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The impact of web-based lecturing technology on the processes and outcomes of lectures in HE (0304)

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Various initiatives have started to take place within UK and in other countries on the use of Web Based Learning Technologies (WBLT) in Higher Education. However, there is very little research evidence that aims to gain a better understanding of how WBLT impacts on learning and teaching in different contexts in order to help lecturers to present effective web-based lectures and enhance student learning. This paper will provide an overview of international developments in this area and generate a discussion on key issues that need consideration in using WBLT

Outline Paper

Introduction

Various initiatives have started to take place within UK and in other countries on the use of WBLT in HE. However, it is particularly relevant that our interest in improving teaching practices in HE through new technologies does not cast away the benefits of more traditional methods of learning such as lectures. The paper is therefore concerned to address the following question: whilst Web-Based Learning Technology offers exciting possibilities for expanding the capacity to enhance individual learning and world-wide dissemination of knowledge, is the technological advancement equipped to deliver the outcomes of more traditional methods of learning such as face-to-face lectures?

Previous research on WBLT

Initiatives involving WBLT are being developed in HE institutions across the world. Studies on WBLT in Australia and Singapore found that students generally welcomed the convenience and flexibility of WBLT and were largely positive about the effectiveness of WBLT in supporting their studies. Thus, for example, students said that they had benefited in terms of being able to use web-based lectures to:

- view/listen to lectures they had not been able to attend;
- access lectures at anytime;
- review parts of lectures which they had not understood;
- amend their lecture notes;
- revise for examinations (Gosper et al 2008; Phillips et al 2008; Soong, Chan and Cheers 2006; McElroy and Blount 2006).

However, the reactions of lecturers were mixed, with some lecturers suggesting that WBLT:

- leads to decreases in student attendance, which is linked to a decline in academic performance (although several studies indicate that students who use WBLT continue to value/attend face-to-face lectures) (Soong, Chan and Cheers 2006; McElroy and Blount 2006);
- encourages a transmission model of lecturing rather than two-way communication between lecturers and students;
- reduces the ability of lecturers to 'connect' with students and to inspire and motivate them.

Other research has highlighted the importance of generational issues in understanding lecturers' and students' use of, and reactions to, WBLT (Oblinger and Oblinger 2005, Kennedy et al 2006).

However, there are some limitations of the previous research including:

- Assessments of the impact of the use of WBLT on learning are based on the *perceptions* of lecturers and students.
- The lecture process has attracted little systematic analytic attention.
- Little (or no) consideration is given to cross cultural issues (using data from across countries and institutional cultures) – e.g. how does WBLT work for distance education-learning across cultures (and time)?

VLL/IRLTHE Research

Future research is needed on how the web-based lecture technology impacts on teaching and learning in different contexts in order to help lecturers to present effective web-based lectures. Our research has identified (and is exploring) a range of issues which are critical in this respect. These include:

- the implications of WBLT for the design and delivery of curricula;
- how the use of WBLT impacts on academics' work practices, teaching methods and styles of lecturing (including how practices from educational television production have been adapted to the production and dissemination of lectures);
- the extent to which future WBL should resemble traditional lectures (What are the important elements to retain? Whom this might be important to?);
- the impact of WBLT on student attendance (taking into account other factors including employment and lifestyle pressures);
- patterns of usage of web-based lectures (and face-to-face lectures) by students and the extent to which there is a transition towards a user-centric form;
- whether and how WBLT establishes effective learning environments for students in different contexts;
- the extent to which generational and cross-cultural issues shape the use of WBLT;
- the extent to which responses to these questions depends on educational and institutional change in general (culture of the institution, level of enthusiasm by the lecturers and support that the institution is willing to provide) rather than technology alone;
- the implications of the findings for both the professional development of academic staff and academic policies and practices.

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