

How to Manage the Big Bang... Evolution or Revolution in the Introduction of an MLE?

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ABSTRACT

This paper examines how introducing an institution-wide managed learning environment impacts on the processes of organisational change. City University is used as a case study - interviews with leading members of the institution providing an exemplar of the change process and institutional plans for a future strategy.

Keywords

Managed learning environments, virtual learning environments, organisational change

INTRODUCTION

'Higher education cannot change easily', writes Diana Laurillard, yet, she concedes that it is being 'forced to change' (2002, p.3) and the introduction of wide-scale e-learning to UK higher education (HE) campuses is one of the key drivers of this pressure on institutions to reinvent themselves. Indeed one of the main factors in this process centres around the move from small-scale e-learning initiatives, often using a virtual learning environment (VLE) to centrally managed, joined up systems and processes that are institution-wide through the creation of a managed learning environment (MLE).¹ MLEs are regarded as favourable due to economies of scale and efficiency and because they can 'streamline' the student experience (see Lee (2003)). However, as Britain (2001) cautions the introduction of 'new technology into an organisation will necessarily involve a process of change'; change can even be seen as 'the reason for adopting the technology'.

Yet, whilst there seems to be widespread agreement that technology and change are inextricably linked, particularly in relation to the HE environment, there is less consensus on how such change can be implemented or embraced. A number of models have been put forward to help shape the philosophy and direction of change, such as Laurillard's notion that institutions need to become 'learning organisations' (p.215), but whilst HE institutions are regarded as resistant to change there is an obvious tension here. In addition, many UK HE institutions are fiercely independent of their individuality; as Stiles (2003) notes a 'need for the organisation to become "distinctive" in a changing and competitive [...] sector' (p.2) can be a major driver for reviewing teaching and learning practice and strategy. Boys (2002) reminds us that 'the requirements of scaling-up and integration demanded by an MLE *necessarily* throw into relief the inherent tensions in large complex organisations with different stakeholder perspectives' (p.10).

So where does this leave a UK HE institution in the process of implementing an MLE? Faced with often conflicting internal and external drivers and levers, the introduction of an MLE can seem like a panacea, a placebo or an inevitable consequence of the changing HE marketplace. The aims of this paper are to firstly contribute to this growing body of research evidence on issues surrounding the management of institutional change with specific reference to the implementation of an MLE at City University and secondly to promote the practice of action research as a way of facilitating the management of such change.²

As Jane Seale (2003) argues 'in most accounts of institutional change there is a recognition that successful institutional implementation of learning technologies depends on key individual stakeholders' (p11). Semi structured interviews carried out in recent months with several key decision makers at City University has formed the basis of this research. Although the investigations are ongoing, the paper provides a snapshot of the

¹ When drawing the distinction between 'virtual learning environment' (VLE) and 'managed learning environment' (MLE) we are referring to those definitions as cited in the JISC Briefing Paper 1 (2002a) which defines a VLE as referring 'to the "online" interactions of various kinds which take place between learners and tutors' and an MLE as 'the whole range of information systems and processes of a college (including its VLE if it has one) that contribute directly, or indirectly, to learning and the management of that learning'

² For example Searle (2003), JISC (2002b), Foster et al (1999), Steeples and Jones (2002), Collis and van der Wende (2002)

institution at a critical moment in the implementation of an MLE. It has been suggested that 'there are two basic paradigms for MLE development, one concerned with merely integrating existing systems and the other with rethinking educational and organizational processes' (Boys, 2002, p.10). We might characterize these as evolutionary and revolutionary respectively. Before considering how this applies to City, we consider the theoretical perspective more fully.

THEORY AND METHOD

Much of the growing literature on change in HE in general, including the impact of technology, has been characterised by attempts to map experience and empirical data to models of change. Given the essentially integrative nature of MLEs it is clear that the full-scale implementation of an MLE potentially involves all aspects of educational and organizational processes. Inevitably this embraces the multiple organizational cultures that constitute a modern university. As Adrianna Kezar (2001) has observed 'the need for cultural models seems clear from the embeddedness of members who create and reproduce the history and values, the stable nature of employment, the strong organizational identification of members, the emphasis on values' (p2). Additionally, as the evidence analysed below suggests, social cognition models are relevant to any analysis of organizational change since, at a basic level, there are multiple interpretations of what an MLE is, as well as competing visions of what it can be used for.

As far as the speed of change is concerned a recent UCISA report by Browne and Jenkins (2003) notes that among UK Higher Education and Colleges 'the overall picture is one of evolutionary consolidation'. The previous study carried out by Collis and van der Wende (2002) on the use of ICT in HE in general and the uptake of VLEs/MLEs in particular, concludes that whilst change is indeed slow, 'nevertheless institutions are gradually 'stretching the mould' although 'changes [...] are gradual and usually slow' (p.7). The present study has been framed with reference to both of these aspects - the models and speed of change.

Fullan (1991) has drawn attention to the importance of examining the subjective meaning of change for those involved in the process, pointing out that subjective meanings may be different not only for individuals but for groups of individuals, be they academics, managers or from support services. Since all three groups are (or should be) involved in the rollout of an MLE, fifteen key decision makers, five individuals from each of these areas at City were invited to participate in recorded interviews about the implementation of the MLE. The E-Learning Unit (ELU), charged with leading the e-learning initiative at City, decided to carry out this research in order to help shape its future planning agenda. Whilst there were some strategic objectives established in the institution around e-learning, it was felt that these may not be apparent to all within the organisation or the effects of a wide-scale implementation may be viewed differently. This decision to undertake such action research was triggered in part by a wish to see how senior decision makers in the University perceived the impact of e-learning on core business activities.

Bentz and Shapiro (1998) define action research as:

less a separate culture of enquiry than [...] a statement of intention and values. The intention is to change a system, and the values are those of participation, self-determination, empowerment through knowledge, and change.

By interviewing various stakeholders from the academic, management, administrative and support units within City this research intends to encourage this notion of reflective practitionership. The interview process itself involves a debate about the issues which result from the acquisition of an MLE and provides a forum for the dissemination of information as well as an opportunity for contributing to the decision making processes. Of the key stakeholders initially identified, seven have been interviewed thus far. Whilst there is a reasonable spread of academics and senior managers from both academic and support services there has been no positive response from those with a specifically technical responsibility. Whether or not this reflects a feeling of exclusion from the wider implications of MLE implementation has yet to be established.

Staff from the ELU designed and piloted an interview schedule which focused on the following key areas:

- Implications for infrastructure development and pedagogic direction
- The drivers behind MLE procurement
- Responsibility for producing an e-strategy and perceptions of the role of the MLE in this
- Staff support and development
- Student support
- Strategic vision - evolution or revolution?

Semi-structured interviews were chosen as the appropriate method; such an instrument allows the exploration of shared or contested meanings of some of the key terms and issues involved in the interview process, such as e-learning, MLE/VLE, the future direction of the university and its e-vision. The interviews were recorded and full transcripts made available to each of the interviewees with a guarantee of confidentiality. These interviews were carried out six months into the implementation process over the Christmas period 2003-4.

CONTEXT

City University has been delivering online learning for over four years in a distributed model – certain departments and individuals have been pioneering new technologies, through VLEs and other web-based solutions, whilst other areas have been largely untouched by new e-learning initiatives. The rationale for developing such e-learning offerings has been mixed - from developing new delivery modes to increasing and widening participation rates to experimenting with more innovative methods of classroom delivery. Such an evolutionary developmental model for e-learning implementation is not unfamiliar to other institutions, as recorded by Browne and Jenkins (2003). An UCISA report in 2001 described VLEs as ‘part of a continuum of development’ and their deployment at institutional level as symptomatic of an institution reaching an ‘innovative’ stage of development (p.24). Such a process is mirrored in the experience at City – this is common in pre-1992 universities which are often characterised by a devolved decision-making model.

In 2003, the situation at City radically changed with a high-level strategic commitment to rollout e-learning across the institution. This was evidenced by the establishment of the ELU and the purchase of a site-wide license to an MLE. There were a number of reasons why this change in policy occurred and the development came at an apposite time. Firstly, the pressure on localised initiatives had grown to a level where the initiatives could no longer be sustained efficiently. Secondly, interest across the institution was growing and there was a concern that inefficiencies were occurring through repetition and inadequate resource sharing. Thirdly, a number of other University initiatives to improve City’s ‘e-readiness’ (both from a learning and teaching and administrative perspective) were now in progress.³

The ELearning Unit (ELU) was placed at the centre of the e-learning process by both managing the rollout of the MLE over the summer of 2003 and supporting all staff engaged with online learning in the University. In order to complete this large task in a short time a set of priorities was drawn up including technical implementation and integration; staff development and training; migration of existing material; student support and guidance to ensure that the project achieved its targets. In September 2003, the MLE went live on time and on target with over 70 modules operational to 2,000 students. The experience that the institution underwent in achieving this result in such a short time scale is an important one and one which can provide useful evidence for other institutions faced with a similar situation. These interviews conducted with senior management enabled us to discover the perceptions on the e-learning initiative six-months on.

FINDINGS

The e-learning initiative at City transects the boundaries between academic activities, administrative activities and support areas. In order for the MLE to function efficiently it needs to pull information from all these different systems and act a conduit between the various business processes of the University. Although City is still in the early stages of this implementation, a number of key findings have resulted from the changes experienced by the institution. These can be grouped into the following areas, which loosely map onto the major themes of the interviews listed above:

- Pedagogic direction - the impact of e-learning on existing and new modes of learning
- Operational connections and development – relationships between registry, administrators and academics
- Organisational structure and change – where to situate e-learning, who has responsibility?
- System process – technological constraints
- Professional development – how to educate staff and students
- Strategic vision and perception – what is e-learning all about?

³ These initiatives included the redesign of the University’s degree programme offering into a standard credit-rated module framework with clear learning outcomes and objectives; the rolling out of a content management system to ensure web uniformity and enhanced resource management; the upgrade of the student record system to include centralisation of the assessment, award and progression process; new assessment regulations; and finally the vision of integrating all University systems into a student portal

Pedagogic direction

Despite the relatively early stages of the e-learning initiative at City there has been some re-evaluation of pedagogic models with the advent of online learning. The main principle behind the wide-scale adoption of the MLE has shifted from supporting flexible modes of learning to supporting face-to-face teaching.

However, there are divided opinions as to the effectiveness of online learning on students' knowledge acquisition. There is some feeling that learning will become more student-centred; one senior academic commented that it will 'make people become more student focused because when designing [a] VLE at the centre of that design schedule should be the student's experience'. Another academic argued that 'e-learning can only ever be a subset of teaching and learning' and he was concerned that the primary motivation for the introduction for the MLE was not on pedagogic grounds. Yet, he continued that 'e-learning is part of [the] infrastructural support for teaching and learning'. There was a definite understanding from academic staff as to how e-learning could contribute to the direction of learning and teaching activities within the University. However, a senior administrator was less sure; whilst conceding that e-learning 'supports a strategy for excellence in professional teaching' they did not regard the MLE itself as automatically enhancing teaching and learning.

Whilst there are often debates about whether the technology is driving the pedagogy, our experience is that these drivers need to be considered together. MLEs can facilitate innovation if carefully used but they can also become merely expensive document repositories of PowerPoint slides or Word files. And if the technological infrastructure is not in place to support these modes of learning then the initiative will inevitably fail.

Key lesson: Ensure that a pedagogic focus is maintained at each stage in the project and that this is communicated to all staff, whether academics, administrators or support.

Operational connections and development

One of the key factors in ensuring connectedness in terms of implementation at City has been the location of the ELU within the organisational structure. As part of Library Information Services and ultimately Information Services, communication and operational relationships have been optimised whilst maintaining academic integrity – the head of the Unit is an academic and all other staff have high academic credentials. This has been an important factor in ensuring academic buy-in. Yet locating the Unit within Information Services enables close links with other key departments such as Business Systems.

The short timescale of the implementation process did cause problems for the development of an interface between the student record system and online learning environment. Concern about the rapid deployment of the MLE was expressed by some interviewees. Delays to other projects around the University have had significant impact on the effectiveness of the data transfer process within the MLE.

From the administrators' perspective the introduction of the MLE has great benefits for student administration but the benefits elsewhere are less clear. For academic staff the connections between the pedagogic and administrative are clearer; one senior academic commented 'if I'm using e-learning I can look at how much [the students] are using the materials, when they are using it, I can then tailor the things to meet their needs more carefully'.

The academic staff we spoke to viewed the MLE as integrating these two aspects of their role much more effectively. Whilst it was acknowledged that this may not be time-saving there was a general appreciation of how pedagogic direction could be influenced by possessing a greater handle on student data. Yet this was not shared by administrative staff indicating that there is a perception difference between these stakeholders. This in turn could jeopardise the project as it is as seen as lower priority.

Key lesson: Address operational connectivity at an early stage by considering how the MLE will operate to introduce effective systems for all stakeholders.

Organisational structure and change

Although five of the interviewees had been involved at some stage in the decision to acquire an MLE there was no clear consensus about what the main drivers were behind that decision, other than a recognition that, as Collis and Moonen (2001) express it 'you can't not do it' (ch.2). Among the reasons given for this were the perception that 'we were quite behind and that we've jumped' and the notion 'that we cannot fall behind in this arena'. Additional reasons were an acknowledgement of the growing and changing nature of student demand, including the need to address the lifelong learning agenda but only in one case was there a clear reference to

government initiatives and funding as a factor influencing the decision. Two staff referred to the need to avoid what one called 'disjointed incrementalism' with the proliferation of local initiatives and saw the introduction of an MLE as an opportunity to exert more central control over such developments within the institution, thus preserving the 'brand'. There was some acknowledgement that there might be cost efficiencies, but there is as yet no mechanism for assessing this. One person commented that the decision to purchase the MLE was 'amazingly quick'; another that the decision seemed 'forced through'.

The diverse reasons given for adopting the MLE are reflected in the lack of a clear shared understanding about what a MLE is and how it differs from a VLE. The perception of one interviewee that some senior managers 'wouldn't really know what [an MLE] was' was born out by three others who admitted that they could not really define it, followed by the assertion along the lines that they would like more information.

Key lesson: Provide a clear definition of an MLE and explain the functionality of the system to those stakeholders who are in a position to influence its implementation.

System process

Due to the tight timescale of the project, it was vital that staff within the ELU made use of existing institutional resources and expertise and kept up good channels of communication. A technical working group was established which facilitated this and enabled the ELU to focus on the pedagogic aspects of implementation; staff development; and technical issues relating to the interface. This co-operative model of working was highly successful for the implementation and one which should form the mainstay of the move towards a fully integrated MLE as it enabled a more objective vision to be applied to the process.

Despite this there is some concern amongst academic staff that certain groups in the University regard this as 'a technology systems implementation [project] with no intrinsic interest, not even willingness to be interested, in what the academic pedagogic issues'. There is a need to balance the obvious technological drivers with a clear sense of the pedagogic benefits for the introduction of a large scale e-learning project. Communicating the advantages of using e-learning can be problematic as it is automatically associated with the introduction of technology. In addition, further challenges were presented by the fact that not all the technological infrastructure of the University was ready for this scale of initiative. As one senior administrator observed, the University has a considerable number of IT projects in development and is considering 'a way of evaluating all these projects [and] deciding on the priorities of them' but, it 'is at a very very early stage in that process'. Where will the MLE fit in order of priority? And as one academic argued 'the physical classrooms have [still] got to be very good if you are using a VLE because [...] you have to be able to show it to students routinely [so if] all these things are not right in the physical sense, you cannot use the VLE as a natural part of your face to face lecture'; in turn undermining the pedagogic value.

Key lesson: Institutional e-readiness is vital for the introduction of e-learning successfully.

Professional development

The challenge at City is how to implant the MLE into the consciousness of staff, particularly academic staff. Among these interviewees there was a widespread perception that there is insufficient support for staff development in the use and applications of the MLE. As one expressed it 'part of the issue which hasn't been addressed is actually the skill set of academics and support staff across the institution in order to take [the MLE] forward'. As far as academic staff are concerned the view was expressed by four of the respondents that such development should be delivered as part of the wider teaching and learning strategy, but whether this will be achieved through recruitment, resource provision in terms of time and/or money, the promotion of e-champions in the schools or some combination of these was another area where opinions diverged. With competing demands and pressures lack of time to engage with staff development activities has been a key factor in the uptake or lack of it of staff development sessions. And there is a difference in opinion between staff on how to rectify this. For example, one academic significantly involved in e-learning stated clearly that they felt 'a proper champion system so that we can reward people even if it's on a very small level for being involved' is vital to the success of the implementation. But others disagree, another academic maintained that 'if the reward is a small amount of money or a small fellowship or a scholarship for something, it won't make people do it'. They will only 'do it because they're interested'. And furthermore, an administrator stated they 'I would see it as part of somebody's job to keep up with IT development and if you reward people for it it might give the wrong messages'. So how do we integrate professional development with e-learning into an environment where academic staff may be skeptical of the benefits of such engagement? This is a question which has not been resolved. However, what has been a considerable success is offering staff development to all members of staff, regardless of status, and in a flexible mode of delivery.

Key lesson: Be responsive and listen to the needs of your staff, whilst maintaining a core level of competency to ensure standards are maintained.

Strategic vision and perception

Where to take the e-learning initiative now has been the subject of very different responses. Whilst there was general agreement among the interviewees that there was no clear strategy for the implementation of the MLE, there were divergent views as to whether this was problematic. On the one hand the view was expressed that 'ownership has to be from all parties involved [...] learning information resources are crucial, academics are absolutely crucial' whilst recognizing that 'administrative staff are probably on the fringe'. In contrast is the view stated by four of the interviewees that the roll out of the MLE should be driven primarily by the teaching and learning strategy with input from other areas as required. There was also disagreement as to whether there should be an overarching e-strategy, one view being that 'what you need are teaching and learning strategies, research strategies and so on, and they have e-dimensions'. Set against this is view that 'the e-strategy [should be ...] slightly wider than the teaching and learning component'. To some extent these differences can be mapped to the differences of understanding about what an MLE is.

Whilst most people interviewed regarded e-learning as significant in terms of general technological progression by the University, there were different levels of agreement as to where this would end. Some staff expressed the opinion that you could not afford not to embrace the opportunities inherent with MLE implementation – 'what people don't realise is that this is not choice that we have, it's not a question of deciding whether to do this or not, it's that we have to do it at some level'. Others were more cautious, 'I think everyone will use it but I think some will be faster than others in taking it on board' and regarding uptake as developing no-further than using the technology for a document repository.

There was a definite sense of agreement from both academic and administrative staff that the University needed to consider e-learning in as a business venture. One academic maintained that whilst 'you can separate to some extent the teaching and learning strategy [...] you also need a higher level business strategy that actually then keeps these three things [...] until we can have a strategic approach, e-learning is rudderless'. This was echoed by administrative staff who saw the e-learning process as part of a new strategic direction for the University. It was agreed that the University was at an early stage in the change cycle, but the time was right for a greater strategic direction to be communicated.

Key lesson: Clear strategic directions for implementing e-learning and integrating systems are required, not just in terms of an e-strategy, but making e-learning integral to all strategies.

CONCLUSION

These six key lessons relating to the implementation of e-learning and the MLE have been brought to light through the research interviews with key decision-makers at City. Examining the strategic vision of influential figures in senior management in relation to City's overall commitment to improving its online business systems and particularly how e-learning connects with this vision has provided valuable insight into the process of institutional change within the University. One of the most significant features of all these interviews is the recognition that institutional change is a complex evolutionary process. Whilst the establishment of the ELU and rollout of the MLE system could be regarded as instances of a revolutionary 'big bang' for the University; most of those engaged with the process view this as the beginning of a longer transitional period. Although City has undoubtedly undergone some major change in e-learning provision since the summer of 2003, the ELU and other staff involved with creating the MLE are still working within existing parameters concerning organisational structures, funding mechanisms and perceptions. This therefore limits the revolutionary impact of the 'big bang' of summer 2003 and sees the advent of a 'bedding down' and quieter integration period.

There will be a number of challenges ahead, but the main one for staff involved with e-learning at City will be to keep the momentum going by maintaining that enthusiasm of early adopters whilst convincing and engaging more skeptical staff. And through all this the University will have to communicate a clear sense of strategic direction and commitment. Yet one of the most positive aspects of this process has been the establishment of effective communications between hitherto disparate elements in the organisation and a greater shared sense of ownership of the process of change in the organisation. The over-arching message that came out of all the interviews we carried out was that the e-learning process and this research has made senior decision makers reflect on their role within the institution and the role of the MLE in this cycle of change. And this is perhaps one of the most truly revolutionary, unanticipated outcomes of the e-learning initiative.

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