Designing an elearning space to teach about elearning ... how hard can it be?!

Pete Bradshaw and Stevie Vanhegan, School of Education, NTU  
Correspondence e-mail: stevie.vanhegan@ntu.ac.uk

Abstract

This paper supports a session given at the annual learning and teaching conference at Nottingham Trent University in April 2009.

It considers the implementation of a Masters-level 30 credit module: PDEP43129 E-learning and teaching in Higher Education.

Our focus here is on the design of a virtual learning space for the module. Our design is informed by the literature and reflection on our own practice. It was implemented under the auspices of the University’s VLE policy and strategy. Both the module and the learning environment in which it was implemented were new in September 2008. This posed some interesting challenges which will be explored in the paper.

The module was developed in response to a perceived need for colleagues to experience, study and reflect on e-learning. Development work was supported by a CASQ secondment. We have now had one complete run through of the module (September 2008 to January 2009) and have started on the second. Together, we developed the module and are the only tutors teaching on it at this time. Much of the development work was undertaken during the academic year 2007-08, but the learning space was set up in September 2008. A unique feature of this module is that, apart from an introductory face to face session, it takes place entirely online.

In this paper we discuss what we wanted to do (content and tools), how we wanted to do it (including layout and tools), the constraints that the new VLE imposed and the opportunities that it offered. We want to reflect on what people have said about the module in their evaluations and also in their formative comments in the orientation unit.

We can also draw from many rich sources of primary data, both quantitative and qualitative, much of which derive from the VLE and its associated tools eg document access statistics, copies of Chat sessions, records of Discussions, and Blogs. In addition, of course, we have our own experiences and personal blogs to draw from.

The guiding principle behind the learning and teaching strategy is one of construction of knowledge through discussion. The module uses the discussion forum tool in particular along with other collaborative technologies – both synchronous and asynchronous. The ethical considerations in presenting such a paper will require us to anonymised content or seek permission from participants.

At the time of writing, it is still too early to draw firm conclusions though we can state now that it has been time-consuming, exciting, challenging and frustrating. We have learned a great deal from implementing the module for its first run at the same time as the launch of NOW and this paper will, we hope, inform colleagues on the generalisable aspects of the use of the learning space.

Introduction and overview of the module

The university, and the School of Education, have offered a Postgraduate Certificate in Higher Education (PGCHE) for many years. This is targeted at new members of academic staff and aims to equip them with knowledge, understanding and skills in the domain of
learning and teaching in higher education. Part of the focus for the PGCHE is the use of e-learning. In a review of the provision to address the new professional framework for learning and teaching in higher education (HEA, 2007) it was decided to enhance this aspect through the development of a complementary module “E-learning in Higher Education”. This development was led by Bob Rotheram and the authors and supported by a secondment funded by a grant from the university Centre for Academic Standards and Quality.

Development work on the structure, content and delivery took place during 2007/08 with an initial intention to launch the module in March 2008. Due to the imminent roll out of a new virtual learning environment (VLE) it was decided to postpone this until September 2008 when the online learning space could be built in the new environment.

The module was built as part of the existing continual professional development (CPD) programme in the School of Education and complemented the PGCHE as part of the pathway to an MA in Education (Learning and Teaching in Higher Education). It’s validation and design was done in consultation with the newly formed university Centre for Professional Learning and Development (CPLD). It this had a place at the heart of the university CPD programme whilst being part of existing Masters level provision in the School. There is a tension here, not least in the funding arrangements for staff to take part in the module. This requires a funds transfer into the School from the individual’s academic team or support unit. This funding has been seen as a constraint on participation by the authors. The first enrolled cohort of eight staff from over 40 initial enquiries would seem to support this view.

As well as the focus on CPD (rather than on technology per se) the module was designed so that participants experienced e-learning while learning about e-learning. There was thus in built opportunities for reflection on the process that their students would undertake if they were offered modules electronically. Additionally, though a face to face meeting was held to launch the module at which expectations and requirements could be discussed and aligned. At this meeting (attended by six members of the cohort) web cams, funded by the university alumni fund were distributed for use in the module.

While, as stated above, the main focus was not on the technology the concurrent introduction of the new VLE (NOW) provided the parallel agenda of developing staff expertise and confidence with a new set of e-tools. Nevertheless the learning outcomes did not set out to provide an explicit assessment of the use of these. See Table 1.

Assessment is by way of a portfolio of tasks designed to provide opportunity to reflect on the literature and the experience of being a participant in an online module and by a report on an implementation of an e-tool in the participant’s own practice.

### Knowledge and understanding

After studying this module you should be able to:

- Critically evaluate a range of e-learning tools and techniques for their usefulness in learning and teaching in higher education.
- Design, conduct, analyse and report on one use of e-learning in your own practice.
- Reflect analytically and critically on the implications of learning and teaching literature for the development of e-learning opportunities.

### Skills, qualities and attributes

After studying this module you should be able to:
Use a range of e-learning tools and techniques appropriate to higher education.
Communicate effectively online to support learning.
Work collaboratively online.
Reflect on your practice via a personal online journal.
Demonstrate synthesis of theory and practice.

Table 1. Module learning outcomes

Design of the online environment

The module was designed to have a number of discrete but interlocking units. These covered the five topics inherent in any teaching and learning online: communication, collaboration, planning, assessment and evaluation (adapted from APU, 2003). For each unit a set of activities, readings and tasks for inclusion in the portfolio were designed and constructed. These followed Stephenson’s and Coomey (2001) in promoting student-led activity with the online teacher acting as facilitator and Salmon’s (2002) design protocols for online activities (e-tivities):

- Information, stimulus or challenge (the ‘spark’)
- Online activity
- An interactive or participative element

Use of e-tools was embedded in the content of the units. This included discussion linked to content via the VLE’s discussion forum content-level link (each item of content had a ‘speech bubble’ link to a unit-specific discussion space) and via the navigation bar link at the top of the screen. At intervals in the module, synchronous events were held. These acted as both group tutorial support and introduction to new tools. In this way synchronous online chat, telephone conferencing and webinars were held. The latter involved the use of video conferencing and shared tools using the elluminate.com tool. One of the units, that on collaboration, made extensive use of a wiki for group tasks.

The use of these tools as the media for the learning rather than the object of the learning was generally welcomed although there were some evaluations that asked for more explicit support. We tried to guide people in the direction of the university’s support systems for e-learning but these were rather busy due to the newness of the VLE.

The design of the online space was such that it followed this approach of unitised content. The default template of the VLE was modified to address the needs of a portal (Garrison and Anderson, 2003) and to help with ‘orientation’. Additionally an orientation unit was provided with activities and portfolio reflection. This first unit did not address the ‘content’ of the module but was designed to allow for the socialization of Salmon’s (2004) first stage of online learning.
The key features of the design were permanence and multiple pathways. The VLE screen is naturally divided into three columns. These were repurposed so that the main central column acted as a navigation aid, the left hand column contained a to-do list and the right hand one news and announcements (see figure 1). These three tools have certain characteristics:

**To do list:** narrow, updated whenever a new unit starts – typically fortnightly

**Navigation:** wide, contains hyper-linked graphic directly to each unit and to e-mail tutors, new graphic added when each unit starts (hence content builds up progressively), nothing is deleted, just added

**News:** narrow, updated as an when, may contain links to content (eg direct to chat room)

The three columns were colour coded to distinguish one from the other. This three-column design and the function of each column was left unaltered throughout the module to provide a permanent design. Although hyper-links were provided in the navigation, participants could also navigate via the to-do list and the VLE’s navigation bars at the top of the screen. Thus multiple pathways were provided, some graphical and some text, some contextualised and others in menus. The navigation bars were expanded to include as many tools as possible (such as Drop Box, Chat, Survey).

In addition to the six units (five plus orientation) for which hyperlinked graphics were provided, a further link was provided to the module Library (a repository of key texts and resources such as the handbook).
Evaluation

As part of the portfolio, participants were asked to evaluate the module. This was set both as a specific task, as part of the unit on evaluation, and emanated from other reflections across the module.

Key points emerging from this evaluation are shown in Table 2

<table>
<thead>
<tr>
<th>Strengths of the module</th>
<th>Issues/ideas for development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of prescription allowing consideration of how the tools and ideas relate to participants’ own disciplines and teaching.</td>
<td>Some areas that would have been interesting to explore or to find out more on include work life balance from the lecturer’s perspective.</td>
</tr>
<tr>
<td>Excellent selection of literature supplied online for review.</td>
<td>The telephone calls – did some feel they were being chased and it was intrusive?</td>
</tr>
<tr>
<td>Encourages the use of a variety of online tools.</td>
<td>Group cohesion falling off towards the end of the module – feeling of disappointment when other participants did not contribute.</td>
</tr>
<tr>
<td>Questions preconceived ideas.</td>
<td>Balance of needs of Masters level assessment and pragmatic learning.</td>
</tr>
<tr>
<td>Focus moves beyond the technology but thinking about social presence was of great value.</td>
<td>Some tools needed greater explanation than was given.</td>
</tr>
<tr>
<td>Problems with technology used as learning points.</td>
<td>More needed on building social presence.</td>
</tr>
<tr>
<td>The portfolio tasks are excellent and thought provoking.</td>
<td>Demands of M-level study when trying to work full time.</td>
</tr>
<tr>
<td>Support by telephone calls much appreciated and provided motivation.</td>
<td></td>
</tr>
<tr>
<td>The materials were very well organised and the order of the units was logical.</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Feedback from participants

Discussion and Conclusions

The module has been welcomed by all those involved – participants, Schools, CPLD and CASQ. This has not produced large cohorts though (8 and 12 respectively for the first two runs) and the funding model and level of demand need to be looked at. There would appear, through the initial enquiries and anecdotal feedback to be a high level of demand for such a module but it may be that the standard half-year model of Masters level provision does not always fit well with the time staff can give to it. Maybe allowing completion over a longer time period would work better. This might also go someway to providing opportunities for building social presence and cohesion in the group. On the other hand, a longer time span could dissipate the focus.

There were few explicit comments about the design of the space. Those that were received were positive. It is felt by the authors that this is an indication of the success of the design. It may be inferred that navigation became second nature for participants and the negative comments reported in the School of Education’s Learning and Teaching Group about navigation and structure were not repeated here. As the VLE is new, it would have been expected that more criticisms would have surfaced. There were concerns expressed, to the e-Learning helpdesk, by the tutors and participants about the
functionality offered by some tools. These did not however contain criticisms of the design, which is our main focus in this paper.

About the authors

Pete Bradshaw is currently Quality Manager for the School of Education. His interests are around the use of ICT and learning, and he is studying for a PhD, as well as teaching across a range of programmes from undergraduate to doctoral supervision.

Stevie Vanhegan is currently the School of Education IT Coordinator. As well as teaching across a range of teacher training and undergraduate programmes, she also runs a nationally accessed accredited course for school ICT Coordinators.

Both have taught in virtual environments in other contexts.

References

APU (2003), *Online Learning, Teaching and Facilitation: Masters level module*, Chelmsford: Ultralab, Anglia Polytechnic (now Ruskin) University


1 Note that the term ‘e-learning’ is used throughout this paper, and indeed in the title of the module. It is noted that the Higher Education Academy (HEA) do not now offer a definition of this term and that the phrase ‘Technology Enhanced Learning and Teaching’ is gaining more prominence (see for example HEA, 2008)

2 Technically, staff enrolled on the module are ‘students’ but this nomenclature may be read ambiguously hence the use of ‘participants’

3 Nottingham Online Workspace, an instance of the VLE from Desire2Learn

4 Coincidentally the use of the word ‘unit’ is replicated in the new VLE as organisational sub division of a module with respect to content