

34 Developing a Strategic Approach to Using Online Learning in Vocational Higher Education: Using Action Research to Identify Factors Affecting its Adoption by Lecturers

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Abstract

This paper presents a case study of a strategic approach to developing online learning in a vocational university in the United Kingdom. Bournemouth University is no different to many other post-92 universities in the UK in the challenges it faces, which may be described as 'having to do more with less'. A significant example of this is having to support an increasingly diverse student population with shrinking resources. Learning technologies are being promoted to address some of these challenges and their increased use is a key priority within the University's Learning and Teaching Strategy. For the past three years, funding has been made available to support small-scale ICT projects, but their impact has been local rather than university-wide, and the lecturers involved are mainly the technology enthusiasts. The University is now considering how to encourage the majority of its lecturers to move towards adopting online learning. Research suggests that successful and widespread implementation of online learning in higher education, as with any technological innovation, depends on a number of factors. The introduction of a Managed Learning Environment (MLE) at Bournemouth happened concurrently with the re-focusing of the University's Learning and Teaching Strategy, so the opportunity was taken to meet with lecturers to discuss issues surrounding the adoption of online learning. The findings informed the revisions to the strategy. The investigation was situated within the author's research for a Doctor in Business Administration (DBA). The research methodology used was action research and the rationale for adopting this approach for the investigation is explored briefly, identifying some of the issues faced by the researcher in conducting research in her own organisation.

Keywords: online learning; strategic implementation; faculty views

1. The challenges facing higher education

1.1. Introduction

The context for extending the use of online learning in universities is often discussed with reference to a number of external, shaping forces.

The first of these is the broad political drive by governments to harness higher education to the needs of the economy. Through widening access to higher education and by promoting the concept of lifelong learning, more people are being attracted into higher education who would not traditionally have considered going to university. This changing concept of seeing a degree as a route to a job has led to many changes to the curriculum, including the incorporation of vocational and transferable skills (Coaldrake and Steadman, 1999).

The resulting increase in student numbers and growth in the diversity of the student population are additional factors encouraging universities to consider new patterns of curriculum design and more flexible strategies for learning and teaching. These are aimed at increasing access to learning from locations other than the traditional campus, for example, from home and from the work-place, and at times that are convenient to the individual student, not the lecturer. This greater diversity of student background is also resulting in the need to make changes to student support and guidance structures and processes. Students enter university with less well-developed study habits, needing a wider range of study and language support.

However, as the number of students entering higher education has risen, so have the costs, while the corresponding per capita funding from government has fallen consistently for two decades. Universities are forced to seek more efficient ways to deliver education and to generate income from a wider range of sources, for example, from business enterprise. The higher fees contributed by international students, either on campus or in their home location, have become an important source of income, but this, together with home students contributing more to their fees, is resulting in a growing emphasis on customer orientation in universities. Students are one group among a rising number of stakeholders

demanding greater accountability from universities (Coaldrake and Steadman, 1999; Watson, 2000).

Many universities are looking towards an increased use of ICT to address these challenges, and Bournemouth is no exception.

1.2. The growth of Bournemouth University

The specific ways in which these challenges are being addressed by Bournemouth University are a reflection of its history and educational philosophy. Bournemouth University is a vocational university on the South coast of England. It aims to be “a pre-eminent vocational university well founded in terms of educational equality and student appeal;” (Bournemouth University, 2001, p.5). It currently has around 8,000 thousand full time students and 4,000 part time students and about 1000 full time staff. Approximately half are lecturers within seven Schools that reflect vocational areas rather than traditional academic disciplines. The other half constitute management and support staff. One of the largest Support Services is Academic Services, in which the author is located.

The University was originally an institute of higher education, administered until 1988 by a Local Education Authority. Following incorporation it obtained polytechnic status in 1990, and was awarded its charter as a university in 1992. During this time the organisation underwent a period of rapid growth and change, experiencing a highly centralised system of management. For the last seven years, however, following the appointment of a new Vice-Chancellor in 1995, there has been a gradual shift towards a more open and collaborative style of management. The lengthy process of seeking staff views on the development of strategic plans is a reflection of this changed approach.

Since 1995 a process of financial devolution has also been taking place, as budgetary control of resources has transferred from the centre to each School. Schools are credited with income from which they pay their staffing and other direct costs, and contribute to the University’s overhead, including the Support Service costs. This has placed an increased responsibility on Schools and Support Services to provide a sound rationale for their activities and financial allocations.

1.3. Meeting the challenges at Bournemouth

The challenges for universities outlined in 1.1 are being addressed by Bournemouth in a distinctive way with reference to its mission.

In response to the widening participation agenda, Bournemouth has committed to developing higher education through partnerships with local further education colleges. The innovative way in which this is being undertaken has been recognised through substantial funding from the Higher Education Funding Council for England for a project to

develop a common learning infrastructure across the partnership.

Attracting funding through diversifying income streams is resulting in more staff being encouraged and enabled to engage in income generating research or consultancy, which has implications for the way in which learning and teaching activities are structured.

Bournemouth has a well-deserved reputation for innovative approaches to providing student support which recognise the diverse needs of students with disabilities, international students and those returning to study (Capstick and Fleming, 2002; Durkin and Main, 2002). A key element of its vocational approach is to provide students with the opportunity of developing their employment skills and competence to a high level.

1.4. Strategic development of the use of ICT

Learning technologies are being promoted to address some of these challenges and their increased use is a key priority for senior managers at Bournemouth, so attention is being paid to ways in which lecturers may be motivated and supported to use them. It is recognised that strategies for enabling change to occur in encouraging the greater use of technology should take into account issues including organisational structure (Bates, 1997) and the individual preferences and motivations of those affected by the changes (Moore, 1991; Collis, Peters and Pals, 2000). The complex influence of the decentralised nature of academic culture should also be taken into account (Bottomley et al, 1999; Coaldrake and Steadman, 1999; Taylor, 1999)

Two key aspects relevant at the organisation level are the vision and support of the senior management, both at the executive level and within faculties, and appropriate deliberative structures, again at university level and faculty level, where issues relating to online learning may be discussed and policies agreed. The Pro Vice Chancellor Academic, and Heads of Learning and Teaching in the seven Schools in senior posts all act as ‘champions’ of online learning. The Learning and Teaching Development Committee has been constituted as sub-committee of Senate.

Another key contributing factor to developing online learning is the allocation of sufficient funds, both at a central level and in faculties. Initiative funds for past three years has been made available for learning and teaching projects of up to £20,000. These projects must be approved by the Schools and show clear links to their Learning and Teaching Plan.

1.5. Central support from Academic Services

As well as having the vision and the structure to promote change, and a dedicated budget, another key feature to enable innovation to become embedded with the university is the need to provide support through organisational structures

that can respond quickly (Bates, 1997). The location of this educational development support can be provided either through a central unit which services the whole university, through devolved support units established in faculties, or through a combination of both. It has been recognised that the organisational culture of universities leads to very decentralised institutions, yet the very nature of technological innovation demands a whole institution approach to its implementation. This has the potential to cause tension between the faculties and the central units established to implement the change, if not carefully managed (McMurray, 2001).

At Bournemouth a central facility within Academic Services, the Learning Design Studio, was established to provide central support for online learning developments, but Schools also have been provided with funds to support lecturers' innovations. The support staff in the Schools are linked through a communication network facilitated by the Learning Design Studio.

The initial approach to encouraging lecturers to use ICT was to see the various elements of online learning as a set of building blocks from which they could select elements to try, depending on their pedagogical need. These elements included the development of subject web sites, the use of computer conferencing and computer assisted assessment. The impact of this approach has been largely local rather than university-wide, and the lecturers involved are mainly the technology enthusiasts, so the issue of scaling up is being addressed. The vehicle which is being proposed to achieve this is an in-house managed learning environment (MLE) known as BUBBLE.

2. Factors affecting lecturers' adoption or rejection of online learning

2.1. Introduction

The successful and widespread implementation of online learning in a university, as with any technological innovation in an organisation, depends on a number of factors. It takes time to achieve, the technology must be practical to use and supportive professional development must be provided (Somekh, 1998). Other factors influencing the adoption of online learning, identified with reference to research findings from the UK, USA and Australia, include knowing the motivation of your audiences and how the innovators differ from the mainstream majority (Johnston and McCormack, 1996; Steel and Hudson, 2001; Spotts, 1999; Collis et al., 2000).

Changing academic practice is always a complex process, especially at a time when perceptions of academic work are changing (Martin, 1999; Coaldrake and Steadman, 1999; Taylor, 1999). In order to promote change at the individual level, appropriate staff development for new teaching methods should be in place (Bates, 1997; Cox et al. 1999). Since

academics are being encouraged to learn to use the technology and develop appropriate pedagogical approaches, in the face of uncertainty or scepticism about its value to student learning and its impact on the academic workload, development opportunities should concentrate on changing conceptions of learning and learners, and then demonstrate how technology may be used to promote learning. (Taylor, Lopez and Quadrelli, 1996, pxiii). But even if an appropriate staff development programme is in place, academics need to see that putting effort into changing their teaching practice is valued and that the effort is rewarded.

2.2. Context at Bournemouth

The introduction of the MLE, BUBBLE, happened concurrently with the re-focusing of the University's Learning and Teaching Strategy, so the opportunity was taken to meet with lecturers and their managers to discuss issues surrounding the adoption of online learning. Information gained from these interviews was used to inform the revisions to the strategy, both in its written form and in its implementation.

This paper presents the findings from that investigation and includes an examination of the role of online learning as viewed by lecturers in a vocational university.

2.3. Identifying lecturers' views about online learning

The aim of the study was to explore lecturers' views about online learning and how Bournemouth, particularly in the context of its vocational curriculum, might encourage its further use. Within the overall strategy of an action research approach, a range of methods was used to collect data from different sources. These including a group interview with lecturers from different subject backgrounds, individual interviews with senior managers and observations of meetings during which a pilot version of an in-house MLE was demonstrated. This papers covers the analysis of the group interview and the BUBBLE meetings to provides the information. The eight lecturers who took part taught vocational subjects underpinned by science, social science and humanities disciplines from six of the seven academic schools. They taught on undergraduate and postgraduate programmes. Four were female and four were male. They were invited to take part on the basis of their use of online learning, as known to the author. Their experience and motivations covered explorers, non-explorers, transferers and non-transferers (Collis, Peters and Pals, 2000).

2.4. Approaches to the use of online learning

When asked what the term 'online learning' meant to them, the lecturers gave a range of examples which revealed, initially, that they conceived of it predominantly as a tool for knowledge

acquisition. One suggested that “learning on the web is no different to learning from a book”. However, as the discussion continued, they began to suggest that they also perceived it to be an important tool for developing students’ skills, both cognitive and transferable. More examples were given which related to the ways in which students could develop communication and collaborative skills, as well as enhance their IT skills.

Two lecturers had used computer conferencing with their students. Initially, both had used it as a means of providing their lecture notes to students, but one admitted that although all her notes were on the web, she was “not quite sure that this was an advantage”. This was because “all I am doing is replicating what I am telling them, and its taking me double the time to put them on the web”. The second agreed with her and reported that she had decided not to make her lecture notes available next year but to use the conferencing tool as a vehicle for discussion and debate, not as a ‘depository’. Another lecturer described how her students had set up their own web site and shared resources through it. Online learning was viewed as one among many tools for teaching. It was referred to several times by the lecturers as ‘complementary’, and ‘a tool’. The primary task for the lecturers was seen to be identifying the learning outcomes that had to be achieved and then making use of different teaching strategies to help students achieve those outcomes. One summarised this view when he suggested that “It (online learning) is a parallel and not a replacement mechanism and it doesn’t suit all subjects, lecturers, learning outcomes or students.”

They also suggested that online learning could benefit certain groups of students. Apart from recognising that online learning can support distance learning generally, it was acknowledged that it can also provide access to resources for students who find it difficult to get to the campus, for example, mature and part-time students, and that it could also be used to support students on work placement. There was also some recognition that other individual preferences might be met. Online learning was seen both as providing an opportunity for those who found it difficult to voice their opinions in seminars, but also possibly as a limitation for those who were good at face to face debate.

However, the lecturers were concerned that students, who came to university for the social experience, would start to question the value of a course at Bournemouth if they came to a campus university and found much of the learning undertaken online. The concept of the student as paying customer of the university was also evident, one lecturer reported that “I have noticed over the past three to four years an increase in students demanding one to one relationships. If they don’t get it in the seminars, they will go and stand outside your door until they do get it.”

2.5. How to encourage the use of online learning – views from the lecturers

The lecturers were then asked what factors encouraged or hindered greater use of online learning at Bournemouth. The ones they identified included the need to see the University’s overall strategy for online learning, having the time and resources to engage with it and feeling supported in their attempts to use it. These were similar to those identified in other studies (Bottomley et al., 1999; Collis and Moonen, 2001).

The strategic direction for online learning at Bournemouth was questioned several times during the interview. There was a suggestion that the strategy was neither clearly articulated, nor was there an obvious rationale for its use. Furthermore, some existing online developments were criticised because they appeared to have been introduced without thought for how they should be used.

2.6. Support for developing online learning

None of the lecturers suggested that online learning should not be part of the university strategy at all, but there was a strong feeling among them that its use should be regarded as complementary to face to face teaching. The choice of when and how to use it should be left to the individual lecturer. They did recognise that perhaps they did not know enough about how it might be used most effectively and that it was difficult to find out what was going on in the rest of the university. There was strong agreement from the group with the lecturer who said that she had never been in such an isolating job.

They recognised that there was a need for more support to help them use online learning. A specific kind of support was referred to, in which technical expertise was combined with the ability to design curriculum support materials. The term ‘consultant’ was used, implying someone to whom you could hand over your subject content and who would not only turn it into an online resource but also give you guidance on the best way of using online learning to achieve your goals. This was linked to the idea of recognising that lecturers should be valued as specialists in teaching and was contrasted with the recognition given to those undertaking research, “That’s important in terms of how you feel valued. There is a tendency, certainly in my School, if you are not doing research you are looked on as if you are something on the bottom of someone else’s shoe, but actually, there are people doing research who really shouldn’t teach.”

2.7. Ease of use of the technologies

There were relatively few concerns expressed about actually using the technology itself. The more technically knowledgeable innovators expressed concern about narrow bandwidth and the need to accommodate a range of web browsers, which prevented easy access to online resources by

students from off-campus in the short term. The scale of facilities currently on-campus was also recognised as a limiting factor. One lecturer recognised that just putting lots of material on the web was resulting in students printing it out, but he could see that his ideal of being directly online with students in a classroom required more terminals in more seminar rooms than available at present. The cost of continually updating IT equipment was also recognised as a constraint. The need for students to be able to upload their own web-sites to show-case their work was considered critical in several Schools.

2.8. Pedagogy of online learning

As the discussion above indicates, given the commonality of conceptions of learning and teaching afforded by the vocational nature of the disciplines taught at Bournemouth, there appear to be few subject areas where online learning would be regarded as totally inappropriate. Lecturers would seem to support its use, providing it complemented more traditional approaches in a balanced approach. It was recognised that it could contribute to knowledge acquisition and concept formation and that it could facilitate collaboration among students, as suggested by Coomey and Stephenson (2001).

The principle negative pedagogic factor attached to online learning appeared to be that it could lead to the reduction in face to face contact between lecturers and students, which might be detrimental to the development of students' vocational skills and might alienate students looking for the campus experience.

The findings from the interview were augmented with notes taken at meetings between Academic Services and each of the seven School executives at which a pilot version of BUBBLE was demonstrated. An even clearer expression of the underpinning value of a constructivist approach to learning emerged. Lecturers suggested that BUBBLE seemed to present a very transmission focused model of teaching. They asked "Is it just an electronic notice-board and "Where does the learning come into it?" or "How can interaction in the learning and teaching process be made more evident?" and commented that "It looks very content driven". In the light of this, they sought reassurance from the BUBBLE developers that they would consider how to design in opportunities for interaction to take place, and include spaces where collaborative activity could take place, and where students could display their best work on their own web-sites.

3. Using the findings to inform the development of an appropriate learning and teaching strategy and its implementation

The analysis of this data provided some key insights to inform the revision to the learning and teaching strategy. It

suggested the four themes for the Learning and Teaching Strategy and it indicated some appropriate terminology to use. The analysis also suggested implications for the implementation of the strategy to promote the further use of online learning. The first of these was to re-schedule the development of various components of the MLE and the second was to look for ways in which engaging with online learning could be made more rewarding for lecturers. This led to the development of Bournemouth's first Learning and Teaching Fellowships scheme.

As a result of this research study, the revised Learning and Teaching Strategy was shortened to just four key priorities that could be explained more readily to academic staff as follows:

1. Emphasise the need to increase flexibility, with online learning as a component of that
2. Focus on enhancing collaborative learning and working practices, to develop employability skills
3. Encourage a supportive, student centred approach
4. Acting to maintain the highest quality of learning and teaching underpinned by an evidence-based approach

The findings also identified that, to be acceptable to lecturers at Bournemouth, online learning has to be seen as complementary to a range of other learning and teaching approaches. Within the strategy this was emphasised in the context of extending flexible learning opportunities, which could include online learning but was not synonymous with it.

The need for greater flexibility in learning and teaching as a way of securing greater efficiency in teaching delivery was also emphasised, but it was not suggested that online learning alone would achieve this, but that it could be achieved through a broad approach to curriculum redesign.

As Sfard suggests: "It takes a common language to make one's position acceptable, or even comprehensible, to another person." (Sfard, 1998, p9)

The study also highlighted some implications for Academic Services in the continuing development of the MLE project. Greater priority was given to developing a conferencing facility rather than concentrating solely on document publishing, in order to facilitate the creation of a learning environment that facilitated participation and collaboration, as well as knowledge acquisition.

Many UK universities have begun to address the issue of recognising and rewarding lecturers for the effort of engaging with the agenda, and the funding recently received from HEFCE for implementing human resources strategies has often been used to establish fellowships or prizes. Criteria were developed for Bournemouth's Learning and teaching Fellowship scheme which draws on this funding.

4. The value of action research as a method of inquiry

The study reported in this paper is part of on-going research undertaken by the author for a Doctorate in Business Administration at Bournemouth University. Action research was adopted because the starting point for the research was grounded in a real-world issue, it was attempting to identify the factors influencing the adoption of online learning in a vocational university. If the findings were going to be useful in improving practice, they had to be derived from a collaborative approach involving the author not as neutral observer but as participant in the research. Action research takes its strength and value in researching professional practice because theory is generated from practice (Coghlan and Brannick, 2001; Ellis and Kiely, 2000; Greenwood and Levin, 1998). It is also a cyclical process of planning, acting and evaluating. This paper considers findings from the first cycle of the research activity.

The tensions arising from undertaking research in my own organisation were similar to those identified by Coghlan and Brannick (2001). All the way through the study it was often difficult to define the research question separately from the management task of revising the learning and teaching strategy. This led to the strong possibility that that bias influenced the findings. In the data collection, lecturers may well have told me what they thought I wanted to hear, and in the analysis, I may not have been sufficiently objective. There was also the tension between the need to present findings in the public domain while respecting the confidentiality of those involved. The process of undertaking the research did lead to greater insight into relationships with colleagues and an understanding of the differing perceptions about the nature of work in a vocational university from the standpoint of academic staff and support staff. This insight has led the development of work in the second cycle of the research to investigate further the nature of the academic culture and the climate for change at Bournemouth.

References

- Bates, A.W., 1997. *Restructuring the university for technological change*. Paper presented to the Carnegie Foundation for the Advancement of Teaching, 18-20 June, London. Available at: <http://bates.cstudies.ubc.ca/>
- Bournemouth University, 2002. Strategic Plan 2002/3-2005/6.
- Bottomley, J., Spratt, C., Rice, M., 1999. Strategies for effecting strategic change in teaching practices: Case studies at Deakin University. *Interactive Learning Environments*, 7 (2-3) 227-247.
- Capstick, S. and Fleming, H., 2002. Peer assisted learning in an undergraduate hospitality course: second year students supporting first year students in group learning. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 1 (1) 69-75 (available online at <http://www.hlst.ltsn.ac.uk/johlste>)
- Coaldrake, P. and Steadman, L., 1999. *Academic work in the Twenty-first Century: Changing roles and policies*. Canberra: Higher Education Division, Department of Education, Training and Youth Affairs. <http://www.dest.gov.au/archive/highered/occpaper/99H/academic.pdf>. Last accessed 28th January 2002
- Coghlan, D. and Brannick, T., 2001. *Doing action research in your own organisation*. London: Sage.
- Collis, B., Peters, O., and Pals, N., 2000. Influences on the educational use of the WWW, Email and videoconferencing. *Innovations in Education and Teaching International*, 37(2) 108-119.
- Coomey, and Stephenson, J., 2000. In Stephenson, J. ed. 2000. *Teaching and learning online: pedagogies for new technologies*. London: Kogan Page.
- Cox, M., Preston, C. and Cox, K., 1999. *What motivates teachers to use ICT?* British Educational Research Association Annual Conference, University of Sussex at Brighton, September 2-5 1999.
- Durkin, K and Main, A., 2002. Discipline-based study skills support for first-year undergraduate students. *Active Learning in Higher Education*, 3 (1) 24-39.
- Ellis, J. H.H M. and Kielly, J.A., 2000. Action inquiry strategies: taking stock and moving forward. *Journal of Applied Management Studies*, 9 (1) 83-94.
- Greenwood, D. J. and Levin, M., 1998. *Introduction to action research: social research for social change*. Thousand Oaks, Cal.: Sage.
- Johnston, S. and McCormack, C., 1996. Integrating information technology into university teaching: identifying the needs and providing the support. *International Journal of Educational Management*, 10 (5) 36-42.
- Littlejohn, A. and Cameron, S., 1999. Supporting strategic change and cultural change: the Strathclyde learning technology initiative as a model. *Association for Learning Technology Journal*, 7 (3) 64-74.
- Martin, E., 1999. *Changing academic work: developing the learning university*. Buckingham: SRHE & Open University Press.
- McMurray, D.W., 2001. The importance of 'goodness of fit' between organisational culture and climate in the management of change: a case study in the development of online learning. *Association for Learning Technology Journal*, 9 (1), 73-83.
- Moore, G.A., 1991. *Crossing the chasm*. New York: Harper Business.

- Sfard, A., 1998. On two metaphors for learning and the dangers of choosing just one. *Educational Researcher*, 27(2) 4-13.
- Somekh, B., 1998. Supporting information and communication technology innovations in higher education. *Journal of Information Technology for Teacher Education*, 7(1) 11-31.
- Spotts, T.H., 1999. Discrimination factors in faculty use of instructional technology in learning and teaching: the perceptions and experiences of teaching staff. *Educational Technology and Society*, 2(4) 92-99.
- Steel, J., and Hudson, A., 2001. Educational technology in learning and teaching: the perceptions and experiences of teaching staff. *Innovations in education and Teaching International*, 38 (2) 103-111.
- Taylor, P., 1999. *Making sense of academic life: academics, universities and change*. Buckingham: SRHE & Open University Press
- Taylor, P. G., Lopez, L. and Quafrelli, C., 1996. *Flexibility, technology and academics' perspectives: Tantalising tales and muddy maps*. Canberra: Higher Education Division, Evaluation and Investigation Program, Department of Employment, Education and Youth Affairs, Australian Government Publishing Service.
- Watson, D., 2000. *Managing strategy*. Buckingham: Open University Press.

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