

**The Pathfinder Journey**  
**Buckinghamshire New University**  
**(previously Buckinghamshire Chilterns University College)**

**Submitted 30 May 2008**

**Context and Background**

We gained university title in 2007 and became Buckinghamshire New University, having been previously Buckinghamshire Chilterns University College. Our roots are in the furniture industry in the late nineteenth century. We have always supported students from a wide range of backgrounds, with many part-time evening routes to degrees for locally employed people. Our mission and strengths continue to address two key items on the national agenda: widening participation and employer engagement. We are at the forefront with Work Based Learning (WBL) activity, and are currently expanding with an increased provision for short courses, part-time courses and more off-campus provision.

In particular, the Faculty of Enterprise and Innovation has developed its courses across the globe during the lifetime of this project, particularly in Crowd Security and in Close Protection, with e-learning being the cornerstone of its delivery. Support for the students on these courses has provided key case study material for the project, as have the nursing courses. Our nursing students benefit greatly from e-learning: pre-registration students particularly for support during placements; post-registration students taking occasional modules whilst working full-time.

Staff supporting these students initially used mainly the Virtual Learning Environment (Blackboard) and email, but they have developed the use of other technologies during the project, such as reflective blogs. We started using Blackboard in 2002, with central provision of basic training on the software provided by Learning and Information Services and faculty champions providing staff development for their colleagues in the appropriate use of Blackboard. This was supplemented by seminars provided by a central department responsible for quality enhancement and continuing professional development.

We are in the process of redeveloping our High Wycombe campus to consolidate on one physical campus by summer 2009. This required us to build a new Gateway building that will house the library, specialist technology laboratories and studios, a gymnasium, large lecture theatre, multi-purpose hall and café, as well as refurbishing all existing accommodation. There will also be a small satellite provision in West London for our nursing provision. These redevelopment plans and institutional reorganisation are further drivers which also benefit from the use of technologies to enable location-independent learning and location-independent working.

One of the main aspects highlighted in our engagement with the e-learning benchmarking exercise was that we did not deliver any courses purely on-line, though we have undertaken blended learning for some time. We identified that we had also not adequately addressed the staff workload issues in change from F2F to on-line and staff were concerned that they could be overworked. It was therefore a concern for us to identify ways of supporting the perceived volume of work, nature of support, volume and type of implied support. The emphasis on the project has been to provide a successful student e-learning experience. We acknowledged that more people (potential students) were now able to use the technology but they need more teaching and support such as we provide to succeed, rather than the traditional distance learning methods.

We acknowledged from the start that different work based learning scenarios were likely to require a different model, e.g. for NHS, MBA distance learning, and Crowd and Safety Management.

Our view of pathfinding was about taking something that we are very good at, i.e. supporting students from non-traditional backgrounds using a face-to-face approach or a blended

learning approach, and developing a model that provides the same 'tender loving care' approach to wholly on-line courses and students, thus opening up new markets to us. WE have always been good at this: the challenge was to take this on-line.

The project team had already been active in e-learning for many years both internally on the Blackboard User Group (now Bucks e-Learning Forum) and externally with a range of associations including the Higher Education Academy (HEA), the Universities and Colleges Information Systems Association (UCISA), the Association of Learning Technologists (ALT), the Society of College, National and University Libraries (SCONUL), and the Heads of e-Learning Forum (HeLF). In particular, the project leader was a founder member of the UCISA-SCONUL-ALT group that was formed to identify synergies in the work of the three associations regarding e-learning and other members of the team have been active in the subject centres of the HEA, eg as a consultant for the Art, Design and Media Subject Centre. Other members of the team have now gained similar experience by engaging with colleagues within our cluster and elsewhere, such as the Edge Hill Solstice team.

Many institutions are facing the same issues as us regarding organisational change and changes in ways of working presented by embracing the use of technology, whilst still providing the extra support many students need in order to achieve their full potential. This pathfinder project therefore aimed to identify those things we did well already that are good in supporting our students and identify ways of ensuring that these are transferred to on-line learning by paying particular attention to staff development and support so that all staff can support students effectively.

### **The Issue**

We were aware that both our WBL students and their mentors were struggling to cope with the various IT tools they were being asked to use. Training for Blackboard was already well embedded for full-time students attending campus, but this was more difficult for these students as they attended weekend workshops typically once per month. The course team also tried to use video conferencing with webcams and Adobe Live Connect but training for this was even more problematic. These students also had the problem that they may enrol on any month but our systems were set to deal with enrolment and completion at two points in the year. Their access to the university network, email, library management system and Blackboard were all linked to this assumption. Password management has also been a problem for off campus students, with systems typically requiring an on-campus visit in the first place. This was exacerbated by problems with the quality of data entry to the student record system, which affected all of these electronic entitlements.

It was acknowledged that students, mentors and lecturers required intuitive access to technology and to new ways of learning and teaching. Students need more stimuli to take part in activities such as blogging, but staff need to be able to restrict the time that all the extra stimulation could take.

It had been very difficult to get all the relevant people together at one time to identify the cause of some of the problems, with any particular difficulty being compounded by insufficient training, inefficient business processes, IT infrastructure peculiarities, staff timetables and students' working lives. It was acknowledged that all of these needed to be addressed in order to improve the student experience and therefore attract and retain more students. The project thus aimed to improve both the general and technical support provided by central services (Learning and Information Services, Student and Academic Services, Marketing and Student Recruitment), and the academic and personal support provided by the faculties.

It was intended that the whole student experience, especially for WBL students, would be improved. This required changes in course design and development, quality assurance internally and externally, improved marketing, improved IT set-up, improved IT induction and support, as well as redesign of enrolment processes.

## Achievements

We undertook surveys and focus groups with staff and students in order to identify issues they had. We also captured the issues that cropped up on a daily basis, those that arose at the various committees, and the good practices that staff used face-to-face. We also researched good ideas from other projects across the sector and learned from the other members of our Pathfinder cluster group. All of this information was collected in a Blackboard organisation for the project. Summaries of the findings, and the project deliverables, are now available on the project website at:

[http://bucks.ac.uk/about/structure/directorates/learning\\_information\\_services/pathfinder\\_project.aspx](http://bucks.ac.uk/about/structure/directorates/learning_information_services/pathfinder_project.aspx)

The results of this research was used in a mind mapping exercise to provide a 'circles' model of the ideal support for students and staff (available on the website). This model covered possible on-line support in twelve categories: prospective students, student application, student finance, student enrolment, student induction, student tutoring, technical support, student careers, learning resources, accessibility, student advice and student communities. We realised that it would not be possible to implement everything within the timescale of the project. We agreed that we should concentrate on a sub-set of this, student tutoring, and develop case studies to illustrate the issues, as well as producing a plan for the ways in which we would continue to address the remaining issues over the next three years.

We took the opportunity afforded by organisational restructuring to implement a new model of e-learning support for faculties based on the Edge Hill Solstice model, with learning technologists from Learning and Information Services spending part of their time embedded in the faculties. This has enabled greater understanding of the issues on both sides, leading to improved processes and more timely support. It has also enabled faculty staff to gain greater confidence in the use of a range of available technologies, thus enabling a more varied and interesting experience for students that is well-supported.

The learning technologists have written case studies of experiences from the faculties. Some of their key findings include:

1. Use of Blackboard to hold information and course materials is well embedded and appreciated.
2. Use of the various communication tools (announcements, discussion boards, blogs, email)
  - provides good support to WBL and placement students when they engage with these tools
  - the tutor must provide regular input to these to engage students
  - tutors can facilitate this regular input by developing a bank of appropriate responses, and by setting up automatic new interactions
3. A blog is a good vehicle for reflection on both work and academic discussions.
4. A blog also gives students timely feedback on their work and progress, and provides a good record of progress.
5. Podcasts, and similar tools, are invaluable in enabling students to play again various learning episodes, such as workshops. This needs much more work on IT infrastructure, help and support before being easily available to all lecturers, but there is a lot of work being undertaken on this.
6. Not all students are able to access the expected technology off campus for several reasons: no computer and broadband available at home or work; company firewalls prevent certain activity; certain countries prevent access to the Internet; certain publishers do not allow access outside the UK, or even off campus, to their information resources; some technology manufacturers do not allow their equipment to be imported into certain countries.
7. Induction and training in the use of IT and information skills is problematic for students who attend campus rarely or not-at-all.
8. Non-standard enrolment patterns can hinder students access to resources.

9. Good quality data entry is even more important for students who attend rarely or not-at-all.
10. Access to support from tutors and support staff is difficult outside normal office hours.
11. A small outage of power or Internet can cause major trauma, particularly to work-based students, at key times in the year.

We have now improved our enrolment process, data entry, automation of electronic entitlements, and simplified password management. We have also improved induction and training for students and staff in both IT and information skills, with particular reference to WBL students.

We also made the following recommendations to the University Quality and Enhancement Committee on e-learning developments that should be considered in the discussion of the teaching, learning and assessment strategies of courses and modules during course design, particularly for WBL courses, and things to look out for during Annual Review and Evaluation. In particular:

1. The Context Document and Student Handbook should be more explicit than currently on the type(s) of e-learning that will be undertaken.
2. The course team should demonstrate how appropriate staff development will be undertaken to ensure that staff will be able to support students in their use of e-learning.
3. The course team should check with librarians to ensure that the recommended information resources are available off-campus, and outside the UK.
4. All possible means of self-help support should be available at the start of the course, on-line.
5. The documents should address the variable IT skills of students to show how they will all be able to benefit from the proposed e-learning.
6. Marketing materials should be explicit on the technology requirements of the course.
7. Students must not be recruited if it is shown that they cannot benefit from the course because they cannot access on-line resources and meaningful alternatives cannot be provided.
8. Particular care should be taken in the enrolment process for work-based students to ensure accurate and timely data is available in the student record system, and thus students gain timely access to all resources.
9. As even a short outage of power on Internet access can cause major upset at key periods, course teams should ensure they have appropriate contingency plans (as recommended in the QAA Code of Practice).

The committee was very interested in these recommendations and agreed to embed them in all relevant strategy and quality documentation. The first of the formal documents to include them will be the revised Teaching, Learning and Assessment Policy and the revised Q26 Assessment Process.

A similar set of recommendations on advice for external auditors on what to look out for when reviewing courses using e-learning, particularly for WBL courses, has been discussed by the SCONUL Quality Assurance Group. This group was pleased to receive these and intends to pursue the matter further at the next meeting. In particular, the Chair was pleased that he would now have some valuable advice based on evidence that will support his next meeting with QAA.

Our research has identified many issues with international online access to our subscription databases:

1. There is a range of diversity in database licences with publishers stipulating a varying list of requirements. Overall there seems to be three main scenarios regarding licences and international database access: UK only access, UK access with the option to upgrade to international access and internationally available. Some of our

licences only permit database use within the UK due to territorial and copyright issues. The licences also forbid the use of material to create online resources for students outside the UK. These licences tend to be for access to multimedia resources.

2. It is important to be extremely clear about copyright to avoid infringing the rights of copyright owners. Three publishing companies have filed a lawsuit against an American university alleging the provision of digital copies of course texts through e-course services and departmental web pages without obtaining permission of the rights holder.<sup>1</sup>
3. Some of our contracts that are currently for UK use only do have the option to upgrade the licence to allow wider access. There are can be significant cost implications to upgrade a licence to allow wider access. Other licences work on a 'single site' subscription rather than a UK or international access option. Distance learners registered to the main 'single site' would be covered by the licence, as are students who study at our partner colleges. However, if there were an additional university campus/office abroad with its own staff and students then access to the main sites resources would not be allowed. Distance learners not covered by the single site agreement would be covered if the licence were upgraded to a NESLi2 licence<sup>2</sup> at an additional cost.
4. Fortunately, some of our licences already permit international database access to our students and no further action is required apart from monitoring student satisfaction with access to the resources. However, some require a supplement to the original licence called 'Additional Authorized Users' which further defines who has permission to use the database. There is no extra charge for this supplement agreement.
5. Database providers that permit international access do not exclude any areas as long as there is compliance with their terms and conditions. The only limitation on access being some countries' restrictive policy on internet searches. Our database providers are keen to discuss our course development plans and how they might be able to assist with subscription access.
6. The majority of our database access is currently managed by Eduserv's Athens authentication. Eduserv are aware of some problem access areas due to bad practice with relation to data ownership. Areas with lower grade telecoms can also experience problems with accessing databases. Any information on access problems can be reported to Eduserv's Athens team for further investigation.
7. Database licences are evolving, as of May 2008 a wide range of journals published online with the assistance of HighWire Press<sup>3</sup> are offering free online access to countries with developing economies. These countries appear on the World Bank's list of low-income economies. There is no licence to sign for this service. Software detects the country the user is connecting from and grants access accordingly.
8. The complexity and variety of database licences and international access issues clearly shows that academic staff developing courses for the international market need to work closely with Learning and Information Services staff to ensure the provision of access to resources and compliance with licences.

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<sup>1</sup> Smith, L. (2008) 'Publishers sue US university over copyright', *Information World Review*, Issue 246, p.1.

<sup>2</sup> NESLi2 is the UK's national initiative for the licensing of electronic journals on behalf of the higher and further education and research communities.

<sup>3</sup> HireWire Press is a division of Stanford University Libraries

## **The Future**

All of the above is being embedded in our revised Learning, Teaching and Assessment Strategy and will therefore be expected and checked by our quality assurance processes.

We expect that we will have

1. Improved enrolment all year round
2. Better quality data entry
3. fewer queries regarding accounts for all student entitlements: network, email, Blackboard, library management system
4. more staff confidently using technologies to support all students, especially WBL students
5. all staff aware of what is good practice in the use of technology
6. higher student retention on WBL courses
7. improved access to resources via the website
8. more staff making innovative use of available technologies
9. staff making more efficient use of technology
10. facilitation of location independent learning
11. courses available wholly on-line

## **The Wider Context**

This project particularly addressed the following aspects of the HEFCE e-Learning Strategy:

- i. Strand 1 Pedagogy, curriculum design and development  
1.5 Encourage the effective use of technology to enable work-based learning.
- ii. Strand 3 Student support, progression and collaboration  
Utilise e-learning for delivery and support of foundation degrees.
- iii. Strand 5 Quality  
Contribute to understanding of the assurance and enhancement issues for quality and standards raised by e-learning.

Technology can be a very great help to work-based learning as the learning can be location-independent. This does, however, require careful thought at the course design stage.

Access to technology is not universally possible: not everyone has a computer and broadband at home; this may be available at work but company firewalls may restrict usage; students abroad may have other problems such as limitations on access off the campus or abroad by publishers; restrictions on access to the internet imposed by foreign government or restrictions on export of technology to certain countries. Course teams need to ensure that marketing materials are explicit about technology requirements so that applicants are not misled. Consideration should be made regarding alternative arrangements for students with these potential problems, and those with disabilities. Course teams should also check with their librarians that the information resources that they recommend to students will be available off campus, and in the particular countries of interest.