Intervening in contexts of schooling

David Rose & J R Martin


0. Introduction

Building on Halliday’s view of linguistics as an ideologically committed form of social action, a major goal of language research in the Sydney School (Hyon 1996, Johns 2002, Martin 2000, Rose 2008, 2011, Rose & Martin 2012) has been to analyse and redesign the pedagogic contexts through which school knowledge is acquired and evaluated. The research has drawn on two complex theories of social context, including the model of text-in-context developed within systemic functional linguistic theory (SFL), and the model of pedagogic contexts developed in the sociological theory of Basil Bernstein (1975, 1990, 2000). On one hand, the Sydney School research has applied the model of text-in-context to describe the systems of ‘knowledge genres’ that students are expected to read and write in school. On the other, it has adapted Bernstein’s theory of pedagogic discourse to describe the ‘curriculum genres’ (Christie 2002) through which control of the written genres of schooling are acquired and evaluated.

The study reported here applied these theories in a large scale educational intervention in Australian primary and secondary schools. The goal of the study was to measure the effectiveness of genre based literacy pedagogy developed in the Sydney School research. Approximately 400 teachers were trained in the pedagogy over the course of the 2010 school year, in western NSW. Teachers implemented the pedagogy and measured their students’ literacy growth by analysing their writing at the beginning and end of the training program. The chapter begins by outlining the the Sydney School model of text-in-context, Bernstein’s theory of pedagogic contexts, and the context of the study. The model of text-in-context is then applied to analysing students’ writing growth, and the overall findings of the educational intervention are presented and discussed.

1. The Sydney School model of text-in-context

Halliday (2013:215) rehearses the question ‘Can we actually model and represent and interpret context within the framework of what is generally involved as a theory of language?’, noting that his teacher Firth thought you could and that he thinks so too, ‘if only because it’s the best chance you’ve got.’ His remarks reflect the longstanding concern in Firthian and neo-Firthian linguistics with modelling context as a level of meaning (Monaghan 1979). As Firth comments (1957/1968: 200-201), ‘The meaning of texts is dealt with by a dispersal of analysis at mutually congruent series of levels, beginning with contexts of situation and proceeding through collocation, syntax (including colligation) to phonology and phonetics…’. Halliday, more influenced by Hjelmslev (1961) and W S Allen than Firth in this regard, had modelled this dispersal as a realization hierarchy such as that outlined in Figure 1, with phonology realizing lexicogrammar, lexicogrammar realizing semantics, and semantics realizing context. This privileges context as a stratum of meaning in Halliday’s
model (akin to Hjelmslev’s connotative semiotics), realized through patterns of language choice (e.g. Halliday 2005).

Figure 1: Context as a stratum of meaning

Halliday’s linguistic perspective on context, in which language construes, is construed by and over time reconstrues and is reconstrued by context, can be termed supervenient. It contrasts with the circumvenient perspective whereby language is conceived as embedded in context, where context is treated as extra-linguistic and not itself modelled in linguistic terms as a system of meaning. The two perspectives are outlined in Figure 2, using co-tangential circles for the supervenient perspective and concentric circles for the circumvenient one.¹

Figure 2: Supervenience and circumvenence

Martin (e.g. 1985, 1992) further develops the supervenient perspective, suggesting that Halliday’s stratum of context needs itself to be stratified into two levels which he calls

¹ We are indebted to Chris Cleirigh for this terminology (which he no longer deploys); we are not using the terms in quite the way he originally intended.
register and genre (Figure 3 below). In doing so Martin is proposing a model in which context can be mapped as a system of genres (Christie & Martin 1997, Martin & Rose 2008), realising through field, tenor and mode systems (collectively referred to as register). One of his reasons for stratifying context as genre and register is to foster Halliday’s proposals (e.g. 1978) for using intrinsic functionality (ideational, interpersonal and textual meaning within language) to map extrinsic functionality (field, tenor and mode respectively) as dimensions of context (Martin 2001), without having to incorporate considerations of genre that muddy the waters (for argumentation see Martin 1999, 2001). Also significant is Martin’s recontextualisation of Halliday’s semantics (cf. Figure 1) as discourse semantics (e.g. Martin 1992, Martin & Rose 2003), by way of emphasising that register and genre are realised through meaning relations in text which regularly extend beyond the clause. Context is not in other words a pattern of lexicogrammatical patterns, but a pattern of pattern of lexicogrammatical patterns – the basic unit of analysis in contextual linguistics has to be text, not clause.

Figure 3: Martin’s supervenient model of language and social context

One strategy for mapping the genres of a culture is to group them according to their broad social goals, and distinguish them by their local organisation (Martin & Rose 2008). Figure 4 presents such a map of genres that students are expected to read and write in school, identified in Sydney School research, that we have referred to as ‘knowledge genres’. They are classified firstly in terms of three broad social goals: engaging readers, informing them, or evaluating texts or points of view. Of course any text has multiple purposes; it is its primary social goal that generates the recognisable staging of the genre, the stages that participants expect to go through to achieve the goal.

---

2 Genre and register are both dimensions of ‘context of culture’ in Malinowski’s terms, and both are instantiated as text in ‘contexts of situation’. Genre and register are related stratally, while ‘situations’ are instances of ‘culture’.
3. Bernstein’s theory of pedagogic contexts

Bernstein (1975, 1990, 2000) provides two complementary perspectives on pedagogic contexts, as institutional structures, and as rules governing institutional practices. From the structural perspective, he describes education systems as a ‘pedagogic device’ operating at three levels: 1) fields of production of knowledge, primarily in the upper echelons of academe; 2) recontextualising fields, where this knowledge is transformed for pedagogic purposes, e.g. teacher training or textbook publishing; 3) fields of reproduction, where recontextualised knowledge is transmitted and acquired by learners. From the perspective of sociological rules, Bernstein distinguishes 1) distributive rules regulating the distribution of resources to social groups, including discursive resources distributed by education; 2) recontextualising rules regulating the transformation of knowledge into pedagogic discourse; 3) evaluative rules regulating transmission and acquisition of knowledge.

These three levels of rules are interrelated. Evaluation regulates the distribution of different types and levels of education to different groups of students through their school years, and hence to professional, vocational or manual levels of occupations. Distributive rules in turn shape the forms in which knowledge is recontextualised for different groups of students, according to their evaluations, for example as detailed scientific knowledge for students...
destined for science based occupations, or as simple hands-on science activities for less successful students.

All these dimensions of the pedagogic device are realised in the school as what Bernstein terms pedagogic discourse, in which he distinguishes two aspects: an instructional discourse “which creates specialised skills and their relationship to each other”, and a regulative discourse “which creates order, relations and identity” (2000:46). Bernstein emphasises that the instructional is embedded in and dominated by the regulative, that the acquisition of knowledge is regulated by the social order and relations underpinning pedagogic discourse.

From the standpoint of genre and register theory outlined above, Bernstein’s use of the term discourse refers to fields of social activity, coloured by tenor.3 Thus pedagogic discourse can be interpreted in terms of pedagogic register, which includes sequences of learning activities (field), pedagogic relations between learners and teachers (tenor), and modalities of learning – spoken, written, visual, manual (mode). These three dimensions are summarised in Figure 5. In this perspective, it is the social relations enacted over time in pedagogic activities that create ‘order, relations and identity’.

**Figure 5: Pedagogic register**

![Pedagogic register diagram]

The instructional discourse thus includes the fields of knowledge (or skills) acquired through these pedagogic activities, relations and modalities. In social semiotic terms, knowledge is projected by the pedagogic register, as the act of saying projects a locution, or thinking projects ideas (in Halliday’s 1994/2004 terms). On this model, knowledge is projected by activities of teaching and learning. There are thus two fields involved in Bernstein’s instructional discourse: the field of pedagogic activity, and the field of knowledge projected by it. The entire configuration of pedagogic activities, relations, modalities and projected knowledge constitutes a genre that Christie (2002) has termed ‘curriculum genre’, illustrated in Figure 6.

---

3 The term ‘discourse’ is also used similarly by critical theorists and discourse analysts such as Gee (e.g. 2005).
As Figure 6 suggests, it is not only knowledge that learners acquire through pedagogic activities, relations and modalities, but identities as learners that are more or less successful, and more or less included in the community of learning in the school. Differentiation in learner identities is a product of 1) continual evaluation, which positions them on a hierarchy of success and failure, 2) varying degrees of engagement in lesson activities and classroom interactions, and 3) varying control over modalities of learning, particularly reading and writing. By these means, pedagogic discourse creates an unequal social order and asymmetric social relations. The creation of differential learner identities internalises and thus naturalises the social order produced by the pedagogic device, as Bernstein (2000:5) points out, “How do schools individualize failure and legitimize inequalities? The answer is clear: failure is attributed to inborn facilities (cognitive, affective) or to the cultural deficits relayed by the family which come to have the force of inborn facilities.”

4. The context of the study: a genre based literacy intervention

The aim of the intervention reported on here was to subvert the hierarchy of success and failure and creation of differential learner identities, by equipping teachers with tools to enable all their students to succeed with the same levels of reading and writing tasks. The genre based methodology employed to do so is known as Reading to Learn (or R2L), which provides three levels of guidance for reading and writing tasks. In the first level, teachers prepare students to comprehend challenging texts, by giving an oral summary of the field as it unfolds through the genre, in terms that all students can understand. At this level, students are also guided to write successful texts, by jointly deconstructing the stages and phases of model texts in target genres, and jointly constructing new texts organised with the same stages and phases (for stages and phases of knowledge genres see Martin & Rose 2008, Rose 2005). In the second level, teachers guide students to read passages of text in detail, by preparing them to recognise groups of words in each sentence, and elaborating on their meanings as students identify each word group. At this level, students are also guided to use what they have learnt from reading, by jointly rewriting the text passage that has been read in detail, using the same grammatical patterns for literary or persuasive texts, or
the same field for factual texts. In the third and most intensive level, teachers guide students to manually manipulate wordings, by cutting up sentences they have been reading, and rearranging them. At this level, they also practise spelling the words they have cut up, and rewrite the sentences they have been manipulating. The Reading to Learn program thus includes nine designed curriculum genres, as follows.

<table>
<thead>
<tr>
<th>reading</th>
<th>writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st level</td>
<td></td>
</tr>
<tr>
<td>Preparing for Reading</td>
<td>Joint Construction</td>
</tr>
<tr>
<td></td>
<td>Individual Construction</td>
</tr>
<tr>
<td>2nd level</td>
<td></td>
</tr>
<tr>
<td>Detailed Reading</td>
<td>Joint Rewriting</td>
</tr>
<tr>
<td></td>
<td>Individual Rewriting</td>
</tr>
<tr>
<td>3rd level</td>
<td></td>
</tr>
<tr>
<td>Sentence Making</td>
<td>Spelling</td>
</tr>
<tr>
<td></td>
<td>Sentence Writing</td>
</tr>
</tbody>
</table>

In Individual Construction, students practise writing new texts with the same stages and phases that have been guided in Joint Construction, before attempting a completely independent writing task. Similarly in Individual Rewriting, students practise the same task that has been guided in Joint Rewriting.

These curriculum genres are practised in daily and weekly programs, with the goal of students independently writing a new genre each month or so. The program as a whole constitutes a curriculum macro-genre, with variable pathways through sub-genres depending on need, schematised in Figure 7. The teacher training program is designed for teachers to learn and practise each curriculum genre in manageable steps. Face to face training workshops provide the knowledge about pedagogy and knowledge about language needed to select and analyse texts, plan and implement lessons, and evaluate students’ reading and writing.

Figure 7: Sequencing options for R2L curriculum genres
5. Data analysis

Students’ growth is assessed by teachers in the Reading to Learn program, through formative testing of reading comprehension in each lesson unit, and through summative testing of writing towards the end of each 10 week school term. The writing assessment developed in the program is designed to accurately reveal the language resources that each student brings to the writing task. Teachers identify these language resources in students’ writing, using 14 criteria. The criteria are derived from the SFL model of text-in-context outlined above, recontextualised to facilitate a simple, practicable text analysis for each piece of writing.

At the level of genre, evaluation focuses on the social purpose, stages and phases of the text. At the level of register, it focuses on the text’s field, tenor, and mode. At the level of discourse semantics, lexical, appraisal (evaluative), conjunction and reference resources are identified. At the level of grammar, the variety and accuracy of grammatical resources are evaluated, and at the level of graphic features, spelling, punctuation and graphic presentation are marked. The sequence of analysis is thus from the ‘top-down’, from genre to register, to discourse semantic resources that realise field, tenor and mode, to grammatical patterns that realise discourse semantics, to graphological features that express these patterns in writing. Questions are used to interrogate each of these criteria, summarised in Table 1 below.

Table 1: Writing assessment criteria

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>[Quick judgements are made about these context criteria.]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>How appropriate and well-developed is the genre for the writing purpose?</td>
</tr>
<tr>
<td>Staging</td>
<td>Does it go through appropriate stages, and how well is each stage developed?</td>
</tr>
<tr>
<td>Phases</td>
<td>How well organised is the sequence of phases in the text?</td>
</tr>
<tr>
<td>Field</td>
<td>How well does the writer understand and explain the field in factual texts, construct the plot, settings and characters in stories, or describe the issues in arguments?</td>
</tr>
<tr>
<td>Tenor</td>
<td>How well does the writer engage the reader in stories, persuade in arguments, or objectively inform in factual texts?</td>
</tr>
<tr>
<td>Mode</td>
<td>How highly written is the language for the school stage? Is it too spoken?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DISCOURSE</th>
<th>[Discourse criteria are marked in the text, to give an accurate measure.]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideation</td>
<td>What are the writer’s lexical resources? How well is lexis used to construct the field?</td>
</tr>
<tr>
<td>Appraisal</td>
<td>What are the writer’s appraisal resources? How well is appraisal used to engage, persuade, evaluate?</td>
</tr>
<tr>
<td>Conjunction</td>
<td>Is there a clear logical relation between all sentences?</td>
</tr>
<tr>
<td>Identification</td>
<td>Is it clear who or what is referred to in each sentence?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GRAMMAR &amp; GRAPHIC FEATURES</th>
<th>[Grammar features are judged overall rather than one-by-one.]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammar</td>
<td>Is there an appropriate variety of sentence and word group structures for the school stage? Are the grammatical conventions of written English used accurately?</td>
</tr>
<tr>
<td>Spelling</td>
<td>How accurately spell are core words and non-core words?</td>
</tr>
<tr>
<td>Punctuation</td>
<td>How appropriately and accurately is punctuation used?</td>
</tr>
<tr>
<td>Presentation</td>
<td>Are paragraphs used? How legible is the writing? Is the layout clear? Are illustrations/diagrams used appropriately?</td>
</tr>
</tbody>
</table>

Students’ writing samples are compared with analysed writing exemplars at each school year level, and each criterion is given a score from 0-3 against the standard in the exemplar. Teachers are asked to assess the writing of students from low, middle and high achieving groups, in order to compare the growth of each group in the class. Samples of these
students’ independent writing are assessed each term (four times a year), using the 14 criteria on a score sheet, exemplified in Figure 8. The totals at the bottom of the score sheet give a clear indication of each student’s progress through the year. They also clearly show the rate of progress of the whole class, and of the low, middle and high achieving groups in the class.

Figure 8: Sample score sheet for writing assessment

<table>
<thead>
<tr>
<th>Student names</th>
<th>Jaydon</th>
<th>Ada</th>
<th>Corrine</th>
<th>Dean</th>
<th>Robin</th>
<th>Vivian</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURPOSE</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>STAGING</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>PHASES</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>FIELD</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>TENOR</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>MODE</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>LEXIS</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>APPRAISAL</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>CONJUNCTION</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>REFERENCE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>GRAMMAR</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SPELLING</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PUNCTUATION</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PRESENTATION</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3</td>
<td>14</td>
<td>19</td>
<td>25</td>
<td>9</td>
<td>19</td>
</tr>
</tbody>
</table>

By way of illustration, Texts 1-2 illustrate growth for one low achieving student in Year 7/8. The pre-intervention Text 1 is a very brief personal response to a book. The post-intervention Text 2 is the type of text response known as interpretation, in which the novel is appreciated and its themes are interpreted.

Text 1: Pre-intervention writing sample by a low achieving student in Year 7/8

In this book I like how I could connect with it as it’s suitable for my age. By the end it dropped on a bit too much for my liking.

PRE 2 1-
Text 2: Post-intervention writing sample by the same student in Year 7/8

Review

"The Recruit"

"The Recruit" is a fantastic novel by Robert Muchamore, which was first published in 2004. This realistic narrative is for young teenagers who would easily relate to this story as the characters face problems of today's teenagers.

The main character, James Chase, goes through tragedy and adventure through his young life. Through the novel, he has to adjust to his losses in life. He finds out who he really is and discovers a lot of new things in life.

After being separated from his sister (Laurie), James had to live in an orphanage. Towards the end of the narrative, James becomes a spy and knows what it feels like to belong and make new friends in a whole new environment.

The author, Robert Muchamore, made the novel very realistic by making James life not so easy. James had a rough life until something amazing happened to him and totally changed.

We’ll deploy the model of language in context to analyse the improvement exemplified in Texts 1-2. Text 1 is the genre known as a personal response (see Figure 4 above). This is a typical response produced by weaker students when asked to evaluate a text (Rothery & Macken-Horarik 1991, Martin & Rose 2008). In terms of appraisal, it is characterised by expressions of personal feelings and reactions to the text (Martin & Rose 2007, Martin & White 2005). Appraisals are marked in bold in Text 6 below.

Text 1: Pre R2L personal response

In this book I like that I could connect with it as it's suitable for my age. By the end it dragged on a bit to much for my liking.

Of the three evaluations here, two are reactions to the text - positively appreciating the text’s appeal to the reader I like that I could connect with it (reaction:impact), but negatively appreciating its emotional effect it dragged on a bit too much for my liking (reaction:quality). The third positively appreciates the text’s value it's suitable for my age (valuation). One evaluation is amplified, a bit too much (graduation), and all are sourced explicitly to the writer (engagement). Ideationally, the only lexical items realised here are ‘this book’ and ‘my age’. The lack of any description of the text and its contents is inadequate for a text response.
Textually, there are several personal references I, me, my, and text references this book, it, it’s, the end, it, which serve to contextualise the response interpersonally (to the writer) and ideationally (to the book).

In terms of tenor variables of status (un/equal) and contact (close/distant), this very personal response implies a familiar peer relationship with the reader; in terms of field, it lacks any description of the book; in terms of mode, it is context-dependent speech written down. As this student is soon to enter secondary school, the tenor would be regarded as too familiar for its academic context, the field as inadequate, the mode as far too spoken, and the genre as inappropriate for the task of evaluating a literary text.

Text 2 is an interpretation, which appreciates a novel and interprets its themes. This is the canonical genre of literature studies in the secondary school. Interpretations typically begin with an Evaluation, followed by a Synopsis of elements of the text that carry its themes, and conclude with a Reaffirmation of the evaluation. Again, appraisals are in bold below.

**Text 2: Post R2L review**

**Evaluation**  “The Recruit” is a fantastic novel by Robert Muchamore, which was first published in 2004. This realistic narrative is for young teenagers who would easily relate to this story as the characters face problems of today’s teenagers.

**Synopsis**  The main character, James Choke (Adams), goes through tragedy and adventure throughout his young life. Through the novel, he has to adjust to his losses in life. He finds out who he really is and discovers a lot of new things in life.

**Plot**  After being separated from his sister (Lauren), James had to live in an orphanage. Towards the end of the narrative James becomes a spy and knows what it feels like to belong and make new friends in a whole new environment.

**Reaffirmation**  The author Robert Muchamore made the novel very realistic by making James’ life not so easy. James had a rough life until something amazing happened to him and totally changed his life. Many young teenagers go through the same problems as James does. Throughout this novel the composer has used informal modern language that would appeal to teenage audience. There is swearing, references to popular culture and references to technology. The third person narration gives a lot of information to the audience. It describes the characters from an objective perspective.

**Appeal**  Every now and then the novel made me feel sad and angry, knowing what James had to go through in life. I would have liked if the author mentioned Kerry a bit more. I believe this story is written well and outstanding novel with a believable plot that many young people would enjoy.

Within its staging, the Synopsis includes two paragraphs which identify the novel’s themes and synopsise its plot. The Reaffirmation evaluates its relevance for teenage readers, its literary composition, and its appeal to the writer and potential readers. While genre stages are highly predictable, phases within each stage tend to be more variable, depending on the field and writers’ imagination.

Appraisals are concentrated in the Evaluation and Reaffirmation, including a much wider range of text valuations: fantastic novel, realistic narrative, very realistic, a lot of information, objective perspective, written well and outstanding novel, believable plot; reader reactions: easily relate, would appeal, made me feel sad and angry, I would have liked, many young people would enjoy; and judgements of characters: not so easy, rough life, something amazing happened to him, totally changed his life, young teenagers go through
the same problems. Resources for graduation are also more diverse: easily relate, throughout, a lot of, whole new, very realistic, not so easy, totally changed, every now and then, a bit more. Engagement is now far more objective, with personal sourcing limited to the final evaluation: made me feel sad and angry, I would have liked, I believe, and valuations attributed to potential readers: young teenagers who would easily relate, young teenagers go through the same problems, many young people would enjoy.

Ideationally, lexical resources construe the texts’ themes and their relevance for readers: tragedy and adventure throughout his young life, has to adjust to his losses, finds out who he really is, discovers a lot of new things in life, young teenagers, problems of today’s teenagers. They also construe the field of literature: novel, narrative, story, characters, main character, tragedy and adventure, plot; author, composer, published; informal modern language, swearing, references, popular culture, technology; third person narration, information, objective perspective. Some of these literary resources have clearly been scaffolded by the teacher, but they are used coherently here by the student writer. Thirdly, the novel’s plot is condensed as an activity sequence in just two sentences:

After being separated from his sister (Lauren),
James had to live in an orphanage.
Towards the end of the narrative James becomes a spy
and knows what it feels like to belong
and make new friends in a whole new environment.

Textually, reference to the book now begins by naming it “The Recruit”, and then presuming it variously as a novel, this narrative, this story, the novel. Characters are also presented by naming: the main character, James Choke, and then presumed: his young life, he, him, his losses, who he really is, James’ life, the same problems as James. As well as presenting each phase as separate paragraphs, the shift from phase to phase is also signalled by clause
Themes that are made prominent, either by doubling an identity, or starting with a time or place, underlined as follows:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>“The Recruit”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synopsis</td>
<td>The main character, James Choke</td>
</tr>
<tr>
<td>themes</td>
<td>After being separated from his sister (Lauren), James</td>
</tr>
<tr>
<td>plot</td>
<td>The author Robert Muchamore</td>
</tr>
<tr>
<td>Reaffirmation</td>
<td>Throughout this novel the composer</td>
</tr>
<tr>
<td>relevance</td>
<td>Every now and then the novel</td>
</tr>
<tr>
<td>composition</td>
<td></td>
</tr>
<tr>
<td>appeal</td>
<td></td>
</tr>
</tbody>
</table>

Tenor unfolds subtly through the text, beginning with strong valuation to engage the reader: a fantastic novel, then amplified judgement for its themes: totally changed his life, and amplified valuation for its relevance: very realistic. While there is little explicit appraisal for its composition, the listing of its qualities serves to amplify its value. While these are all presented objectively, the personalised reactions in the last paragraph enact solidarity with teenage readers. The field here is multi-layered, with one field, the novel’s plot, projecting a field of personal growth (its themes), and the field of literary appreciation (Rothery 1997). The mode is now at an appropriate level of written language for the end of primary school,
and the genre is masterfully controlled. This student is now well prepared for the writing demands of secondary literature studies.

6. Findings

Table 2 illustrates how the writing assessment criteria are applied to Texts 1-2, to produce a numerical score to measure students’ progress. Text 1 scored 0 for most contextual and discourse criteria, as its two sentences are so far below the standard expected for junior secondary school, although they meet minimum standards for lower level criteria. In contrast, Text 2 scored 2-3 for all criteria, as it meets a top to average standard for genre, register and discourse criteria. A score of 2 recognises potential for improvement in a criterion. The total scores show growth from well below the grade standard (less than 15/42), to around a high standard for the grade (around 35/42).

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Text 1</th>
<th>Text 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staging</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Phases</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Field</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Tenor</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Mode</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Lexis</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Appraisal</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Conjunction</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Reference</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Grammar</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Spelling</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Punctuation</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Presentation</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

To measure overall trends for the whole intervention, teachers’ score sheets were collected and the total scores were recorded for analysis. Scores were analysed from approximately 100 randomly selected classes. As students targeted for assessment in each class were selected from low, middle and high achieving groups, the scores are representative of results for these groups in whole classes, helping to minimise bias. The sample thus represents a large set (~400 classes x 20-30 students per class, or ~8-12,000 students).

Charts 1 and 2 below show the gap between low, middle and high achieving student groups, before and after the intervention. Chart 1 shows the pre-intervention scores for each student group and school stage in Term 1. Chart 2 shows the post-intervention scores for each student group and school stage, after 3 terms of R2L teaching.

School stages surveyed include kindergarten (K), junior primary (Yr1/2), middle primary (Yr3/4), upper primary (Yr5/6) and junior secondary (Yr7/8). Note that the same students are represented in each cohort in Charts 1 and 2, for example the K group includes the same students in Charts 1 and 2, before and after the intervention. Note also that the data do not
show longitudinal growth rates from year to year. Rather these are data from the year that teachers were being trained in the R2L program.

Chart 1: Pre-intervention scores show gap between student groups before R2L teaching

In Chart 1, pre-intervention scores at the start of Kindergarten show the gap between low and high achieving students is 16% of the total possible score. By the start of Yr1/2, average scores have risen by 25% of the total, but the gap between low and high students has tripled to over 50% of the total - the high group has accelerated but the low group is still near zero. This gap then continues throughout the years, decreasing slowly. The low group improves very slowly from Yr1/2 to Yr7/8, the middle group remains steady, and the high group falls slightly.

Comparing results between Chart 1 and Chart 2, post-intervention scores show average growth in Kindergarten is 70% above pre-intervention scores, and the gap between low and high achieving groups is halved to 9%. In the other year levels, growth is 30-40% above the pre-intervention scores, and the gap is reduced to 20-30%.

The pre and post-intervention data in Charts 1 and 2 are combined as trend lines in Chart 3 below. The bottom two lines are pre scores for low and high groups (i.e. without R2L.
teaching) and the top two lines are the post scores for low and high groups (after R2L teaching).

**Chart 3: Pre and Post data combined**

Chart 3 clearly shows the contrast between outcomes with and without the R2L intervention, for low and high achieving student groups. Without R2L, the low group improves slowly each year, but stays within the failing range (~5 points). The high group improves faster in Kindergarten and then stays in a high average range (~25 points), falling slightly. In contrast, following the R2L intervention, both low and high groups improve in Kindergarten to a high range (~35 points). In other school stages, the low group improves to a high average range (~25 points), and the high group improves to the top range for their schools stages (~35 points).

These generalised data are unpacked in more detail for each school stage as follows. Literacy growth of low achieving groups is illustrated with pre and post-intervention writing samples. For reasons of space, these samples are limited to Kindergarten, middle primary and junior secondary stages.

Texts 3-4 illustrate the contrast between the outcomes of R2L and standard early literacy practices in Kindergarten. The left hand Text 3 was written and drawn early in Yr1 (with teacher’s translation), after a full year of standard early literacy practice in Kindergarten. Text 4 on the right is by the same student 2 months later, after the R2L intervention.
The pre-intervention sample is a typical standard for the low achieving student group at the start of Yr1/2, as shown in Chart 1 above (<5 points). This student’s reading level would be similarly very low. Without the R2L intervention, this student would probably have continued in the failing range throughout primary school, as shown for the low group in Charts 1 and 3. Within 2 months of R2L teaching, the same student has independently written a detailed, coherent and legible description on a topic the class has studied, has self-corrected while drafting it, and has incorporated key elements in the illustration, including the mother seal, the hole in the ice with a line for the direction of her dive, and the storm gathering in the sky above. This text is already well above the average standard for Yr1.

Chart 4 below restates the growth rates and gap between students in Yr1/2, with and without R2L. The data show little change over two years of junior primary, in the proportions of high, middle and low achieving students (with a slight improvement for the low group). In contrast, after three terms of R2L teaching, the low group are almost at the level that the high group normally achieves. This growth rate is 17 times the normal growth of the low group. For the high achieving students, the growth rate after R2L teaching is 30% above their normal achievement.
Despite the growth using R2L, the gap between high and low achieving students remains at 34%. While this is an improvement on the 49% gap without R2L, it demands further work. The gap for this cohort of students may reduce further in following years, given consistent genre based teaching.

Chart 5 restates the growth rates and gap between students in middle primary, with and without R2L. After 2 years without R2L, there has been a slight improvement in the scores of low achieving students, and a slight decrease in the high group. After 3 terms with R2L, the growth for the low group is 13 times what it was without R2L, and the high group has improved 26% more than without R2L. However the gap between the high and low groups is the still 35%, so further work is still needed to reduce this gap.

Growth for the low achieving group in Year 3/4 is exemplified with writing samples from one student in Texts 5-6. The pre-intervention Text 5 on the left is an incomplete recount that borrows elements from the animated movie Shrek. The post-intervention Text 6 on the right is modelled on a literary description studied in detail by the class.
Texts 5-6: Outcomes of standard and R2L teaching for a low achieving students in middle primary

Chart 6 restates the growth rates and gap between students in upper primary, with and without R2L. After 2 years without R2L, the growth is very similar to Yr3/4 - there is a slight improvement in the low group, and a slight decrease in the high group, so the gap is reduced to 41%. In contrast, after 3 terms with R2L, the low group is now achieving above what the high group achieved without R2L. This improvement for the low group is 49 times what it was without R2L. The high group has improved 28% more than without R2L. The gap between the high and low groups is reduced to just 24%.

Chart 6: Growth rates in Yr5/6, with and without R2L teaching
Chart 7 restates the growth rates and gap between students in junior secondary, using R2L. Chart 7 does not compare the growth rates in Yr7/8 with and without R2L teaching, as these data were not available. However given the consistent trends we have seen without R2L from Yr1/2 to Yr7/8, it may be assumed that a similar trend continues into the secondary school years. That is, the low group remains around 5 points, the middle group around 15, and the high group around 25. Nevertheless, after 3 terms with R2L the low group is now achieving slightly above what the high group achieved at the start of Yr7/8, and the high group has improved 28%. This is a similar pattern to that shown above in Yr5/6. Likewise the gap between the high and low groups is just 25%.

Chart 7: Growth rates in Yr7/8 using R2L

7. Discussion

These data provide an unusual opportunity to compare the outcomes of different approaches to teaching and learning, from a large set of students, classes and schools. This is not a comparison between teachers, classes or schools, because it is averaged across a large set of schools and classrooms. Rather it is strictly a comparison between teaching approaches. What is compared in Charts 1, 2 and 3 are the outcomes of standard teaching practices in each stage of school, with the outcomes of carefully designed strategies in the R2L intervention. The pre-intervention scores in each stage represent the outcomes of the preceding 1-2 years of standard teaching practices. This data is unusual in that it compares these normal outcomes with those of a large scale teaching intervention.

As Charts 1 and 3 show, the gap that begins in Kindergarten normally continues throughout the following stages of school, as low achieving students remain in the failing range, the middle group in the low average range, and the high group within the high average range. The maintenance of low achieving students in the failing range remains an intractable outcome of standard teaching practices in the primary and secondary school, as innumerable international reports attest.

In order for the high achieving group to maintain its position in the high average range, these students must keep developing their literacy skills at a standard average growth rate. In terms of the R2L assessment, this standard average growth rate is about 7 score points
per year, or 16.6% of the total possible score. However for low achieving students to get out of the failing range, up to a passable average range, they must develop their skills at more than double the rate of the high achieving students. This rarely happens with standard teaching practices. Nor does it happen with targeted interventions such as phonics programs, withdrawal reading programs, leveled readers, leveled reading groups or special education programs, which may produce incremental but not exponential growth (Hattie 2009).

A key reason that these interventions have little significant long term effects on the literacy rates of low achieving students is that they do not work with the curriculum texts that the class is studying. Instead they use low level texts and activities that are targeted at the assessed ‘ability levels’ of the low achieving students, their so-called ‘instructional level’. It seems unlikely that students who are learning more slowly, with low level texts and activities, will ever catch up with their peers who are learning faster with higher level texts and activities.

A critical difference with R2L is the use of high level quality curriculum texts, which teachers select and prepare, and carefully designed strategies that teach every student in the class to read and write them at the same time. These are whole class strategies, in which the teacher is the expert guide. Crucially, the intensive Level 2 and 3 strategies are used with whole classes, as well as with small groups and one-on-one for additional support. But these intensive strategies also use the same high level texts that the whole class is studying. There are no withdrawal sessions for low achieving students using low level texts and activities. Independent research has shown that better results are obtained with whole class teaching using R2L than with withdrawal sessions (Culican 2006).

8. Conclusion: enhancement, inclusion and participation

In our discussion of language/context relations, we focused on the hierarchy of abstraction from language to register to genre. In discussing the genre based literacy intervention above we have also incidentally explored a hierarchy of individuation (Martin 2010), from the language community of the school, to groups of high, middle and low achieving students, to individual students. In this regard we have been concerned with differences between learners in their engagement in curriculum genres, their mastery of knowledge genres, and their identities as learners (cf Maton forthcoming). In Bernstein’s terms, this hierarchy of individuation relates the reservoir of meanings in a culture to the repertoire available to a person.

I shall use the term repertoire to refer to the set of strategies and their analogic potential possessed by any one individual and the term reservoir to refer to the total of sets and its potential of the community as a whole. Thus the repertoire of each member of the community will have both a common nucleus but there will be differences between the repertoires. There will be differences between the repertoires because of the differences between members arising out of differences in members’ context and activities and their associated issues (2000:158).
Each person possesses a set of strategies for recognising contexts, and for realising the texts expected in a context, for which Bernstein uses the terms recognition and realisation rules. In terms of genre and register theory, a student may be able to recognise the curriculum genre that their class is engaged in, but may not be able to realise the responses needed to participate successfully. Or they may be able to neither recognise a knowledge genre, nor to realise it successfully as a written text.

Yet Bernstein also points out that each person possesses an analogic potential, which we understand as the potential for expanding one’s repertoire from the known to the new. A central function of the school is to facilitate the expansion of each student’s repertoire to incorporate more and more of the culture’s reservoir of potential meanings. For some students the expansion of their repertoire builds steadily, year by year, in sync with the curriculum sequence of the school, while the repertoire of others lags behind, sometimes far behind. These differences in the realisation of students’ analogic potential are not incidental to the functioning of the school; they are central to the creation and maintenance of social inequalities, not only in the resources that education affords, but in the personal identities that are shaped by education.

In our view, inequality of outcomes is sustained by failing to explicitly teach all students the skills they need to independently read and write the curriculum at each stage of school. Instead, successful students tacitly acquire skills at each stage that will prepare them for the next stage. The practices for each school stage, outlined above, concretely illustrate this process. Rather than explicitly teaching skills needed in each stage, students are evaluated on skills they may have tacitly acquired in preceding stages, beginning with parent-child reading and associated orientations to meaning in the home (Hasan 2009, Williams 1995, 1999b, 2001). This sequence of tacit preparation and evaluation is diagrammed in Figure 9.

Figure 9: Tacit learning sequence in school

Figure 9 represents the contexts of schooling diachronically as an ontogenetic pathway, beginning with engagement in reading and talk-around-text that are characteristic modes of curriculum genres in the school. This engagement is a necessary condition for participating actively in classroom learning in the junior primary, and for becoming independent young readers and writers. This active participation and independent literacy skills are in turn the
conditions for learning to learn from reading, and for demonstrating what has been learnt by writing in the upper primary, which are in turn necessary for successful independent learning in the secondary school (see Rose 2004, 2007 for further discussion). This ‘hidden curriculum’ of literacy development has evolved in the school to enable the children of literate middle class families to progress smoothly towards university matriculation, stage-by-stage, but the practices outlined above at each school stage simultaneously ensure that children from other backgrounds are less likely to progress so smoothly.

The evaluative rules that govern differentiated progression through the school thus realise the distributive rules that govern unequal access to society’s resources. Our approach to this contra-democratic system has been to design curriculum genres that can provide all students with the skills needed for success and can be integrated with curriculum teaching at all school stages. The intervention reported on here put these designs into practice.

Bernstein (2000:5) warns that “Biases in the form, content, access and opportunities of education have consequences not only for the economy; these biases can reach down to drain the very springs of affirmation, motivation and imagination.” To counter these biases, Bernstein (2000:8) proposes for each student, three “pedagogic democratic rights of ‘enhancement’, ‘inclusion’ and ‘participation’ as the basis for confidence, communitas and political practice.” ‘Enhancement’ we interpret as the expansion of each student’s repertoire, building confident identities as successful learners as they progress through the school’s curriculum sequence. In terms of genre and register, this includes accumulating knowledge of curriculum fields through reading, and control of knowledge genres in writing. ‘Inclusion’ we interpret as active engagement in the curriculum genres of the school, building identities as authoritative members of a community of learners. This requires enabling all students to participate successfully in curriculum genres, to be continually affirmed, and so benefit equally from pedagogic activities. ‘Participation’ we will interpret as an outcome of enhancement and inclusion, since both knowledge and belonging are necessary conditions for exercising informed citizenship; they are as Bernstein says, ‘the necessary and effective conditions for democracy’.

For us, the contexts of texts written in the school thus go well beyond their specific settings in field, tenor and mode. Minimally it is also essential to consider the types of knowledge genres that are realised by configurations of field, tenor and mode. Secondly we need to examine the curriculum genres through which knowledge genres are acquired in the school. But the purpose of these analyses is not simply to contemplate pedagogic contexts; they are merely a necessary first step towards intervening in them. For this purpose we need a far broader view of social contexts than linguistics can offer on its own. Bernstein’s sociological interpretation provides such a model, with which our linguistic understandings can be articulated. The results of the intervention reported here illustrate the power that can be generated from combining these two formidable theories of language in context.

References


Martin, J R 2010 Semantic variation: modelling system, text and affiliation in social semiosis. in Bednarek & Martin. 1-34.


Rothery, J 1994 *Exploring Literacy in School English (Write it Right Resources for Literacy and Learning)*. Sydney: Metropolitan East Disadvantaged Schools Program.


TOTAL = 8433 words