Virtual learning environments in action

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In this workshop Paul and Patricia demonstrated the webcast lectures developed at Glasgow Graduate School of Law as part of a learning environment where students can take control of their own learning experience. They outlined the practical benefits of such a learning environment for both professional and undergraduate legal education, and discussed the theoretical implications of this approach for the pedagogy of legal education.

Virtual learning environments (VLEs) describe those environments that use digital and electronic technology in order to facilitate learning and teaching. This may include not only learning resources on CD or on the Web, or both, but also resources linked to more traditional, paper-based resources as well. The phrase VLE has tended, in recent years, to refer to an 'off the shelf' set of facilities that enable staff and students to read, write and communicate over the Web. While this is for many staff a helpful introduction to what can be created and presented on the Web, it is always going to be a generic envelope of activities that are available to staff and users. The Web is, though, a remarkable medium whose capabilities are expanding hugely as bandwidth and our experience in using it expands.

During this presentation we took an example of one element that rarely appears in most VLEs, namely the webcast. We described how we have developed it, how it is being used in a wide variety of courses, how it is changing the learning landscape within the LLB in the University of Strathclyde's law school and postgraduate vocational courses in the Glasgow Graduate School of Law (GGSL).

Webcasts, when used in appropriate VLE environments, can do more than provide cheap lectures on the Web. The profoundly different medium of the Web transforms the student experience of learning. The relative ease with which video and text can be spliced, the accessibility of information and the environment within which knowledge can be constructed is significantly different from the experience of paperworld study environments. We therefore set about to create a learning environment where students take control of their own learning with immediate access to cases, discussion forums, Web links, style documents, class resources and so on, and all available in an easily usable form.

We began filming webcasts in 2001. Since then, we have completed around 25 separate webcasting projects, pertaining to both undergraduate and postgraduate legal education, ranging from one-off lectures to entire modules. Initially these were experiments with image and text - a talking head and PowerPoint slides with simple navigational devices. In the process, we learned how to develop good practice in the merging of text and video image. We found, for instance, that presentation and camera angle can have a subtle and significant effect on how the performance is viewed by the viewer. In particular we considered how the speaker can give an impression of intimacy with the viewer which, when done well, is a device which helps to draw the viewer into the knowledge structure of the session.

The early webcasts were valuable, but they were very much presenter-driven; for example, there was no integration on-screen with other learning elements in the course, and there was little incentive for independent learning. In the later workshops we worked to create more interactive and thoughtful environments for study and reflection. In doing so, there were a number of issues that we had to consider, some of which are summarised below:
the placing and availability of the resources - the materials ought to be as adjacent as possible to other relevant resources, and students should be able to read the resources in a variety of formats – online or paper.

- attending lectures v viewing webcasts: a lecture serves as a focus or a prompt for learning. Lectures discipline personal time. A webcast requires to be planned into a schedule. How can we best ensure that a student will watch a webcast lecture and engage with the conceptual knowledge presented in it?
- learning from lectures v learning from webcasts: webcasts are not bound by time in the same way as lectures. Students are no longer controlled by the lecturer - they can switch him or her off, move to another part of the lecture, listen repeatedly to various sections and view resources when relevant. This sense of control also gives a feeling of disorientation and students have to find a degree of self-discipline. Designers also need to research interface design based on user and task needs and priorities
- note taking: at lectures students summarise speech, in part using any handouts they might have been given. With webcasts we have had to examine in detail how they might take notes and what they might want to write.
- integration of resources: integration of all resources based on the convergence principle is essential - technological, paper-based, traditional teaching methods, etc. Students want to move seamlessly and easily from one part of a learning environment to another.

We knew that integrating on-screen text with video was a powerful tool for professional legal skills training. In 2003 we were presented with circumstances which encouraged us to develop a webcast learning environment for two of our Diploma in Legal Practice courses. The modules in civil and criminal procedure were highly lecture intensive, with students attending one or two lectures per week for the two semesters. There were also weekly tutorials in advocacy and pleading dealing with the practical application of the procedural rules articulated in the lectures.

While retaining the tutorials we sought to create a learning environment based around the webcast lectures which would be available both on CD and as a Web-based application on the GGSL computers.

The environment we created and demonstrated in the workshop session combined the lectures with multimedia units, discussion forums and relevant online resources, including style documents, cases, statutes, photographs, handbooks and flow charts, in an easily navigable and manageable format.

Entering the civil procedure webcast environment students are presented with a menu which include the lectures, a multimedia unit on advocacy and pleading, a multimedia unit on drafting writs and an assessment unit:

Once a student has accessed the webcast lectures the screen shows a small video of the lecturer in the top left hand corner with various navigational tools for the lecture itself, volume controls and access to the resources. The running time of the lecture is given together with a time bar that students can use to move from one part of the lecture to another. The PowerPoint slides appear automatically as the lecturer speaks and students can also click on the numbered sections on the left hand side of the window to jump directly to a slide. The heading for each slide is revealed if the user rolls over the slide number with the mouse.
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the webcast lectures

Clicking on the resources icon slides the resources page across the screen from the right hand side. The user can decide whether or not to stop the lecture and view the resources or continue the lecture as audio only while viewing the resources. The resources menu can be seen along the top of the screenshot below and includes statutes, Web links, downloadable PowerPoint slides for the lectures, documents, links to BAILII and Westlaw and relevant case references. The screenshot shows some of the statutory resources that are embedded in the environment.

Multimedia is integrated with the webcasts. Thus, the advocacy multimedia resources allow the students to follow the progress of three motions which are analysed through videoed role play and the multimedia drafting unit takes the students step by step through the drafting of an initial writ. Both units offer a range of activities and learning support tools to aid student learning.

We are currently undertaking a longitudinal study with a number of students who are completing the course, and the feedback we have received so far has been very positive. We have not had the opportunity to analyse these formally, but a few of the comments are included below:

- “The time bar was excellent as you could move about the lecture more freely and you also had an accurate idea of how long you had left to go.”
- “I used the lecture slide handouts as printed out and this was really helpful. Having them means you can listen more carefully to the main points of the lecture without having to stop and start all the time. I suppose it’s more like a real lecture where you would get a handout.”
- “...found the webcasts very easy to access...Very easy to navigate. I remembered the slides were available for this webcast so I printed them off and added notes to them. I found this extremely helpful, I love it!!”
- “Also really appreciated the point where Patricia was lecturing on Record, the ordinary cause rules link was right on the screen, and when clicked on the rules appeared without Patricia disappearing, I liked this a lot.”
- “At the stage in the lecture where Patricia was discussing the process folder I decided to use the documentation option to have a look...the pictures did help me to visualise it in my mind’s eye.”
Webcasts are only one element of a virtual learning environment, but even from this brief position paper it will be clear that they are valuable learning tools. Like VLEs generally, they support forms of distance learning. But distance learning is exactly the wrong term for what goes on in this form of learning. Distance learning is actually intimate learning. When it goes wrong it becomes lonely learning, and when it becomes too difficult or unsupported it becomes claustrophobic learning. When distance learning goes well, it has the capacity for enormous engagement and enhancement of learning. But webcasts, like technology generally, cannot do for us what we may neglect to do for ourselves. The keys to success, in distance learning, in the use of VLEs, and in webcasting, lie in planning forms of deep embedding in the curriculum, in planning the relation between distance and intimacy, in achieving clarity of communication flows, in creating aims and expectations of task, staff and students, course, curriculum, institution – in other words, when webcasting becomes, invisibly, part of the contours of learning within the virtual learning environment.