

An Activity Theory Approach to Learning and Development in Educational and Research Institutions

Over the past two decades there has been an increased interest in Activity Theory and Vygotskian psychology among researchers in Australia and New Zealand. There have been numerous applications of the theories to such research areas as education, linguistics and commerce. At a sequence of annual workshops on Activity theory and Information Systems, held at the University of Wollongong since 1995, the applications of Activity theory to work in organisations, human-computer interaction, knowledge management, usability testing and web-based marketing have been reported. A Special Interest Group on Socio-cultural and Activity Theory Research was created at the Australian Association for Research in Education (AARE) in 2003. A regional subdivision of ISCAR (International Society on Cultural and Activity Research) which covers Australia, New Zealand and South Africa was created in 2002. The first regional ISCAR Conference was held at The University of Wollongong, Australia, in July 2004 where the applications of Vygotskian psychology and Activity Theory to the areas of education and commerce were discussed.

This edition of Outlines includes selected papers presented at the regional ISCAR Conference. The authors are a diverse group of researchers across Australia who share interest in the socio-cultural and activity theory approaches to studying important contempo-

rary real world problems. This set of papers is indicative of the breadth and commonality of the processes of active learning and development whether in the school classroom, in settings of tertiary education, or in solving real world problems in work place at a local or international level. In spite of the utterly different areas of human practices, explored in the selected papers, there is a common theme that connects and brings them together. This relates to the need to take a dynamic and holistic approach to research into issues of learning, doing and development that occur not only within educational, professional and research institutions but also across their boundaries into society as a whole.

The issues of effective learning and quality teaching have been a recent concern of Australian educators. Researchers have found the socio-cultural theory to be fruitful in advancing their understanding of learning and teaching as a complex process inseparable from its social, cultural and historical contexts. As Vygotskian theory places emphasis on dialogue and co-construction of knowledge, it helps educators' understanding of the quality of teacher – child interaction. The metaphor of scaffolding, commonly regarded as based in the theory of Vygotsky, is often used to capture the nature of support and guidance in learning. While the popularity of the metaphor of scaffolding is growing, the paper of Irina Verenikina argues that the community of its users needs to be aware of the essential characteristics which make scaffolding qualitatively different to traditional direct instruction.

The multi-level contexts of learning are addressed by Marilyn Flear and Jill Robbins, researchers from Melbourne, who apply socio-cultural approach to studying the connections between the school, home and community in teaching young children. Their research demonstrated a significant gap between home learning environment of Australian children of low socio-economic status and their practices of schooling based on the middle-class discourse. They conclude that the deficit model needs to be overcome when bridging the gap between home and school environments and the household funds of knowledge need to be looked at. The authors have explored an interesting way of assisting school teachers tuning into the child's home learning experiences through photographing and discussing everyday home and community activities that represented literacy and numeracy practices of the child.

The complexity of social contexts of an Australian teacher's professional development has been demonstrated by the group of re-

searchers from the University of Sydney, Sue Gordon and Kathleen Fittler. They applied activity theory to explore the contradictions and barriers in a teacher's learning when engaging in an innovative science project.

Learning and development are now a crucial part of the modern work place, which is in a constant state of change as sophisticated technologies create diverse and flexible ways of working. This volume contains two papers that address issues of development in the complex environments of contemporary organisations. One group of researchers (Joseph Meloche, Helen Hasan and Angelo Papakosmas) deal with the challenge of preparing tertiary information systems students for their role in a future world where they may need to support workers in a distributed virtual environment. Another group (Alanah Kazlauskas and Kate Crawford) take an activity view in analysing the role of an expert and research community in mobilizing necessary knowledge to carry out the high profile expert work of anti-dope control among elite athletes.

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Guest editors