## **E**DITORIAL **P**REFACE

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Following the last issue of IJANTTI, which was a Special Issue on ANT and Education, this issue also contains several education-related articles. With the growth of interest in this topic it is likely that we will have another Special Issue on ANT and Education in 2012.

The first article in this issue: Performing Actor-Network Theory in the Post-Secondary Classroom is by Andrea Quinlan (from York University), Elizabeth Quinlan (from the University of Saskatchewan), and Desiree Nelson (also from the University of Saskatchewan). In the article they remark that teaching innovative schools of thought calls for innovative methods of instruction, and investigates the challenges associated with the teaching of Actor-Network Theory. It proposes a creative pedagogical approach of 'performing' ANT in the classroom using a small case study of an instance where a theatrical method was employed in an undergraduate classroom to teach Annemarie Mol's 'The Body Multiple'. The article argues that it is only through innovative teaching methods that ANT can be effectively explored in the classroom.

Also related to ANT and education (and also to socio-technical research methodologies), the second article is by Tas Adam from the School of Management and Information Systems, Victoria University, Melbourne, Australia. Its title is: A Petri Net Model for Analysing E-Learning and Learning Difficulties. Adam notes that Petri Nets are tools for the modelling and analysis of the behaviour of systems and that analysis of the Petri Net can then, hopefully, reveal important information about the structure and dynamic behaviour of the modelled system. The article argues that Petri Net concepts (when used qualitatively) are not fundamentally different from those of ANT. The original research that this article is based on was undertaken using an actor-network framework to develop a model for e-Learning for students with Learning Difficulties. This article explores the qualitative use of Petri Nets to supplement this ANT treatment.

The third education-related article: Deconstructing Professionalism: An Actor-Network Critique of Professional Standards for Teachers in the UK Lifelong Learning Sector is by Jonathan Tummons from Teesside University in the UK. Tummons notes that the problematisation of the professional standards for teachers in the UK lifelong learning sector tends to focus on the discourses that the standards embody: discourses that are posited as being based on a restricted or technicist model of professionalism, that fail sufficiently to recognise the lived experiences of teachers within the sector both in terms of professional knowledge and competence, and professional development. This paper looks at shifting the locus of problematisation away from what the standards might mean, to how the standards are physically assembled or instantiated. It concludes by suggesting that a first point of problematisation rests not in the discourses that the standards embody, but in the inherent fragilities of any material artefact that has the intention of carrying meaning across spatial, institutional or temporal boundaries.

In an entirely different area the next two articles deal with socio-technical research methodologies.

The fourth article: Knowledge Conversion Processes in Thai Public Organisations Seen as an Innovation: The Re-Analysis of a TAM Study Using Innovation Translation by Puripat Charnkit and Arthur Tatnall from Victoria University, Australia, looks at two different models of innovation. The article uses data collected for a study undertaken in the mid-2000s using the Technology Acceptance Model (TAM) to investigate knowledge conversion processes in a Thai Government Ministry and re-analyses this making use of the power of actor-network theory. After outlining the original study and its findings, an analysis is made of how an Innovation Translation approach differs fundamentally from one using the Technology Acceptance Model.

The final article, by Stasys Lukaitis from RMIT University, Melbourne, Australia, is titled: *Applying Hermeneutic Phenomenology to Understand Innovation Adoption* and, as its title suggests, looks at approaches other than ANT to framing technological innovation. The paper considers at phenomenology and hermeneutics as research traditions and proposes a philosophical basis for their use. It goes on to propose an iterative research process model that meets the needs of socio-technical research into technical innovation.

A future issue of *IJANTTI* will look at various other socio-technical research methodologies with a comparison to ANT. Articles in this issue will also provide example of how these methodologies can be used. More article of this type will be welcome.

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Arthur Tatnall is an Associate Professor in the Graduate School of Business at Victoria University in Melbourne, Australia. In his PhD he used actor-network theory to investigate adoption of Visual Basic in the curriculum of an Australian university. Arthur's research interests include technological innovation, history of technology, project management, information systems curriculum, information technology in educational management and electronic business. Much of his research is based on the use of actor-network theory. Arthur is a Fellow of the Australian Computer Society and active in the International Federation for Information Processing (IFIP) as Chair of IFIP WG9.7 – History of Computing, Chair of IFIP WG3.4 – ICT in Professional and Vocational Education and a member of IFIP WG3.7 – Information Technology in Educational Management. He has published widely in journals, books, book chapters and conference proceedings and recently edited the Encyclopaedia of Portal Technology and Applications, and Web Technologies: Concepts, Methodologies, Tools, and Applications for IGI Global. Arthur is also Editor-in-Chief of the International Journal of Actor-Network Theory and Technological Innovation, Editor-in-Chief of the Journal of Education and Information Technologies and Editor of the Journal of Business Systems, Governance and Ethics.