

**Librarians Outside The Box:
Waterford Institute Of Technology's Library-based
Virtual Learning Environment (VLE) Training & Development Programme**

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Abstract

The article fits into the category of *Case Study* as defined by the Emerald Publishing Group :

Describes actual interventions or experiences within organisations. May well be subjective and will not generally report on research.

Purpose

To outline the structure and development of a library based VLE training programme at WIT and to describe its origins, implementations and long-term goals. To explain why WIT Libraries was prepared to diversify from its traditional role and to take on the challenges involved in this project.

Design / Methodology / Approach

Case study report on the VLE training initiative as it has progressed at WIT. Describes WIT Libraries' experience as the main instigator of the WebCT training programme at WIT and questions whether or not this has been an effective medium for the introduction of WebCT to WIT.

Findings

Concludes by stating that the Library Unit is capable of implementing a varied and diverse and successful VLE programme. Stresses the importance of the personnel involved to the success of the project to date.

Research limitations / implications

The project is still at an early stage of development. The study provides a short-term view of one small academic library service's experience of implementing a VLE. No full-scale user survey has been conducted to date.

Practical implications

This account of WIT Libraries experience of working with a VLE is likely to be a useful source of practical information for libraries in similar positions, of similar scale, faced with similar challenges.

Originality / value

Offers practical solutions for libraries in similar positions. The successful diversification of the traditional library role is likely to be of interest to all members of the library profession.

Keywords : VLE, WebCT, Academic libraries, Learning Support, User education, E-Learning

Introduction : In the Beginning

Based in southern Ireland, Waterford Institute of Technology (WIT) is a higher education institution of 8,000 full-time students up to PhD level. The use of information and communications technologies (ICT) in teaching & learning has been increasing at the Institute in the past 20 years through e-mail, presentation software in the classroom, online library catalogues and course websites. In more recent years academic staff with a particular interest in ICT in education have been experimenting with different virtual learning environment (VLE) software systems, including some collaborations in course design and delivery with partner institutions abroad. In 2003, VLE enthusiasts from a range of academic departments and support units, including senior staff from the Library, Computer Services and the Adult & Continuing Education Departments came together as a working group, their objective being to lobby intensively for an institutional VLE.

The group recognised that implementing an institutional VLE would afford WIT many opportunities not only to expand into distance education and in-service training, but also to enrich and renew current courses with online learning materials and interactions. These developments would facilitate time and distance independent support for part-time students and students on placement. The group was also aware that failure to develop the expertise and infrastructure to deliver online learning would, in the near future, risk the Institute losing potential students to the growing number of competitors in the education and training market, including for-profit educational institutions at home and abroad, online training companies and online learning divisions of major educational publishers.

Submissions were invited from all academic staff on how to proceed. Based on this feedback and on the group's own deliberations, a specification for an institutional VLE was agreed. The Librarian and the Information Technology (IT) Manager wrote a formal proposal document to senior management requesting funding for the purchase of a commercially available VLE solution. On acceptance of the proposal the IT Manager managed the tender, evaluation and contracting process. Primary factors governing the final choice of VLE were the range of functionality the system offered, the user interface, the high level of interoperability between the VLE and the Institute's Management Information System (MIS) system, SCT Banner and the price. Following presentations from various suppliers, WebCT Campus Edition (available from www.webct.com) was chosen as the optimal VLE for WIT.

Why a Library-based Institutional VLE Training programme?

From the beginning, the group prioritised the training and support of teaching staff as central to the successful implementation of WebCT at WIT. Feedback from the teaching staff themselves emphasised that this training needed to incorporate both instructional and educational or pedagogical elements.

The implementation of a VLE without significant investment in developing staff will almost certainly not produce good results. Institutions must ensure teaching staff receive training and skills development in pedagogy, course design and support of students learning online including new methods for communication (for example discussion groups and e-mail) as well as in the technology itself. (Joint Information Systems Committee (JISC))

The reality of funding levels in the Institute of Technology (IoT) sector meant that appointing dedicated new staff to implement a training programme was not deemed possible in the early stages of the VLE project. The VLE working group investigated options amongst existing resources for suitable candidates to perform this role and WIT Libraries was identified as the unit most capable of implementing a VLE promotional, training and support programme for the teaching staff.

The decision to outsource the project to the library was based on a number of factors:

- from the mid 90's onwards the library has built a very positive reputation on campus for training staff and students in the effective use of information resources
- library staff had previously displayed a keen interest in e-learning and in the potentials of alternative forms of teaching and learning as evidenced in the development of OLAS*, an online information literacy tutorial for the library website
- the library management team was central to the campaign to purchase a VLE. They demonstrated an enthusiasm for taking on the training project and were willing to free up, in as much as possible, the time of two particular staff members to work on the project
- these two staff, at Deputy Librarian & Assistant Librarian level, were highly motivated to undertake the design and implementation of the VLE training and support programme as demonstrated by their portfolio of relevant skills, including website development, online learning course creation, software systems administration and design and development of print and online learning support materials. One staff member was successfully pursuing the WebCT Certified Trainer qualification, while the other was completing a course in Online Education.

(*A created word, the English language pronunciation of which sounds very similar to the Irish Gaelic pronunciation of the word "eolas", meaning "knowledge" or "practical understanding" (Ó Dónaill, 1977))

“ What's in it for the Library? “

The Institute's recognition of the library as the centre for WebCT training and support not only expands the library's role in WIT's educational endeavours, but also accords with library policy to promote the use information technologies for the delivery of effective teaching and learning, a policy which can indeed be summarised as follows: *We must see our educational role as not only making faculty aware of and able to use the new technologies that are central to their disciplines, but as including helping the faculty integrate the new information tools into the fabric of the instructional programmes in ways that enhance learning and offer new structures for programme delivery.* (Stoffle,1996)

WIT Libraries has a long-standing history of proactively contributing to campus projects that might not be traditionally regarded as within the realm of the library or indeed, as part of its traditional role, but which can nevertheless significantly contribute towards its mission of being *“ a creative partner in the achievement of the Institute of Technology's teaching, learning and research goals. Acquiring, organising, and promoting seamless connections to worldwide recorded knowledge for WIT staff, students, alumni and other customers at the place and time of their choice* (WIT Libraries, 2002).

The VLE project is a case in point. WIT Libraries has taken a leading educational role in the development of the system, which not only increases the profile of the library service generally, but also adds further credence to all of the library's educational endeavours, in particular, its campaign for a mandatory, accredited information literacy module for all WIT students. The library's involvement in the project has further advantages. As usage of the system matures throughout the Institute, teaching staff will have been empowered to make specific electronic library resources directly available to students, in the desired pedagogical context, within online courses.

“ The VLE Comes to Town ! “

Following the purchase of the software, the Computer Services Department (CS) liaised with the supplier to integrate the VLE into other campus systems. It was particularly important that information be able to be exchanged between the Institute's MIS system and WebCT as up to date data on registered students is necessary so that students can access the WebCT courses that they have registered for. Additional software is required to make WebCT fully interoperable in 'real-time', however it was agreed that the projected usage levels in the early years of the VLE project would not justify the extra expense incurred in purchasing this software. Usage levels will be monitored in the second full academic year since WebCT rollout and purchase of the middleware required to allow WebCT to 'talk' directly to Banner will be reviewed at that point.

CS have devised an interim solution which involves using scripts created in-house by CS technicians to routinely upload user data from Banner onto WebCT in batches. The CS technicians also create a shell course for every WIT module to which the appropriate students are systematically added from Banner by the batch process. Each shell course is modelled on a template developed by the library WebCT team to provide a consistent 'look and feel' across the Institute. The template includes a selection of the most commonly used online course components and tools so that teaching staff do not have to start creating their VLE from a 'blank sheet', which would perhaps be a little intimidating for the novice user.

CS have also integrated WebCT with an LDAP (Lightweight Directory Access Protocol) authentication system, meaning that all registered WIT users can authenticate themselves (logon) to the VLE using their standard CS computer account username and password. This set-up has proved very successful. It removes the need for unique passwords for WebCT access and provides users with a familiar means of accessing their courses.

The library team are currently responsible for manually 'attaching' teaching staff to their VLE courses, however, the CS helpdesk deals with any ongoing queries regarding password or registration issues. This streamlines the work of the library team somewhat, who agree that the division of labour and complementary working relationship between CS and themselves, has been crucial to the success of the project to date.

Preparing the Ground

The library team's fundamental task was that of training and support:

- to empower teaching staff in the use of the VLE
- to highlight the potential benefits of the system for teaching and learning and
- to provide ongoing support to staff as they worked to create the online teaching and learning experiences that they envisaged for their students

Prior to launching a large-scale training programme at WIT, the library team spent several months familiarising themselves with the system, partly by creating a new version of the library online information literacy module in the VLE. The suppliers provided basic training and the team researched training programmes taking place in other institutions. The Learning Technology Team (LTT) at the Dublin Institute of Technology, who at the time of the team's first meeting, already had over a year's experience of designing and implementing an enterprise wide VLE training and support programme, gave generously of their time in a very collegiate manner. The advice and guidance that the LTT offered on practical aspects of implementing a training programme has proved invaluable to the library team at WIT.

Initially, rather than create original training materials in-house, which would have delayed the launch of the programme, the team sourced workshop style manuals from the Netskills organisation based at the UK's University of Newcastle and adapted them according to local needs. Preliminary training consisted of a presentation to the Heads of Departments and Schools, which outlined the potential benefits of a VLE for course development and renewal. A Question and Answer session and 'hands-on' introductory training followed the presentation.

Let the Training Begin

Despite being library based and closely linked to CS, the team was determined from the outset, to position VLE training as a mainstream academic staff development activity rather than a specific 'library' or 'computer' event. The Team decided to base the training sessions not in the library training room, but in a new, dedicated staff training room, which though close to the library, is set aside from lecture rooms and offices. The chosen venue was inviting and attractive, facilitating participation, interaction and discussion. Both members of the team were present for all training, which followed a systematic approach with the presenters periodically alternating between the roles of 'trainer' and 'classroom assistant'.

The philosophy of the team, as it developed, was not so much to follow a rigid process of predetermined formal training, events and materials, but rather to encourage staff to engage with WebCT at their own pace. The training was purely voluntary and while the Netskills workshop materials were used as a means of introducing interested staff to the basics of WebCT, the real objective of the training was that it would be informative and practically relevant for the teaching staff at WIT. The main message, indeed, that the team wished to convey during training was that the VLE was a teaching tool, which lecturers were essentially free to use as they wished. Thus, in a bid to stimulate discussion amongst the staff and to encourage them to question the benefits of using WebCT for their particular courses, the training sessions introduced examples of 'real life' VLE usage and recommendations and guidelines for long-term use.

The pilot training scheme commenced in Spring '04. The programme consisted of two half-day 'hands-on' training sessions which were regularly advertised on the Institute website, newsletters and via e-mail. Session One, *Creating Course Content in WebCT & Course Support Tools* introduced staff to the basics of uploading their original materials into VLE courses and a variety of communication tools. Session Two, *Student Management & Assessment* covered the principles of self-tests, quizzes, surveys and grading. Sessions were quite informal with lecturers learning from each other as well as from the trainers.

The training evolved over the course of the Spring and Summer terms. As will be described in the next section, an integrated approach was followed, which combined the general workshop sessions with one-one help and print and online resources. The response rate for the programme was generally good with over half of WIT's 550 teaching staff completing the course by mid June 2004 and despite the fact that the courses represented a steep learning curve for some, feedback was generally very positive.

Throughout the summer break, the team continued to promote and encourage the potential of the VLE to create opportunities for new types of learning interactions between lecturers and students. Thirty or so academic staff used this time to begin experimenting with the discussion, assignment and assessment features of WebCT on a limited or trial basis with their students. A small number of project teams were also set up to begin work on blended learning programmes for distance learning students. These innovators set the scene for WebCT use for the future, and through working with them, the Team gained first hand experience of using the system from a

lecturer's point of view. This fresh insight was then fed back into the team's training and support efforts for the staff generally.

Support Services Evolve Alongside Training

As VLE usage grows at WIT, the provision of adequate support becomes increasingly critical.

The quality of this support is a significant factor in how comfortable the teacher will find working with a package such as WebCT and whether or not they continue to use some or all of its features. (Pain & Le Heron, 2003)

The teams' experience in more 'traditional' library roles proved beneficial in the creation and implementation of support measures. The team's background in conducting reference interviews and in providing intensive, one-to-one library training for researchers meant that they were well equipped to establish individual lecturer needs and to work towards empowering staff to efficiently and effectively exploit the VLE.

The support function has evolved over time. At the conclusion of each training session, teaching staff are encouraged to contact the team to arrange a meeting at their convenience. The Team is committed to working with individuals on identified projects, providing guidance and technological support. Follow on tutoring is based on a constructivist 'learning by doing' model: users are asked to identify the skills required, and one-to-one training ensues accordingly.

The methods of constructivism emphasise students' ability to solve real life, practical problems.-----The job of the teacher in constructivist models is to arrange for required resources and act as a guide to students while they set their own goals and 'teach themselves' (Robyler, Edwards and Havriluk, 1997)

Follow-on sessions are generally held in the staff member's office. This creates a positive learning environment as lecturers can be 'talked through' the system on a case by case basis using their own PCs and with their own class materials. Lecturers appreciate being able to discuss the system in the context of their 'real-life' teaching and the structure of these sessions makes the potential benefits of WebCT more meaningful to them than generic training ever could. The training team has also benefited from the structure of these sessions as it provides them with an opportunity to informally take soundings on the VLE project and on training from a wide variety of viewpoints. This feedback has proved invaluable in the development of further support.

The VLE Support Website Blossoms

All information accumulated by the team from user feedback and experiences as well as from their own research, experiences and contacts is distilled into the evolving WebCT Support Website. The site offers academic staff and students information and advice on using WebCT and is a convenient access point to in-house and external supplementary materials and guides, sample courses, links to additional online resources, FAQs and troubleshooting pages. The main "Login to WebCT" hyperlink on the institutional website homepage channels the user through this support area en-route to the main WebCT page so that the site is widely exposed to all users.

The response to the site has been very positive, particularly from those who are interested in concentrating on particular aspects of WebCT and in discovering new and creative ways of manipulating its tools for individual course needs. Additional support is also available in the form of text-based documentation, for example, 'teach yourself' user manuals, which are based on frequently asked questions received from lecturers during training. The manuals are composed of step-by-step instructions

including screenshots on how to get started with WebCT. Information on adding content, as well as detailed instructions on how to use a variety of WebCT tools.

Training Evolves in Response to User Needs

By the beginning of the '04-'05 academic year the potentials of the VLE were beginning to be realised, and its use and future development was widely discussed amongst the academic staff at WIT. The training team was inundated with queries from individual lecturers about how they might progress in using WebCT with their particular student groups. This concentrated response was just the kind of stimulus the team needed to advance the project onto the next stage. The majority of the teaching staff at WIT cater for full-time, on-campus students. Feedback from this group revealed that they intended to 'dip their toes in the water' of VLE usage by making notes and supplemental material available to students in the 2004-2005 academic year.

In response to this demand, the Team designed a training session, *Using WebCT for Content Delivery*. This short, 2 hour session covered the basics of making MS Word and Powerpoint documents available online to their students through the VLE, and included brief suggestions and discussions as to how this could be expanded on for the future. The course was first delivered in October 2004 and the 'customers' voted with their feet. There was a huge response, both from WebCT 'newbies' and from those who had previously attended the pilot training, returning for a refresher session.

During training, the team became aware that while certain staff are able to create tailored materials for online learning using web editors or software, such as Macromedia Flash, the majority of lecturers use MS Word to create their lecturing materials. This is problematic as neither the linear format nor the file size of typical Word files is ideal for online use. In a bid to assist staff to diversify from MS Word to a more web-friendly format, the team decided to develop a course aimed at empowering lecturers to modify existing materials or to create new materials in a format optimised for delivery via a VLE.

This course was based on courseGenie, a package which works with MS Word by converting word documents into smaller 'chunked' files in XML format to produce materials, which are fully formatted for online use. The team are currently piloting courseGenie on an institutional subscription basis and the training sessions which have been held to date have been well attended and received by the academic staff at WIT.

While recommendations for good online pedagogy were interwoven throughout all of the training sessions, individual academic staff periodically requested that the topic of online learning pedagogy be explicitly addressed in training. In response, the team developed a half-day session entitled "Practical Pedagogy & Online Communication", the basis of which was to introduce staff to theoretical considerations of online pedagogy and to follow these up with practical examples using WebCT's communication tools.

Although feedback from the evaluation questionnaires collected at the end of each session was quite positive, the overall uptake on this course proved disappointing. The low attendance rate for the pedagogy training was perhaps due to this session coming on stream in Spring 2005 at exactly the same time as the major project to move all courses offered by the Institute towards a Credit-based Modular System (CBMS) began to occupy much of the thoughts, discussions and time of the entire academic community.

The team feels that the CBMS project was such a major change to the fundamental business of the Institute that it deflected academic staff somewhat from progress on

the VLE project generally. The team does however intend to run the pedagogy course again, and is currently working on an updated version, which will incorporate outside expertise in online pedagogy theory, and will include first hand accounts from academics on their experiences of teaching online.

Progress to Date

If students are to learn desired outcomes in a reasonably effective manner, then the teacher's fundamental task is to get students to engage in learning activities that are likely to result in their achieving those outcomes; it is helpful to remember that what the student does is actually more important in determining what is learned than what the teacher does. (Shuell, 1986)

So what are the results of the Team's training efforts to date? Informal contact with teaching staff has given the team a good insight into the lecturers' views on the VLE. Feedback is generally very positive with many individuals highlighting their appreciation of the flexible, practical and cheerful support that they have received from the team. Despite the fact that the 'word on the ground' is good, the team is conscious of the need to undertake a comprehensive user survey so as to establish an official response rate for the project and to fully assess training initiatives to date.

A formal eLearning Innovation Committee was set up in early 2005 to guide policy on eLearning within the Institute. This group is comprised of senior staff from the Academic Schools, Computer Services, Administration and the Library. In partnership with colleagues from CS, and under the auspices of this committee, the Team intends to develop and process a major user survey in academic year 2005 – 2006 which will guide developments into the future.

Current statistics from training reveal that over 300 of the 550 academic staff at the Institute are actively using the VLE: the majority, to deliver course notes and a growing minority, to conduct online discussions, assessments and student assignment submissions. This is comparable to VLE usage in other institutions worldwide where early use is predominantly linked to document delivery in the shape of supplementary lecture materials, reading lists and syllabus information. (Jennings, 2005)

The Team has also trained and supported a small number of project teams who have used the VLE for online distance learning activities. The first of these pioneers was a team from WIT's School of Education who piloted a module of a new nationwide course for adult literacy trainers in association with the National Adult Literacy Association (NALA). Another team from the same School worked in partnership with the Waterford Chamber of Commerce and Skillnets, a national organisation which funds and supports enterprises in their training needs. This group piloted a single module of a training programme based on upskilling factory floor workers in the manufacturing sector throughout the South-East region of Ireland. The module was wholly delivered and assessed online. Feedback from students in both of these groups was very positive.

Going Forward - New Initiatives & Supports

Dr. Sean Rowland, founder of Hibernia College (Ireland's first nationally accredited third level online College), has stated his belief that successful e-learning project development is largely personality driven (Rowland, Dr Sean 2004 pers.comm...,22 June)

In WIT's experience, the team's personal qualities, enthusiasm and energy have certainly been important factors in the development of the project to date. In time, it is anticipated that the training sessions and one to one assistance will be enhanced, if

not replaced by a measure of devolved support, the development, for instance, of local support units, mentoring systems, collaboration and mutual support among lecturers themselves. In view of this and in conjunction with WIT's Development Office, the Team recently put forward proposals for two new initiatives : an eLearning Innovation Centre and an eLearning Innovation Awards Programme. Both initiatives won funding from the Executive Board of the Institute and will begin operating from September 2005.

The idea of the Innovation Centre is to create an eLearning oasis for staff. The Centre, which is to be based in the main library building, represents a major progression in the development and integration of WebCT at WIT. Its mission is to provide streamlined resources, training, consultation and support to help WIT staff extend teaching and learning through the use of WebCT. The Centre is to be managed by members of the WebCT Team, who will be available to advise and support academic staff on WebCT related activities on a scheduled or drop-in basis.

A number of suitably qualified postgraduates will also be based in the Centre on a studentship scheme as WebCT facilitators. The Centre will be equipped with state of the art hardware and software and will also be stocked with a number of related print resources. It will thus act as a type of open laboratory, which will provide a dedicated space where staff can work on individual or group projects and where facilitators are available to provide technical and pedagogical expertise, guidance and support. The Centre is to be focused on reflection and active learning. It is envisaged that it will be an effective catalyst for the future development of WebCT at WIT.

In a bid to encourage academic staff to take advantage of this facility, an eLearning Innovation Awards project fund has been established and lecturers who wish to develop skills in mixed mode delivery are encouraged to submit proposals for identified projects, courses or parts of courses. The project application form includes the proviso that those granted funding use a percentage of it to 'buy' facilitator time and expertise from the Centre. This, in turn, funds the postgraduate studentship scheme.

Conclusion

This is an era of "unprecedented levels of expansion, change and diversification" in higher education in Ireland (OECD, 2004). In such an environment the VLE project has to 'fight for attention' alongside various other initiatives, including the CBMS project mentioned above, however, the activities of the WebCT Unit at WIT are one example of how a small, enthusiastic, highly skilled team can advance VLE education in its parent organisation in a short timeframe in practical, achievable steps.

Successful integration of e-learning into an institution in the longer term requires a coherent institute wide e-learning strategy and support from senior management (Jennings, 2005). At this stage, several senior managers at the Institute have championed the VLE project, but an institutional eLearning strategy has not yet been formally adopted. Under the auspices of the eLearning Innovation Committee, the library team has written a draft strategy for circulation and commentary early in the '05-'06 academic year. The amended strategy will then be submitted to the institutional governing bodies for ratification. This exercise is intended to create the opportunity for formal debate on elearning in institutional decision making fora and to set a guiding policy on e-learning for the future.

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