Chapter 15

Making it Rich and Personal: Crafting an Institutional Personal Learning Environment

Su White
University of Southampton, UK

Hugh Davis
University of Southampton, UK

ABSTRACT

Many of the communities interested in learning and teaching technologies within higher education now accept the view that a conception of personal learning environments provides the most realistic and workable perspective of learners’ interactions with and use of technology. This view may not be reflected in the behaviour of those parts of a university which normally purchase and deploy technology infrastructure. These departments or services are slow to change because they are typically, and understandably, risk-averse, the more so because the consequences of expensive decisions about infrastructure will stay with the organisation for many years. Furthermore across the broader (less technically or educationally informed) academic community, the awareness of and familiarity with technologies in support of learning may be varied. In this context, work to innovate the learning environment will require considerable team effort and collective commitment. This paper presents a case study account of institutional processes harnessed to establish a universal personal learning environment fit for the 21st century.

INTRODUCTION

Contemporary practice in the use of technology has been evolving rapidly in the early years of the 21st century. There has been considerable progress in network technologies, miniaturisation and telephony services. These changes have made an impact on practice and thinking across all types of computer applications ranging from those which are concerned with large-scale organisational and infrastructural issues through to smaller scale personal and mobile applications.
The trend in business and commerce deployment of large-scale computer systems has been to move away from single centralised monolithic architectures towards shared, distributed, architectures. Individual use of technology for the majority in post-industrial countries has become widespread bringing about greater access to personal computers, laptops, netbooks and mobile devices. For many it has led to behaviours which integrate personal technology use into everyday behaviours, extending across the whole range of individual activities; life, leisure and learning. In less developed countries, mobile technologies and distributed architectures plus new business models have enabled or accelerated technology adoption because of the reduction and management of front-loaded infrastructure costs.

However, while individuals can be agile in their response to technology changes, organisations are typically more constrained by the heritage of past decisions and previous investment. In addition organisations can find that they are required to provide consistency over time (in software, platform or infrastructure) for large numbers of individuals with differing needs and requirements. For the organisation these factors can tend to slow the process of change, so that in a time of rapid technological development and adoption the gap between everyday practice and organisational provision tends to increase.

A growing understanding of these difficulties has emerged at the University of Southampton. It has fired an institutional ambition to provide a replacement for parts of the existing technology infrastructure to be known as the ‘Southampton Learning Environment’.

This ambition has been influenced to some extent by contemporary development in the modelling of Personal Learning Environments (PLEs). The context is the increasingly widespread use of the social web, increasing understanding of the applications and affordances of Web 2.0, and effective use in our School of Electronics and Computer Science of ‘linked data’ for educational and associated administrative applications.

As well as being influenced by external technological developments, the requirements for this system have been derived following extensive analysis of existing practice across the University of Southampton. The university initially engaged in an institution-wide e-learning benchmarking exercise that was followed by a large-scale survey of the student experience of technology.

At the same time a set of colleagues concerned with the management of teaching and learning across the institution participated in a national Higher Education Academy (HEA) Enhancement Academy designed to assist organisational change. This latter initiative helped provide some additional impetus required to developed policy to bring about changes in our current practices associated with the digital learning infrastructure. This academy sponsored innovation and change was led by the university director of technology-enhanced learning (TEL) and formed part of a wider network of changes introduced under an umbrella initiative titled the ‘Curriculum Innovation Programme’. Thus prepared and armed with a large amount of information the University of Southampton has begun designing the “Southampton Learning Environment” (SLE) as a virtual, adaptable, and innovative environment fit for the next ten years.

LOCAL CONTEXT

The University of Southampton was an early adopter of technology for learning and teaching based on personal computer networks. Prior to the web in the early 1990s the university made an extensive commitment to the use of a locally developed hypertext system called Microcosm. It embarked on an ambitious project to establish a ‘campus-wide structure for multimedia learning’ (White, 1993). Colleagues across the institution developed approaches to resource-based learning which were subsequently incorporated into mate-