

Towards the promotion of effective e-learning practice for academic-staff development in DIT

Introduction

Despite the many challenges facing educators today, as well as the array of teaching paradigms on offer, the principal goals of higher education will always remain the same: higher education plays a central role in the development of human beings and modern societies alike, as it enhances social, cultural and economic development, active citizenship and ethical values ([HEA, 2003](#)).

Globalisation of higher education, increased initiatives aiming at internationalisation, the activities of 'so-called' new providers and various forms of 'borderless' higher education, challenge the higher-education community worldwide and call for new and imaginative strategies. To successfully fulfil their educational, research, and informational functions in the twenty-first century, higher education institutions need to be able to respond effectively to changing education and training needs, to adapt to a rapidly shifting higher education landscape, and to adopt more flexible modes of organisation and operation ([World Bank et al., 2000](#)). Europe, which enjoys one of the highest levels of education and has the necessary investment capacity, still lags far behind the US in the use of the new information and communication technologies (ICTs).

Given the new technologies available to us, the question now is how best can educators accomplish the goals of higher education ([Black, 2001](#)). The continuing interest and emergent delving into e-learning by academic staff in DIT has been directed primarily towards getting to grips with the technology of WebCT. Whether it is to increase student numbers, widen access and meet the demands of lifelong learning, great demands are made on the time of academic staff to keep up-to-date with their training in this area. The cyberspace classroom, however, is quite different from that of the traditional face-to-face classroom, and substantial pedagogical shifts are required for successful online learning.

Over the past number of years, there has been a great dichotomy of opinion as to the value of ICTs to learning, and indeed as to the value of online learning itself. One group declares that online learning can resolve all the problems facing traditional education, while the other insists that 'courses taught on the net are incapable of living up to the standards of the traditional bricks and mortar classroom' ([Institute for Higher Educational Policy, 2000](#)). Research, however, suggests that students prefer hybrid courses to either online-only or classroom-only courses, as they 'receive the benefit of face-to-face interaction with faculty and student while at the same time being exposed to web-based learning paradigms' ([Black, 2001](#)). Furthermore, studies have also shown that students who had access to both modes of delivery performed better than either those studying completely online or entirely in the classroom ([Karr, 2003](#)).

DIT Responds

In recent years, increases in class size, the diversity of student populations and changes in the expectations of students have all acted as stimuli for an examination of approaches to teaching and learning at third level. The DIT's strategic plan, [A Vision for Development 2001–2015](#), identified a need for the development of online courses and encouraged academic staff to develop online materials. Coupled to developments in DIT in the area of ICTs, and in particular to the purchasing of a site license for WebCT, the virtual learning environment (VLE), these stimuli have generally led to a need for different and more flexible approaches to learning. To help teaching staff cope with these new pedagogical shifts, and their potential move into the area of e-tutoring, the Learning and Teaching Centre and the Learning Technology Team have collaborated to share expertise in this area. Together, they have designed an e-learning training programme that aims to combine a systematic process of planning, design, development, evaluation and implementation to create an online environment where learning is actively fostered and supported. The resulting e-learning courses produced should be meaningful not only to learners, but to all stakeholder groups, including tutors/instructors, support services staff and the institution.

The need for academic staff development in ICTs

Many teaching staff adopting the role of online tutor are often persuaded to do so based on a number of misconceptions:

- they already lecture on the subject and have ample notes;
- student contact will be at a minimum, and only via email;

- it is just a matter of beautifying their existing lecture notes for online delivery;
- it's all about facilitation – they do not actually have to teach online, only 'facilitate' students learning.

The adoption of e-learning in the past, therefore, appears to be based on finding ways of presenting lectures and tutorials through various types of technology without changing very much the function or the content of the lecture. This has led to the situation where any change to the role of the teacher is perceived mainly as a need for greater and more thorough planning and preparation of their lectures, rather than the need to learn new skills.

When teaching with new technology, the most common form of training given to academic staff is showing them how to use the technology rather than how the technology can be used to aid the teaching and learning process. According to Salmon (2000) 'online teaching and learning changes the scope and the competencies we require of academics and lecturers. It changes what we actually do with students.' She goes on to suggest that online teachers do not themselves have enough training to make the online teaching environment successful for productive learners: 'where training is provided, it concentrates on the use of the technology rather than on the role of the online teacher.'

Teaching online requires a different set of skills and a different pedagogy to that of the face-to-face classroom, none of which can be developed quickly or easily. In fact, experts in this area warn against assuming that 'people who can teach face-to-face can surely be expected to teach online' (Rowntree in Salmon, 1998). Managing learning in a VLE demands new and specific skills, and furthermore, tutors also need 'to be aware of the learner-centred nature of online learning environments' (Holland, 1998). Salmon argues that before concentrating on the skills and techniques needed to facilitate online learning, potential tutors need to 'become familiar with the new medium, convinced of its potential educational value and confident to use it effectively for interaction with students' (Salmon 1998). She goes on to suggest that a deliberate training programme is necessary as prospective tutors 'need to understand through experience which techniques will transfer and how they can be deployed'. Such was the theoretical basis for the development and implementation of the training programme in the form of a series of workshops offered generally to DIT academics staff in February and again in April 2003, designed to show how technology can be used most effectively as a teaching tool.

The training programme

There were five aspects to the programme, and each area is here outlined broadly.

Learning theory provides an appropriate theoretical basis for teaching and learning in online environments, and so, in the first workshop, learning theories were explored in some depth to guide the pedagogy in the online environment WebCT. Lecturers attending were afforded the opportunity to differentiate between the main orientations of learning and associated learning theories of Behaviourism, Cognitivism, Humanism and Constructivism, and how each can be applied to the complex world of education. The all-important concept of motivation of students is explored, with practical solutions being offered in a variety of subject disciplines. Learning-style theory was also examined as part of this first workshop, as an understanding of how the individual learns is essential in order to present content online and design activities in a way that enhances the online learning experience of the student. Those attending during the workshop tested their own learning style, discovered what it meant for them, and subsequently examined the types of activities that suit each style in turn.

Using the knowledge of learning theory and different styles of cognitive engagement as a foundation, a second workshop looked at how best to design online learning materials and activities which promote active, meaningful learning. The lecturers ascertained how to plan an online course using a relevant model of instructional design. Linked to this was an evaluation of good and bad approaches to interface design, and the choosing of appropriate learning and teaching strategies to meet the educational needs of online students. Also considered was the discovery of the impact of the practical considerations of plagiarism, copyright and accessibility upon an online course design strategy.

The third workshop was designed to recognise that there are a variety of online communication strategies, and inherent in all is the importance of developing a sense of community and supporting student group work online. In more detail, there was an appraisal of the changing roles of the online student and tutor, and an evaluation of a range of online collaborative activities and resources for specific subject disciplines. The lecturers had the chance to practise using the synchronous chat facility in WebCT through an online role play and discussion of computer mediated conferencing (CMC), as well as using the asynchronous discussion board facility in WebCT through managing a problem situation via online collaboration.

The final workshop was in two parts: firstly, it explored different strategies which can be used in online assessment, coupled with the importance of the role of formative feedback; secondly, it was a summation of

topics covered in the previous sessions, reflecting both upon workshop content and also practical case-study experience in order to evaluate the relative effectiveness of different online materials and courses. Assessment is usually intended to provide both instructors and learners with information on progress and to measure achievement of learning goals. It is also always a popular area for academics to discuss and debate, and by the end of this workshop the participants were aware of how to select an appropriate method of assessing specific learning outcomes in their own discipline, design an objective question in their subject discipline and use the assessment features of WebCT to see how online assessment can effectively manage multiple choice quizzes, as well as other types of questions. In addition, they had the chance to review a variety of other methods of using technology to support the assessment practices in third-level learning and teaching, including e-portfolios and e-projects, online role play and online reflective journals and logs.

Lecturer reactions to date

The evaluative feedback from the initial pilot round was very positive and has allowed us to refine and adapt the materials for the ongoing roll-out of the e-learning initiative at DIT. The main issue to emerge from the evaluation of the feedback was the need for lecturers to be aware that, before developing material for delivery online, one must plan and organise material and activities so that they have a structure; otherwise, as one participant stated, 'it could be unorganised chaos'. Many other participants said of the workshops that they forced them to be aware of the human element of learning, of the real meaning of 'pedagogy', and of the ways in which people learn and collaborate both online and in the traditional face-to-face learning situation, and that this, in turn, would aid them in adapting their course materials accordingly. Furthermore, a WebCT area was developed to accompany these workshops where the instructors posted notes and readings to supplement the workshops. The participants indicated that they found it helpful to have access to so much material that they could read through in their own time and use as a resources as they began developing their materials.

Asked if they had any further comments to make, many answered that they found the workshops very beneficial and that they were now looking forward to spending some time designing a course using the principles for good course design that they had just learnt and making the next academic year more interesting for their students.

The future

The comprehensive e-learning programme started with a mix of face-to-face interactive WebCT training, amalgamated with professional development training in how to teach in an online environment. Current research and development work is taking place to deliver electronically mediated, well-designed, learner-centred, interactive training via WebCT to any interested DIT lecturer, anyplace, anytime.

For further information on these workshops access:

<http://intranet.dit.ie/lit/index.html>. Alternatively, contact the Learning and Teaching Centre at learning.teaching@dit.ie, or the Learning Technology Team at ltt@dit.ie.

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