Trends in Faculty Use and Perceptions of E-Learning

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ABSTRACT :

A preliminary survey of the use of, and perceptions of e-learning by two faculty groups at Manchester Metropolitan University in the United Kingdom found that the practices, concerns, and issues regarding e-learning, and reform in teaching and learning more generally, which confronted these faculties, were not out of the ordinary and were similar to those found in other comparable organizations. Notwithstanding interest among faculty members in e-learning technologies, especially WebCT, and how they might be able to use it to support existing teaching and learning practices, this survey revealed a general lack of engagement in e-learning and revealed a concern among the faculty groups about its potential. The reasons that were proffered for this weak engagement and poor enthusiasm for e-learning included lack in institutional support, time and resources to undertake such activities, as well as a lack of information, knowledge and expertise in such new e-learning technologies.

1. INTRODUCTION :

With exponential growth in e-learning practices in higher education, there is increasing interest in faculty members' use of, and perceptions of e-learning. While the innovators and early adopters of e-learning have embraced it enthusiastically, the majority of faculty members seem still disengaged and uninterested in e-learning (see Newton, 2003). Many of the reasons for this, including their concerns about poor access to the network, point to the heart of faculty members' dispositions to change, innovation adoption, and general unwillingness to move out of their comfort zones, and develop new skills and competencies in order to be able to cope with new phenomena. It is suggested that engagement in innovative educational practices has tended to render faculty members vulnerable. And more importantly, it has the potential to detract them from the pursuit of their research and other reward related activities (See Bower, 2001 ; McKenzie, et al., 2000).

Innovation in teaching and learning, especially in view of the changing context of higher education is nevertheless, inevitable (Clarke, 2003). The political, social, economic and educational imperatives for our engagement in e-learning now seem to be clear (http://www.dfes.gov.uk/elearningstrategy/strategy.stm). However, without institutional sponsorship, support and appropriate rewards for engagement in e-learning and the pursuit of excellence in teaching and learning at the local level, faculty members are likely to remain disengaged and unenthusiastic about engagement in e-learning or innovative educational practices.

2. INNOVATION ADOPTION IN TEACHING AND LEARNING :

A recent study of innovations in higher education in the United Kingdom examined the responses of educators to the challenges posed by increasing student numbers and diversity, the need for promotion of lifelong

learning and a learning society, and the requirements of employment and citizenship - for more information see http://www.fae.plym.ac.uk/itlhe/summ.htm. This study focused on capturing the experiences of 221 innovators based at 15 universities across the United Kingdom.

The first phase of the study found, amongst several notable observations, that there was extensive use being made of information and communications technology in learning and teaching, which were aimed at replacing or supporting conventional teaching. This was true to an extent that such innovations and their proponents were considered dangerous to conventional teaching practices. For instance, the use of distance learning was accelerating, especially strongly at the postgraduate level, and for both on-campus and off-campus students. The study found that among the innovators, there was widespread emphasis on the importance of the support of senior management, which many felt was not always forthcoming. Strong emphasis also was placed on the importance of funding support. Even in situations where centralized policies and procedures in relation to supporting innovations in teaching and learning had existed, staff remained suspicious of the seriousness of the intent expressed in these policies and decision-making.

The subsequent in-depth case study of selected institutions from this sample, detected the presence of a 'culture of teaching and learning' or a 'culture of research', or a mixture of the two, but not a 'culture of innovation'. Not surprisingly, the researchers concluded, that institutional cultures are difficult to analyze, given that they are the result of often widely different staff and student attitudes, competing interpretations of policy, as well as competing commitments (to the institution, the discipline, to research, and to teaching and administration). They argued that middle managers were seen to be crucial to the implementation of institutional policies on teaching and learning. Furthermore, that successful practice in teaching and learning and relevant policy implementation often depended on reliable monitoring

procedures. This study suggested that major obstacles to innovative developments in teaching and learning include the emphasis on research and the Research Assessment Exercise, staff attitudes based on tradition and unquestioned assumptions, and student resistance to change as a result of pre-entry expectations and pressures, for example, from part-time employment which placed limits on the time available for learning.

3. POLICY IMPLICATIONS FOR INNOVATION ADOPTION :

The foregoing study argued that while various institutions were independently developing their own policies for recognizing innovative developments in teaching and learning, they would benefit from targeted funding and sponsorship of the pursuit of excellence in the area. It is no surprise that successful innovation in teaching and learning is going to be possible where a balance with research is maintained, and research that enhances teaching and learning is recognized, promoted and rewarded. The report of this study argues that the future of innovation in teaching and learning has to be seen in national, institutional and individual terms, particularly taking account of the needs of those at the point of contact with students (Rogers, 1995).

In summary, the study suggests that innovation in teaching and learning is most likely to thrive when :
- The innovator has encouragement or support from senior management, and where resources for engaging in such innovative activities are made available;
- An institution has a clear policy establishing parity between research and teaching and learning, and where the policy is reflected in practice; and
- Colleagues and people in authority show an interest in disseminating the outcomes of innovation in teaching and learning.

On the other hand, innovation in teaching and learning is likely to be obstructed in the presence of :
- Low esteem of teaching and learning,

compared with research;

- Lack of recognition and interest in the excellence in teaching and learning by colleagues and people in authority;
- Institutional or other policies and plans laying down firm directions that preclude individual, alternative initiatives; and
- Excessively bureaucratic procedures for approval, support and resources for teaching and learning.

The study suggests that it is imperative that institutions of higher education, in reviewing the policies and practices governing research, teaching and supporting learning (which comprise their core functions), must seriously consider the long-term implications of employment attributes of their graduate, their participation in lifelong learning and contribution to the society in general.

4. CONTEXT OF THE CURRENT STUDY :

This paper reports the results of a much smaller study into e-learning practices and provision in two Faculty groups at Manchester Metropolitan University in the United Kingdom. The respective Learning and Teaching Committees of the two Faculties at the University carried out this survey in order to inform their e-learning and teaching plans and also coordinate their staff development activities. It would be useful to examine the findings of this study in view of the findings of the larger UK-based project study described.

Manchester Metropolitan University (http://www.mmu.ac.uk/) in the North West of England is a large organization with a varied population that attracts students from a broad range of backgrounds and countries. The university comprises seven campuses, five in the Manchester area and two at Alsager and Crewe (MMU

Cheshire) in the south. The central Manchester campuses form part of the largest higher education campus in the UK and one of the most extensive education centres in Europe.

The two Faculty groups that were included in this study were MMU Cheshire and the Faculty of Community Studies, Law and Education. Table 1 summarizes the data on the study sample for the two faculties. The numbers reported in this table represent frequency counts. Responses from five departments at MMU Cheshire and five departments in the Faculty of Community Studies, Law and Education have been included in this analysis. The numbers of questionnaires returned from the two faculties are about equal, but the number of students in the two faculties is quite different. This reflects of the enrolment patterns in the courses whose coordinators returned their survey forms.

5. USE OF ONLINE RESOURCES TO SUPPORT E-LEARNING :

Figure 1 reports the percentage of respondents and their use of various types of online opportunities. It shows that the most widely used resources, across both Faculties, are 'directing students to useful URLs' and 'directing students to library Internet resources'. The practice of placing study materials on servers and shared drives for on-campus use is fairly prevalent in MMU Cheshire. Many respondents across several departments in both Faculty groups suggested that they either do not use or do not find useful the provision of a WebCT site, or a non-WebCT based site. Some use is being made of WebCT for formative assessment however, there is little interest in using WebCT for summative assessment. Few reported using WebCt for communication between staff and students.

Table 1 : Study Sample

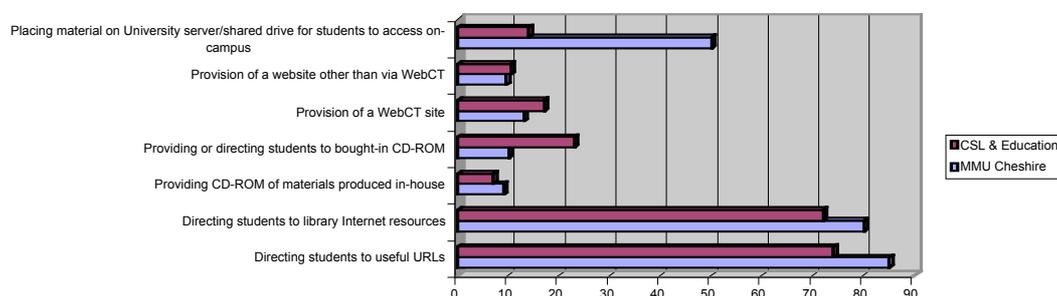|	Faculty: MMU Cheshire	Faculty: CSL & Education
Number of departments	5	5
Number of respondents	178	161
Number of students involved	8, 820	15, 641

Figure 1 : Percentage of use of online resources to support e-learning in the two faculties

When asked to indicate online resources which they believe would enhance their teaching, respondents expressed most interest in being able to provide online 'handouts and materials that are currently provided on paper, material that is currently not delivered on paper, self-testing exercises for students, and materials that are currently provided on the student common drive'. Other items of interest suggested for inclusion were 'online collaborative learning exercises, audio and video clips online and opportunities for students to showcase their work online'. The one thing they all seem to be less sure about is 'web-based formal assessment'.

6. CURRENT USE OF, AND KNOWLEDGE ABOUT WEBCT :

WebCT is currently, the preferred course management system for e-learning that is supported by the University. Figure 2 shows current knowledge among respondents about WebCT for each Department in the two Faculties. It reveals the presence of a great deal of awareness in all departments about the presence of WebCT as a course delivery platform for e-learning. In some

Departments such as Law, there are many who have heard of it, but claim to have little practical knowledge. Many have received some training in the past and many have heard of it. Notably, every respondent from the department of Environment and Leisure Studies is using WebCT. The survey revealed plenty of interest in the Faculties (across all departments) in getting to know how to use WebCT. Many of the respondents reported interest in a 'basic introduction to WebCT', and 'how to set up and administer a WebCT site'.

7. BARRIERS TO WEB-BASED PROVISION :

Figure 3 shows that the most heavily loaded factors that are seen as barriers to faculty engagement with Web-based learning are those which are at the top of the list of items that were presented to them in this question. These include 'the lack of time to develop materials', 'lack of knowledge and understanding of WebCT', 'lack of technical support', 'concern about their own IT skills', 'concern about student ability to use WebCT', and 'concern about accessibility for students'.
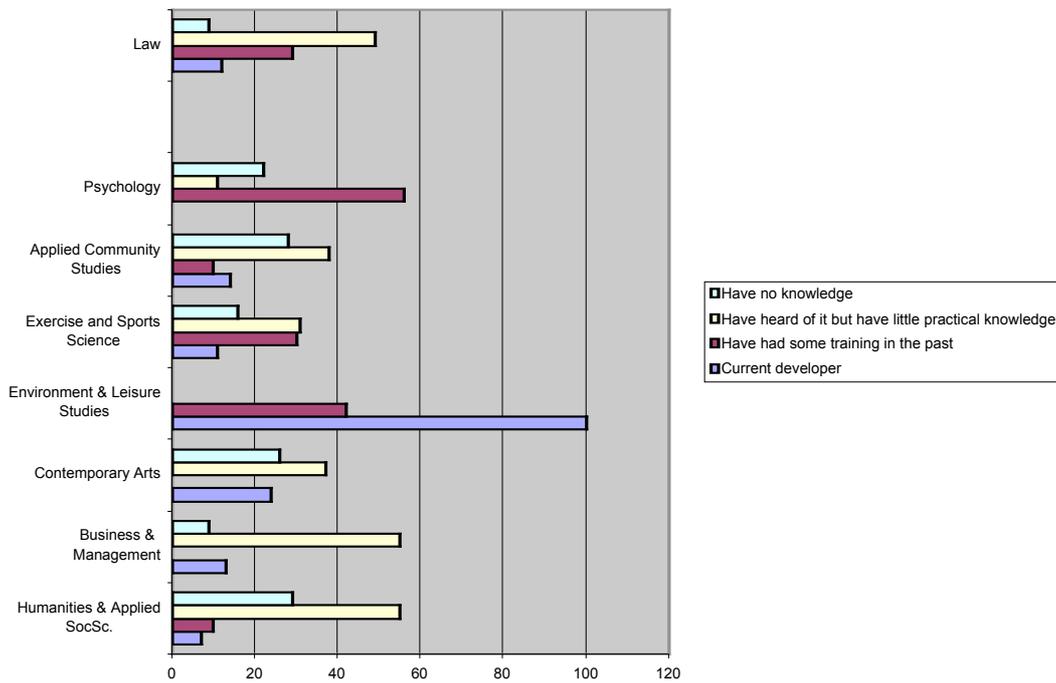
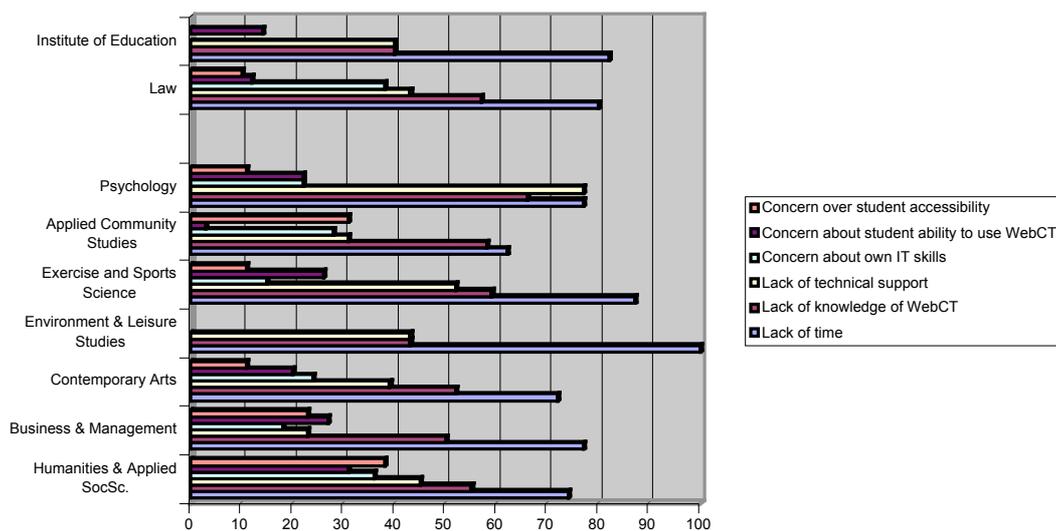Figure 2 : Current use of, and knowledge about WebCT (percentage of respondents) across departments

Figure 3 : Barriers to web-based provision (percentage of respondents) across departments

8. DISCUSSION :

This paper examines trends in faculty members' use of e-learning technologies (especially WebCT), and their perceptions of e-learning in general, at a large metropolitan University in the United Kingdom (i.e., Manchester Metropolitan University). It is based on a survey of e-learning practices in two of the faculties at the University. While e-learning has been identified as a priority within each Faculty Learning and Teaching Plan at the University, this survey revealed a rather poor uptake of e-learning in two faculty groups (MMU Cheshire and the Faculty of Community Studies, Law and Education). However, the practices, concerns, and issues regarding e-learning, and reform in teaching and learning more generally, in these Faculties, are not out of the ordinary and are similar to those found in other comparable organizations (Newton, 2003). The reasons given for the lack of such inertia and interest in e-learning, are also commonly known and familiar. In the main, these are related to a lack of a clear and singular message emanating from senior management down to middle managers and through to staff regarding the implications and rewards for their engagement in e-learning and innovative teaching and learning practices more generally.

9. USE OF ONLINE RESOURCES TO SUPPORT E-LEARNING :

According to this survey, commonly used online practices in support of teaching and learning comprised directing students to useful URLs (i.e., web addresses), and directing students to library Internet resources. It is rather alarming to note that very few of the respondents in the survey wanted to use these resources in the future. Large numbers of respondents said that they do not use these resources currently, or do not find them useful. It would have been useful to ask respondents (the survey did not seek this information), why they might have felt that directing students to useful URLs and Internet resources was not a very good idea.

In MMU Cheshire, placing student study materials on shared drives for access by on-campus students is clearly more prominent. It is very likely that this practice at MMU Cheshire is a result of the availability of shared server facilities in the faculty. It can be argued that this is an important service that allows teachers and departments to give students ready access to essential study materials without them having to come to lectures to receive such materials. However, placing study materials on shared drives, in itself, does not comprise a particularly novel teaching and learning innovation. Indeed, several of the respondents suggested feeling somewhat uncomfortable about placing materials online for fear of alienating their students by passing printing costs onto them. They were also concerned about declining lecture attendance when student study material is placed online.

Another statistic of some concern regarding use of online resources is the large numbers of respondents across several departments suggesting that they either do not use or do not find useful the provision of a WebCT site, or a non-WebCT based site. It is important to probe a little deeper into the reasons for these observations. If faculty members are positively disposed towards making available study materials online via shared drives, then what are their objections to hosting a WebCT or even a non-WebCT site for their course when such websites will not only allow them to place students study materials online but do much more in support of their teaching and student learning? To what extent is this related to faculty members' concerns about the skills that are necessary to build and maintain such sites? The vast majority of the respondents in this survey claimed to have no more than very basic technical skills and are concerned about the availability of technical support in this venture. Many also expressed concerns about their students' ability to cope with WebCT.

10. CURRENT USE OF, AND KNOWLEDGE ABOUT WEBCT :

WebCT is currently the preferred course management system that is supported by the University. This survey found that large numbers of respondents, except for those from Environment and Leisure Studies, do not currently use WebCT, although the majority have heard of it and many have received some training in it. Moreover, those who do use WebCT, mostly use it for putting their handouts and slides online. Further exploration into the reasons for these practices would be most useful in aligning resources and planning further WebCT related activities for staff.

Respondents suggested that WebCT ought to be regarded as a support for teaching and learning, not necessarily as a replacement for student contact and real-time student-lecturer as well as student-student interaction. This is a legitimate concern and it points to the need to consider the teaching and learning functions of the institution in a holistic way, as opposed to what might be fashionable at the time.

A good deal of use is being made of WebCT for formative assessment, for instance in the Humanities and the Social Sciences. That is encouraging and ought to be reinforced and showcased. There was very little interest in using WebCT for summative assessment. It would be worth investigating this further with a view to adopting some University-wide approach to allay any fears there might be about security.

Very few academics reported using WebCT for communication between staff and students, which is surprising when that facility is considered as one of the key strengths of online learning technologies (see Salmon, 2000). What could be the reasons for this? The reason that they readily suggest is lack of time to develop these skills, much like the reason they suggest as a barrier to enhancing and improving their teaching practices with web-based provision. While it might be argued that teaching academics have been allocated preparation time as part of their normal time allocation for teaching, these are nevertheless, legitimate concerns for faculty members in comparable institutions. Time and resources have to be made available if any serious uptake of e-learning is envisaged (Lockwood, 2001). Meaningful ways of addressing these are with targeted faculty development activities that focus attention on strategies for designing and moderating online discussions (see Robinson, 2001 ; King, 2001; MacLachlan-Smith & Gunn, 2001). And indeed there is much to learn and a lot known about online education. See for instance the work on this subject being carried out by Salmon (2000; 2002) at http://www.atimod.com/e-moderating/. Failure to approach this sort of staff support systematically is sure to lead to a great deal of poor practice, which will result into increased student and staff frustration all around. This could lead to large numbers of academics withdrawing from such innovative practices altogether (Oliver & McLoughlin, 2001).

There is some concern (ascertained from open-ended responses), that students prefer printed notes as opposed to materials on the web because of the costs of printing these out. This too is a legitimate concern that needs to be addressed, and in fairness to the students. Remarks that student lecture attendance tends to decline when their material is placed online, probably says a lot more about the need for that lecture then student tendencies. There is no disagreeing that a good lecture can be a very powerful instructional strategy just as a poor lecture can be a demoralizing event for both, the students and the teacher. Study materials that can be placed online or handed out in print form, should be provided in that form and the time that is taken up in presenting the material verbatim could be more wisely spent in engaging students with that material.

Some of the comments such as 'the development of debating and presentation skills are only possible in a classroom', and that 'this subject is not suited for web-based delivery' begins to make one wonder about the real reasons for not considering the opportunities that e-learning technologies might be able to afford. Central to this is the issue of teacher's perceptions, and

perspectives about teaching and the subject matter content. Desirable changes in these directions require a great deal of effort over time (see Wicker & Boyd, 2003). Obvious possibilities include showcasing the work of the innovators in order to demonstrate what is possible as well as encourage and reward their efforts more publicly.

Serious attention needs to given to incentives and motivations for adopting online learning. Besides the political, social and economic imperatives for reforming our learning and teaching practices, we need to be very clear about the educational imperatives for adopting e-learning. The reasons for any such engagement have to be educationally driven. These educational reasons for the use of e-learning ought to be made very clear to all, most importantly to the academic staff and the students. The issue with this is not at all about whether e-learning is better than face-to-face teaching or vice versa, but what combination of teaching strategies are going to best meet the needs of your current and future student intake, and the demands of workplace that they will be hopefully employed. That is most surely, an educational concern.

In sum, the adoption of any particular educational delivery system needs to be approached systematically and systemically. We should think back to what the reasons were for bringing students and faculty together in a campus-based lecture and tutorial environment, and consider carefully, if that model of teaching and learning is still appropriate. Can these approaches to learning and teaching continue to be supported as they were in the initial stages of their adoption? If not, then what kind of educational model and accompanying infrastructure support is necessary for teaching and learning in contemporary higher educational settings? These are useful questions to ask.

11. Barriers to Web-Based Provision :

It seems like that this question had pre-empted the responses by the way it was presented to faculty members. Or perhaps the question rather accurately reflects the mood of academics about using technology in their teaching? The most heavily loaded factors that are identified by faculty members as barriers to their engagement with e-learning are those, which were at the top of the list of items that were presented to them in this question. These are 'lack of time to develop materials', 'lack of knowledge and understanding of WebCT', 'lack of technical support', 'concern about their own IT skills', 'concern about student ability to use WebCT', and 'concern about accessibility for students'.

I wonder, if these would be the reasons they would identify, if they were not offered these choices. What might be revealed by a grounded analysis of such things like the perceptions of academics towards teaching and learning in higher education, their engagement with e-learning, and their perceptions of existing course management systems? This is kind of research would be useful to carryout.

Nevertheless, many of the concerns identified by faculty members in this survey are also found in other similar organizations and all of these comprise real and serious issues, and which need a comprehensive institutional response. See for instance Bower (2001), and McKenzie et al. (2000).

At the heart of this response will have to be a consideration of the form and function of the teaching and learning transaction that an organization can, and needs to be able to support. Invariably, this will comprise consideration of numerous stakeholders and a very complex set of issues. As far as academic staff members are concerned, the issues that would need attention are rewards, workloads, support and training to venture into new directions (Latchem & Lockwood, 1998). In most instances, the longstanding existing reward and infrastructure support systems governing academic life and work will not suffice. And a partial approach will not do either, as it will lead to conflicting messages. A comprehensive institutional response and sponsorship is essential if sustainable reform is to be achieved in teaching and learning.

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