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**Delivering Blended Legal Learning by Open Source Methods**

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## ***Abstract***

E-learning in legal education has increased substantially in recent years, leading to concerns that traditional teaching is being phased out. This paper proposes a blended approach, combining appropriate e-learning with traditional methods to achieve a coherent and effective approach.

The use of e-learning has been associated with high costs and high levels of specialised support. The Oxford Institute of Legal Practice (OXILP) has made extensive use of Moodle, an open source virtual learning environment (VLE) which delivers high quality facilities at low cost. The software is free to download and is now used by over 8,000 registered sites worldwide. MoodleMoot, the annual conference for Moodle, was founded by OXILP's IT Systems Manager in 2003, with assistance from the author. The MoodleMoot conference was hosted by the Open University in 2006. The Open University has recently adopted Moodle as its e-learning software, an endorsement of its quality and its ability to compete with commercial packages.

The paper considers the use of e-learning to support traditional lectures and interactive group work by means of preparatory and follow up exercises, web and podcasting. The paper also considers the use of multiple-choice questions which can be marked by the software, providing instant, detailed feedback to learners. The paper also reflects on the possible use of portfolios in legal education and training in the light of issues considered by the Law Society of England and Wales in its recent training framework review.

**Keywords:** Virtual learning environment, blended learning, Moodle, e-portfolio, webcasting, podcasting, legal education, Legal Practice Course, multiple choice questions, MCQs, discussion boards, chatrooms

## ***1. Introduction***

The use of IT in all levels of education is becoming more and more common. Nursery classes have learning games on computers, schools use computers and interactive whiteboards as part of their normal day (Department for Education and Skills, 'Harnessing Technology: Transforming learning and children's services' 2005). It is hardly surprising that legal education makes more use of IT than ever before. There is a trend towards including significant amounts of IT as a replacement for traditional and face to face teaching. This may be the way things will go in the future, but some contact time will always be required, even if it is only to address particular issues for individual learners.

The trend towards increased use of IT can cause tremendous anxiety among teaching staff. What needs to be remembered is that whatever material students use, and in whatever form, there must be a teaching professional behind it. Just as books need someone to write them, so too with e-learning material. Also, although a lot of

interactive material runs more or less on its own once it is set up, (for example, computer marked multiple choice questions 'MCQs'), the tutor needs to edit and update materials in response to changes in the law and amendments to the syllabus or assessment requirements.

## **2. Blended learning**

The approach taken by many institutions generally is to integrate IT into their courses, rather than replacing traditional elements wholesale. Some types of activity can be carried out more effectively using IT, others benefit from a more traditional approach. Individual study can be made more effective by the use of interactive material, reinforcing what has been read. In many cases, a blend of different teaching and learning methods is used to achieve a unified course which presents learners with opportunities to deepen their learning.

The use of the term 'blended learning' has become the subject of some controversy. Trigwell and Oliver (2005) state that 'there is little merit in keeping the term blended learning as it is currently understood. It is either inconsistent...or redundant'. Although there may be some academic and semantic conflict over the use of the term, the use of a variety of different methods working together in a seamless way appears to be accepted in many institutions.

Blending different teaching methods appears to be an effective method of engaging students and providing the necessary flexibility to appeal to a diverse range of learners. The author uses the term to mean e-learning used to enhance and support traditional lectures and small group sessions. The enhancement can take the form of preparatory or follow-up activities, interactive material which provides students with feedback and tutors with useful data and technology used in sessions themselves.

## **3. The approach taken by the Oxford Institute of Legal Practice (OXILP)**

As with most educational institutions, OXIP's student body is diverse. Issues such as dyslexia and increasing numbers of students with English as a second language must be taken into account when considering the structure and content of courses. In addition, learning styles vary and the more ways information can be presented, the better.

Maximising the use of active learning in whatever form is always a key factor in course design. While e-learning lends itself very well to an active learning approach, in view of the costs associated with a commercial virtual learning environment and indeed with commercial software generally, OXILP's policy is to make use of open source software wherever possible.

The term 'open source' essentially means that the software is free to download, subject to conditions. The conditions vary from product to product. Generally, if the user develops any additional features which can be used with the software, these developments must be made freely available in the same way that the original product was made available to the developer.

#### **4. Moodle**

OXILP's chosen system is Moodle – an open source course management system which has a huge following worldwide. 'Moodle' stands for Modular Object-Oriented Dynamic Learning Environment. The principle behind the product is constructivist learning – active learning in which learners interact with the virtual environment to construct their knowledge.

Moodle's author is an Australian educational expert called Martin Dougiamas. It is therefore written from a pedagogic, rather than an IT viewpoint, although it matches the standards of commercial products in both areas. The package can be downloaded from <[www.moodle.org](http://www.moodle.org)>, the main site, which also provides some free support, FAQs and other information. The source code is available under the terms of a GNU general public licence. More detail is available from the Moodle site, but essentially, the software can be downloaded and modified subject to the conditions of the licence. The name 'Moodle' is a registered trade mark of the Moodle Trust. The Moodle community is international, with sites all over the world and a growing number of users.

Moodle can carry out the functions that you would expect from a commercial package such as Web CT or Blackboard (although the two providers are now in the process of merging into one). The author will consider the facilities offered by Moodle and their use in the legal practice course in more detail later in this paper. Broadly however, different types of quizzes and question and answer materials are supported by the package, including essay questions which can be set and marked online. It also provides discussion board and chat facilities, e-books, audio and video files with interactive materials and document archiving and retrieval.

The Open University announced that it was adopting Moodle as its VLE at the end of 2005. This was an exciting development and a real endorsement of Moodle as a system. It is anticipated that OU will make a significant contribution to the development of Moodle features, which will then become available to the Moodle community generally under the terms of the Open Source software agreement.

The Moodle Community is a virtual international community, working together for mutual benefit and support. The annual UK conference for Moodle - MoodleMoot - is organised by OXILP's IT systems manager, Sean Keogh and the author. It is now in its third year and was hosted by the Open University in Milton Keynes in July 2006. In its first two years, OXILP hosted this increasingly popular event. Details on <<http://moodlemoot.org>>, the conference site.

The author has worked closely with the OXILP IT Systems Manager, Sean Keogh, to develop the use of Moodle as an integral part of the LPC since its introduction at OXILP in 2003/04. The system was first used as an archive and document repository. Course materials were made available for students to print out or read online. The timing of their availability depended on when it would be most effective to release them. For example, course outlines would be given to students in hard copy at the beginning of the relevant term. This meant that the electronic copy was made

available to students immediately – as a back up for lost documents or to save students the trouble of carrying large amounts of paper around with them.

Moodle is available on the web, although students require a password and I-D in order to access the system. This allows students to access their course materials from home, the library or anywhere with a computer with an internet connection as well as at OXILP. This gives useful flexibility to the course and allows OXILP to make more materials, both archived and interactive, available to students in a variety of locations.

## ***5. Reading onscreen***

Other document facilities included posting answers to practice questions or assignments after those assignments had been completed to allow self and peer assessment. An e-book facility was also made available so that students could have access to more material. However, the e-book function has so far been confined to relatively small amounts of text (except where it provides a back up copy of hard copy materials). Students do not seem to respond well to large amounts of onscreen text and invariably wish to print off such material before reading it. Relatively small amounts of text, broken up with interactive material appears to command better attention.

Research published by Morkes and Neilson (1997) suggests that users do not actually read online text, but skim or scan it to find what they want. The author's approach has therefore been to keep onscreen reading to a minimum where possible and break up text with other material to make it easier to scan.

## ***6. Interactive materials***

Given that simply putting material in hard copy into a virtual book is not especially effective, the author has focused interactive materials, especially those which allow the learner to work independently without additional tutor support. To ensure that all students are capable of working with Moodle, OXILP's learning resources team conduct training sessions as part of each student's induction process.

Students are registered on the Moodle system and shown how to access its facilities. They then conduct an independent exercise with the tutor available to assist as necessary. The exercise consists of an online tutorial written by Ray Lawrence of the training organisation HowtoMoodle (<<http://www.howtomoodle.com>>). The exercises allow the students to practice each feature independently and with their peers (for example the chat feature involved students working together).

## ***7. Webcasting***

The use of webcasting or I-tutorials is increasing throughout legal education, with great advances made in this area by the College of Law. In 2003/04, OXILP ran the Financial Services and Markets Act 2000 ('FSMA') component of the LPC as an e-course, with no traditional teaching at all. The course was, at that time assessed pervasively; as part of another assessment rather than as a standalone subject. There were two webcasts, with interactive material incorporated into the presentation onscreen and slides plus commentary appearing alongside the 'talking head'.

The decision to run the course in this way was taken for a variety of reasons, including flexibility (the webcasts were accessible from any computer with an internet connection) and diversity (students with dyslexia and students with English as a second language were able to replay as often as they needed to).

While individual responses were positive – students with English as a second language and students with family commitments were particularly positive – the general response was very mixed. Students seemed to value the social element of traditional lectures and did not appear at that stage to regard a webcast as an adequate substitute. Students did value the option to review and replay material to suit their own needs and at their own convenience, but overall they appeared to regard webcasting as something they would like in addition to traditional lectures, rather than instead of them.

From an operational standpoint, the use of webcasting to any significant extent involves a substantial investment of staff time and funds. It is therefore intended that in the short term, webcasting will have a relatively limited use in OXILP's curriculum for the full-time version of the course.

FSMA is now part of a wider course with a separate assessment in addition to the pervasive assessment already described. This change follows amendments to the Law Society's course requirements for this area. Because the subject is now part of the wider course – professional conduct, money laundering and FSMA (“PCFSMA”) and is now separately assessed, it was considered that students would require more contact and the course has therefore been run in a blended form.

The course now consists of three traditional lectures, with interactive multiple choice quizzes as follow up. There are also two small group sessions and a mock assessment comprised of MCQs which is set up on Moodle. The mock assessment is interactive, being marked by the system and providing feedback to students. It is set up so that students are able to take it under examination conditions with the system allowing only the amount of time that the student would have in the assessment, with a facility to go back and check or amend answers before submitting.

## ***8. Podcasting***

Podcasting, a downloadable audio record of a lecture, is being trialled as part of OXILP's review of IT in the curriculum. One difficulty that some students expressed with webcasting was the practical issue of actually accessing the materials remotely. The large amounts of memory required in order to access the webcasts and the large file sizes seemed to cause access problems for students. Podcasts are much smaller files and therefore easier to download.

With the increase in the use of MP3 players and iPods in the last few years (in 2005, music downloads tripled their share of the total sales of the music industry (Peworld)) many students are used to downloading audio material. Many universities are now offering audio versions of their lectures to download – for example the site <<http://www.itunes.stanford.edu>> give access to a wealth of audio material from

Stanford University. This offers a flexible medium which allows learners to access in their own way and at the own pace.

The use of podcasting is being trialled using the FSMA course in its new format (see above). Although the course now includes traditional lectures, podcasts of those lectures are available to students prior to the discrete assessment for revision purposes. Depending on student feedback, the trial will be widened in 2006/07 to include other subject areas. Moodle can accommodate audio files for download onto an iPod or MP3 player or the student can listen to the file at their computer.

## ***9. Discussion boards***

Discussion boards were trialled in 2003/04 at OXILP. The students did not appear to respond positively to this facility. The use of discussion boards was not compulsory, but was encouraged. Student use of this facility was negligible, despite reminders and encouragement to make use of it. For example, the tutor on the compulsory course on which they were trialled (FSMA) announced in lectures and by email that questions and answers were posted on the board, together with links to the Financial Services Authority website and other sources of information.

A possible explanation for this lack of interest is that fact that currently, the entire student cohort at OXILP is full-time. Students who saw each other every day saw no need to use a virtual medium to communicate when they could simply talk to each other or to their tutors.

In future, it is likely that more part-time and distance courses will be offered, and this will give an opportunity to reintroduce the facility to students who may find it of more use, given that they will not have as much face to face contact with their contemporaries.

## ***10. Chatrooms***

The use of chatrooms is being piloted this year by the private acquisitions course – the largest non-compulsory module on the legal practice course. It is intended to provide a revision chatroom service for the tax element of this course. This element is one that students traditionally find very difficult and it has been the practice of the author to hold a separate tax revision session. This year, the chatroom facility was offered in addition, so that students who are not in Oxford during the revision period were still able to have an interactive session with the tutor. The chatroom also addressed the issue of many students asking the same question, as the chatroom records questions and answers.

Depending on the success of this pilot, it is intended to use this facility more widely. The main benefits are to those who return home to study, particularly those students who are resident outside the UK. It will also benefit those who have childcare or other family issues and would not be able to attend their institution to talk over their revision queries with the tutor. They can, of course, use email or the telephone, but this does not allow the questions and answers to be disseminated more widely, nor does it guarantee that the tutor will be available at the time required. Tutors

conducting live revision sessions are usually talking to the students in their office, not answering the phone or emails!

## *11. MCQs*

Students frequently ask for additional feedback, particularly on a vocational course such as the Legal Practice Course where the emphasis is different to the academic courses that they have previously undertaken. This in turn means that tutors spend increasing amounts of time addressing this concern. The use of automatically marked multiple choice questions in Moodle can assist with this issue as the students can receive immediate feedback from the system without the need for additional resources from their tutors.

Multiple choice questions can be drafted to provide an effective test of student knowledge as well as engaging their analytical skills. It is not necessarily the case that multiple choice questions provide an easy route to success in assessments. If they are drafted carefully, they can be just as testing as more 'open' forms of assessment.

The use of MCQs and closely allied question formats such as true/false, short answer and numeric questions which can be marked by computer is becoming more widespread. The author is currently conducting research into the use of MCQs in formative assessment in conjunction with Oxford Brookes University. Informal research into the effects of MCQs on student performance has been undertaken in a number of subject areas by the author and the results have been very encouraging.

Paul Catley, of University of the West of England conducted research into this area for undergraduates while at Oxford Brookes  
<[http://www.brookes.ac.uk/publications/bejlt/volume1issue2/academic/catley05\\_1.html](http://www.brookes.ac.uk/publications/bejlt/volume1issue2/academic/catley05_1.html)> His results are very useful and strongly support the view that the levels of engagement for this type of formative assessment are high.

The author's approach to MCQs is that the learner is not given the answer, but is given feedback enabling them to revisit their reading and course materials and review the area. The learner is also given their grade, which is also recorded on the Moodle grades record so that tutors can review the results and offer targeted support.

This provides valuable feedback for both tutor and learner and enables both parties to improve their focus in terms of effort and support. It also answers the learners' need for timely feedback and prompts those who need additional support to seek it before they reach their summative assessment when it is too late.

Quizzes are also used for preparation and follow-up activities so that they can complement traditional teaching. Where quizzes are used for preparation activities, activities at the lower level of Bloom's taxonomy such as knowledge and comprehension (of factual information contained in reading set as preparation) can be carried out prior to the face-to-face session. This allows more active learning techniques, such as group work and role-play to be used, applying the factual information to practical scenarios and moving to the higher levels of the taxonomy – application, analysis and synthesis.



This enables the tutor to undertake a facilitative, rather than a didactic role and ensures that the students' learning is deeper and more effective. The use of quizzes in this way ensures that reading preparation is more effective by testing knowledge and ensuring that the material is not simply skimmed – it helps to make reading an active, rather than a passive learning method. Similarly, the use of quizzes as a follow up activity can promote retention of the material that the student has just heard in a lecture. Information which is used relatively quickly after it is introduced to the learner tends to be retained more effectively (Gibbs 1992).

## ***12. Portfolios***

The author has collaborated with Goldsmiths College on a JISC funded project to design an e-portfolio tool to plug into Moodle and other VLEs ([vmap.gold.ac.uk/vmap\\_initial.ppt](http://vmap.gold.ac.uk/vmap_initial.ppt)). Portfolios are becoming increasingly popular as a way of evidencing relevant experience. The format encourages reflection as evidence of outcomes or experience is assembled, promoting continuous improvement. The Law Society is currently considering their use in the process of training solicitors and as a way of compiling evidence of post-qualification continuing professional development.

The project was undertaken in response to the lifelong learning policy adopted by the government, but is equally applicable to professional training. The use of a portfolio which can provide evidence of the individual's learning experiences is not a new one. What is new is its possible application to legal professional development and training. An e-portfolio provides the facility to produce an electronic record of work undertaken, which can be examined by a regulatory or educational body and which supports material other than documents. There are obvious concerns regarding confidentiality, which may be addressed by anonymisation of the materials included.

The tool in question is based on an open source product for mindmapping – Vmap. This visual format enabled the user and anyone else accessing the material to view the materials in a mindmap or "tree" format, with the facility to attach documents, embed video clips or link to web and other resources. The tool is still under development, but feedback from student testers was mainly positive and many said that they would welcome this facility as a way of providing evidence to prospective employers that the trainee solicitor met the necessary standard.

The issue of e-portfolios in legal education is the subject of further research funded by JISC in which the author is involved, but it is clear that e-portfolios are likely to play a role in future legal training, although the exact detail of that role is not yet clear.

## ***13. Conclusion***

Moodle's wide range of learning activities and course management facilities has allowed the author to provide learners with a varied range of activities. The use of Moodle, including multiple choice quizzes as preparatory and follow-up activities has provided the author with opportunities to enhance and extend learning and to supply feedback to aid reflection.

The use of open source software has allowed the author to experiment with possible learning methods without the costs associated with commercial packages. Some ideas, such as multiple choice quizzes, have worked well and the author is continuing more formal research into their effect on results and the overall learning experience. Other ideas, such as discussion boards, have been less well received, but may be useful in the context of other courses. To date, the only disadvantage that the author has experienced using Moodle is that the group function would benefit from further development. Moodle does allow group work, both in an open and a closed format, so that groups can either work in isolation or are able to see each other's work, but not have any input into a group other than their own. The Moodle development plan includes a proposals for more sophisticated group facilities so that, for example, data relating to a particular group of students can be isolated more easily.

The possible use of e-portfolios in legal education is still under consideration, but initial views from the Law Society suggest that they regard some form of portfolio or learning log as a way forward in legal education, both pre and post qualification. The development of an e-portfolio tool which will plug into Moodle and other VLEs will facilitate the use of electronic portfolios, rather than the potentially cumbersome paper versions is ongoing. The use of a VLE which allows this type of development and experimentation without incurring excessive costs can only enhance the development of blended, reflective and ultimately satisfying learning.

## Endnotes

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## Recommended Websites

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2. Model Support and Consultancy – <http://www.ptepic.net>
3. Moodle Training – <http://www.howtomoodle.com>
4. Moodle Conference Website – <http://moodlemoot.org>