

## Genre, knowledge and pedagogy in the ‘Sydney School’

David Rose

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### 1 Generations of genre

The idea of language as meaning in social context has been explored for over six decades in the systemic functional tradition. The roots of this project can be traced to MAK Halliday’s teacher, JR Firth, who foresaw its key directions with remarkable prescience. Firth’s particular field was phonology, but by the 1930s he had already developed a model of how meaning could be described in strata, from the sounds of words all the way up to social contexts: ‘I propose to split up meaning or function into a series of component functions. Each function will be defined as the use of some language form or element in relation to some context. Meaning, that is to say, is to be regarded as a complex of contextual relations, and phonetics, grammar, lexicography, and semantics each handles its own components of the complex in its appropriate context’ (1935:45). Meaning for Firth was function in context; the context of phonology was grammar and lexis; the context of grammar was semantics.

As a grammarian, Halliday set out to describe the semantic functions of grammatical patterns, by examining their functions in discourse, in the texts that people actually speak and write with each other. Perhaps his greatest contribution is the description of three layers of grammatical patterning, simultaneously serving **interpersonal**, **ideational** and **textual** functions in each clause of a text. The description he has given us of these grammatical ‘metafunctions’ in Halliday 1985/2004, is thorough, elaborate and immensely useful, but the idea of meaning as function in context started with Firth. The same may also be said for the idea of language as systems of functions, which Firth elaborates for phonological systems: ‘The phonetic function of a form, of a sound, sound-attribute, or sound-group is then its use in contradistinction from other “sounds”; the phonetic value or use of any sound is determined by its place in the whole system’ (1935:55). This is the genealogy of the term ‘systemic functional linguistics’ or SFL; language is organised as systems of contrasting options for making meaning (Saussure’s *valeur*), at the levels of phonology, lexico-grammar and discourse semantics; elements at each stratum serve functions in the context of higher strata, with the social contexts of language modelled as a further stratum of meaning.

Halliday proposed intrinsic relations between the three metafunctions of language and three dimensions of social contexts, modelled as types of realisation: interpersonal functions enact patterns of social relations, or **tenor**; ideational functions construe patterns of social activity, or **field**; textual functions present interpersonal and ideational functions as relevance in context, or **mode**. But Firth had also foreshadowed such a tripartite contextual model: ‘The central concept of the whole of Semantics considered in this way is the context of situation. In that context are the human participant or participants, what they say, and what is going on’ (1935:64).

Critically, Firth interposed a semantic stratum between grammar and context: ‘if you want to bring in general cultural background, you have the contexts of experience of the

participants... when phonetician, grammarian, and lexicographer have finished, there remains the bigger integration, making use of all their work, in semantic study. And it is for this situational and experiential study that I would reserve the term “semantics” (1935:65). For this stage of the research, Halliday’s grammatics provided the foundations for his student, JR Martin, to describe interpersonal, ideational and textual systems of discourse semantics, that realise variations in tenor, field and mode (Martin 1992, Martin & Rose 2003/2007). Martin used the term **register** to denote this contextual stratum, and proposed general options for its systems of meanings, that are observable in discourse. With respect to tenor, relations between interactants are most generally either equal or unequal, and close or distant. Fields are focused on activities and/or entities, that are specific or generalised. With respect to mode, discourse is either dialogic or monologic, and either accompanies what is going on or constitutes its own field (language as ‘action’ or ‘reflection’). As each of these parameters may vary independently, Martin referred to tenor, field and mode as **register variables**. The advantages these explicitly articulated parameters have provided for research cannot be overstated.

As outlined in his chapter for this volume, Martin also built on work by Gregory, Hasan, Plum, Rothery and others to propose **genre** as a more abstract stratum of social context, phasing together unfolding patterns of tenor, field and mode. In the terms of SFL, genre is defined as recurrent configurations of meanings, and a culture can be described as an evolving system of genres. As they are recurrent configurations, each genre is recognisable to members of a culture, by way of repeated experience, and empirically describable to the analyst. Again this approach to genre is presaged by Firth, as ‘an empirical rather than a theoretical analysis of meaning. It can be described as a serial contextualization of our [linguistic] facts... all contexts finding a place in what may be called the context of culture. It avoids many of the difficulties which arise if meaning is regarded chiefly as a mental relation’ (1935:72). Firth’s ‘contexts of experience of the participants’ is also crucial here, as experience varies between members of a culture. Following Bernstein (2000:158) we can view culture as a ‘reservoir’ of semiotic resources, at the levels of genre, register and language, and the set of resources that each member variously acquires and deploys as our ‘repertoire’.

This model of genre has been prodigiously fruitful for empirical research, using Halliday’s grammatics and Martin’s discourse semantics to analyse text after text in multiple social institutions, building descriptions of the genres in which participants enact their social relations and construe their experience. The best known of these institutions, that is most often associated with the so-called ‘Sydney School’ research, is education. But as it reaches beyond language into institutional contexts, this project has not relied simply on linguistic analysis, but on sociology of education. Firth also foresaw this: ‘Sociological linguistics is the great field for future research’, which must address ‘the very difficult problem of describing and classifying typical contexts of situation within the context of culture, and secondly of describing and classifying types of linguistic function in such contexts of situation’ (1935:65). What Firth called ‘typical contexts of situation’ include the genres of classroom discourse in the school, but also the genres in which knowledge is written and read in the school. At this point, his ‘context of situation’, derived from Malinowski’s anthropology, must be left behind, as written genres constitute their own fields, and the ‘situations’ in which they are

learnt are another set of genres, discussed below. There are no ethnographic contexts beyond genre, only other genres.

A major goal of the project has been to describe ‘types of linguistic function’ in pedagogic genres, so they can be made explicit for teachers and learners. Bernstein’s sociological theory of ‘pedagogic discourse’ (1990, 2000) has been essential for this project. His sociological use of the term ‘discourse’ is broadly parallel with SFL’s fields of social practice, but includes their social relations. He also uses ‘practice’ interchangeably, so we will substitute ‘practice’ for his ‘discourse’ when possible, to avoid confusion with discourse as a stratum of language. Bernstein has given us the structuring of pedagogic practice, in terms of social relations between teachers and learners, and types of knowledge they exchange. The task of educational linguists has been, firstly to describe how these social relations and types of knowledge are realised as texts, and hence elaborate Bernstein’s model, and secondly to recontextualise what has been found in a form that is directly useful for teachers and their students.

## 2 Describing knowledge genres

The first stage of the education project described the genres typically written by primary school students, through large scale text analyses in collaboration between educators and linguists (see Rose 2008). These descriptions were recontextualised for teachers, with names for the genres and their stages, along with synopses of their primary social functions, as in Table 1. Naturally, any text has multiple social functions, but its primary goal expects the stages through which the goal is achieved.

**Table 1: Genres described in the first phase of research**

	genre	function	stages
Stories	recount	<i>recounting events</i>	Orientation Record of events
	narrative	<i>resolving a complication</i>	Orientation Complication Resolution
Factual texts	description	<i>describing specific things</i>	Orientation Description
	report	<i>classifying &amp; describing general things</i>	Classification Description
	explanation	<i>explaining sequences of events</i>	Phenomenon Explanation
	procedure	<i>how to do an activity</i>	Purpose Equipment Steps
Arguments	exposition	<i>arguing for a point of view</i>	Thesis Arguments Reiteration
	discussion	<i>discussing two or more points of view</i>	Issue Sides Resolution

As these are genres in which school knowledge is typically written and read, I will refer to them as **knowledge genres**. Their mode is language as reflection, constituting fields that may

be specific (recounts, narratives, descriptions) or generalising (report, explanation, procedure), and their tenor may be more distant than the discourse that children are familiar with. These reflective, generalising, objective types of register lie outside the experience of most primary school children, who require careful scaffolding to master the language resources that realise them. They must learn how to generalise experience as technical fields in factual texts, to engage readers through literary devices in stories, and negotiate evaluations of issues and positions in arguments. In terms of Bernstein's knowledge types, their repertoire must expand from 'horizontal discourses', that are 'local, segmentally organised, context specific and dependent' to 'vertical discourses' that 'take the form of a coherent, explicit, and systematically principled structure' (2000: 157).

Alongside the description of knowledge genres, a classroom genre was designed, principally by Joan Rothery (1994), for guiding students to write these genres successfully. Dubbed a teaching/learning cycle or TLC, it included three stages. The first was termed Deconstruction, in which a teacher guides students to identify and name the stages of a model text in the genre under focus, along with some pertinent language features. The second is Joint Construction, in which the teacher guides students to construct a new text with the same stages, but about a field that the class has been studying. The third is Independent Construction, in which each student writes their own text following the model they have practised together. I will use the term **curriculum genres** for genres of classroom practice, following Christie 2002.

The designed TLC curriculum genre represented a significant departure in teaching practice, as it explicitly guides students to do a writing task through joint practice, before they are expected to do individual writing tasks. A more typical pattern in schools and further education is for teachers to set writing tasks, with more or less explicit instructions, and then evaluate each student's attempts, perhaps with feedback. The genre writing TLC reversed the pedagogic focus, to first prepare all students to do the task successfully, rather than repairing less successful attempts afterwards. In terms of tenor, the teacher's authority is essential to guide students, but their outcomes are less unequal than in other pedagogies. These include both traditional pedagogies in which teachers' authority and students' rankings are explicit, and progressive/constructivist pedagogies that proscribe teachers' authority and prescribe each student to progress at their own unequal levels.

With respect to knowledge, an explicitly labelled description of the knowledge genres under focus was an essential component of this pedagogy. Teaching this knowledge about language was embedded in the practice of writing about the curriculum topics under focus, in contrast to more traditional practices of teaching language systems in isolation. In genre pedagogy, students acquire two fields simultaneously: knowledge about the curriculum topic and knowledge about the language that realises it as written texts. In terms of mode, this was accomplished by dialogue about written texts that could be seen and shared by all, pointing out features of the model, and constructing the joint text on the board.

The project's second phase extended the description of knowledge genres across the secondary school curriculum and beyond to further education and associated workplaces. For example, research on science and related school curricula was reported in Martin & Veel 1998, while Rose, McInnes and Korner 1992 tracked written genres in science based

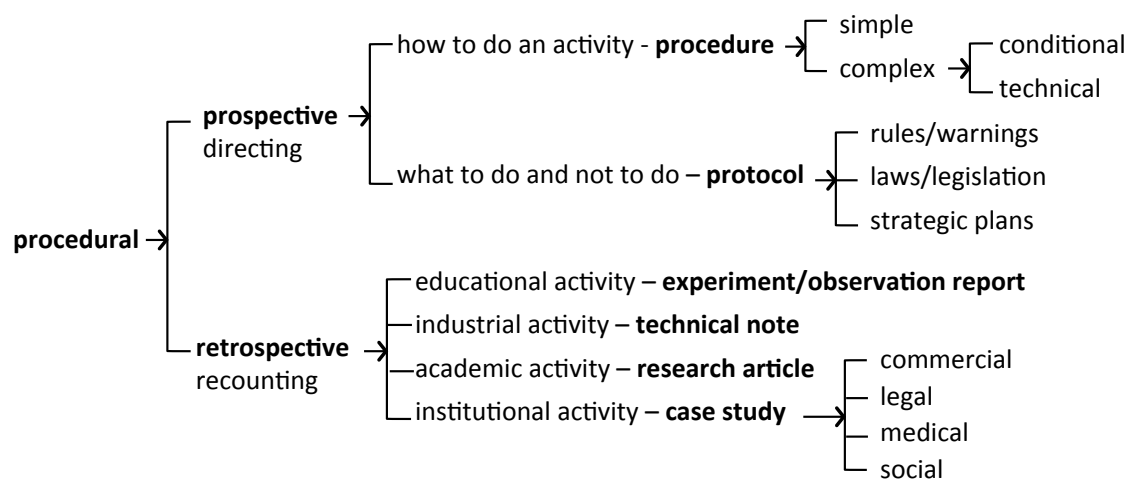
industries, from procedures for manual tasks, through technical notes written by technicians, to research articles written by industrial scientists. Relations between genres and the fields in which they are acquired and deployed were thus thoroughly explored, together with the social hierarchies of knowledge and power they enact (Rose 1998). Genres described for school curricula are listed in Table 2. These and other knowledge genres described in the research are discussed in detail in Martin & Rose 2008.

**Table 2: Genres described in the second phase**

	<b>genre</b>	<b>purpose</b>	<b>stages</b>
Stories	<b>recount</b>	recounting events	Orientation Record of events
	<b>narrative</b>	resolving a complication	Orientation Complication Resolution
	<b>exemplum</b>	judging character or behaviour	Orientation Incident Interpretation
	<b>anecdote</b>	sharing an emotional reaction	Orientation Remarkable event Reaction
	<b>observation</b>	commenting on an event	Orientation Event description Comment
	<b>news story</b>	reporting current events	Lead Angles
Chronicles	<b>autobiographical recount</b>	recounting significant life events	Orientation Record of stages
	<b>biographical recount</b>	recounting stages of a life	Orientation Record of stages
	<b>historical recount</b>	recounting historical stages	Background Record of stages
	<b>historical account</b>	explaining historical stages	Background Account of stages
Explanations	<b>sequential explanation</b>	explaining a sequence	Phenomenon Explanation
	<b>conditional explanation</b>	alternative causes & effects	Phenomenon Explanation
	<b>factorial explanation</b>	multiple causes for one effect	Phenomenon:outcome Explanation:factors
	<b>consequential explanation</b>	multiple effects from one cause	Phenomenon:cause Explanation:consequ.
Procedures	<b>procedure</b>	directing activities	Purpose Equipment Steps
	<b>protocol</b>	prescribing and proscribing actions	Purpose Rules
	<b>procedural recount</b>	recounting procedures	Purpose Method Results
Reports	<b>descriptive report</b>	classifying & describing an entity	Classification Description
	<b>classifying report</b>	describing types of entities	Classification Description:types
	<b>compositional report</b>	describing parts of wholes	Classification Description:parts
Arguments	<b>exposition</b>	arguing for a position	Thesis Arguments Reiteration
	<b>discussion</b>	discussing two or more positions	Issue Sides Resolution
Text Responses	<b>review</b>	evaluating a literary, visual or musical text	Context Description of text Judgement
	<b>interpretation</b>	interpreting the themes of a text	Evaluation Synopsis of text Reaffirmation
	<b>critical response</b>	challenging the message of a text	Evaluation Deconstruction Challenge

Table 2 expands the genre options outlined in Table 1 in three dimensions. More specific types of explanations and reports were identified, story and procedural families were extended with contrasting options, and chronicle and text response families were added, netting in curricula in science, geography, history, technology, media and literature studies. Ongoing research continues to expand these options. For example, Figure 1 elaborates the procedural family systemically, as a network of contrasting choices, beginning with a prospective option for directing activities vs a retrospective option for recounting activities. Procedures direct sequences of activities, with sub-types common in industrial workplaces, whereas protocols prescribe and proscribe activities, in institutions as various as homes, schools, bureaucracies and corporations. Recounted procedures range from school science reports, to technical notes in industry, to research articles recounting academic activities, and case studies recounting various types of institutional activities. Descriptions of these procedural genres have fed into language teaching in fields such as school science, technical training, engineering, law, business and medicine. In contrast, a major focus of genre research in other traditions has been on just one of the options in Figure 1, the academic research article.

**Figure 1: Expanded procedural family**



Alongside these typological perspectives on knowledge genres, Figure 2 presents a topological perspective, in which genres are clustered along two axes: the extent to which their primary purpose is to provide information or to engage readers' feelings and judgements; and to present things and events as natural, or to contest viewpoints about them. Genres in the top left tend to present scientific or technological information as fact, more natural than contestable, so that contested science stands out as newsworthy. In contrast, we expect the chronicles in the top right to take a position in relation to other views, more or less explicitly; if history is presented merely as fact it may be regarded as either dull or one-sided. Arguments and text critiques by definition contest other voices, but in deft hands their conclusions can flow so naturally that they appear uncontested. And stories can weave their writers' judgements into the events so seamlessly that the reader scarcely realises they are moralising. Any text may be positioned along axes like these, depending on its particular settings in field, mode and tenor.

**Figure 2: Topological perspective on genre families and functions**



This perspective also brings out genre preferences of contrasting pedagogic theories and practices. As informing genres are deployed in fields of economic production and social management, they are a particular focus of 'traditional' pedagogies, e.g. in sciences and social science; progressive/constructivist theories often privilege story genres as they are vehicles for personal expression and growth; critical theories privilege the persuasive functions of arguments and critiquing functions of text responses, reflecting these theories' roots in literary criticism. Genre pedagogy, on the other hand, merely equips teachers to scaffold any genre expected of their curricula and students' needs, furnishing descriptions to do so.

### 3 Analysing curriculum genres

The third phase of the project extended the design of the pedagogy from the tasks of writing to reading. Central to this development was the recognition that reading is a fundamental mode of learning in the school, that many if not most school students are unable to read at the levels they need for academic success, and that teachers are inadequately trained to teach reading effectively to meet these needs. Moreover, the primary function of writing tasks in school and university is to demonstrate what students have learnt from reading, for the purpose of evaluation.

These institutional criteria suggested a sequence of designed curriculum genres that commence with reading to learn and culminate with learning to write. The series of curriculum genres would need to address each stratum of the language task, from genre to register to discourse, grammar and graphology, and to integrate teaching these skills with teaching the curriculum. They would need to be applicable to all stages of schooling, across curriculum fields, and they should meet the needs of all students to achieve success.

With respect to this last goal, Bernstein's analysis of 'pedagogic discourse' makes plain that inequalities in education outcomes are consequences of 'social biases in education. These biases lie deep within the very structure of the educational system's processes of transmission and acquisition and their social assumptions' (2000:xix). The school's exchange of knowledge is embedded in the social order it serves:

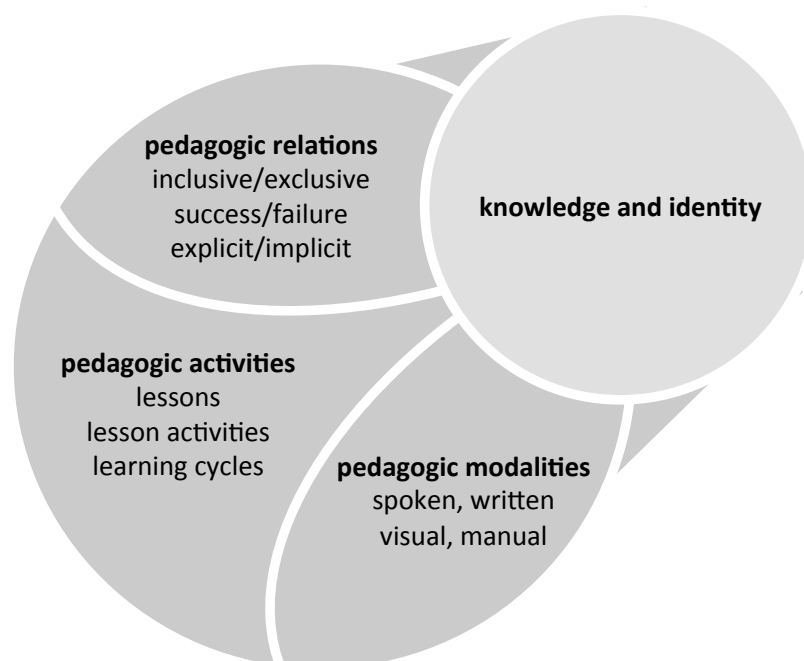
Pedagogic discourse embeds rules which create skills of one kind or another and their relationship to each other, and rules which create social order. We shall call the discourse which creates specialised skills and their relationship to each other instructional discourse, and the moral discourse which creates order, relations and identity regulative discourse... Fundamental to my argument is that the regulative discourse is the dominant discourse. In one sense this is obvious... it tells the children what to do, where they can go, and so on. It is quite clear that regulative discourse creates the rules of social order. However, I also want to argue that regulative discourse produces *the order in the instructional discourse*. There is no instructional discourse which is not regulated by the regulative discourse. If this is so, the whole order within pedagogic discourse is constituted by the regulative discourse... Therefore I argue that the regulative discourse provides the rules of the internal order of instructional discourse itself. If this argument holds, much can be derived from the notion that we have *one discourse* and *the regulative discourse is dominant* (2000: 33-5).

Bernstein's instructional discourse (practice) covers both pedagogic activities and relations, and the knowledge that is exchanged by teachers and learners; his regulative discourse (practice) is clearly far broader, and oriented more to social relations, including social hierarchies in the society and the school, relations between participants, and their social identities. Genre and register theory is powerful enough to describe Bernstein's order in instructional practice empirically, to reveal the rules of social order in the regulative practice that constitutes it, and to subvert dominant rules by re-designing instructional practice.

Instructional practice can be described in terms of register variables, including pedagogic activities (field), pedagogic relations (tenor) and pedagogic modalities (mode), together with the fields of knowledge that are exchanged through these activities, relations and modalities. Pedagogic activities are structured as sequences of lessons, composed of lesson activities, composed of learning cycles. Pedagogic relations between teachers and learners, and between learners, are more or less hierarchical and more or less inclusive. The teacher/learner pedagogic relation may be explicit, as in traditional ('didactic') modes, or implicit, as in progressive ('socratic') modes. Pedagogic modalities include spoken, written, visual and manual modes of meaning, and relations between modalities as learning activities unfold. Knowledge exchanged includes both the fields of the curriculum, and knowledge about the language in which these fields are written and spoken. However this knowledge is not equally acquired by all students, as Bernstein points out, 'The school necessarily produces a hierarchy based on success and failure of students... 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' (2000:xxi). What students acquire from school is not just unequal shares of knowledge, but unequal identities as more or less successful or failing learners. This configuration of pedagogic activities, relations, modalities, knowledge and identities constitute a curriculum genre, modelled in Figure 3.



**Figure 3: Configuration of curriculum genres**



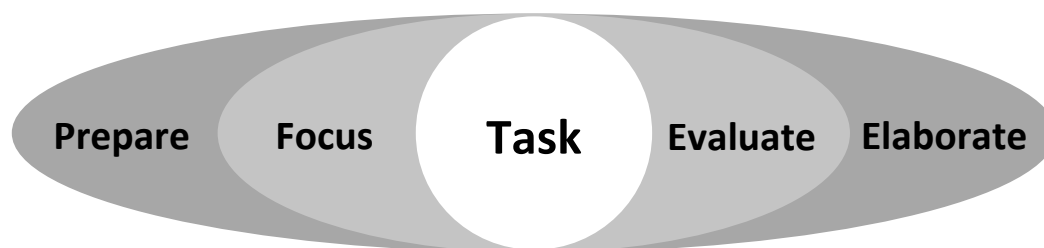
One further model is required to design the sequence of curriculum genres outlined above, that is the structure of pedagogic activities. The core phase of any pedagogic activity I will call the learning Task. Only the learner can do this task, but in education institutions each task is typically initiated and evaluated by a teacher, either directly or through a written medium. The initiating phase can be called the Focus. The nucleus of a pedagogic activity thus includes Focus, Task and Evaluate phases, as in Figure 4.

**Figure 4: Nucleus of pedagogic activities**



This nucleus can be expanded with two optional phases. The learner may first be prepared to do the task successfully, by some form of demonstration, synopsis or explanation. Once the task is successfully completed, it may be elaborated with a further step, such as a definition, explanation, or discussion of its significance. Prepare and Elaborate phases are thus more marginal elements of a pedagogic activity, as in Figure 5.

Figure 5: Expanded potential of pedagogic activities



We can refer to these as **phases** of a pedagogic activity. To prepare all learners to succeed with each learning task, it is essential for teachers to understand the nature of the task. This is obvious with manual activities, in which an expert physically demonstrates each step in the task and hands control to the novice to practice the step with guidance, before moving on to the next step. Indeed this ‘apprenticeship’ mode of demonstration and guided practice appears to be a fundamental mode of learning in human cultures, and may be a defining feature of our species (Rose 2006). It is less obvious with semiotic activities, which require close analysis using a social semiotic model, to reveal the structuring of pedagogic activities.

This structuring is evident in studies of children learning their mother tongues, by Halliday (1975) and Painter (1986, 1991, 1999). Language actually begins with the sets of sounds and gestures that infants start using from around 9 months, known as protolanguage, before the mother tongue takes over. Language teaching may involve drawing the child’s attention to phenomena, or following the child’s attention, as in the following example at 14 months old, from Painter (1986:81-2).

#### Exchange 1: Learning the mother tongue

Child	<i>dae</i> [pointing at a bird in the garden]	Identify
Mother	<i>Yes</i>	Affirm
	<i>Bird</i>	Elaborate
Child	<i>da</i> [pointing]	Identify
Mother	<i>Bird</i>	Elaborate
Child	<i>da</i> [pointing]	Identify
Mother	<i>That’s a bird.</i>	Elaborate
Child	<i>ba; ba</i> [pointing]	Identify

As the child initiates the exchange here, there is no Focus phase, but the pointing and naming activity is prepared by thousands of instances of caregivers pointing and naming the world, long before infants start to do so themselves. The task is to identify elements in the context, and eventually to articulate their mother tongue names, a universal pattern of human language learning. The mother capitalises on the child’s attention, by first affirming, and then elaborating with the mother tongue word.

It is this evaluation and elaboration that marks this as a pedagogic exchange, in which the mother is the teacher and the child the learner. The affirmation evaluates the child’s utterance as success with a learning task, rewarding the child with positive emotion. Expectation of this reward is the child’s motivation for pointing and naming, and for engaging in pedagogic exchanges in general. In this instance, the reward encourages the child to repeat the identifying act again and again. On the mother’s side, she knows intuitively that success and affirmation enhance the child’s capacity for learning, which she

capitalises on by repeating her elaboration, initially just with the word, but then with a whole clause. Elaborations such as these provide models of mother tongue language features such as lexical items ('bird') and grammatical structures ('that's a bird'), at the precise moment when the child is most ready to recognise and remember them. These links between learning and emotion are explained neurologically by Edelman's Theory of Neuronal Group Selection (1992), but understood intuitively by all teachers, from parents to peers to professional educators. In this example, the outcome of repeated success and elaboration is that the child begins to replicate the mother tongue word. Painter comments that 'A few days later 'ba' became the regular form for bird' (ibid).

In terms of pedagogic activities, each of these repetitions of Identify, (Affirm) and Elaborate phases is a learning cycle. The sequence as a whole is an informal lesson activity, which is made explicit by the mother's repeated elaborations, and culminates with the child's acquisition and production of a new item of knowledge. At the level of lesson activity, this culminating utterance is the Task, for which the preceding learning cycles Prepare. This utterance would undoubtedly have been affirmed by the mother, but was not recorded in Painter 1986. That is, the structure of pedagogic activities applies at each level of learning cycle, lesson activity, and lesson. We can refer to these as **ranks** of pedagogic activity, with a fractally repeated structure of phases (Prepare) (Focus) Task (Evaluate) (Elaborate).

The pedagogic relation in this instance is one-on-one, so maximally inclusive; it is explicit, and consistently evaluated affirmatively. The pedagogic modalities are spoken and gestural. The initial source of meaning is an entity in the sensory environment, which the child brings into the exchange by pointing and vocalising, the mother assigns it a name, and then refers to it exophorically as 'that', reconstruing the acts of pointing and vocalising as mother tongue words. We will use the term **source**, for the origins of meanings in pedagogic modalities, and the term **vector**, for the ways in which meanings are brought into the discourse, such as by pointing, naming and referring. The knowledge exchanged is the word 'bird' for the entity the child identifies, which is repeated and approximated with 'ba'.

At this point we can make the discursive realisations of pedagogic register variables explicit. Pedagogic activity is realised as lesson activities, each phase of which is composed of one or more learning cycles, that are also composed of phases; pedagogic relations are realised as teacher/learner exchanges, in which one or more learners participate; pedagogic modalities are realised as sources and vectors of meanings; knowledge exchanged is realised as lexical items, and relations between items as an activity unfolds. Relations between these pedagogic register variables and discourse semantic systems are schematised as follows.

register	pedagogic activities	pedagogic relations	pedagogic modalities	knowledge
discourse	phases in learning cycles & lesson activities	participation in teacher/learner exchanges	sources & vectors of meanings	items & their relations as activity unfolds

The model can now be applied to expand the analysis of pedagogic exchanges, illustrated in Exchange 1'.

**Exchange 1': Expanded analysis**

exchange		cycle phases	sources & vectors	items & relations	activity phases
Child	<i>dae</i> [pointing at bird]	Identify	point at entity		Prepare word
Mother	<i>yes</i>	Affirm			
	<i>bird</i>	Elaborate	name entity	<i>bird</i>	
Child	<i>da</i> [pointing]	Identify	point at entity		Propose word
Mother	<i>bird</i>	Elaborate	name entity	repeat <i>bird</i>	
Child	<i>da</i> [pointing]	Identify	point at entity		
Mother	<i>that's a bird.</i>	Elaborate	refer & name entity	refer & repeat <i>bird</i>	
Child	<i>ba; ba</i> [pointing]	Identify	point & name entity	repeat <i>bird (ba)</i>	Propose word
Mother	...	(Affirm)			

The analysis helps us to see precisely how knowledge is negotiated, presented and construed in a curriculum genre. Cycle phases specify learning tasks (e.g. identifying phenomena or proposing wordings), evaluations (affirming or rejecting), and elaborations of knowledge; sources and vectors specify where meanings originate and how they are imported into the discourse; items and relations specify the meanings exchanged, and how they are accumulated as activities unfold; activity phases specify the pedagogic functions of learning cycles. In this instance, the pedagogic functions of repeatedly pointing, referring and naming an entity, coalesce as preparations for the child's final task of proposing the name himself, 'ba; ba'.

This close analysis of the 'order in instructional practice', can then be applied to interpret the regulative practice that produces it. This is an instance of a curriculum genre that is probably shared across human cultures. For example, I have frequently observed similar exchanges in the Indigenous culture of Australia's Western Desert (Rose 2001, 2010). Its broad social function is intergenerational reproduction of mother tongue language. In this instance, the mode is dialogic and ancillary, as it refers to an entity beyond the discourse (the bird), using gesture, gaze and a pronoun 'that'. Although the field is initially a specific entity (the bird), the pedagogic goal is to generalise a class of similar entities, with the noun 'bird'; the mother is giving the child a resource to classify his experience. The pedagogic activity is clearly built on oft repeated experience, as the child expects affirmation for identifying the entity, and recognises the pedagogic function of elaborations, eventually repeating the class term himself as he points at the bird. As the pedagogic relation is inclusive, affirming and explicit, it is maximally effective at achieving the goal of the genre, i.e. acquisition of language knowledge. In Bernstein's terms the familial 'rules of social order' are visible and explicit, in that the child recognises the mother's authority to evaluate him, and to provide knowledge for him to acquire; the 'social relation' is hierarchical but nurturing; the 'social identity' it produces is a successful learner who is confident and motivated to display what he has learnt.

Now let's apply the analysis to a curriculum genre in the school, which is intended to help prepare children for the tasks of reading. Shared Book Reading involves teachers reading picture books to young children, and discussing meanings in the text and images. Exchange 2 is a snippet of shared book reading of *Jack and the Beanstalk* (from Williams 1995: 501). As participation in classroom exchanges is unequally distributed, a column is added specifying which students are addressed by the teacher, and which students respond.

## Exchange 2: Shared book reading

exchange	participation	cycles	sources	knowledge	activity phase
T <i>Long ago in a far away land lived a widow and her son Jack.</i>	class		read text	<i>widow, her son Jack</i>	Task listening
T <i>What's a widow?</i>	class	Focus	student knowledge	<i>widow</i> repeat	Evaluate knowledge
<i>It looks like a lady to me.</i> [pointing to picture]	class	Prepare	refer & point image	<i>lady</i> class	
<i>What's a widow?</i> <i>Rhianna?</i>	class Rhianna	Focus	student knowledge	<i>widow</i> repeat	
S <i>An old woman.</i>	Rhianna	Propose	student knowledge	<i>old woman</i> member, synonym	
T <i>Well she doesn't look too old.</i>	Rhianna	Reject	refer image	<i>not old</i> negate class	

The lesson activity begins with the teacher reading the first sentence of the book to the class, whose task is to sit and listen. She then directs a Focus question at the class, asking for a definition of 'widow', the source for which must be the children's own knowledge. As there is no immediate response, the teacher prepares by giving the class of entity she wants, 'lady', and points to the image in the book. Students now have their hands up and she selects Rhianna, who proposes 'an old woman'. This is consistent with the preparation, as *woman* is synonymous with *lady*, and *an old woman* is a member of that class. But this is not what the teacher wants and she rejects it by referring to the image (*doesn't look*) and negating the classifier *old*. This is a 'qualifying' type of rejection, that does not explicitly negate the entire response but is clearly not affirming. It may be argued these are not rejections, but students always know when they are not affirmed.

Following Rhianna's failed response, the teacher provides a further clue (in the next extract), with a Focus question that all students can answer successfully, 'Is there a daddy there? - No'. On the basis of this successful response, she then asks them to guess what has happened to the daddy. Unfortunately, as she is giving this clue, one child is still trying to identify the answer in the picture. Each cycle is separated by a horizontal line, as follows.

## Exchange 2 continued

exchange	participation	cycles	sources	knowledge	activity phase
T <i>Is there a daddy there?</i> [pointing to picture]	class	Focus	point image	<i>daddy there</i> co-class	Evaluate knowledge
Ss <i>No.</i>	class	Identify			
T <i>What do you think has happened to the daddy?</i>	class	Focus	student knowledge	<i>happened class</i> <i>to daddy repeat</i>	
S <i>Looks like... a cow.</i>	David	Identify	refer image	<i>looks like repeat</i> <i>cow</i>	
T <i>David?</i>	David	Focus			
S <i>It's it's it's a little cow.</i>	David	Identify	refer image	<i>little cow</i>	
T <i>No no.</i>	David	Reject			
T <i>When there's a widow, something's happened to daddy.</i>	class	Focus	teacher knowledge	<i>widow, repeat</i> <i>happened to</i> <i>daddy repeat</i>	Elaborate knowledge
S <i>He died? Miss, he died?</i>	Student3	Propose	student knowledge	<i>died</i> member	
T <i>Yes that's right.</i> <i>A widow means that her husband has died.</i>	Student3 class	Affirm Elaborate	teacher knowledge	define <i>widow =</i> <i>husband died</i>	

David appears to be focused on the teacher's continual pointing at the image for criteria. As Rhianna's 'woman' has been rejected, and there is no 'daddy', the only other option in the image, aside from Jack, is the cow. He even repeats 'looks like' which seems to be the teacher's criterion for interpreting images. Despite this achievement in reasoning and following the teacher's cues, the teacher explicitly negates David's proposal. She then repeats her Focus, but this time as a statement, giving rather than demanding information. This provides sufficient criteria for one student to recognise that the required answer is a member of the class of activities 'happened to daddy', i.e. 'he died'. At last the teacher has a response she can affirm, and elaborate with an explicit definition, from her own knowledge instead of the students'.

This rigmarole of asking the class to 'guess-what's-in-the-teacher's-head' derives from the teacher's progressive/constructivist training, not to tell students, but to encourage them to make 'inferences' for themselves, as 'inferencing' is purported to be a cognitive skill in reading that children must acquire. The guessing game is part of a collection of activities sometimes called 'discovery learning', that is held to be 'learner-centred' in contrast to 'teacher-centred' traditional practices. The teacher has also been trained to encourage students to try and infer the meaning of words by looking at the accompanying pictures. Again this is widely touted as an early reading strategy, but can be highly misleading as David's struggle illustrates. These practices are associated with representational and cognitivist theories of meaning, that Firth was warning against 80 years ago, where 'meaning is regarded chiefly as a mental relation', but remain pervasive in reading and learning theories.

What is the social order, relations and identities behind this instructional practice? The shared book reading genre is closely related to the parent-child reading genre, with which it has co-evolved in middle class culture, along with early childhood schooling (Bernstein 1975). Their similarities are described by Williams (1995, 1999), and contrasted with parent-child reading practices in non-middle class families. Their continuities and disjunctions with

mother tongue language learning are also discussed in Rose 2010 and Rose & Martin 2012. Their primary social function is to engage children in the pleasure of reading picture books, but other functions are shaped by the theories and practices of the school, such as encouraging 'inferencing' above. Shared book reading is also used to train infants in behaviours such as sitting still and quietly, attending, responding to teacher questions, raising hands to speak, giving relevant answers. The mode is dialogic; it is ancillary to the field of the story being read, but uses spoken, visual and manual modalities to engage children in written stories' monologic mode (detailed in Rose 2010).

In this instance, the field of knowledge is initially the setting and characters of the story in its first sentence, but the teacher abruptly shifts this to knowledge of word definitions. The connection is the teacher's word level theory of meaning, in which she has been trained to teach 'vocabulary'. At the rank of learning cycle, the task is to propose a definition, which David mis-reads as identifying an image. Two responses are rejected before one can be affirmed and finally elaborated. At the rank of lesson activity, the children's task is to comprehend the story as it is read aloud. The teacher may consider the function of the following cycles is to expand their comprehension, by encouraging them to infer the meaning of 'widow', but the regulative function is to evaluate their knowledge. The elaboration of knowledge only becomes explicit when the teacher finally provides the definition. Such confusion of evaluation and learning activities is endemic in schools. In progressive/constructivist theory it is legitimated as learners constructing their own meanings, but the texts they produce are always subject to evaluation. Pedagogic relations in this case are not inclusive, as only a few children respond, two responses fail and only one is successful. So relations between students are hierarchical, as is the teacher/student relation. Despite the theory of 'learner-centred' practice, in which children are encouraged to guess for themselves, the teacher's institutional authority to evaluate and elaborate is always final.

Bernstein refers to this practice as 'invisible pedagogy', in which criteria are known only to the teacher, and hierarchies are masked. In contrast to Exchange 1, the social order in this practice is implicit and invisible, as it must be to mask its regulative function, to continually and relentlessly evaluate children on the ladder of success and failure, creating differentiated identities as successful or failing learners. This regulative practice appears to have evolved along with early years schooling, and the rise of the new middle class in the late twentieth century (Bernstein 1975). It depends on universal features of children's primary socialisation in mother tongue language learning, to engage and respond to the adult, but unlike mother tongue language learning it functions to legitimate the inequality of participation and outcomes between children from middle class and other families, in the school years that follow. It does so by socialising children into internalising their positions on the success ladder as part of their personal identities. As Bernstein makes plain, 'these biases can reach down to drain the very springs of affirmation, motivation and imagination' (2000:xix).

#### **4 Designing curriculum genres**

Now let's turn to alternatives, to a sequence of curriculum genres that are explicitly designed to enable all students to continually succeed at learning tasks, no matter what

their class, language or cultural backgrounds, informed by genre and register theory, and our analysis of pedagogic activities. This is the sequence of curriculum genres in the program known as *Reading to Learn* (Rose 2014, Rose & Martin 2012).

The first genre in the sequence is known as Preparing for Reading, the function of which is to enable all students to follow a text with general understanding as it is read, and to participate successfully in elaborating activities during and after reading. The preparation stage includes two elements: a synopsis of the field of the text to be read, and a step-by-step summary of how the field unfolds through the genre. This can be done at any stage of school or university, with any text in any field. Its effect is that no student need struggle to follow the text as it is read. Telling learners what to expect as the text unfolds reduces their semiotic load, allowing them to attend to the field without overload. The text may then be read aloud, which further reduces the semiotic load, as they need not struggle to decode unfamiliar words. Some longer texts such as novel chapters or short stories may be read all at once, but denser texts may be read paragraph-by-paragraph, in which case each paragraph may be briefly prepared, read and elaborated. Preparing for reading *Jack and the Beanstalk* could begin as follows.

*This is a story from a long time ago. It's about a young boy named Jack who lived with his mother. His mother was a widow. That means her husband, Jack's father had died. They were very poor. The only money they got was by selling the milk from their cow. But the cow stopped making milk, so Jack's mother told him to take the cow to the market and sell it for money. On the way, he met an old man who had some magic beans, and he persuaded Jack to swap the cow for the beans. When Jack got home without any money, his mother was very angry. She threw the beans on the ground outside, and sent Jack to bed. The next morning, when Jack woke up, the beans had grown into an enormous beanstalk that stretched right up into the sky...*

Whereas academic texts may require prior introduction to the field, stories generally require no synopsis other than a summary of the field (i.e. plot) unfolding through each phase of the story genre. In addition, key lexical items are included in the preparation, such as the definition of widow. The preparation is analogous with a roadmap for following the text, with certain lexical elements as sign-posts that students recognise. Planning requires teachers to analyse a text's structure, phase-by-phase, and note essential items to include in the preparation. Such analyses are facilitated by knowledge about genres and their structures. *Jack and the Beanstalk*, for example, is a recount, consisting of a series of episodes, and many episodes include a setting, problem and solution phase. Recognising such patterns is invaluable for teachers to plan Preparing for Reading. With multimodal texts such as children's picture books, the illustrations are also used to support the preparation. This may done for the whole text before reading, or one page at a time. After reading, key elements of a text may be discussed, to reinforce and extend students' understanding of the field. Again these elaborations may follow reading the whole text, or after reading each paragraph.

The second curriculum genre in the sequence is Detailed Reading, in which the teacher guides students to read an extract from the reading text, sentence-by-sentence, identifying and discussing each element of meaning as they go. Its functions are to enable all students to read the passage with complete comprehension and fluency, and to recognise the language choices the author has made, so they can recognise such choices in other texts and



deploy them in their own writing. Detailed Reading uses carefully designed learning cycles that enable the teacher to engage every student in a class in recognising the meanings under focus, and to benefit equally from elaborations. This type of design can be illustrated with the opening sentence from *Jack and the Beanstalk*. The exchange begins with the teacher preparing the sentence with its function and a simple synopsis before reading it, and then preparing each element of meaning, before asking students to identify them.

### Exchange 3: Detailed Reading

	participat.	cycles	sources	knowledge
T <i>This is the setting of the story. The first sentence says that Jack lived with his mother. Look at the words and I'll read it.</i>	class	Prepare sentence	refer text	<i>setting, first sentence, jack, his mother</i>
S <i>'Long ago in a far away land lived a widow and her son Jack.'</i>	class		read text	repeat
T <i>Now, right at the beginning of that sentence it tells us when the story happened.</i>	class	Prepare	refer text	<i>that sentence when happened</i>
S1, <i>can you see the words that say when it happened?</i>	student 1	Focus	"	class
S <i>Long ago</i>	student 1	Identify	read text	instance
T <i>That's exactly right</i>	student 1	Affirm		
S <i>Let's all highlight the words 'long ago'.</i>	class	Direct	refer text	repeat
S <i>Long ago means many years ago, before you or your parents or even your grandparents were born. Fairy stories often start like this.</i>	class	Elaborate	teacher knowledge	define function in genre
T <i>Who can tell me another way fairy stories start by saying when it happened?</i>	class	Focus	student knowledge	<i>when happened</i>
S <i>Once upon a time</i>	student 2	Propose	"	class
T <i>Exactly</i>	student 2	Affirm		
S <i>Once upon a time also means long ago.</i>	class	Elaborate	teacher knowledge	repeat
T <i>Then it tells us where the story happened.</i>	class	Prepare	refer text	<i>where happened</i>
S3, <i>can you see where it happened?</i>	student 3	Focus	"	class
S <i>In a faraway land</i>	student 3	Identify	read text	instance
T <i>Excellent</i>	student 3	Affirm		
S <i>Everyone highlight the two words 'faraway land'.</i>	class	Direct	refer text	repeat
S <i>That's another way fairy stories often start. It's long ago and far away because it's very different from how we live now.</i>	class	Elaborate	teacher knowledge	explain functions in genre
T <i>Next it tells us the two main characters in the story.</i>	class	Prepare	refer text	<i>characters</i>
S4, <i>who is the first one?</i>	student 4	Focus	"	class
S <i>A widow</i>	student 4	Identify	read text	<i>who</i>
T <i>Right</i>	student 4	Affirm		class
S <i>Let's highlight the word 'widow'.</i>	class	Direct	refer text	repeat
T <i>Who remembers what widow means? S5?</i>	class	Focus	remind prior lesson	repeat
S <i>Jack's daddy died</i>	student 5	Propose	recall prior lesson	define <i>widow</i>
T <i>Exactly right</i>	student 5	Affirm		
S <i>A widow is a woman whose husband has died.</i>	class	Elaborate	shared knowledge	re-define <i>widow</i>
T <i>Who's the next character, S6?</i>	student 6	Focus	refer text	<i>character</i>
S <i>Her son Jack</i>	student 6	Identify	read text	class
T <i>Yep</i>	student 6	Affirm		instance
S <i>Highlight 'son Jack'.</i>	class	Direct	refer text	repeat
S <i>So there's just the two of them.</i>	class	Elaborate	"	enhance field
S <i>So that's the setting of the story, it tells who it's about and where and when it happened.</i>	class			define story phase

Detailed Reading unfolds in highly predictable cycles of Prepare, Focus, Identify, Affirm, Direct and Elaborate. The predictability of the pedagogic activity enables all students to engage in a complex discussion of the text's register and language patterns. The knowledge exchanged is highlighted in the analysis. Students present their knowledge in response to Focus questions, and the teacher elaborates with new knowledge. This includes both the field of the text and knowledge about language, at the levels of genre, register and discourse (*fairy story, setting, characters, often start this way, first sentence*). While the field in this instance is a children's fairy story, the same practice can be applied to any text at any level of education.

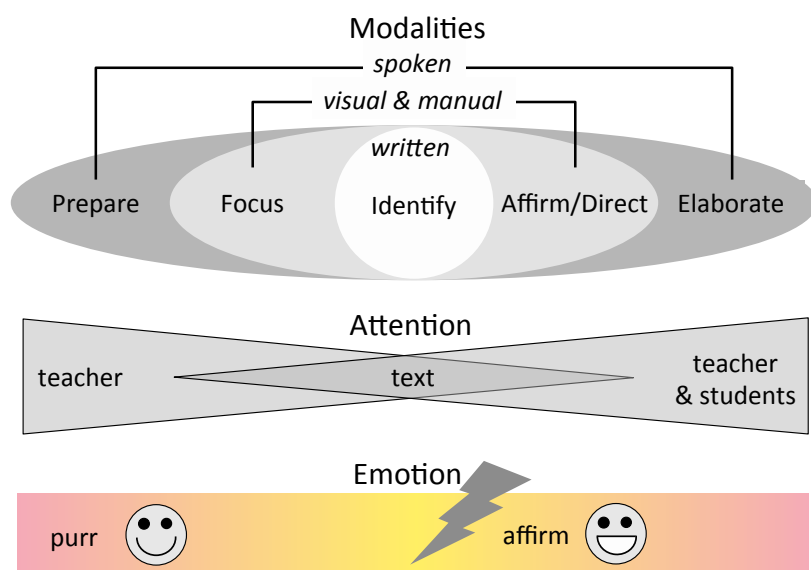
Preparation cues often give a general class of meaning (*main characters, who, when it happened, where*). The students' task is to identify instances of these semantic categories in the sentence. They are supported to do so by position cues (*right at the beginning of that sentence, then, next*), as they highlight each element in turn. Preparations are typically presented as statements, giving students information about the meaning to attend to, and Focus questions then repeat these cues, addressed to individual students by name, so that all have an opportunity to respond successfully and be affirmed. The teacher may then give the elaboration, or ask students to propose one from their knowledge (*Who can tell me another way fairy stories start? Who remembers what widow means?*). The final elaboration for this sentence reinforces and extends explicit knowledge about the genre (*setting of the story*). Such abstract elaborations are given after students have control of the text's field, embedding knowledge about language within knowledge about the field of study.

Sources of meanings are generally the text itself, and teacher knowledge in elaborations. Student knowledge is elicited when the teacher is confident that students can respond successfully, such as recalling prior lessons. There is an elaborate interplay of modalities here, from the spoken preparation, to focusing visual attention (*Can you see the words?*), to the written wording that students identify, to the manual practice of highlighting, and back to the spoken mode in elaborations. Each cycle is a wave of information, with peaks in the preparation and elaboration, when attention is focused on what the teacher and students are saying, and a trough in the identifying phase, allowing students to focus their attention on the written text. Martin 2006 describes the textual and interpersonal patterns of Detailed Reading cycles as follows.

...we can recognise a wave of information structure with lots of information at the beginning and end of the complex and a much narrower band of relatively redundant information at its centre - a pulse of preparation content which wanes from an initial peak towards a central trough and then waxes again in the culminative extension. And beyond this it is important to recognise a prosody of positive affect radiating through the exchange complex... and amplified in the [affirmations of] successful identifications by the class.

These tiers of ideational, textual and interpersonal structure are outlined in Fig. 6.

Figure 6: Modalities, attention and emotion in Detailed Reading



With regard to participation, preparations and elaborations involve the whole class, but directing focus questions at individuals ensure that every student is actively and successfully engaged. In this instance, six students are affirmed in the space of just one sentence, but the whole class successfully performs the identifying and highlighting tasks, so all are prepared for the elaborations. What prepares them for elaborations is their semiotic work in identifying the wordings from the teacher's meaning cues, and this learning activity rapidly orients students to recognising related patterns in other texts. Note also that student responses need not be entirely accurate to be affirmed, as the teacher then directs the class precisely what to highlight.

These designed learning cycles are related to the standard classroom practice of asking questions to engage students in the construction of knowledge. But this is an evolved, universal, intuitive practice, that teachers acquire and deploy tacitly. Although it is a fundamental mode of classroom teaching, involving a complex set of skills, teachers are rarely trained to do it, beyond general protocols for 'questioning techniques'. Typically only a handful of students consistently respond (Nuthall 2005, Rose & Martin 2012), and teachers use their responses to elaborate with items of knowledge they want the whole class to acquire. The broad pedagogic function of this practice is to reduce students' semiotic load by breaking up the acquisition of knowledge into manageable segments, guiding students to apply their own knowledge to the field. The practice is a feature of most curriculum genres to a greater or lesser extent (Alexander 2001 describes international practices). At one extreme is the academic lecture, where knowledge is transmitted in a continuous stream and the learning task is to listen and interpret independently; next are tutorials or secondary school lessons, in which the transmission of knowledge is interspersed with questions to the class; more interactive are primary school classes, in which knowledge is continuously negotiated with questions and responses; Exchange 2 illustrates a maximally interactive variant of the practice in the early school years.

One reason that so few students consistently respond in any class is that questions typically demand interpretations of the field from students' own knowledge. Inevitably only a few

students can provide appropriate responses successfully, while other students learn to avoid rejection by remaining silent. As Exchange 2 illustrates, this socialisation starts at the beginning of school and continues relentlessly over the years that follow. Detailed Reading resolves this problem in three ways: firstly, the initial source of responses is the text that is available to all, rather than a few students' exclusive knowledge; second, the task is prepared with meaning and position cues that all can understand and apply; third, the task of articulating the identified wording is directed at individual students by name, so that all get an equal opportunity to respond. This practice has the added advantage of managing students' attention and behaviour through success and affirmation, rather than control and admonishment. The expectation of success and public affirmation is a powerful motivator for every student.

This regulative practice is closer to that of Exchange 1 than Exchange 2. Pedagogic relations are deliberately inclusive and equal between students, guided by the teacher's explicit authority. The teacher's knowledge is explicitly beyond that of any student, but is made equally accessible to all by the teacher's interactive guidance. This is accomplished by a carefully designed traversal of pedagogic modalities, managing students' attention and emotion through the phases of each learning cycle, culminating in elaborations of knowledge that all students are prepared to acquire.

Practice with planning and managing the complexities of the Detailed Reading genre gradually gives teachers the skills to confidently deploy its design of pedagogic activities, relations and modalities in other curriculum genres in the *Reading to Learn* sequence. It can be used in paragraph-by-paragraph reading, to guide students to identify key information in each paragraph, and in the elaborating discussion that follows reading; and it can also be used to guide writing. Following Detailed Reading, the sequence can proceed down the language strata to focus on grammar and graphology, or it can go straight to writing new texts.

The writing genre that follows Detailed Reading is known as Joint Rewriting, in which the teacher guides students to appropriate the language resources from the Detailed Reading passage, to write a new text. For stories these are the literary language devices in each sentence; for arguments and text responses they are the patterns of appraisal that evaluate an issue, position or text; for factual texts they are the ideational elements in each sentence. For stories, the preparation stage of Joint Rewriting involves generating a new field for the text. The teacher guides students to propose options by pointing to the original passage, and consider what innovations in plot, setting and characters would fit its patterns. In the task stage, students then take turns to scribe the new text, as the teacher guides the class to propose new elements for each sentence. For example, as *Jack in the Beanstalk* is a fairy tale, its discursive patterns could be appropriated to write a different story in the same register as follows.

*Long ago in a far away land lived a widow and her son Jack. All they owned was a cow. Every day they sold some of the cow's milk. Then one day the cow stopped giving milk. Jack's mother said to him, "Take the cow to the market. Sell her and bring me the money."*

A rewrite follows the the original sentence patterns as closely as possible, with a new field. Here the settings, characters and events of Little Red Riding Hood are substituted, but the class could equally have invented their own fairy story.

*Once upon a time, in a village near a wood, lived a woman and her daughter Red Riding Hood. In the wood in a little cottage lived her grandmother. Every week Red Riding Hood took some food to her grandmother. One day they packed a basket of food. Red Riding Hood's mother said to her, "Take the basket to Grandma. Give the food to her, but don't talk to any strangers on the way."*

And so on. Learning cycles in Joint Rewriting are prepared by pointing to each sentence element in turn, and considering alternatives that would fit the overall discourse and grammar patterns of the sentence and passage. The students' tasks are to propose options, and take turns scribing. Elaborations include rephrasing students' proposals, and discussing language features at the levels of genre, register, discourse, grammar, and graphology, as students scribe the chosen elements on the board.

Following Joint Rewriting, students attempt their own versions, in the activity of Individual Rewriting. For stories, they choose their own plot, setting and characters, and follow the same literary patterns as the original and joint rewrite. This is a powerful technique for learners to appropriate the culture's reservoir of literary language devices into their own repertoire. This is of course what experienced readers and accomplished writers do more or less intuitively. Explicit guidance in these curriculum genres brings this practice to consciousness, so that the both stronger and weaker writers in a class acquire the literary resources of accomplished authors. Rewriting may be compared to the *imitatio* tradition of classical rhetoric, except that the guidance provided in Detailed Reading and Joint Rewriting ensures that every student succeeds in the tasks. The effect extends well beyond the particular patterns in any one passage, as repeated guided practice gives all students a conscious orientation to recognising and appropriating language resources as they read.

The language focus of Detailed Reading and Rewriting is on the discourse and grammar patterns that instantiate the register of particular texts. In the next curriculum genre in the sequence, Joint Construction, the focus is on patterns of genre and register. In the original genre writing TLC outlined earlier, model texts were deconstructed as far as their generic stages, and characteristic language features. In the *Reading to Learn* sequence, deconstruction goes further to appropriate the structures of phases within each generic stage of a model. Martin in this volume presents an example which used an extract of Mandela's *Long Walk to Freedom* as a model. The Joint Construction by a class of Indigenous university students followed the phasal structure of Mandela's autobiographical recount precisely, as follows.

<b>phases</b>	<b>Mandela's model</b>	<b>Joint Construction</b>
<b>setting</b>	<i>born free</i>	<i>adventures of life</i>
<b>comment</b>	<i>obeyed my father</i>	<i>listened to my elders</i>
<b>episode1</b>	<i>as a young man</i>	<i>started school</i>
<b>episode2</b>	<i>as a student</i>	<i>from my first day at school</i>
<b>episode3</b>	<i>as a young man in Johannesburg</i>	<i>as a teenager in high school</i>
<b>episode4</b>	<i>my brothers and sisters were not free</i>	<i>my family also needed a role model</i>
<b>episode5</b>	<i>joined the African National Congress</i>	<i>decided to go to university</i>
<b>comment</b>	<i>Freedom is indivisible</i>	<i>Education is indispensable</i>

The obligatory staging of a recount is simply Orientation and Record, as set out in Tables 1 and 2. But phases within stages are more variable, depending on the genre and register. In this instance the Orientation includes a setting and comment phase, while the Record includes a series of episodes, that are stages in the author's life, concluding with a comment (see Rose 2006, Martin & Rose 2008 for more detail on types of phases). Joint Construction in *Reading to Learn* follows the phasal patterns of model texts, for the same reason that Joint Rewriting follows the sentence patterns of Detailed Reading passages; it is a powerful technique for guiding students to appropriate the repertoires of accomplished authors into their own, at the levels of register unfolding through genre. In this particular lesson, Rewriting was combined with Joint Construction, but typically Rewriting is done with short passages, and Joint Construction with whole texts.

Martin also presents the sequences of curriculum genres in the *Reading to Learn* program diagrammatically, as a series of nested cycles. The sequence is re-presented below, with glosses for the functions of each genre, their language focus and scale of text.

	curriculum genres	functions	language focus
whole text	<b>Preparing for Reading</b>	Understanding texts as they are read	Patterns of field unfolding through genre
	<b>Detailed Reading</b>	Reading literary, abstract and technical language in depth	Patterns of meaning within and between sentences
	<b>SentenceMaking Spelling SentenceWriting</b>	Embedding foundation literacy skills in reading and writing curriculum texts	Functions of word groups in sentences, words in groups, letter patterns in words
	<b>Joint Rewriting</b>	Appropriating literary, abstract and technical language from reading	Grammatical structures as sentences are rewritten
	<b>Joint Construction</b>	Constructing successful texts for assessment	Stages and phases of genres explicitly labelled

## 5 Knowledge

I have outlined one trajectory of research in the work of the 'Sydney School', from the description of a handful of knowledge genres in the primary school, and design of a curriculum genre for teaching students to write them, to far more elaborate descriptions of knowledge genres across education institutions, and more detailed descriptions and designs of curriculum genres for reading and writing.

I have also shown how genre and register analysis can be applied to any curriculum genre to display its configurations of pedagogic activities, pedagogic relations and pedagogic modalities, and their roles in the exchange of knowledge and creation of identities. We have illustrated how genres of mother tongue language learning have evolved to be maximally effective, by means of continual affirmation and elaboration of a child's communicative acts. We have also seen how the curriculum genres of the school have evolved to be instructionally effective for some students more than others, by means of continually unequal distributions of affirmation and unequal preparedness for elaborations of knowledge. In terms of regulative practice, they are effective for the reproduction of social hierarchies, through unequal acquisition of knowledge in school, and internalisation of

learner identities along the ladder of success and failure. This is the regulative practice of the school, no matter what the ostensible instructional theory, 'traditional', behaviourist, progressive, constructivist, critical. Finally I have shown how this regulative practice can be subverted by deliberate redesign of pedagogic activities, relations and modalities, informed by genre and register theory. But this is no mere theoretical exercise; these redesigned curriculum genres have been achieving results for over fifteen years, across education sectors, that are on average four times more effective than standard practices for the least successful students, and one and a half times more effective for the most successful (Culican 2006, Rose et al 2008, Rose & Martin 2013). In currently fashionable parlance, they are phenomenally effective at closing the gap in education outcomes.

One strand of 'Sydney School' research that I have only touched on is the knowledge exchanged through the school's curriculum genres. We have seen that this knowledge is of two orders: knowledge of curriculum fields, and knowledge about the language that realises them. The school has evolved to provide at least one group of students with types of knowledge that are remote from the everyday experience of most children, that have and are evolving in institutions that control the social and natural worlds, Bernstein's 'vertical discourses'. The language that has evolved with these fields, primarily in written modes, is abstract, technical, metaphorical, condensed. To participate in the controlling institutions of modernism, through professional education, students must learn to control these patterns of meaning. If we wish to provide all students with access to these resources, and hence to the knowledge structures of these institutions, then teachers require two orders of explicit knowledge: knowledge about the semiotic structures of their curriculum fields and the language that realises them; and knowledge about the semiotic structures of their own instructional practice. Research in the 'Sydney School' has gone a long way to describing the first (Halliday & Martin 1993, Christie 1997, Christie & Martin 1999, 2007, Martin & Veal 1998, Martin & Rose 2003/7, 2008, Christie & Maton 2011); the latest generation of research is focusing on the second (Christie 2002, Rose 2004, Martin 2006, Martin 2012, Rose & Martin 2012, Martin & Maton 2013).

Genre pedagogy is designed to integrate each of these domains of knowledge in pedagogic practice. In popular terms, language and literacy learning is embedded in learning curriculum content, and both are embedded in a designed pedagogic practice. Rehearsing Firth's stratal model of meaning as function in context: the contexts of language learning are the registers of the curriculum, and the contexts of curriculum registers are the curriculum genres through which they are learned. The school's dis-integration of these dimensions of learning serves its stratifying regulative functions. Reading and writing skills are supposed to be acquired at the start of school, making way for the learning of curriculum content, imagined as sets of concepts existing independently of language, while learning is imagined as a generic cognitive activity; both content and learning are imagined apart from their actual contexts in knowledge and curriculum genres. If students do not acquire the requisite reading skills early, they may be assessed as lacking cognitive abilities to acquire curriculum concepts, and may be prescribed generic literacy or numeracy remediation. If they arrive at school with a different mother tongue, they may be prescribed generic language remediation, isolated from the curriculum knowledge their peers are studying. These archaic institutional practices divorce and mask the integral relations between knowledge, language and learning at all stages of education. Sydney School research has aimed to describe the

complexes of knowledge genres and semiotic modes that constitute curricula, and the curriculum genres through which they are acquired. The outcome is a pedagogy that enables teachers to guide successful acquisition of knowledge through reading the curriculum, and displays of knowledge in writing, not just for the elite but for every student in the school.

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