



Editorial

## Knowledge, Learning and ICT in Early Childhood Education

**Christopher Naughton**

*New Zealand Tertiary College*

This special edition, the third in the series after Arts (Vol.2 No.1) and Literacy (Vol.2, No.3) has taken as a theme “Knowledge, Learning and ICT in Early Childhood Education.” As with the two previous editions this has produced a number of differing opinions that have focused on the relationship between knowledge and ICT in early childhood education: How do we conceptualise Knowledge and how does Learning reflect knowledge in action? And how can ICT applications incorporate concepts of knowledge and learning? The authors present arguments and perspectives on the role of ICT within education as a whole and what constitutes knowledge in the 21<sup>st</sup> century. The impact of new developments in ICT and technology are also examined in this edition in relation to learning theory.

Irina Verenikina and Lisa Kervin have chosen to look at the use of ipads, digital play and learning in their paper. Their study which looks at the ipad and related games and software packages in the home environment, examines the access that children have to the technology, the opportunities for spontaneous play and the affordances and limitations that are observable from the experience. Their findings demonstrate many positive aspects to children’s engagement and the activity in relation to theories of play in general. In addition the vital role played by the parents and care givers is noted in introducing and sustaining new opportunities for learning through their child’s digital play.

The importance of socio-cultural learning is emphasised in a study undertaken by Cecilia Wallerstedt and Pernilla Lagerlöf. They report on children developing musical responses using the MIROR (Musical Interaction Relying on Reflection) Impro system. This study, funded by the European Union, involved a keyboard linked to a computer responding to the child’s improvisation. This was conceptualised in a form akin to a mother evoking and responding to a child’s utterances by making stylistically advanced responses to the child’s improvisations. The research considered how participation changes responses and develops as a form of intersubjectivity. This becomes a basis for “a common focus of attention and some shared presuppositions that form the ground for communication” (Rogoff, 1990, p. 71). The empirical study indicates how such a system relies on many contextual matters relating to the musical experience and engagement on the part of the child and adult.

Nicola Yelland has focused on ‘knowledge’ in respect of the *New Basics* (2001) curriculum that has been adopted in the state of Queensland, Australia. This far-reaching curriculum has instigated a move away from what might be seen as traditional teaching and understanding of the curriculum in the modernist sense, looking to the potential for children to engage in authentic learning activity. Yelland describes a curriculum where collaborative learning relates to the child’s own real life worlds. Reporting on three specific studies using ICT tasks, Yelland



describes how children—and teachers—reconfigure their concepts of knowledge so that they become aware of the learning they encompass. Pointing to the need for a population that can be ‘creative’ rather than ‘work intensive,’ Yelland sees this advance as the inevitable step in addressing the learning potential of the 21<sup>st</sup> century.

The curriculum features in the paper by John Siraj-Blatchford and Neelam Parmar, in an examination of the teaching of phonics. Referring to knowledge as located within the curriculum, the argument is made that in early childhood education, play, and learning through play, has served to marginalise the concept of a curriculum. The encounter with play is thus seen as reducing the chances of children reaching their academic potential if learning is left to chance. Ignoring the role of phonetics in the early childhood curriculum it is claimed, threatens the child’s access to knowledge and academic achievement, and in turn perpetuates social inequality within society. With reference to two case studies it is demonstrated how skilled intervention will enable children to reach beyond the limitations of their immediate environment and develop the necessary skills and knowledge to progress in their reading skills acquisition.

The impact of technologies in a philosophical sense is brought into the discussion by John Roder who illustrates how ICT and technology may be typically identified and related to within an early childhood centre. With reference to Lenz Taguchi (2010) the environment in all its elements is seen as playing a vital role in how we relate to young children and technology. In an extract from an extended observation the way in which a young child interacts with the technology of the environment is made apparent, revealing aspects of ‘being’ that lend much to the teacher acting as keen interpreter of gesture as much as participant. Using a digital camera to record the event the teacher also transmits ideas and at other times has to re-evaluate through the technology a child’s actions and intentions.

Jean Rockel, Marisa Bromhead and Donna Bregman, have written on the process and potential of moving from print based media to an online platform for the journal *The First Years Ngā Tau Tuatahi*. This journal, which is published by the University of Auckland’s Faculty of Education, is intended for those working in early childhood education. The question that the authors ask is to what extent open access leads to a professionalization of teachers? Claiming that open access may lead to greater engagement and hence democratisation in debate at both national and international level, the authors cite the increasing number of opportunities for discussion and debate amongst teachers and students. With reference to McWilliam (2010), the way in which increased communication can lead to shifts in notions of learning are seen as part of the role within the scope of the online academic community.

Sean Dolan has written on the possibilities offered by online asynchronous learning. Having outlined the traditional position of learners as receivers, Dolan goes on to discuss the value of asynchronous learning where, owing to the time delay, students develop the facility to consider and reflect on their online response. The development of a community and the formulation of a communal identity are also discussed by Dolan seeing negotiation and the re-negotiation of roles are played out and where topics and learning can be enhanced through reflections on life experience as well as professional experience.



The editorial team of *He Kupu* would like to extend thanks to all of the authors who have contributed to this special edition.

The next edition of *He Kupu* is to be published in early 2012. For those who may wish to contribute a paper to this open edition please contact Dr. Juliette Smeed who will be the editor.

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