Teaching multiliteracies across the curriculum
Changing contexts of text and image in classroom practice

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Central to the orientation of this book is a view of literacies, learning and teaching as completely interconnected social processes. As the theoretical and research bases for this position became more established in the 1980s and 1990s, some tertiary textbooks (Unsworth 1993d) dealt with the detailed practical classroom ramifications of these theoretical understandings about the social construction of literacies. While there is a strong and continuing consensus about the more ‘socially responsible’ practices in literacy pedagogy explicated at the time, the parameters of school literacies have been significantly extended with the rapid cultural and technological changes in literate forms of communication in recent years. Predominant among these are the growing impact of images in an increasing range of texts and the shift from page to screen-based literacies. Learning materials in school subject areas are changing, texts of popular culture are being seen as important curriculum resources and traditional resources like children’s literature are being influenced by intermodal comparisons and transformations.

There have been some useful publications dealing separately with some issues arising from these changes. However there remains a need to address the bi-directional impact of research and practice from the perspectives of both beginning and experienced classroom teachers. Teachers are looking for a coherent and practical framework for classroom work, which consolidates fundamental aspects of traditional literacy pedagogy and also encompasses the multiliteracies competencies that children will need to negotiate in the new millennium. This book extends the trajectory of the 1993 edited work, Literacy Learning and Teaching: Language as Social Practice in the Primary School (Unsworth 1993d), to attempt such an enterprise, focusing on primary and junior secondary schooling.

There are three broad stages in the structure of this book as indicated in Figure 0.1. Framing perspectives in Chapter 1 introduces sociocultural, semiotic and pedagogic perspectives on key issues in literacy learning and teaching and emerging dimensions of change. It addresses the theoretical and practical bases of contemporary literacy pedagogy and foreshadows the subsequent chapters’ explorations of both consolidation and transformation in the development of a pedagogy of multiliteracies.
Facilitating knowledge deals with a number of areas of detailed technical knowledge teachers need to have. Chapter 2 is concerned with the grammatical, cohesive and generic structures of language. Chapter 3 addresses the meaning-making structures and features of images. Chapter 4 delineates the distinctive textual forms and literate practices of different school subject areas, including some of the ways in which computer technology mediates characteristic screen-based literacies. Chapter 5 describes the multimodal meaning-making of literature for children.

Accessible accounts of these areas of knowledge are important since most students and many teachers, due to the curriculum they experienced, have very little systematic knowledge about language structures. Nor have they studied visual semiotic systems. They frequently do not appreciate the distinctive literacies of subject areas and are novices in the field of computer-based literacies.

This knowledge about how semiotic resources are deployed to make meanings in a variety of contexts facilitates teachers’ informed and effective intervention in children’s learning. Underlying the accounts of the meaning-making resources of language and image in conventional and electronic modes across curriculum areas is the understanding that the ways in which these resources are deployed are mediated by the cultural and socioeconomic positioning of the participants. From this perspective the issue of
critical social literacies is integrally linked to the actual descriptive accounts of the meaning-making systems.

Classroom practicalities shows how the knowledge of meaning-making systems informs the design and implementation of teaching/learning activities in different school curriculum areas in classroom contexts from infancy to adolescence. Chapter 6 is concerned with teaching children in the early years of schooling. Chapter 7 deals with the development of multiliteracies in curriculum area teaching and learning in the upper primary and junior secondary school, while Chapter 8 focuses on work in the English classroom at these levels. It is important that teachers have not only the sound understandings that will inform their practice at the particular school level of their current teaching, but that they also understand the differences and continuities of teaching and learning literacies across primary and junior secondary schooling. As well as articulating general principles and providing guidelines for the practical classroom teaching of multiliteracies, sample programs and detailed lesson material are included.

The importance of the bi-directionality of theory and practice in negotiating the teaching and learning of emerging multiliteracies is a major premise of the approach in this book. The intention has been to provide sufficient detail to demonstrate the advantages of engagement with this kind of theory–practice orientation to classroom work. Although selected key learning areas have been addressed in some detail, a conscious decision was made not to attempt the kind of panoramic survey that could deal only superficially with the full range of learning areas. What is gained is a thorough introduction to informing theoretical understandings and detailed accounts of their impact on practical day to day planning of classroom activities. It is hoped that this book will stimulate critically constructive revision and renewal of what it advocates as teachers and researchers together explore the kinds of interrelated theoretical and practical understandings needed in negotiating changing contexts of text and image in the social construction of multiliteracies in classroom practice.
PART I

- Framing perspectives
OLD AND NEW LITERACIES: NEGOTIATING CHANGE, CONTINUITY AND COMPLEMENTARITY

The textual habitat, the textual environment which affects us and which we affect, has experienced remarkable changes in the twentieth century and will continue to do so in the twenty-first century, as the students we teach grow to adulthood. While many of the fundamentals of established, language-based literacy pedagogy will remain necessary, they are by no means sufficient for the development of the kinds of literacy practices that already characterize the continuously evolving information age of the new millennium. We know that many young children have already functionally and critically engaged with electronic and conventional format texts in ways which they do not encounter in their classrooms when they begin school (Green and Bigum 1993; Mackey 1994; Smith et al. 1996).

Many instances can be cited from the professional literature and from everyday experience of children intensely involved in multimodal textual practices outside their school experience, which are rarely reflected or acknowledged as part of school literacies. For example, fifth grade students Max and James are avid users of the animation program Microsoft 3D Movie Maker. As well as making their own 30-minute movies, they download from the Internet similar movies made by other children, send both finished cartoons and ‘work in progress’ internationally, swap ideas and communicate by e-mail about style and effect (Davidson 2000). Christian, also in year five at school, is described (Wilson 2000) as a studious reader of his prolific collection of N64 (Nintendo 64) magazines. His adult interviewer was initially concerned that one of his favourite sections is ‘cheats’, which turned out to be a list of strategic shortcuts in procedures for achieving success in playing the electronic games. The adult interviewer was also bemused by Christian’s electronic games discourse like ‘I’ve clocked Banjo Kazooie.’ However, Christian subsequently revealed that he was also reading a recent novel by well-known Australian author of literature for children, Victor Kelleher. This serves to remind us that the advent of the digital datasphere as part of the textual
habitats do not necessarily mean the extinction of page-based literacies. Christian’s devoted reading of N64 magazines reflects the burgeoning bookstore shelves of computer magazines (often with CD ROM included), manuals, enhanced practice guides etc. But Christian’s reading of N64 does not preclude his attention to the fictional narrative in the conventional novel format, and this would appear to be reflected more broadly in the phenomenal commercial success of J.K. Rowling’s ‘Harry Potter’ books (1997, 1998, 1999, 2000).

Although there is no doubt that multimedia and electronic information sources are quickly taking up the communication of much information previously presented solely in traditional text formats, rather than being displaced by computer text, conventional literacies are maintaining a complementary role as well as being both co-opted and adapted in the evolution of our textual habitat (Goodwyn 1998; Rassool 1999; Lankshear et al. 2000; Leu and Kinzer 2000). In the twenty-first century the notion of literacy needs to be reconceived as a plurality of literacies and being literate must be seen as anachronistic. As emerging technologies continue to impact on the social construction of these multiple literacies, becoming literate is the more apposite description. If schools are to foster the development of these changing multiple literacies, it is first necessary to understand the bases of their diversity. These include not only the affordances of computer technology but also the increasing prominence of images in both electronic and conventional formats, the differentiation of the distinctive literacy demands of different school curriculum areas, and the distinguishing among forms of reproductive and critically reflective literacy practices. In the next section the nature of these parameters of diversity are outlined and their interactive effects are described as producing multidimensional, multiple literacies – multiliteracies.

In order to become effective participants in emerging multiliteracies, students need to understand how the resources of language, image and digital rhetorics can be deployed independently and interactively to construct different kinds of meanings. This means developing knowledge about linguistic, visual and digital meaning-making systems. This kind of knowledge about how meanings are made requires meta-language – language for describing language, images and meaning-making intermodal interactions. Of course, meta-language in the form of a range of different types of grammar and descriptions of text structure is not new. Various forms of meta-language describing technical aspects of images and their production are also well known. What is needed, however, is a meta-language which recognizes that ultimately the forms of multimodal meaning-making resources that are available, take the forms that they do because of the functions they have evolved to fulfil, which are largely determined by the cultural forces at work within any society. In a later section (p. 16) such ‘socially responsible’ descriptions of visual and verbal grammar and discourse will be outlined as the basis of a functional and accessible meta-language of multiliteracies.

What students learn about multiliteracies and meta-language is inextricably intertwined with the how of their learning. That, of course, is influenced by the interaction of a multitude of complex individual and social factors within the classroom, the school, the community and the broader cultural and political contexts. Although the
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nature of classroom practices cannot be realistically decontextualized from this complexity of influences, pedagogic frameworks for managing multiliteracies development that optimize learning and teaching need to be identified. To conclude this chapter, some key features of such frameworks will be discussed (see p. 19).

MULTILITERACIES: MULTIDIMENSIONAL, MULTIPLE LITERACIES

The relationships between visual and verbal representations – visual literacies

Written texts have always been multimodal. They are produced using a particular script or typeface, of a particular size or in varying sizes, laid out in a particular way and on certain types and quality of paper or other materials. On the whole we have been taught to overlook this kind of multimodality except in cases where students have been chided for ‘untidy’ work on ‘scrappy’ paper or rewarded for ‘excellent presentation’ of an essay (Kress 1995b: 26). But today the multimodality of print is being exploited in a wide range of texts. In her discussion of ‘visual English’ Sharon Goodman illustrates the role of typographic variation in representing multiple voices in texts and the increasing use of what she calls visual puns, which rely on the interaction of visual and verbal elements to bring their meaning to the fore (Goodman and Graddol 1996). Computer technology facilitates not only effortless use of wide typographic variation in terms of font, colour, size etc., but also the use of dynamic text which can ‘appear’, ‘fly’ across the screen, ‘rotate’, ‘flash on and off’ etc. The verbal forms of the computer screen also have a strong intertextual function (alluding to or echoing other texts) when they appear in other contexts such as signs on shopfronts identifying businesses like ‘Newtown.freshfruit@Georges.com’. The graphology of written language needs to be read multimodally. In so doing the ways in which these multimodal features of written language make different kinds of meanings need to be understood because they are fundamental to a text’s positioning of the reading with respect to how it might be interpreted.

Texts are also becoming increasingly multimodal in their incorporation of images with written language. This is very obvious in contemporary newspapers, although there is some variation across different types of publications (Kress 1997). Even in the case of picture story books the nature and the role of images have undergone major changes with the advent of the postmodern picture book (Lonsdale 1993; Stephens and Watson 1994; Hollindale 1995; Watson 1997; Prain 1998). In the case of school textbooks the latter part of the twentieth century has seen a significant shift to the prominence of images (Kress 1995a, 1997). The situation has changed from one where language as writing was dominant as the vehicle for all of the information deemed important, to the current situation where writing is far from dominant. In contemporary
texts the majority of the space is given to images and they have a significant role together with language in communicating the essential information about the topic (Kress 2000).

Kress has argued that the contemporary integrative use of the visual and the verbal has produced a new code of writing and image, in which information is carried differentially by the two modes (Kress 1997). Information that displays what the world is like is carried by the image, consistent with the logic of the visual as arrangement and display. Written language on the other hand, tends to follow the logic of speech in being oriented to action and event, and is thus oriented to the recording/reporting of actions and events and the ordering of procedures. Lemke has also pointed out that in scientific texts, images like abstract graphs and diagrams on the one hand, and written text on the other hand, contribute differentially to the construction of meaning (Lemke 1998b). He argues that in these texts meanings are made ‘by the joint co-deployment of two or more semiotic modalities’ suggesting further that, ‘It is the nature of scientific concepts that they are semiotically multimodal in this sense, and this may well be true in other systems of semiotic practices as well’ (Lemke 1998b: 111).

As well as recognizing that all texts need to be read multimodally, we need to understand how these different modalities separately and interactively construct different dimensions of meaning. These dimensions include the ‘ideational’ dimension, concerning the people, animals, objects, events and circumstances involved; the ‘interpersonal’ dimension, concerning the issues of relative power, attitude, affect etc., defining the relations among the participants in the communication; and the textual dimension, concerning the channel of communication and the relative emphasis and information value of aspects of what is being communicated. To understand how these dimensions of meaning are constructed by the elements and structures of language and image requires knowledge of the kind of visual and verbal grammar that relates such elements and structures to meanings and ultimately to the nature of the context in which the visual and verbal texts function. Such a meta-language of multiliteracies is addressed later in this chapter (see p. 16).

The differentiation of subject-specific literacy demands – curriculum literacies

Multiple literacies can be differentiated not only on the basis of the channel and medium of communication (print, image, page, screen), but also according to field or subject area (history, geography, science, maths etc.). Research from a variety of theoretical perspectives has shown that school subject areas have their own characteristic language forms and hence entail distinctive literate practices (Richards 1978; Applebee 1981; Davies and Greene 1984; Street 1984; Gee 1990; Martin 1993b). A study of the literacy demands of the enacted curriculum in the secondary school (Wyatt-Smith and Cumming 1999) showed that the literacy demands were dynamic, varying significantly both within lessons and across school subject areas. The researchers concluded that it
is no longer appropriate to talk about ‘literacy across the curriculum’. Instead there is a need to delineate ‘curriculum literacies’, specifying the interface between a specific curriculum and its literacies rather than imagining there is a singular literacy that could be spread homogeneously across the curriculum.

Descriptions of differentiated curriculum literacies of a range of school subject areas has resulted from systemic functional linguistic research (Halliday and Martin 1993; Coffin 1996, 1997; Humphrey 1996; Rothery 1996; Veel and Coffin 1996; Martin and Veel 1998; Unsworth 1999a; Veel 1999). This work has identified the genres (types of texts like explanations, reports, procedures, narratives etc.) that are prominent in the reading materials and writing demands of different subject areas, specifying the organizational structures of such text types. For example, explanations and procedures are very frequent in science but rare in English and, while explanations also occur in history, procedures are much less frequent. The schematic structures of these genres are quite different. A report begins with a general statement that classifies the object of the report, then describes it, then details its behaviours or uses. An explanation begins with an identification of the phenomenon to be explained and then proceeds through a series of implication sequences showing how or why something is the way it is. What has also been documented is the variation in the deployment of grammatical resources in different genres and in the language of different subject areas. One example is the use of ‘nominalization’. That is the formation of a noun from the verb form, like ‘compress’ → ‘compression’. In sequential science explanations (which show how something came to be through a sequence of events) like the formation of coal, there is negligible use of nominalization. On the other hand in explanations where cause is also linked to increasing levels of technicality like how sound travels, nominalizations like ‘compression’, ‘rarefaction’, ‘series’ etc. are integral (Unsworth 1997c). In history nominalizations also occur but rarely to construct subject-specific technical terms like ‘rarefaction’ etc. In history nominalizations are prominent in explanatory genres, but they are usually abstract nouns that are not history-specific like ‘widespread unemployment’ and ‘intolerance of religious dissent’ (Martin 1993b; Coffin 1996; Veel and Coffin 1996).

Understanding the grammatical forms of written English and how these are characteristically deployed in the genres of school subject areas is a crucial resource for enhancing students’ comprehension and composition of the distinctive discourse forms of different school subject areas. What is required to mobilize this resource is a meta-language shared by students and teachers. A number of professional development programs for teachers in Australia have incorporated the explicit teaching of functional grammar and genre to provide such a meta-language (National Professional Development Program 1997; Polias 1998). This kind of meta-linguistic understanding positions students not only to comprehend and compose the text forms of their school subjects but also to critique the perspectives on knowledge they construct (see Chapter 4).

Once teachers understand the orientation and basic concepts of systemic functional grammar and discourse and genre, their use in classroom work can be quite well
aligned with meeting the government mandated syllabus requirements concerning knowledge of grammar and text form. An outline of key concepts in systemic functional grammar and discourse is provided in Chapter 2. The ways it has informed differentiation of curriculum literacies in science and humanities is detailed in Chapter 4 and its application to classroom work is demonstrated in Chapters 6, 7 and 8.

The affordances of computer technologies – cyberliteracies

Some of the affordances of computer-based and networked technologies for information and communication are exclusive to this digital datasphere. These include hypertext and hypermedia links, windows or frames, ‘chat rooms’ of various kinds, e-mail and certain ‘search’ capabilities. Such features have generated new kinds of literacy practices. Multimodality is not an exclusive feature of electronic texts, but the range of modalities, the extent of their use, and the nature and quality of their articulation, have significantly increased in electronic formats. The interaction of the peculiar affordances of computer-based and networked technologies and the multimodality of electronic format texts has the effect of multiplying potentially new literacy practices. Because of the digital dimension of these new practices and growing access to multimodal authoring software, individuals are now more likely to be able to be equally engaged as constructors and consumers of textual materials, closely articulating comprehending and composing behaviours. Clearly the impact of the new technologies cannot be understood as an add-on tool for learning and teaching literacies. Rather than trying to squeeze new technologies into familiar literacy education procedures, we need to attend to the reality of new and emerging literacies. As in the case of curriculum literacies, central to understanding the new dimensions of multiliteracies afforded by information technology is meta-semiotic knowledge – understanding the systematic nature of the digital rhetorical resources that are available to make meanings and having the meta-language to describe them. Although theoretical descriptions of digital rhetorical systems remain in their infancy, brief comment will be made about the nature and potential of hypertext links and windows and the relative significance of multimodal features of cybertexts. Then, having noted the need to attend to the reality of new and emerging literacies, it will be important to acknowledge that the conventional, hard-copy forms of ‘linear’ texts will continue to coexist with the textual matrixes of electronic hypertext for some time, and that in many electronic texts, less than optimal use is made of the potential of digital rhetorics.

The rhetorical role of the hypertextual link is routinely regarded as a kind of neutral ‘connection’, which facilitates readers being able to choose among various permutations and combinations of ‘non-linear’ pathways through one or more texts. But attention has been drawn to the need to problematize this view and develop a more sophisticated account of the meaning-making potential of links (Foltz 1996; Burbules 1997; Kamil and Lane 1998). The use and placement of links is one of the vital ways in which the tacit assumptions and values of the designer/author are manifested in a
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hypertext – yet they are rarely considered as such (Burbules 1997: 105). Burbules proposes several categories of links based on the kinds of meanings they imply. For example, a link from a page dealing with ‘political organizations’ to one dealing with ‘Catholic Church’ could be read as a metaphor, encouraging the reader to think about politics and religion in a different way. If a page on ‘human rights violations’ is linked to pages on ‘corporal punishment in schools’, this suggests categorical inclusion.

Links make such associations, but do so in a way that is seldom made problematic; yet because such categorical links are often the gateway that controls access to information, clustering and relating them in one way rather than another is more than a matter of convenience or heuristic – it becomes a method of determining how people think about a subject.

(Burbules 1997: 113)

The use of frames or windows makes it possible to have two different texts and/or images on the screen at the same time. This provides new ways for designers/authors to structure their texts and may be considered a significant advance in the potential use of the Internet for educational purposes (Moore 1999). But again the semiotic significance of the use of and placement of these frames to achieve these parallelisms goes beyond a neutral resource for juxtaposing related information. Critical reading of digital rhetorical structures necessitates a capacity to ‘make strange’ or problematize the apparent ‘naturalness’ or ‘invisibility’ of the rhetorical choices designers/authors have made, questioning why certain links and juxtapositions are included and to imagine connections of a similar kind that could have been made but weren’t. This requires meta-knowledge of digital rhetorical devices – such as understanding how hyperlinks are made and multiframes included; ‘the more one is aware of how this is done, the more one can be aware that it was done and that it could have been done otherwise’ (Burbules 1997: 119).

In view of the potential for non-linear text structuring and the inclusion of multimedia ‘pages’ or screens, it is remarkable that so much electronic publishing features written text and makes strong demands on conventional reading skills (Garton 1997). Nevertheless, the potential of electronic texts for enhanced multimodal presentation has had an obvious impact and it has been argued that visual literacies may be pre-eminent in negotiating multimedia electronic texts.

The most popular and successful websites are not necessarily elaborately linked hypertexts, but they are visually interesting. Literacy in electronic environments may have more to do with the production and consumption of images than the reading and writing of either hypertextual or linear prose.

(Bolter 1998: 7)

The nature, extent and rhetorical use of images in electronic publishing however, also warrants critical attention. Some literary narratives for young readers on CD
ROM use multimedia and hypertextual elements to draw the reader into the story in ways that are not available in conventional format books (James 1999). On the other hand some such narratives are replete with gratuitous hypermedia links to images and text that are at best peripheral to the story (Miller and Olsen 1998). In an investigation of science topics for primary school students (Unsworth 1999b) sections in conventional trade books were compared with presentations of the same topics on the CD ROMs: *Encarta 95* (Microsoft 1994) *The Eyewitness Encyclopedia of Science* (Kindersley 1994) and *The Way Things Work* (Macaulay 1994). There were many more, and a greater variety of images in the trade books. In some topics on some of the CD ROMs there were no images at all. On the other hand some CD ROMs on some topics provided animations that were not possible in the books. The significance of the type of animation also needs to be considered, however. For example, the *Encarta 95* CD ROM provides a realistic animation of the water cycle, but there is no synoptic, schematic diagram simultaneously depicting all stages of the water cycle. Current work comparing science explanations on CD ROM and on Internet websites suggests that learners attempting to work from less complex to more complex explanations need to adopt different reading strategies depending on the format of the material they are using. For example the *Encarta 95* CD ROM entry for the greenhouse effect presents the more technical version as the main text and the second version as a hyperlinked oral explanation accompanying an animation. On the other hand on the *USA Today* website (http://usatoday.com.weather/tg/whrmng.htm) the simpler explanation with animated images is presented first with a hyperlink to the more technical version and a more complex, static image.

In Chapter 7 sample lesson materials address the complementary use of conventional and computer-based texts in curriculum area teaching. These deal with developing critical understanding of the resources of electronic texts. They also incorporate explicit teaching of verbal and visual grammar using the meta-language drawn from systemic functional linguistic and visual analyses, which is introduced in the next section and described in detail in Chapters 2 and 3.

The challenge of alternative perspectives – critical literacies

What is involved in critical literacy defies simple definition (Lankshear 1994; Muspratt *et al.* 1997) but work from a variety of theoretical perspectives suggests a common recognition of critical literacy practices that can be distinguished from routine decoding of textual information and from compliantly participating in the established, institutionalized textual practices of a culture. These different aspects of literate practice will be categorized here as ‘recognition literacy’, ‘reproduction literacy’ and ‘reflection literacy’. The relationship of these categories to those published elsewhere is indicated in Figure 1.1.

Recognition literacy involves learning to recognize and produce the verbal, visual and electronic codes that are used to construct and communicate meanings. It can also refer to the literacy practices that are very familiar to members of a culture as they
are ubiquitous and integral to common experiences of everyday life. Reproduction literacy involves understanding and producing the conventional visual and verbal text forms that construct and communicate the established systematic knowledge of cultural institutions. Reflection literacy necessitates an understanding that all social practices, and hence all literacies, are socially constructed. Because of this, literacies are selective in including certain values and understandings and excluding others. Reflection literacy means learning how to read this inclusion and exclusion. Interpreting and constructing texts entails the text analyst role, interrogating the visual and verbal codes to make explicit how the choices of language and image privilege certain viewpoints and how other choices of visual and verbal resources could construct alternative views.

This triadic categorization carries the risks of its neatness. In practice there is likely to be some degree of overlap and intertwining. Nor is the triad a simple developmental progression. Even those quite proficient in a range of literacies need to deal with code-breaking or operational mechanics in contexts of literacy practices that are novel to them. It has also been shown that quite young learners can engage productively in reflection literacies (Knobel and Healy 1998). Nevertheless, it has been argued (Hasan 1996; Macken-Horarik 1996) that, regardless of the age or experience of the learner, reflection literacy presupposes reproduction literacy, which presupposes recognition literacy. These three facets of literate practice are not linked by temporal sequence but by logical inclusion: reflection literacy includes a well-developed range of reproductive literacy practices, and these include recognition literacies, but the reverse is not the case. In Chapter 6, sample lesson materials indicate how to address these three facets of literacy with young children and in Chapters 7 and 8 examples of classroom materials indicate how they are practically managed in working with students in the upper primary or junior secondary school.

What is being increasingly recognized is the importance of meta-language in developing all three facets of literacy but particularly critical literacies (Lankshear 1997; Rassool 1999; Luke 2000). In fact, although not a sufficient resource, some argue that meta-language is a priority resource for critical literacy development.

A rudimentary working definition of critical literacy entails three aspects. First, it involves a meta-knowledge of diverse meaning systems and the socio-cultural
contexts in which they are produced and embedded in everyday life. By meta-
knowledge I mean having an understanding of how knowledge, ideas and informa-
tion ‘bits’ are structured in different media and genres, and how these structures
affect people’s readings and uses of that information.

(Luke 2000: 72)

Since the ‘critical dimension’ of literate practice fundamentally involves awareness
that all literacies are socially constructed (Lankshear et al. 2000), an essential feature
of the meta-language to be adopted would seem to be a clear theoretical link between the
descriptions of the visual and verbal elements of texts and how they make meanings,
and their relationship to the parameters of the social contexts in which they function.
This is at the heart of systemic functional linguistics and the verbal semiotic analyses
extrapolated from it, contributing a sound basis for a meta-language of multiliteracies.

A META-LANGUAGE OF MULTILITERACIES

The importance of a meta-language for developing multiliteracies is very widely
acknowledged, and there seems to be growing consensus about the kind of meta-
language that is needed. A group of 10 academics, identifying themselves as ‘The New
London Group’, and including members from the UK, the US and Australia addressed
this issue in their proposal for a pedagogy of multiliteracies (New London Group
2000). They emphasized that the meta-language needed to support a sophisticated
critical analysis of language and other semiotic systems yet not make unrealistic de-
mands on teachers and students. Above all, however, the meta-language needed to
derive from a theoretical account that linked the meaning making elements and struc-
tures of semiotic systems like language and image to their use in social contexts: ‘the
primary purpose of the metalanguage should be to identify and explain differences
between texts, and relate these to the contexts of culture and situation in which they

This aligns with a fundamental premise of systemic functional linguistics (SFL) –
the complete interconnectedness of the linguistic and the social (Halliday 1973, 1978;
1999). SFL approaches the description of social context by interpreting it as two
interrelated levels: context of situation and context of culture. The context of situation
is the immediate context in which the language is used. The ‘same’ context of situation
may be very different in different cultures. For example, purchasing food in a western
supermarket where prices are not negotiable is quite different from purchasing fresh
food in a market in Bangkok or Singapore, where bargaining is expected. Some con-
texts of situation are quite culture-specific. The context of culture can be thought of as
the full range of systems of situational contexts that the culture embodies.

In order to be able to achieve social purposes one needs to be familiar with the ways
in which culturally recognized situation types are typically structured to achieve those
purposes. These structured, goal oriented social processes have been referred to by Martin as genres (Martin 1984, 1989, 1993a, 1997) and the stages or steps by which they are organized are known as their schematic structure or generic structure. For example, in visiting a local doctor in Australia, one arrives at the medical centre, approaches the receptionist, shows a medicare card, then the receptionist retrieves (or generates) a patient file, and you wait your turn in the waiting room for the doctor to emerge, greet you and take you into the consulting room. If you are writing a review of a novel or film in a junior secondary school English class in Australia, you will probably begin with a 'context' stage in which you give the cultural/historical context of the work together with a brief synopsis. The next stage will be the 'text description' in which you will introduce the main characters and summarize key incidents. The final stage will be the 'judgement' in which you will evaluate the text and make a recommendation to potential readers/viewers. (For a more elaborated introduction to the relationship between context and culture and genre and the associated meta-language see the first chapter in Researching Language in Schools and Communities: Functional Linguistic Perspectives, Unsworth 2000.) Specifying the genres of school literacies and identifying the stages of schematic structure that characterize these genres have been a major contribution of SFL to literacy pedagogy. The meta-language of these genres or text types and their stages are now included in mandatory school syllabuses in New South Wales (New South Wales Board of Studies 1998b) and Queensland (Queensland Department of Education 1994). Genres and school literacy development are further discussed in Chapters 5 to 8 of this book.

As well as the context of culture influencing the genres and their staging, key features of the particular context of situation are related to the grammatical and discourse forms that are used. Any context of situation is described in terms of three main variables that are important in influencing the choices that are made in the language that is used. The first of these, Field, is concerned with the social activity, its content or topic; the second, Tenor, is the nature of the relationships among the people using language; and the third, Mode, is the medium and role of language in the situation – whether spoken or written, accompanying or constitutive of the activity, and the ways in which relative information value is conveyed. These situational variables are related to three overarching areas of meaning – ‘ideational’, ‘interpersonal’ and ‘textual’ meanings. For example, if I say ‘My daughter is coming home this weekend’, ideationally this involves an event, a participant and the circumstances of time and place associated with it. Interpersonally it constructs me as a giver of information and the reader/listener as a receiver (as well as perhaps suggesting I have at least some acquaintance with the listener). Textually, it locates ‘my daughter’ as the orientation or point of departure for the interaction, simultaneously suggesting that ‘my daughter’ is given information that we both know about and the new information is that she is coming home ‘this weekend’. If I say ‘Is my daughter coming home this weekend?’, the ideational meanings remain the same – the event, the participant, the circumstances have not changed – but the interpersonal meanings have certainly changed. Now I am demanding information, not giving it (and there may be some suggestion of estrangement
between the listener and me). Similarly, if I say ‘This weekend my daughter is coming home’, the ideational meanings are still the same, but this time the textual meanings have changed. Now the orientation is the weekend and this is the given or shared information. What is new or unknown concerns what my daughter is doing. So the different structures reflect different kinds of meaning, which in turn reflect different aspects of the context. The meta-language of systemic functional grammar derives from this linking of language structure, meaning and context. Basic concepts of this grammar are outlined in Chapter 2. Its use in distinguishing curriculum area literacies is explained in Chapter 4 and in interpreting literature for children in Chapter 5. Then the incorporation of this grammar in teaching is demonstrated in Chapter 6 in work with young children, in Chapter 7 in teaching in curriculum areas and in Chapter 8 in enhancing teaching in the English classroom.

Extrapolating from systemic functional descriptions of language, researchers have developed a corresponding functional account of ‘visual grammar’ (Kress and van Leeuwen 1990, 1996; O’Toole 1994; Lemke 1998b). This work recognizes that images, like language, realize not only representations of material reality but also the interpersonal interaction of social reality (such as relations between viewers and what is viewed). The work also recognizes that images cohere into textual compositions in different ways and so realize semiotic reality. More technically, functional semiotic accounts of images adopt from systemic functional linguistics the meta-functional organization of meaning-making resources:

- **representational/ideational** structures verbally and visually construct the nature of events, the objects and participants involved, and the circumstances in which they occur;
- **interactive/interpersonal** verbal and visual resources construct the nature of relationships among speakers/listeners, writers/readers, and viewers and what is viewed;
- **compositional/textual** meanings are concerned with the distribution of the information value or relative emphasis among elements of the text and image.

The basic concepts of the functionally oriented ‘grammar of visual design’ proposed by Kress and van Leeuwen (1990, 1996) are described in Chapter 3. Their use in interpreting literature for children is explained in Chapter 5, the incorporation of visual literacy into teaching is demonstrated in Chapter 6 in work with young children, in Chapter 7 in teaching in curriculum areas and in Chapter 8 in enhancing teaching in the English classroom.

The New London Group (2000: 24) indicated that what is needed to support a pedagogy of multiliteracies is

an educationally accessible functional grammar; that is, a metalanguage that describes meaning in various realms. These include the textual and the visual, as well as the multimodal relations between different meaning-making processes that are now so critical in media texts and the texts of electronic multimedia.
The descriptions of verbal and visual grammar used in this book clearly address these requirements. Current research is developing functionally oriented intermodal descriptions relating visual and verbal semiotic resources (O’Halloran 1999; van Leeuwen 2000; Martin in press) as well as those relating to movement (Martinec 1999), sound and music (van Leeuwen 1999). This work will extend and enhance the current visual and verbal bases of a meta-language of multiliteracies as described here.

MULTILITERACIES AND MANAGING CLASSROOM PRACTICE

In dealing with the practicalities of implementing multiliteracies in learning and teaching, three dimensions of classroom learning contexts will be addressed. These are the knowledge dimension, the pedagogic dimension and the multiliteracies dimension. The multiliteracies dimension has been outlined in the previous sections and will be further developed in the next four chapters. In this section the knowledge and pedagogic dimensions will be briefly outlined. The three dimensions will be brought together in the context of sample classroom programs in the final three chapters of the book.

The knowledge dimension distinguishes among informal, systematic and transformative knowledge. Informal or commonsense knowledge is the understanding individuals develop largely incidentally through personal and/or communal experience. Knowledge of this kind is often passed on through casual interaction or at points of perceived need and is frequently also acquired through observation and trial and error. It may and may not be accurate, but it is the knowledge students often bring to school learning situations. Systematic knowledge is the specialized learning of societal institutions reflected in the content of formal school curricula. It includes the fundamental concepts and hegemonic perspectives within recognized disciplines like maths, science, geography, history, economics, etc. Systematic knowledge builds up an alternative construction of reality alongside that of commonsense experience. Transformative knowledge initially involves questioning the taken-for-grantedness of systematic knowledge, understanding that what appears to be the ‘natural’ view of phenomena is actually a view produced by particular combinations of historical, social, political influences, and that alternative combinations of these influences could produce different views. Transformative knowledge extends beyond critique, however, to a remaking of understanding emerging from the negotiation of conflicting and complementary perspectives. The result may be enduring tension rather than resolution, but it is transformative knowledge that leads to new understandings and the potential for social action. Classroom work needs to address all aspects of the knowledge dimension for all students. These kinds of knowledge are constructed and communicated by multiliteracies practices and it is the pedagogic dimension of classroom learning contexts that articulates students’ access to the intersections of multiliteracies and learning and hence to different kinds of knowledge.

The pedagogic dimension involves the strategic use of student-centred, discovery learning as well as teacher directed, overt teaching and intermediate guided investigations
of various kinds. Managing classroom learning also includes designing learning experiences based on collaborative small group activities, individual independent work and common whole class tasks. The teacher at times will be a facilitator and guide or a co-researcher, but at other times will be an authoritative (but not authoritarian) leader and direct instructor. Initial work on a topic for example may involve sharing of informal knowledge, observations, and opportunities and suggestions for extending understanding. This may be highly student-centred and exploratory but as the teacher begins to bridge toward negotiating more systematic knowledge, the pedagogic dimension shifts to more guided investigation and direct instruction. On the basis of students’ greater familiarity with systematic knowledge of the topic, the teacher then moves to emphasize more critical framing to provoke critical questioning by students and a shift toward transformative knowledge. This kind of work may entail more collaborative group work and independent research and may also require a shift back to more student-centred, student-initiated learning. As the classroom work progresses through these phases, teaching is differentiated to optimize the engagement of all students in essentially the same learning tasks. This means sophisticated planning and preparation. It might include providing scaffolded learning guides for some students. It could also involve grouping students with high support needs together to ‘prime’ their understanding of subsequent tasks through direct teaching while more proficient learners operate independently, then regrouping students heterogeneously so that highly proficient students and high support students are able to work productively together on collaborative tasks. These kinds of articulations are explained more fully in the Curriculum Area Multiliteracies and Learning (CAMAL) framework and accompanying examples of classroom work detailed in the final three chapters.

NOTE

1 Courtney Cazden (Harvard, USA); Bill Cope (University of Technology, Sydney); Norman Fairclough (Lancaster University, UK); Jim Gee (Clark University, USA); Mary Kalantzis (James Cook University of North Queensland); Gunther Kress (University of London, UK); Allan Luke (University of Queensland); Carmen Luke (University of Queensland); Sarah Michaels (Clark University, USA); Martin Nakata (James Cook University of North Queensland).
Multiliteracies is a term coined in the mid-1990s by the New London Group and is an approach to literacy theory and pedagogy. This approach highlights two key aspects of literacy: linguistic diversity, and multimodal forms of linguistic expression and representation. The term was coined in response to two significant changes in globalized environments: the proliferation of diverse modes of communication through new communications technologies such as the internet, multimedia, and digital media, and
For the teaching of multiliteracies, Cope and Kalantzis (2015) have developed a Learning by Design framework where they introduce the knowledge processes of Experiencing, Conceptualising, Analyzing and Applying in multiliteracies, summarised in Table 1. The pedagogical features of the systemic functional approach, introduced in this article, is aligned to Cope and Kalantzis (2015) Learning by Design Framework and adopts the "reflexive pedagogy described. The focus in the dimension of Situated Practice is on the immersion of learners in the everyday world and helping them make connections across the domains of education and daily life. Xi, 306 pages : 24 cm. This textbook outlines the basic theoretical knowledge teachers need to have about visual and verbal grammar and the nature of computer-based texts in school learning. It includes both theoretical frameworks and detailed practice guidelines. Includes bibliographical references (pages 283-295) and index.