

# Multiliteracies in early childhood

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## Multiliteracies in early childhood<sup>^</sup>

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Now, more than ever the lives of young children are saturated with multimedia, in the form of DVDs CD-ROMs, computer games, digital music, email, text messaging and digital photography, to name just a few. This has required new thinking about the new forms of literacy and one of the ways that this rethinking has occurred has been encapsulated in the pedagogy of multiliteracies (New London Group, 1996) which has expanded our view of reading, writing, speaking and listening to include the various multimedia symbol forms. In this way computers are 'symbol machines' that allow young children to negotiate a complex interplay of multiple sign systems (e.g., video clips, music, sound effects, icons, virtually rendered paint strokes, text in print-based documents), multiple modalities (e.g., linguistic, auditory, visual, artistic), and recursive communicative and cognitive processes (e.g., real time and virtual conversations, cutting/pasting text, manipulating graphics, importing photographs).

The term multiliteracies in fact covers what has also been regarded as electronic literacies, technoliteracies, digital literacies, visual literacies, and print based literacies. To explore multiliteracies we require an understanding of semiotic theory to know how symbols, in the form of letters and words, drawings, icons of various types, photographs, colours and animation movement can communicate meanings (Kress & Van Leeuwen, 2001). Semiotics offers a wide lens to describe the ways in which meanings are made and goals accomplished using 'semiotic resources' such as oral language, visual symbols and music. As the figure shows below, emergent and early literacy is not simply a question of print based versus electronic or digital literacies, but a consideration of the multi modal

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context of multiliteracies that makes it unique and relevant to contemporary early childhood education.

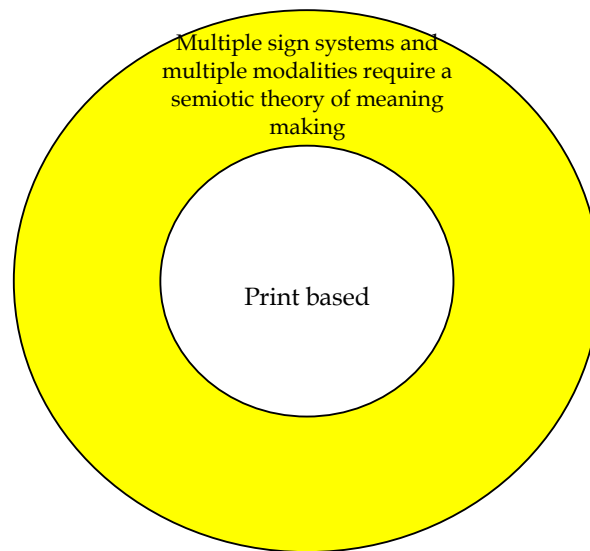


Figure 1 Multiliteracies incorporates print based literacies

While being multiliterate is extremely relevant to the early childhood context Lankshear and Knobel (2003) in a review of the research into new technologies and early childhood found a preponderance of use of multimodal resources to promote decoding and encoding alphabetic texts. The authors claim there has been an under realisation of the potential of new technologies to orient children towards literacy futures that will be very different from those of the past. Lankshear and Knobel's review of research also affirmed that the interrelated fields of new technologies and literacy in early childhood were radically under researched when compared to other age groups. Interestingly the authors contend that much new learning was occurring in out-of-school settings rather than in classroom settings. This review of research alerted Australian researchers to the need for involving teachers as researchers in exploring the possibilities of new learning and multiliteracies.

In other research into the integration of technology and literacy pedagogy Durrant and Green (2000) found that in various Australian states there has been an overly technical skills

approach to integrating technology literacy pedagogy. This ‘skills orientation’ was outside of an authentic context of situated social practice and at odds with social constructivist theories that underpin much of early childhood pedagogy. Durrant and Green’s research into digital literacies provided a conceptual framework known as the ‘3D’ view of new literacy learning to bring together three dimensions ‘operational’, ‘cultural’ and ‘critical’ that need to be addressed simultaneously to enable a holistic, culturally, critical view of pedagogy.

Building on the work of Durrant and Green (2000) and Lankshear and Knobel (2003) an Australian early childhood research project titled *Children of the new millennium*<sup>\*</sup> involved twenty teacher-researchers exploring four to eight year old children’s knowledge and understanding of multiliteracies. In the first instance the teachers and researchers undertook a ‘technotour’ of children’s’ homes that revealed a high level of use of new technologies by children which was far greater than teachers had anticipated. In most cases the children had access to and could use information and communication technologies (ICT) far in advance of the equipment that existed in many of the schools and preschools. Children were able to go online to websites that were often linked to their favourite television shows, use search engines to find information and often played interactive games online and with game software. New ways of building on the skills and interests from home emerged when teachers engaged some children as coaches or mentors in the classroom and capitalised on children’s funds of knowledge by using similar software in school as at home. This was particularly so for children with special learning needs. The pedagogies of the teachers using new technologies was inquiry based and autonomous investigations and problem posing and solving were promoted. The multimedia software supported the creation of animations, movies, slideshows and explorations of digital still photography and video.

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<sup>\*</sup> Hill, S. & Yelland, N. Australian Research Council Linkage Grant LP0215770, *Children of the New Millennium: Using information and communication technologies (ICT) for playing and learning in the information age.*

Situated practice—making learning meaningful and based on real life experiences by focusing on children’s interests and understandings—was highlighted in the learning stories compiled by the teacher-researchers. The teachers commented on the need for authentic real life, purposeful engagements in early childhood settings because children at home were able to quickly locate an enormous amount of resources and material through the use of the information rich Internet. Teachers wrote that the visual aspect of the Internet was a valuable tool to further enhance young children’s understanding of their world.

A framework for mapping the depth and complexity of young children’s learning with multiliteracies was developed by the teacher-researchers (Hill 2005). The four interrelated dimensions while interrelated provided a lens for teachers to analyse what children know about multiliteracies and help reveal the next steps in planning for learning.

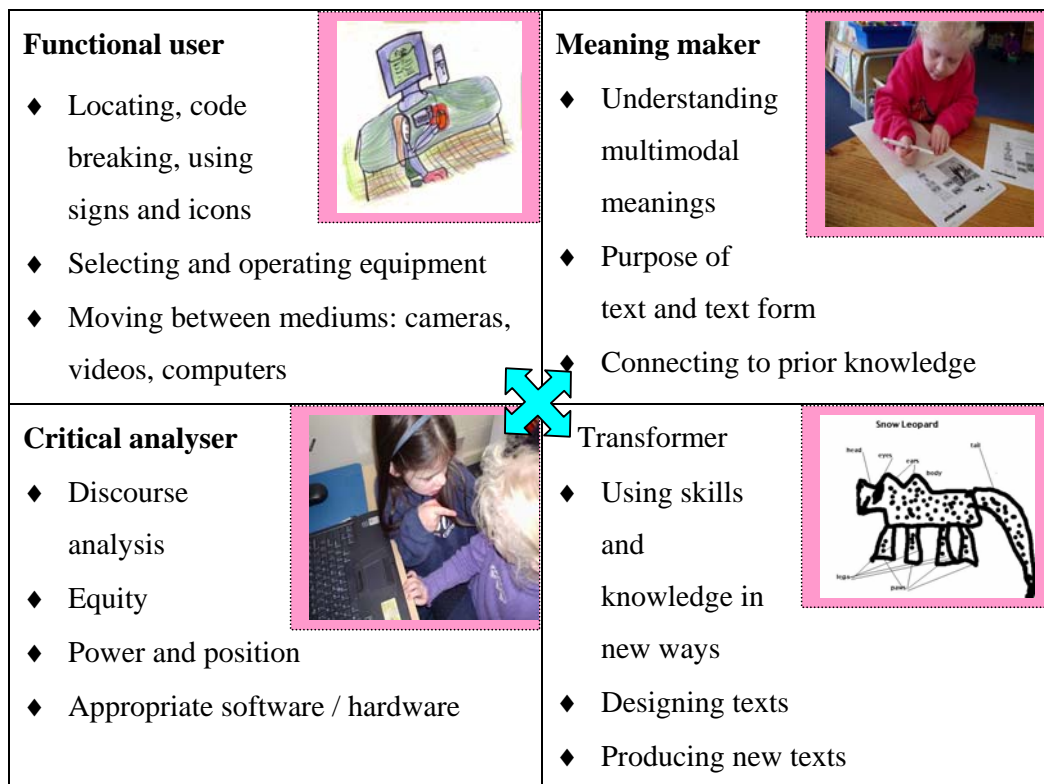


Figure 2 The Multiliteracies map

The teacher researchers found that children thrived on generating new multi-modal texts and this led to the need to understand principles of multi-modal meanings. For example, the use of graphics and story making software encouraged communication and other emergent literacy behaviours as well as enhanced interpersonal interactions amongst learners. The electronic books in various software programs supported the development of children's readings and re-readings and this was particularly evident with children with special needs. The use of electronic multimedia options opened up an interactive world that can support children's literacy development in a digital world and provide them with stories that may be beyond their reading level.

Projects such as *Children of the new millennium* have shown that children as young as three and four years of age can represent meaning with digital photographs about their learning and they can play with these photographs importing them into slide shows, changing the layout, the colours, and the shape. They can make books with photographs and their own art work using a myriad of colours, backgrounds and this can have audio voice and sound effects and animation added to it. The project has also revealed that the traditional content of reading and writing needs to be broadened to include the use of multiple sign systems that represent meaning. Children in early childhood have always used construction, drawing or illustrations, movement and sound to represent meaning. The newer multimodal technologies merely add to children's choice of medium to represent ideas and to comprehend the meanings in a range of texts.

Indeed as an example of how quickly the concept of multiliteracies has taken hold over the past three years most Australian state departments of education have embraced the concept of multiliteracies. Indeed, Education of Queensland and the South Australian Department of Education promote literacy learning in the context of the pedagogy of

multiliteracies and encourage teachers to create contexts for learning that are multi-modal and incorporate the use of new technologies where appropriate.

Very quickly, over the past five years it has become evident that digital literacies and print-based literacy are not oppositional concepts, both are required for effective functioning in the 21<sup>st</sup> century. In fact traditional print-based reading and writing was found to be vitally important for success in digital contexts. Writing was significantly important as a memory tool, for planning, designing and recording ideas and information. Reading was critically important for predicting, scanning, interpreting, analysing and selecting from the abundance of information. Interestingly, in *Children of the new millennium*, the children switched effortlessly between genres, scanning material for information, following procedures, searching by scrolling through menus, and interpreting icons and written instructions on tool bars. In other words, although reading, writing, listening and speaking are paramount, today's students must be able to do more, as they decipher, code break, achieve meaning and express ideas through a range of media incorporating design, layout, colour, graphics and animation.

In fact, learning to critique the digital media, and consider whether the information is appropriate or accurate, is far more important than ever before considering the amount of time children are engaged with the screen. For many children preschool and school is the only place where they can learn to question the values and intentions of the many software programs and numerous websites. Teachers have commented about the need for practical examples of strategies they can use to support children to develop a critical orientation to multiliteracies.

It is clear that more research is needed into the long-term effects of prolonged use of screen-based learning. Children as young as two and three years of age are choosing to play with computers for long periods of time at home; in some learning stories teachers wrote of

children whose main leisure activity at home was playing with the computer for extensive periods without adult supervision. Add to this, long periods of screen-based learning at school and the length of time interacting with the screen is significant. Long term use may affect children's health, social and communicative abilities, and thought processes.

Further research into multiliteracies in early childhood education is important because technological change is increasingly defining the nature of literacy. Reading and writing will become even more important in the future due to the increasing need for acquiring and communicating information rapidly in a world of global competition and information economies. We live in a time where speed of information is central to success and reading and writing proficiency will be even more critical to our children's futures.

There has been a plethora of research regarding the impact of television on children. However, the Internet, as a source of information, education and entertainment, is set to have a far greater impact on the lives and learning of young children than television. It is essential for us to consider, for example; How will interactive game-based entertainment affect children's play and learning? How will new technologies transform children's' dispositions or 'habitus', or ways of thinking? As children play, think and learn this learning becomes internalised as structures, schemas or ways of thinking that can be used in other contexts. How will the increasing engagement with multimodal literacies change the ways children think and learn? New technologies have already transformed the lives of young children in their home and informal learning contexts – such questions will be vital if we are to have an education system that is meaningful and relevant to the lives of young children in the 21<sup>st</sup> century. Becoming multiliterate is viewed as being an essential part of successful learning for these new times.

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