived from a social semiotic theory that recognises the role of semiotic resources in creating social order, and role of schooling in distributing these

resources. From this theory we have developed semiotic tools to operate in the instructional discourse, to provide learners with explicit knowledge about text in social context, and in the regulative discourse, to provide teachers with the means to distribute this knowledge equitably to all their students, to genuinely democratise their classrooms. Furthermore, the tools enable teachers and students to use knowledge about text in social context to deconstruct their schooling, as well as its contents - a project with which numbers of critical theorists appear to have some political interest (cf. Wells 1999 on students negotiating their curriculum). In our adaptation of Bernstein's terms, both the instructional and regulative discourses are projected in this pedagogy by a social semiotic instructional discourse (SSID), schematised in Figure 6.

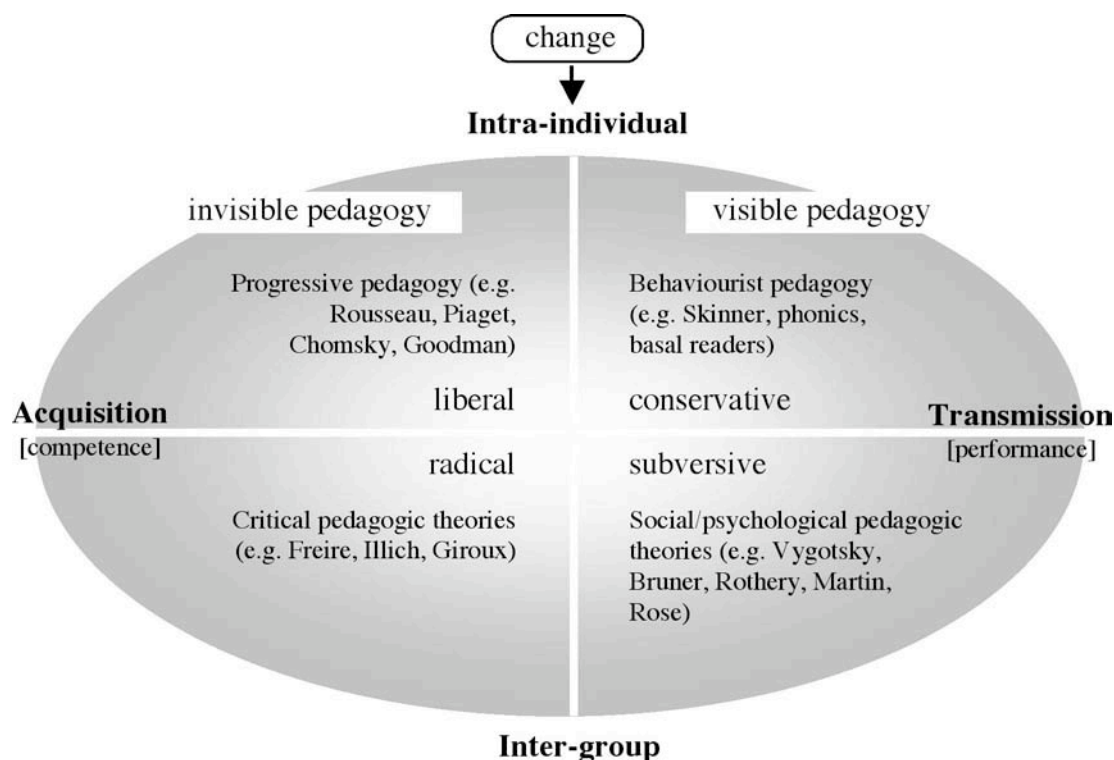
Fig. 6: Social semiotic instructional discourse projecting pedagogy



As a final step, we can situate our pedagogy in relation to complementary perspectives. Bernstein 1990:214 provides a grid, which we have adapted in Figure 5 to position the pedagogy with respect to traditional, progressive and Freirean alternatives. As Bernstein outlines (1990: 213-4):

The vertical dimension would indicate whether the theory of instruction privileged relations internal to the individual, where the focus would be *intra-individual*, or ... relations *between* social groups (inter-group). In the first case... the theory would be concerned to explain the conditions for changes within the individual, whereas in the second the theory would be concerned to explain the conditions for changes in the relation between social groups. The horizontal dimension would indicate whether the theory articulated a pedagogic practice emphasising a logic of acquisition or... a logic of transmission. In the case of a logic of acquisition...the acquirer is active in regulating an *implicit* facilitating practice. In the case of a logic of transmission the emphasis is upon *explicit* effective ordering of the discourse to be acquired, by the transmitter.

Fig. 5: Types of pedagogy (after Bernstein 1990)



Bernstein adds (1990:73): "It is a matter of interest that this top right-hand quadrant is regarded as conservative but has **often produced very innovative and radical acquirers**. The bottom right-hand quadrant shows a radical realization of an apparently conservative pedagogic practice...each theory will carry its own conditions of contestation, 'resistance', subversion." Our labelling of the different quadrants is adapted from this comment.<sup>7</sup> As the grid implies, our approach in the lower right-hand quadrant has been a visible and interventionist one (Martin and Painter 1986, Hasan and Martin 1989,<sup>8</sup> Cope and Kalantzis 1993) - with a relatively strong focus on the transmission of identified discourse competences and on the empowerment of otherwise disenfranchised groups in relation to this transmission. As such it has strong affinities with the social constructivist position articulated by Mercer and his colleagues in Britain (1995, 2000), although it has to be said that American implementations of neo-Vygotskian ideals seem to slide rather seamlessly into the upper left-hand progressive quadrant (see for example Wells' social constructivist manifesto<sup>9</sup> in Appendix I of Wells 1999).

We consider that the greatest advantage our work has had, over other educational interventions in each quadrant, is its grounding in Michael Halliday's powerful theory of language in social context, and the work on language learning that has flowed from this theory over four decades. Social justice was the original motivation for Halliday and his colleagues to begin the systemic functional project; his enduring vision and commitment to this ideal continues to inspire our contribution as the project unfolds.

### Notes

<sup>1</sup> For overview articles see Christie 1992, Feez 2002, Macken-Horarik 2002, Martin 1991, 1993a, 1998a, b, 1999, 2000, 2001, 2002a, b, c). Feez 1998, 2002 includes

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discussion of adaptations for adult education (TESOL). For relevant discussion of ESL learners in mainstream classrooms see Gibbons 2002.

<sup>2</sup> The genre cycle was influenced by Gray's work teaching reading to Indigenous students in central Australia (e.g. 1990); the Reading to Learn pedagogy was influenced by strategies developed for early reading by Clay (1994), and for stories in primary years by Gray and Cowey (Rose, Gray & Cowey 1999).

<sup>3</sup> For useful breakdowns of this opposition see Alexander 2000: 548-9 and Brophy 2002: ix, both of whom argue for a judiciously inclusive pedagogy in place of crusading adversarialism.

<sup>4</sup> See Martin & Rose 2003 for an accessible introduction to these discourse systems.

<sup>5</sup> Halliday (1996) critiques structuralist language models, on which phonics and related literacy approaches are based, as 'bricks-&-mortar'.

<sup>6</sup> The sequences of strategies in the Reading to Learn pedagogy are demonstrated for factual texts, stories and early reading in a series of training videos (Rose 2004b,c,d)

<sup>7</sup> At the time of writing this, Bernstein was unaware of our pedagogic initiatives; see Christie 1998.

<sup>8</sup> See especially the papers by Painter, Rothery and Jones et al therein.

<sup>9</sup> To be fair, there are many places in Wells' book (and in Wells 2002) where teacher centred activities are acknowledged - but the teacher is completely elided from the manifesto; Brophy 2002 provides a balanced over-view of social constructivist teaching initiatives. Muller 2000 critiques the very disturbing 'progressive' implementation of social constructivist principles in South Africa after apartheid (see also Taylor et al 2003).

## References

- Alexander, R 2000 *Culture & Pedagogy: international comparisons in primary education*. Oxford: Blackwell
- Applebee, A M & J Langer 1983 Instructional scaffolding: reading and writing as natural language activities. *Language Arts* 60.2. 168-175.
- Bergin, C. 2001. The parent-child relationship during beginning reading. *Journal of Literacy Research*, 33:4, 681-708
- Bernstein, B. 1975. *Class and Pedagogies: visible and invisible*. London: Routledge
- Bernstein, B. 1990. *The Structuring of Pedagogic Discourse*. London: Routledge
- Bernstein, B. 1996. *Pedagogy, Symbolic Control & Identity: theory, research, critique*. London: Taylor & Francis
- Brophy, J [Ed.] 2002 *Social Constructivist Teaching: affordances and constraints*. London: Elsevier (JAI: Advances in Research on Teaching 9)
- Carter, R [Ed.] 1990 *Knowledge about Language and the Curriculum: the LINC reader*. London: Hodder & Stoughton.
- Carter, R 1996 Politics and knowledge about language: the LINC project. Hasan & Williams. 1-28.
- Christie, F 1992 Literacy in Australia. *ARAL* 12. 142-155.
- Christie, F [Ed.] 1998 *Pedagogy and the Shaping of Consciousness: linguistic and social processes*. London: Cassell (Open Linguistics Series).
- Christie, F 2002 *Classroom Discourse Analysis: a functional perspective*. London: Continuum.
- Clay, M. 1994. *Reading Recovery: a guidebook for teachers in training*. Portsmouth, NH: Heinemann
- Cloran, C 1999 Contexts for learning. In Christie. 31-65
- Cloran, C 2000 Socio-semantic variation: different wordings, different meanings. In Unsworth.152-183
- Cope, W. & Kalantzis, M. eds. 1993. *The Powers of Literacy: a genre approach to teaching literacy*. London: Falmer & Pittsburg: University of Pittsburg Press
- Feez, S 1998 *Text-based Syllabus Design*. Sydney: National centre for English Language Teaching and research (NELTR), Macquarie University.
- Feez, S 2002 Heritage and innovation in second language education. in Johns [Ed.] 43-69.
- Foley, J. [Ed.] 2004 *New Perspectives on Education and Discourse: functional approaches*. London: Continuum.
- Gibbons, P 2002 *Scaffolding Language, Scaffolding Learning: teaching second language learners in the mainstream classroom*. Portsmouth, NH: Heinemann.
- Gray, B 1990 Natural language learning in Aboriginal classrooms: reflections on teaching and learning. C Walton & W Eggington [Eds.] *Language: maintenance, power and education in Australian Aboriginal contexts*. Darwin, N.T.: Northern Territory University Press. 105-139.
- Halliday, M.A.K. 1975. *Learning How to Mean: explorations in the development of language*. London: Edward Arnold
- Halliday, M.A.K. 1978. *Language as a Social Semiotic: the social interpretation of language and meaning*. London: Edward Arnold
- Halliday, M.A.K. 1989. *Spoken and Written Language*. Geelong: Deakin University Press/ Oxford: Oxford University Press
- Halliday, M A K 1993 Towards a language-based theory of learning. *Linguistics and Education* 5.2. 93-116.

- Halliday, M.A.K. 1996. On Grammar & Grammaticals. In Hasan, R., Butt, D. & Cloran, C. (eds.) *Functional Descriptions: language form & linguistic theory*. Amsterdam: Benjamins, 1-38
- Halliday, M A K 1998 Things and relations: regrammaticising experience as technical knowledge. in Martin & Veel, 185-235
- Halliday, M A K 2004 Representing the child as a semiotic being (one who means). J Foley [Ed.] 19-42.
- Halliday, M A K & J R Martin 1993 *Writing Science: literacy and discursive power*. London: Falmer (Critical Perspectives on Literacy and Education).
- Hammond, J [Ed.] 2001 *Scaffolding: teaching and learning in language and literacy education*. Sydney: Primary English Teaching Association.
- Hasan, R 1990 Semantic variation and sociolinguistics. *Australian Journal of Linguistics* 9.2. 221-276.
- Hasan, R 1991 Questions as a mode of learning in everyday talk. M McCausland [Ed.] *Language Education: interaction and development*. Launceston: University of Tasmania. 70-119.
- Hasan, R 1995 On social conditions for semiotic mediation: the genesis of mind in society. in Sadovnik. 171-196.
- Hasan, R 2001 The ontogenesis of decontextualised language: some achievements of classification and framing. A Morais, H Baillie & B. Thomas [Ed.] *Towards a sociology of pedagogy: the contribution of Basil Bernstein to research*. New York: Peter Lang (History of Schools & Schooling 23). 47-79.
- Hasan, R 2004a The world in words: semiotic mediation, tenor and ideology. Williams & Lukin 158-181.
- Hasan, R 2004b The concept of semiotic mediation: perspectives from Bernstein's sociology. Muller et al, 30-43
- Hasan, R & J R Martin [Eds.] 1989 *Language Development: learning language, learning culture*. Norwood, N.J.: Ablex.
- Hasan, R & G Williams [Eds.] 1996 *Literacy in Society*. London: Longman.
- Johns, A M [Ed.] 2002 *Genre in the Classroom: applying theory and research to practice*. Mahwah, NJ : Lawrence Erlbaum.
- Macken-Horarik, M 1998 Exploring the requirements of critical school literacy: a view from two classrooms. Christie & Misson. 74-103.
- Macken-Horarik, M 2002 Something to shoot for: a systemic functional approach to teaching genre in secondary school science. in Johns [Ed] 17-42.
- McRae, D., Ainsworth, G., Cumming, J., Hughes, P., Mackay, T. Price, K., Rowland, M., Warhurst, J., Woods, D. & Zbar, V. (2000). *What has worked, and will again: the IESIP Strategic Results Projects*. Canberra: Australian Curriculum Studies Association, [www.acsa.edu.au/publications/worked](http://www.acsa.edu.au/publications/worked), 24-26
- Martin, J R 1991 Critical literacy: the role of a functional model of language. *Australian Journal of Reading* 14.2. 117-132. [Focus Issue on Literacy Research in Australia edited by Peter Freebody & Bruce Shortland-Jones]
- Martin, J R 1993 Genre and literacy - modelling context in educational linguistics. *ARAL* 13. 141-172.
- Martin, J R 1998a Mentoring semogenesis: 'genre-based' literacy pedagogy. F Christie. 123-155.
- Martin, J R 1998b Practice into theory: catalysing change. S Hunston [Ed.] *Language at work: Clevedon: Multilingual Matters (British Studies in Applied Linguistics 13 [BAAL 13])*. 1998. 151-167.

- Martin, J R 1999 Linguistics and the consumer: theory in practice. *Linguistics and Education* 9.3. 409-446.
- Martin, J R 2000 Design and practice: enacting functional linguistics in Australia. *Annual Review of Applied Linguistics* 20 (20th Anniversary Volume 'Applied Linguistics as an Emerging Discipline'). 116-126.
- Martin, J R 2001 Giving the game away: explicitness, diversity and genre-based literacy in Australia. R de Cilla, H Krumm & R Wodak et al. [Eds.] *Functional Illiteracy*. Vienna: Verlag der Osterreichischen Akademie der Wissenschaften. 2001. 155-174.
- Martin, J R 2002a From little things big things grow: ecogenesis in school geography. in Coe et al. [Eds.] 243-271.
- Martin, J R 2002b Writing history: construing time and value in discourses of the past. C Colombi & M Schleppergrell [Eds.] *Developing Advanced Literacy in First and Second Languages*. Mahwah, N.J.: Erlbaum. 87-118.
- Martin, J R 2002c A universe of meaning - how many practices? in Johns [Ed.] 269-278.
- Martin, J R & C Painter 1986 *Writing to Mean: teaching genres across the curriculum*. Applied Linguistics Association of Australia (Occasional Papers 9) 1986.
- Martin, J R & J Rothery 1990 *Literacy for a Lifetime - teachers' notes*. Sydney: Film Australia.
- Martin, J R & J Rothery 1993 Grammar: making meaning in writing. in Cope & Kalantzis 137-153.
- Martin, J.R. & Rose, D. 2003. *Working with Discourse: meaning beyond the clause*. London: Continuum
- Martin, J.R. & Rose, D. to appear 2005. *Genre Relations: mapping culture*. London: Equinox
- Martin, J R & R Veal [Eds.] 1998 *Reading Science: critical and functional perspectives on discourses of science*. London:Routledge.
- Mercer, N 1994 Neo-Vygotskian theory and classroom education. R Stierer & J Maybin [Eds.] *Language, Literacy & Learning in Educational Practice*. Clevedon: Multilingual Matters. 92-110.
- Mercer, N 1995 *The Guided Construction of Knowledge: talk amongst teachers and learners*. Clevedon: Multilingual Matters.
- Mercer, N 2000 *Words & Minds: how we use language to work together*. London: Routledge.
- Morais, A., Baillie, H. & Thomas, B. [Ed.] 2001 *Towards a Sociology of Pedagogy: the contribution of Basil Bernstein to research*. New York: Peter Lang (History of Schools & Schooling 23).
- Mountford, J 1998 *An Insight into English Spelling*. London: Hodder & Stoughton 1998
- Muller, J 2000 *Reclaiming Knowledge: social theory, curriculum and education policy*. London: Routledge (Knowledge, Identity and School Life Series 8).
- Muller, J, B Davies & A Morais [Eds.] 2004 *Reading Bernstein, Researching Bernstein*. London: Routledge Falmer.
- Nassaji, H. & Wells, G. 2000. What's the Use of 'Triadic Dialogue'? an investigation of teacher-student interaction. *Applied Linguistics* 21/3, 376-406
- Nuttall T, Wright J, Hoffman J, Sishi N, Khandhela S 1998 *From Apartheid to Democracy: South Africa 1948-1994*. Pietermaritzburg: Shuter & Shooter.
- Painter, C 1984 *Into the Mother Tongue: a case study of early language development*. London: Pinter.



- Painter, C 1986 The role of interaction in learning to speak and learning to write. C Painter & J R Martin [Eds.] *Writing to Mean: teaching genres across the curriculum*. ALAA (Occasional Papers 9)62-97.
- Painter, C 1989 Learning language: a functional view of language development. Hasan & Martin [Eds.] 18-65.
- Painter, C 1996 The development of language as a resource for thinking: a linguistic view of learning. Hasan & Williams [Eds.] 50-85.
- Painter, C 1998 *Learning through Language in Early Childhood*. London: Cassell
- Painter, C 1999 Preparing for School: developing a semantic style for educational knowledge. Christie [Ed.]. 68-87
- Painter, C 2000 Researching first language development in children. Unsworth [Ed.]. 65-86
- Painter, C 2003a The use of a metaphorical mode of meaning in early language development. In Simon-Vandenberg et al, 151-167
- Painter, C 2003b Developing attitude: an ontogenic perspective on APPRAISAL. *Text 23.2* (Special issue: *Negotiating heteroglossia: social perspectives on evaluation*, Ed. M. Macken-Horarik & J.R. Martin). 183-210.
- Painter, C 2004 The 'interpersonal first' principle in child language development. G. Williams & A. Lukin (eds) *Language Development:...* London: Continuum: 133-153.
- Plum, G. 1988. *Text and contextual conditioning in spoken English: A genre-based approach*. Unpublished PhD thesis, University of Sydney
- Rose, D. 2003. *Reading and Writing Factual Texts at Sobantu*. Teacher Training Video. Faculty of Education: University of Sydney (Learning to Read:Reading to Learn). For copies contact author d.rose@edfac.usyd.edu.au
- Rose, D. 2004a. Sequencing and Pacing of the Hidden Curriculum: how Indigenous children are left out of the chain. In Muller, Davies & Morais (eds.), 91-107
- Rose, D. 2004b. *Reading and Writing Factual Texts*. Teacher Training Video. Sydney: Learning to Read:Reading to Learn. For copies (VHS or DVD) contact author d.rose@edfac.usyd.edu.au
- Rose, D. 2004c. *Stories in the Middle Years*. Teacher Training Video. Sydney: Learning to Read:Reading to Learn. For copies (VHS or DVD) contact author d.rose@edfac.usyd.edu.au
- Rose, D. 2004d. *Early Years Reading and Writing*. Teacher Training Video. Sydney: Learning to Read:Reading to Learn. For copies (VHS or DVD) contact author d.rose@edfac.usyd.edu.au
- Rose, D. in press a. Democratising the Classroom: a literacy pedagogy for the new generation. In *Journal of Education*, University of KwaZulu Natal 25pp
- Rose, D. in press b. Grammatical Metaphor. In *Encyclopaedia of Language and Linguistics 2nd Edition*. Oxford: Elsevier, 15pp
- Rose, D, Gray, B. & Cowey, W. 1999. Scaffolding reading and writing or Indigenous children in school. P Wignell [Ed.] *Double Power: English literacy in Indigenous schooling*. Melbourne: Language Australia.
- Rose, D., Lui-Chivizhe, L., McKnight, A. & Smith, A. 2004. Scaffolding Academic Reading and Writing at the Koori Centre. In *Australian Journal of Indigenous Education*, 30th Anniversary Edition, www.atsis.uq.edu.au/ajie, 41-9
- Rothery, J 1989 Learning about language. Hasan & Martin. 199-256.
- Rothery, J 1994 *Exploring Literacy in School English (Write it Right Resources for Literacy and Learning)*. Sydney: Metropolitan East Disadvantaged Schools Program.

- Rothery, J 1996 Making changes: developing an educational linguistics. Hasan & Williams. 86-123.
- Sadovnik, A [Ed.] 1995 *Knowledge and Pedagogy: the sociology of Basil Bernstein*. Norwood, N.J.: Ablex (The David C Achin Series in Social and Policy Issues in Education).
- Schleppegrell, M J 2004 *The Language of schooling: a functional linguistics perspective*. Mahwah, NJ: Erlbaum.
- Simon-Vandenberg, A.M., Taverniers, M. & Ravelli, L. 2003. (Eds.) *Metaphor: Systemic-functional perspectives* Amsterdam, Benjamins
- Sinclair, J McH & R M Coulthard 1975 *Towards an Analysis of Discourse: the English used by teachers and pupils*. London: Oxford University Press.
- Taylor, N, J Muller & P Vinjevold 2003 *Getting School Working: research and systemic school reform in South Africa*. Cape Town: Peason Education.
- Unsworth, L [Ed.] 2000 *Researching Language in Schools and Communities: functional linguistics approaches*. London: Cassell.
- Vygotsky, L.S. 1981. The genesis of higher mental functions. In J.V. Wertsch (ed.) *The Concept of Activity in Soviet Psychology*. Armonk, N.Y.: M.E. Sharp
- Wells, G 1996 Using the tool-kit of discourse in the activity of teaching and learning. *Mind Culture Activity* 3.2. 74-101.
- Wells, G 1999 *Dialogic Inquiry: toward a sociocultural practice and theory of education*. Cambridge: CUP (Learning in Doing: social cognitive and computational perspectives).
- Wells, G 2002 Learning and teaching for understanding: the key role of collaborative knowledge building. J Brophy [Ed.].
- Williams, G 1999 The pedagogic device and the production of pedagogic discourse: a case example in early literacy education. in Christie. 88-122.
- Williams, G 2001 Literacy pedagogy prior to schooling: relations between social positioning and semantic variation. Morais et al. 17-45.
- Williams, G 2004 Ontogenesis and grammatics: functions of metalanguage in pedagogical discourse. Williams & Lukin. 241-267.
- Williams, G & A Lukin [Eds.] 2004 *The Development of Language: functional perspectives on species and individuals*. London: Continuum (Open Linguistics Series).
- Wood, D., Bruner, J., & Ross, G. 1976. The role of tutoring in problem solving. *Journal of child psychology and psychiatry*, 17, 89-100