Exploring The Usefulness Of New Technology With New Students:
a case study

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Background

In traditional campus-based universities it is recognised that one factor for student success is that students are physically present, and that therefore one way of encouraging student involvement is to attract them to spend more time on campus. At London Metropolitan University, our students could not be expected to prolong their presence on campus physically due to their multitude of commitments and its inner city location. However, it may be possible to get them to engage with university life virtually.

The idea behind that goal is that students would be encouraged to develop their online skills whilst at University, and the lecturing staff would be role models for this approach. The paradox with this approach is that some students will not maximise their learning opportunities and participate without the carrot of assessment reward. One answer lies with the more popular virtual learning environments (VLEs), such as webCT, endorsed by university management, which give lecturers the ability to track students, to watch them and to monitor their progress.

Our solution differs from this – we were looking to develop a "professional practice" approach, the key premises of which are:

1. We should be involved in the development of learning technologies not necessarily to enhance or improve student learning but because that is what professionals now do;
2. Students will learn how to use communication and information technologies because they will see us and other people using them more than being taught how to use them;
3. Students will learn best when they realise that to be effective socially and professionally they need to have a web presence.

This approach is derived from the work of Lave and Wenger (1990) and their analysis of situated learning. They argue that significant learning takes place not through conscious educational activities but through being around people who are more advanced in the area of activity. They looked at various forms of apprenticeship, for example, becoming a midwife in Mexico, but also include a study of becoming members of alcoholics anonymous. From their empirical examples they posit that learning is the process of becoming a member of a "community of practice" and

takes place through the process of "legitimate peripheral participation". This notion, they observe, "has led us to emphasise the sustained character of developmental cycles of communities of practice, the gradual process of fashioning relations of identity as a full practitioner…" (*ibid*.: 121). What we are seeking to do is to provide students who take our module with the opportunity to experience "legitimate peripheral participation" through being involved in the development of a website.

Educational context

The Dearing Report (NICHE, 1997) envisaged a changing role for the lecturer within our new technological world. Lecturers, it contends, "need to adopt new pedagogical approaches in order to maintain the quality of their modules." Bennett (2002) concludes that as class sizes have risen, and staff/student ratios have worsened, coping with this new situation has required fresh thinking *vis-à-vis* modes of delivery of instructional materials and novel approaches to the management of very large classes. However, several issues need to be confronted.

Resistance to online teaching can come from both staff and students. Talbott (cited in Rudestam & Schoenholtz-Read, 2002) highlights the apprehension of lecturers who anticipate losing status and power. For Noble (2002) the concern is that by the increasing commodification of education *per se*, that is that the educational experience has been disintegrated and distilled into "discrete, reified, and ultimately saleable things or packages of things". The first step is the assemblage of the module into packages – learning outcomes, syllabi, lectures, lessons, exams - commodities which, for Noble, barely reflect what actually takes place in the educational experience, and "lend an illusion of order and predictability to an undetermined process" (op cit).

Research by Mick & Fournier (cited in Rudestam & Schoenholtz-Read, 2002) indicates that while successful operation of new technology can lead to a greater sense of intelligence and efficacy, failure can evoke feelings of stupidity and ineptitude for both staff and students. Fear and a lack of self-confidence have a real impact on the student learning experience, and affect that learning. The unequal power relations of educational dismodule can very easily reinforce negative self-perceptions (Sinfield, Burns & Holley 2003).

As Oliver & Conole (1998) comment, "few studies have been able to demonstrate the kind of advantages which have been promised". Hence it is not enough simply to introduce new methods; an evaluation of the impact is also necessary.

The case study

This paper describes attempts to evaluate the use of new technologies within the teaching environment of one module taken by new students at the North Campus of the University. There are limited resources, large classes and time constraints. As many students are recruited through the clearing process, a significant minority start after the induction period.

The student group upon whom this project was based comprised 750 new first-year students, all of whom were studying some aspect of Business. They all had to take a core module called "Business Skills", which consists of a series of lectures and seminars introducing the student to the context of Higher Education and of studying Business in particular (see website http://learning.unl.ac.uk/bx101). To accommodate the class size, identical, one-hour lectures were presented on four occasions during the week. For seminars students were divided into smaller groups of 17/20, loosely organised around the subject area students specialised in.

A team of four tutors (including the authors) who taught the lectures redesigned the module in the light of the previous year's feedback. Seminar staff had commented that many of the students lacked motivation, were unreflective, surface learners and unengaged with the learning process.

Use of a Learning Style Inventory (LSI) had addressed some of the issues (see Pheiffer et al 2003), but it was felt the module needed a more interesting and innovative approach. The module redesign looked to engage both staff and students in a more meaningful learning dialogue. All the lectures were posted onto the module website as PowerPoint slides, together with suggestions for seminar and other extension activities. The module website had direct links into the two main electronic interactive resources: the bulletin and the wikisite. The bulletin board was used as a tool for voluntary discussion of debates on key topics, and also contained guidelines on academic skills. Through the wikisite, students had the opportunity to respond to weekly questions related to module topics; it was also an alternative source of information about the module and the department.
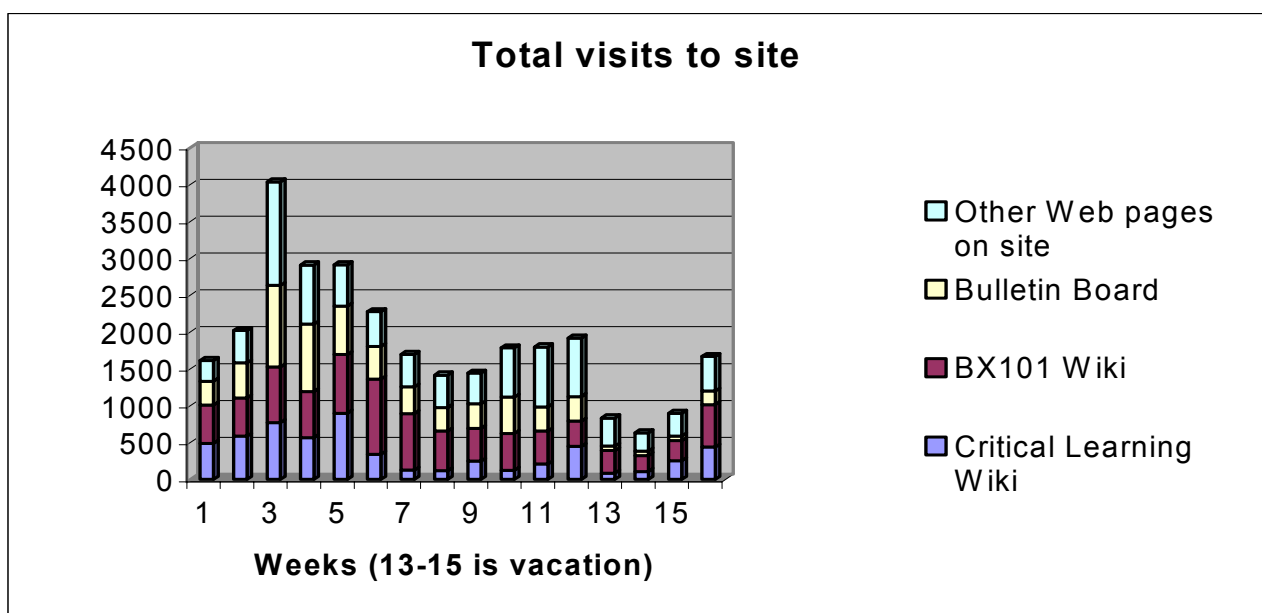
Wiki and Bulletin Board

Wiki comes from the Hawaiian word "wiki wiki", meaning quick. The term has been applied to web pages that are very easily edited using a simple code to create hyperlinks and to format pages. While flexible they tend to be limited to text. (Probably the best place to explore wiki is the wikipedia at http://en.wikipedia.org.) The Bulletin Board we used was also a free product, Funkboard (available from http://www.funkboard.co.uk/), which uses the same infrastructure. The module therefore had a website plus the wiki pages and bulletin board that were hosted on the lecturers' own "critical learning" website.

We established the site in September 2003 and monitored its use over the semester. Originally we monitored it in terms of the visible signs of activity, such as messages posted on the bulletin board - which were slow but regular, showing contributions from a small number of students - and changes to the wiki pages, almost non-existent. At that point we felt that the project was being unsuccessful. However, when we started to look at the statistics for the web site a different picture emerged. It became clear that students were visiting the website and continued to do so regularly over the semester. Averaged out across the semester there were around 1500 instances of accessing the website per week.

Findings and Discussion

In order to review the use of the site we have analysed the web statistics of the site. [1] These figures show that despite the lack of visible participation in the bulletin board and the development

Total visits to site

of the wiki pages, there was a high level of accessing of the site. Students were apparently viewing the site on a regular basis during the term time. Week three is significant because this is the week the lectures discussed the site. The lull in weeks 13 to 15 corresponded to the Christmas vacation.

Interestingly, students were not only viewing the module pages but were looking at the rest of the site while they were there. The balance between accesses to the module pages and the rest of the site remained proportional throughout the semester. The data suggests the potential for creating an on-line community of practice, and so universities should be paying more attention to the opportunities of involving students in virtual communities. We argue that for such communities of practice to evolve without the resistance discussed earlier, they have to be optional and allow for leaders to emerge from the student group. Two significant leaders did emerge: one was already running his own web design firm, the other had not used the internet before the beginning of the semester.

Three main themes emerged from the online work: they pertain to teaching (the staff), learning (the students), and implications for further use (institutional).

Despite an extensive amount of extra material being placed on the website and the wiki site, and despite much prompting, the module team did not use the site. The core lecturing team had one enthusiastic user, two users when it was necessary and one indifferent user. We acknowledge that there was a problem with our own IT skills, and logging on daily and contributing to the wiki and bulletin board were not natural daily activities. Of the larger group of seminar tutors, only one colleague was actively engaged. This has resonance with a study by Gerrard (2002) surveying the training of academic staff. The survey showed that 80% of the training was limited to *how to use* the technology, yet only 5% of academic staff had development or training into *how to teach* using new technology. Further research could be done to explore why the module team members were not more engaged and whether the professional practice approach of sustained development, or a more coercive traditional training approach, should be applied to colleagues.

For the students, the trends are most interesting. Students that "log-on" and leave a message or post a contribution can be seen. Our analysis of the figures indicates that a significant proportion of the students explored the sites, but left no visible trail. These students can be classified as lurkers. According to Denning & Davis (2001), lurking is a term used to describe less active participation in a computer-mediated activity: in other words reading not writing. Traditionally lurking had been viewed in a negative way, conjuring up images of voyeurism. However, in depth interviews had shown that this was not the case, and often uncertainty or shyness were more often factors. Students in the Denning and Davis study, whether participating or not all agreed that lurking should not be viewed as non-participation. In terms of our professional practice approach, lurking equates to legitimate peripheral participation.

With regard to teaching, the tutor role was crucial: by modelling tolerance towards differing styles tutors can affect the views of other participants. Indeed, the tutors often do lurk in all the various online activities – as we did in the Business Skills online arena.

The final theme is an institutional one. One consequence of the merging of two former universities to create London Metropolitan University is the move from campus-based, faculty teaching to departmental teaching. The implication is that from Autumn 2004, this core module discussed here is to be offered to departmental undergraduate students on two sites. Hence, the teaching team wanted to explore whether new, innovative technological tools could be a part of possible

solution to making a Higher Education orientation module relevant, interesting and appropriate for our new entrants.

Our experience leads us to conclude that to a certain extent it did. Students who did take part, either silently (as lurkers) or visibly, commented that they valued non-compulsion, the opportunity to learn and the tolerance staff showed for "non-participants". Implications for further use are that training for both staff and students is essential. Changing the teaching role from the "sage on the stage" (Harasim et al 1995) to sheep dog on the side – by pushing, forcing, coercing students down path on online learning - will not encourage students down the path of exploratory learning. The aim of encouraging students to become independent learners cannot be forced through by over zealous management relying on technology as a panacea to budgetary woes. As Rowland (1993:106) wonders rhetorically, how will you face the central irony of your position: that you cannot give power to your students? They must take it.

Note

[1] The use of web statistics is not straightforward and we agree that they should not be used as a demonstration of the effectiveness of a web site. Web statistics record every time a visitor accesses a page - known as a hit. The problem is that if a visitor just goes from page to page they record a number of hits. Given these problems we have however produced some statistics that we think give a reasonable overview of the use of the site over the 12 teaching weeks to the module, the Christmas break and the final revision week before the assessment of the module.

References

Bennett, R (2002) Lecturers attitudes to new teaching methods, *International Journal of Management Education*

Denning, K and Davis, M (2001) "Almost as helpful as good theory: some conceptual possibilities for the online classroom", ALTJ, vol 9 no. 2

Gerrard, C (2002) Promoting best practice for e-tutoring through staff development, in *Networked Learning Conference Proceedings*

Harasim, L.,Hiltz, S.R., Teles, L., & Turoff, M. (1995) *Learning networks: A Field Guide to Teaching & Learning Online*, Cambridge, MA:MIT Press

Lave, J., and Wenger, E. (1990) *Situated learning: Legitimate peripheral participation.* Palo Alto, CA: IRL

National Commmittee of Inquiry into Higher Education [NCIHE] (1997) *Higher Education in the Learning Society: Report of the National Commmittee of Inquiry into Higher Education.* London MSO and NICHE Publications

Noble, D (2002) *Digital Diploma Mills: The automation of higher education.* New York

Oliver, M & Conole, G (1998) Evaluating communication and information technologies: a toolkit for practioners, *Active Learning*

Pheiffer, G Andrew, D Green M & Holley, D, (2003) Engagement with University Life – Engagement with the Learning Process? Paper presented at BEST conference, Brighton

Rowland, S (1993) *The enquiring tutor: Exploring the Process of Professional Learning*; The Falmer Press

Rudestam, K E & Schoenholtz-Read, J (ed) (2002) *Handbook of online learning: Innovations in Higher Education and Corporate Training*. Sage Publications

Sinfield, S, Burns, T & Holley, D (2003) 'Outsiders looking in or insiders looking out? Widening participation in a post 1992 University'. Paper presented at *Discourse, Power & Resistance* conference, Plymouth University 6/8 April 2003

Biographical note

The authors are members of the 'Critical Learning Group' of lecturers who teach in the Business subject area and are involved in HE research – see the research section of this journal and their website: http://critical-learning.co.uk.

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