### Implementing Learning Support Systems

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#### INTRODUCTION

Kearsley (1998) writes that "technology is often seen as a quick fix, a siren song," and warns that "educational technology is a distraction ... from what matters most—effective learning and good teaching." The approach taken often seems more in the vein of entertainment than education, with television-type material creating an expectation of how information will be presented; the linkup of the Internet and television through streamed video may just exacerbate this.

It is our view that information technology (IT) is unlikely to create empty institutions delivering distance learning, but is more likely to create distanceless learning, which is actually more accessible to all potential students. What this implies, and few in the academic professions yet understand properly, is that the whole business of delivering teaching is likely to be transformed in a way that has not happened for generations. While it is possible to develop IT-based approaches that, to some extent, mirror traditional methods of remote learning by isolated individuals and which has little or nothing to do with lifelong experiences or expertise, most academics will find themselves forced to confront very basic questions about what it is that they are trying to achieve and how they might best go about achieving those desired outcomes.

What seems certain is that delivery systems are likely to change the role of academics in higher education. Quite what those changes will be depends upon closely observing current developments and exploring what works and what does not work. What follows is an attempt to pick out some of the issues which arise from the attempt to use one particular IT delivery platform (Wolverhampton Online Learning Framework, or WOLF) at one institution over four semesters. WOLF exhibits the fundamental components of a virtual learning environment (VLE), in which learners and tutors participate in "online" interactions of various kinds,

including online learning, collaboration, teaching and delivery.

#### THE ROLE OF TECHNOLOGY

One of the major problems we faced was that of creating a culture shift in terms of understanding what technology is and what it might achieve in higher education. The shift to focus more on learning outcomes in recent years may make this process less painful, but the development of IT delivery platforms requires academic staff not only to rethink what they deliver (Should I amend that lecture, since students did not appear to understand the argument?), but also how they deliver their content (What kind of activity will enable students to understand the argument?). In the short term, it is likely that IT-based delivery systems will be seen as the most appropriate alternative means of delivering content, if only because of the Internet and the massive spread of IT-based solutions in our lives.

Higher education is best seen as a process focused on learning in which content is combined in some way with some forms of technology, whether they be "chalk and talk," television broadcast or an IT-based delivery platform. It is our view that the development of technology-based enhancements to formal teaching and learning strategies will assist the education and training sector best, in part supported by Achacoso (2003). In some ways, the changes currently going on are compelling us to examine issues about how we support student learning, an issue which many of us might prefer to ignore (Bensusan, 2001). The most obvious comment, and one heard quite frequently by the authors from less IT-committed colleagues, is, "I simply don't have time to change the way I do my teaching." Behind this statement perhaps there is also a few staff that do not have time or inclination to critically examine or reflect on what and how they do what they do.

Over the recent past, some naive attempts have been made to address these issues. The most simplistic solution adopted by some institutions has been to invest heavily in technology. It is actually a relatively painless, one-off capital cost to purchase a lot of hardware to introduce technology, videoconferencing and large labs of PCs with very powerful software. Significant investment has been made in technology within schools, colleges and universities. While staff have readily taken up e-mail and to some extent the Internet, their "deeper" adoption of the technology in the context of learning delivery has been limited (O'Donoghue, Singh, Caswell, & Molyneux, 2001).

#### **EXPLORING EVIDENCE**

In evaluating a series of pilot modules, a great deal of material has been generated, and the authors are faced with the question of how to present this in some accessible fashion while not imposing too much apparent rationality or coherence to the comments themselves. The main strategy used is to review a conceptual schema from Kolb (1984) and Sulla (1999) and add a third category about the nature of institutional challenges. We then attempt to develop summary conclusions in the shape of key lessons.

The focus of this chapter is on usability issues, whether deployment of WOLF accomplishes either the intended purposes or any purposes at all. We take seriously the note by Hall and White (2001): "It is rather frightening to think that so much money was spent and we are so little further forward." Rather than focus on an institutional review or the views of staff deploying technology, the following draws mainly upon class evaluations by students participating in using the technology.

The following material is drawn from qualitative evaluations by students of modules on five level-2 and level-3 sociology modules (around 250 student module registrations), and experiences in collaborating in delivering modules in the subject areas of English, French, philosophy and religious studies, and occasional work in other humanities subject areas, as well. This group includes a wide range of different approaches to Information Communications Technology (ICT) use; some of these modules were engaging in small "add-on" experiments, while others, especially those in

sociology, reflected progressive stages of development in using ICT to support learning.

## THE GOOD NEWS: THREE SUCCESSFUL INNOVATIONS

One of the very common requests made of the authors in training sessions for staff considering taking up the delivery platform revolves around advantages the platform provides. The adoption of a virtual learning environment enabled students to achieve three tasks of value to their learning and which would not be possible, or so easy, to achieve within conventional classroom situations. This is not exhaustive or exclusive, but provides an introduction to technology-supported learning for reluctant staff. The technology under these three achievements is currently reliable, and while digital video may be a little challenging (especially editing), the use of forums and lists of URLs is straightforward.

- a) **Provision of Streamed Video:** Video streaming might appear, at first sight, to be an ideal way to deliver "content"; indeed, we intend to undertake some experiments in this area with a delivery of summary lectures. In the first case, interest was in modifying the learning process and developing and delivering something not possible by conventional methods; the chosen area was the evaluation of modules by students.
  - Students developed "key points" in mid-module and end-of-module evaluations in workshop groups without tutors present; the conclusions were then videoed by students themselves. Since the evaluations were put online within a few days of creation, students could see that their evaluation work was taken seriously and presented as they wished: The edited video clips were presented to the whole class for approval before upload. This also means that subsequent student cohorts can review earlier evaluations. Students were very enthusiastic about this process, and many chose to see the tutor involved to report how refreshing they found the openness around module evaluation
- b) **Extensive Asynchronous Discussions:** For many years, the authors have adopted a resource-based approach to learning that avoids a set text or

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