

Capacity Building for Sustainable eLearning Development

Dr. I Doherty

Director, Learning Technology Unit
Faculty of Medical and Health Sciences
University of Auckland
Auckland 1023
New Zealand
Ph: +64 9 373 7599 ext 89607
E-mail: i.doherty@auckland.ac.nz

Pauline Cooper

Learning Technologist,
Learning Technology Unit
Faculty of Medical and Health Sciences
University of Auckland
Auckland 1023, New Zealand
Ph: +64 9 373 7599 ext 82596
E-mail: p.cooper@auckland.ac.nz

eLearning Challenges

In a paper on the nature of organisational change, J. Flower writes, “It is useful to ask yourself: what is the unsayable truth at the core of this challenge?” (Flower, 1997). In the case of eLearning within institutes of Higher Education, we will suggest that there are a number of unsayable truths around eLearning strategy and that we need to address ourselves these truths if eLearning is to realise its full potential.

Learning Technology Unit

Since being appointed as Director of the Learning Technology Unit (LTU) in 2004, the LTU has operated 3 project rounds: October 04 – October 05; October 05 – October 06; October 06 – October 07. The number of projects accepted by the LTU across the 3 project rounds is as follows: 15 Projects accepted from 17 submissions in the October 04 project round; 18 projects accepted from 21 submissions in the October 05 round; and 11 projects accepted from 11 submissions in the October 06 round.

The University data base provides us with core course information for the

courses that we have worked on including: total students enrolled on course; student grades ranging form A through to E; Did Not Complete (DNC); and Did Not Sit (DNS). The data provided below relates to full course developments – converting an entire course for flexible or distance delivery – carried out by the LTU during first and second project rounds – i.e. October 04 and October 05 project rounds – and delivered during the two academic years 2005 and 2006. The data does not include other projects carried out by the LTU such as creating discrete learning objects and producing videos for lectures. At the time of writing, data is not available for courses created during the third project round i.e. October 06 delivered during 2007.

During the two project rounds October 04 and October 05, the LTU worked on 17 unique courses. As a result of our work 23 flexible and distance courses have been delivered across the two academic years 2005 and 2006 (6 of the 17 courses have been delivered twice). All of the courses are postgraduate. Student enrolments on the courses range from 164 for postgraduate nursing to 5 students on a postgraduate pharmacy course. Of all courses delivered across the two semesters, two courses show an overall pass rate < 75%. 21 courses show an overall student pass rate of > 75% with 14 of the 21 courses > 75% showing an overall

student pass rate of 100%.

Whilst we have not carried out a comparative analysis with student pass rates on these courses before they were converted for flexible/distance delivery, the pass rates are deemed to be acceptable. We have additional data from project close out documents, student evaluations and Board of Studies Reports that further support the fact that we are delivering courses of an appropriate standard.

Wider Perspective

We have run a query on the Learning Management System (LMS) database that shows all courses offered within the Faculty across the two semesters for 2005 and 2006. The query also returns data on which courses are actively using the LMS together with a breakdown of the features of the LMS that are being used: student enrolments; total announcements; total activity sessions; total online tests delivered; total topics; total files; total discussion; total discussion threads; total discussion messages; total read count of discussions; total web page collections; total web links.

The LMS query (reported July 2006) for Semester 1 2005 and Semester 1 2006 and the LMS query (reported September 2006) for Semester 2 2005 and 2006 show the following: Semester 1 2005, 251 courses in LMS, 173 active = 69%; Semester 2 2005, 244 courses in LMS, 130 active = 53%. The total number of courses in the LMS for 2005 = 495. The LTU worked on a total of 15 courses (i.e. all project work) during 2005 = 3.0%. Semester 1 2006, 254 courses in LMS, 137 active = 54%. Semester 2 2006, 249 courses in LMS, 131 active = 53%. Total number of courses is in the LMS for 2006

= 503. LTU worked on 18 courses (i.e. all project work) during 2006 = 3.6%.

Whilst a more rigorous data analysis – to be carried out in the future – will provide for a more comprehensive picture concerning the state of eLearning within the Faculty we can say at the moment that: of all courses offered with the Faculty, only between 60 – 70 % are making use of the LMS at any one time. We can say that relative to all courses offered with the Faculty of Medical and Health Sciences the LTU has had direct input to a very small proportion of those courses. This is true even if we take into account all work as opposed to complete course conversions. We can also say that all the full course developments that we worked on were postgraduate courses.

The Strategy of Offering Choice

Given the fact that we have not demonstrated improved learning outcomes for eLearning (Clark, 1983, p.448), Ruiz et al (Ruiz, Mintzer, & Leipzig, 2006), Upton (Upton, 2006, p.22) Neuhauser (Neuhauser, 2002, p.112) and Sharmila et al (Sharmila Basu Conger, 2005), there is a great deal of wisdom in talking about learner choice i.e. choice concerning where, when and how students choose to study. An emphasis on learner choice points to the fact that we are in a transitional time in terms of using technology for teaching and learning. Universities, including Auckland University, are re-thinking their strategy around eLearning. The literature indicates that this rethinking includes a focus on the fact that teachers who teach with technology are doing what they have always been doing (Oliver, 2006). Teachers still have to deliver a curriculum, monitor student's progress, provide feedback and so on. This leads us to the first unsayable truth which is that we have not always been clear concerning what we might realistically achieve with eLearning (Zemsky & Massy, 2004).

For example a programme to benchmark eLearning development across the United Kingdom higher education sector represents an early stage of the Higher Education Funding Council for England (HEFCE) ten year eLearning strategy. Two quotations from the pilot study reflect the reality of the current state of eLearning. One participant said that, “the concept of benchmarking implies that we know what we’re measuring, and that just isn’t the case for eLearning.” (Morisson, Mayes, & Gule, 2006, p 585). A second participant said, “For the first time we’ve been made to think quite deeply about what we’re doing – not just about how we support eLearning but about whether we’re deploying our limited resources in a way that really helps students to learn” (Morisson et al., 2006, p.585).

The second unsayable truth at the heart of eLearning is that improved learning outcomes have not been shown. The no significant difference phenomenon predominates i.e. we can show that there is no significant difference in learning outcomes as between face to face teaching and teaching in a more flexible or a distance format. Sarmila et al (Sarmila Basu Conger, 2005) ask why we should care if we can only show no significant difference. One reason to care is that we know that we can deliver teaching in a way that allows for flexibility whilst still achieving the same learning outcomes. This means that we can provide ways for students to study off campus which is particularly important for postgraduate taught courses and for undergraduates who find that they have to juggle a work life with their university life.

The third unsayable truth is that we have not developed any new learning theories. We are making use of existing

theories and applying them in new context. In 1998 Mergel wrote a paper on the relationship between behaviourism, cognitivism and constructivism and instructional design. (Mergel, 1998). In 2005 Siemens wrote that “Behaviourism, cognitivism and constructivism are the three broad learning theories most often utilized in the creation of instructional environments” (Siemens, 2005). Perspectives on multimedia development for eLearning do not offer new educational theories. They present the new opportunities within the context of existing theory, most noticeably constructivism. There is an emphasis on active engagement and discovery. In talking about multimedia development to support teaching and learning Leeder uses the terms “Browse, investigate, explore, choose, and do” (Leeder, 2000). Nunes and McPherson propose moderate constructivist approaches to teaching and learning as opposed to knowledge transference, objectivism and a focus on behaviourism (Nunes & McPherson, 2003). Subject structure and content must be based on sound pedagogical theory. There must be a coherent supported learning framework. Multimedia can then function to enable teaching and learning (Morice, 2002).

The Learning Management System

The fourth unsayable truth concerns the use of the Learning Management System (LMS) or Virtual Learning Environment (VLE). Currently the technology of choice with institutes of higher education remains the LMS. Literature would suggest that use of the LMS is educationally poor. Zhang and Nunamaker refer to the prevalence of static text, PowerPoint presentations and unstructured multimedia in eLearning (Zhang & Nunamaker, 2003, p.215) whilst Zemsky and Massy note a similar phenomenon with respect to distance learning (Zemsky & Massy, 2004, p.7) According to Sheely, “There is much in the literature concerning teaching and learning online that advocates using the online

environment to promote communication and interaction amongst students.

Despite this, much of what happens in practice in this area is focussed on preserving and translating lecture materials to the online environment” (Sheely, 2006, p.769). Based on an in depth study of students experience of eLearning funded by the Joint Information Systems Committee (JISC) in the U.K. Conole et al write that, “. . . Many of the students showed a marked lack of enthusiasm for VLEs (Virtual Learning Environments). Only one person mentioned the VLE as one of the four technologies that they liked to use most, and ten listed a VLE as a dislike” (Conole, Laat, Dillon, & Darby, 2006, p.156). They also say that, “. . . It is more likely to be because in those instances the VLEs are being used primarily as repositories for materials rather than being used in more imaginative ways to support learning” (Conole et al., 2006, p.156).

If we had to point to a reason for this kind of use of the LMS then we might say that lecturers have to “foster their professional careers in institutions that increasingly devote a disproportionate weight to research in comparison to teaching . . . and it is not unusual that lecturers in HE have no formal training in teaching and learning” (Nunes & McPherson, 2003, p.4). With regard to research there is a publish or perish culture within universities (Reeves, 2002). These facts do not encourage a commitment to teaching and learning.

Capacity Building

The unsayable truths at the heart of eLearning point to three key institutional issues. First there must be a clear vision for eLearning within institutes of Higher Education and this requires giving serious consideration to the question whether the

goal is improved learning outcomes or a more flexible approach to teaching and learning. Secondly, the institution must have a picture of the current state of processes that support eLearning (Marshall, 2006b). These processes need to be considered in terms of the idea that “the ability of an institution to be effective in a particular area of work is dependent on their capability to engage in high quality processes that are reproducible and able to be sustained and built upon” (Marshall, 2006a). The focus on processes is inextricably linked with the question of organisational capacity for eLearning where capacity is understood in terms of “the staff complement and resources, as well as its structure, management system and linkages with other organisations” (Horton, 2002, p.4).

The “Quality Manual for eLearning in Higher Education” (European Association of Distance Teaching Universities) is one of a number of eLearning quality manuals that can provide the requisite benchmarks and targets. In terms of institutional strategy, the manual states that a level of excellence has been achieved in an institution when an “Understanding of the role of e-learning is widespread within the institution and there is an institution-wide engagement with the development of policies and plans for its achievement and enhancement” (“Quality Manual for E-learning in Higher Education,”). In terms of staff support for eLearning developments, the stated benchmark is, “The institution should ensure that appropriate training and support is provided for these staff and that this is training is enhanced in the light of system developments” (“Quality Manual for E-learning in Higher Education,”). Whilst we have given two examples from the quality manual, the manual itself covers: strategic management; curriculum design; course design; course delivery; staff support; and student support. Each section of the manual provides, “a set of benchmarks, quality criteria and notes for guidance against which

eLearning programmes and their support systems may be judged. The manual should therefore be seen primarily as a reference tool for the assessment or review of eLearning programmes and the systems which support them" ("Quality Manual for E-learning in Higher Education,"). Alternatives are readily available (Marshall, 2006a; Morisson et al., 2006)

If we are really serious about offering learners choice concerning where, when and how they learn, then as institutions we need to consider our eLearning vision, the quality of our processes and our capacity for sustaining quality eLearning delivery. The Joint Information Systems Committee report "Embedding Learning Technology Institutionally" (Timmis, 2003) identifies issues upon which vice chancellors and management might focus in order to overcome the fact that "learning technology work is marginal in terms of the practices and cultural values of most academic departments" (Timmis, 2003, p.2)

We would suggest that if we focus on vision, quality and capacity then we will be forced to ask penetrating questions that will reveal some unsayable truths to do with the quality of eLearning within higher education. In short, the problem with eLearning is not a lack of theory or a lack of potential technologies. The real problem is that universities do not have sufficient eLearning capacity to engage in high quality replicable and sustainable eLearning processes.

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