Chapter 5.13
Literacy in K–12
Teacher Education:
The Case Study of a Multimedia Resource

Kristina Love
The University of Melbourne, Australia

ABSTRACT
Midway through the first decade of the new millennium, teachers are still facing considerable challenges in dealing with the complex forms of literacy that are increasingly required for success across the K-12 curriculum in Australia. Three critical areas in particular need to be addressed in teacher education in this regard: teachers’ knowledge about text structures and about how language functions as a resource in the construction of a range of spoken, written, and multi-modal genres; teachers’ understanding of language and text as critical socio-cultural practices and how these practices build disciplinary knowledge across the K-12 curriculum; and teachers’ capacity to choose models of pedagogy that allow learners to master new literacy practices, transform meanings across contexts, and reflect substantively on learning through language. In this chapter, I will outline how a video-based interactive CD-ROM entitled BUILT (Building Understandings in Literacy and Teaching) was developed for use in teacher education to address these concerns. I will conclude by signalling some of the challenges that remain for teacher educators training novice teachers to scaffold, through ICT, their K-12 students into an important range of literacies.

LITERACIES IN SCHOOL EDUCATION IN AUSTRALIA
For the last decade or so, state and national K-12 school curriculum documents in Australia have begun to reflect a concern with literacy and its role in learning across the curriculum, though the depth and embodiment of this concern has been variable from state to state and from Key Learning Area (KLA) to KLA. This concern has been foregrounded in English (as a mother tongue) and Literacy curriculum and policy material, which
is generally underpinned by a view of language (in all of its modes) as a social resource, as much as a set of cognitive skills. As such, areas of the official curriculum are beginning to reflect a number of key theoretical assumptions prevalent in the research literature, in summary:

- that literacy consists of a complex set of social practices, rather than being a unitary psychological concept;
- that language and literacy practices vary according to social contexts and therefore need to be studied as they occur in those different contexts; and
- that language and literacy constitute powerful semiotic systems for the construction of meanings. (Hammond, 2001)

Such a socially oriented view of literacy, it has been argued, is particularly important in a world where globalization of communication and proliferation of multimodal texts is increasing daily (Cope & Kalantzis, 2000).

Teachers across the K-12 curriculum are struggling to come to terms with these more socially oriented versions of literacy, with more traditional approaches to literacy being further reconfigured through new information and communication technologies. At the very least, traditional notions of literacy as reading, writing, speaking, and listening need to incorporate the processes of viewing, navigating, and composing in a multimodal environment.

Reading can no longer be simply viewed as a process of decoding symbols on a page, but must be seen as an increasingly complex process which includes:

- understanding a range of semiotic systems, in both their individual and blended forms;
- making inferences around these based on available cultural knowledge;
- testing understandings of texts in pragmatic contexts; and
- engaging in critical analysis of how texts deploy various semiotic systems to position readers.

Thus, while traditional ‘basic skills’ such as word recognition, spelling, and comprehension are still seen as necessary for successful individual literacy development, they are no longer sufficient for young people to meet the increasingly complex demands of communication in the 21st century. Freebody and Luke’s (1990) model of competent readers as those who are able to draw on four resources simultaneously is now central to many literacy programs, those resources being: encoding and decoding resources, semantic or meaning-making resources, pragmatic or text-using resources, and critical or text-analysing resources. Helping students exploit these resources, or develop practices in using them across K-12 contexts, is now seen as central to the development of a generation of literate individuals, able to function effectively in a modern technological society.

The development of readers in these four practices is particularly important in a global context where more traditional forms of spoken and written language are increasingly embedded in larger multi-modal texts, many of these in digital electronic format. Students across the K-12 curriculum are engaging with various forms of meaning-making, many of which combine modes such as the linguistic, visual, auditory, gestural, and spatial (The New London Group, 2000, p. 6). In the hypertextual environment of the World Wide Web for example, to access the information so often required for school research, students must read information that is coded in a variety of often blended formats, including, besides the verbal, animation, symbols, photos, movie clips, and graphics. These multi-embedded texts require young navigators to draw on “a range of knowledges about traditional and newly blended genres or representational conventions, cultural and symbolic codes, as well as linguis-