

## Chapter 21

# Viability, Sustainability, Scalability and Pedagogy: Investigating the Spread of Real- time, Rich Media Technologies in Australian Universities

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### ABSTRACT

*In a two year project called the Leading Rich Media project, the implementation of rich media technologies in Australian universities was investigated from the standpoints of viability, sustainability, scalability and pedagogy. Over half of all universities responded with several respondents from each institution providing rich data concerning how implementation is planned, funded, maintained and administered. The silences in the investigation were interesting, with the project team discovering a surprising lack of current scholarly publications available to inform their work. Other silences in the data led them to conclude that there is a policy and strategic planning void in many institutions which could threaten best use of emerging rich media technologies such as desktop videoconferencing and other synchronous communications technologies.*

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## INTRODUCTION

In Australian higher education institutions technology in teaching, learning, administration and research is washing over the sector in ever diverse waves. Since the onset of the initial online learning wave earlier in the last decade, we have seen increasing use of the internet in Australian universities for teaching and learning, research and administration. Most recently, there have been increasing uses of multi-media and social networking technologies and rising demand for synchronous communications. However, little evidence is available to show how the adoption of synchronous technology is strategically planned for positive impact on organisational efficiency as well as to enhance the social experience of staff and students.

Our *Leading Rich Media Project* (Funded by ALTC, The Australian Learning and Teaching Council) has begun to unpack this context by investigating the implementation of real-time, rich media, communications technologies from points of view around sustainability, viability, scalability and pedagogy. The project is founded in educational change theory and practice. It uses the concept of the 'professional community' as a support structure for the project. The mediating variables which are critical to mobilising the sector for change are the shared knowledge and expertise of the existing stakeholders and others in universities, partner institutions and the corporate sector, nationally and internationally.

Thus, the project team set out with the intention to form a community of practice comprising technicians and others using the technology, to quantify how Australian universities plan for and implement technologies, and to investigate emerging pedagogies.

The project methodology is based in the educational change literature because the generalised failure of educational change initiatives over the last 30 years (Fullan, 2007), shows us that a strong basis in educational change theory and practice

provides a useful lens through which to analyse the adoption of rich media technologies. The approach to managing the project uses Sergiovanni's (1998) concept of the 'professional community' as its conceptual framework because his notions of community encapsulate the values required for success: expertise, collegiality, professional obligations, norms and conduct to leverage deep and enduring change. The shared knowledge and expertise of the stakeholders is utilised through a virtual community of practice which includes a wide range of staff in universities and partner institutions, particularly the Australian Academic Research Network (AARNet Pty Ltd). In order to operationalise this proposal the project leaders chose to assume the role of integrators in the Competing Values Framework devised from the substantial body of work in management literature, most recently by Vilkinas and Cartan (2006). The project leaders oversee the project from this perspective in order to support and expand a functioning professional community which can support sustained change. Thus, their roles include aspects of each of the elements within the four foci of the framework: people, task, external and internal. Using this framework in the hope of success, the project leaders have consciously dealt with change through regular videoconference meetings, collaborated to obtain resources and attempted to look after the people who are the community of practice while getting the job done (Vilkinas & Cartan, 2006).

The evaluators for the project have been involved regularly throughout the life of the project and provided expertise from methodological and technological perspectives derived from their expertise nationally and internationally. The project leaders have been grateful for their engagement and acknowledge this. Similarly, the support and collaboration of AARNet management and members of the AARNet videoconferencing network has been ongoing since their early work on videoconferencing futures which preceded the project (AARNet Pty Ltd, 2006).

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