

# Integrating and simplifying web-based IT systems to transform the development of e-learning

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QIA in partnership with ALT with the support of CEL, LSC, JISC, LSN and Becta.

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## 1. The organisation

North Devon College is a successful tertiary college situated in Barnstaple, North Devon. An Ofsted inspection in October 2006 found the College to be outstanding in all five areas against which it was assessed. It achieved Beacon status in September 2004 for its central information system (CIS). The college has one main site located on the edge of Barnstaple and eight satellite sites, some in Barnstaple and others across North Devon. There are over 2600 full-time and 6000 part-time students and around 3200 courses.

## 2. Overview

Two key developments have converged to produce a truly integrated college learning resource area and administrative system. Firstly, the central information system (CIS) feeds directly into all administrative and quality systems (registers, self assessment reports etc) and automatically populates courses on the virtual learning environment (VLE) which uses Moodle. Secondly, a shared staff drive has been developed as a single area to deposit material for course level administrative operations and resources for both the lecturers and students. The innovative element has been to link the VLE with both CIS and the shared drive so that teaching and learning resources can be uploaded and modified effortlessly. The integration of systems has allowed the college to move closer to its aim of becoming an *e-mature* institution in line with the recently piloted Becta e-maturity project.

### 3. The detail

#### 3.1 Approach

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The broad approach to the development of e-learning at the College over the last three years has been to involve all staff in the daily use of IT in every aspect of their role (administrative and educational) so that over time they would become increasingly confident in its use. Although some staff were IT enthusiasts, most were not.

Our starting point in terms of the available technology was an aging intranet that functioned well, and indeed was being used enthusiastically but in reality only by about 10% of college staff. Following a trial with the installation of Moodle on an old server, the College moved to using this VLE in September 2005. From the outset the VLE was tied to the CIS, so all courses are automatically populated with students and their lecturers. All courses are linked to an academic section (e.g. the Social Sciences Section).

Training in the use of the VLE has much increased the number of staff using the platform to post resources for students. However, it still seemed an uphill battle to convince some staff to use the VLE, particularly as the College also had an uncontrolled shared drive that both staff and students could use, with staff having *write* as well as *read* access to the resources.

Some progress was then made by creating an area specific to individual staff members, called *Your Resources* into which they could drag and drop files and then link these to items listed on the VLE. This certainly simplified uploading and allowed files to be edited without having to reload them. However, we soon realised that this was not going to be the solution to embedding ILT within the college.

A more wide-reaching approach was then taken; this was to convert the shared drive to become a staff-only area that could serve as a single depository for:

- local administrative materials related to courses;
- teaching resources (interactive whiteboard files, PowerPoint slides etc);
- student resources.

On the shared drive each academic section is allocated a folder within which they have complete autonomy. These section folders are generated automatically by a link to CIS. When uploading a resource or folder to the VLE the so-called *section resources* appears as an option to direct the link to a file/folder on the shared drive. In fact, assuming a link to a folder has already been set up in Moodle, a lecturer can then easily drag and drop or save a file directly to a folder on the shared drive. This is particularly useful at the end of a class as staff can save a file that will appear on the VLE (typically in a folder called *recent class work*) without actually needing to open Moodle to do so. Equally, a file can be modified and re-saved using the same file name as used by an existing link on the VLE, without having to upload it again. This has much simplified the use of Moodle within the College.

### **3.2 Impact**

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The development has been a college-wide initiative that involves all full-time and part-time staff and students. That said, clearly some areas of the college have used the capability more than others. Particularly pleasing in the more progressive sections has been the impact that the development has had on collaborative working. The benefits are recognisable beyond simply the sharing of resources, but equally involve a culture change with more discussion about approaches being used with students. Probably because the shared drive is organised by section, we have found that the most effective way of working with staff is at a section level rather than arranging cross-college training.

The dismay of the IT services manager at the rate of growth in storage requirements is perhaps a good measure of the progress being made. As would be expected, the learners clearly appreciate the availability of resources at all times. This is evident from feedback surveys.

### **3.3 Costs and benefits**

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Costs include technical staff time to set up the integration of CIS with Moodle and the training of teaching staff. The CIS developments focus on the work of three qualified developers, but they are supported by our innovative use of the top students on our foundation degree in computing where we provide them with two years of work experience in conjunction with their course. The maintenance of Moodle is now of the order of less than one hour per week as the systems are so highly automated.

Benefits include raised expertise within the development team, which is on-going and means we can act on new ideas and demands as they emerge. Teaching staff are becoming increasingly IT focused as a way of reducing workloads and improving their teaching and learning.

This approach has had several other major benefits. First, it overcomes limits to the size of files that are accessible using the VLE and, secondly, it is much more straightforward to link to saved or internally created web pages as all the associated files can simply be dragged and dropped into the shared drive with a link to the index/home page.

## **4. Lessons**

There are a number of pitfalls to avoid. The most important has been that in progressing from one improvement to the next, and with the way resources were uploaded to the VLE, the more progressive staff suffered from having to re-upload material twice over. However, those staff who were more resistant towards the concept of e-learning (although not so directly affected as they had uploaded a limited number of or no resources) needed more convincing to become involved. Fortunately, in spite of this, a frequent comment at training is now, "I thought it was more difficult to do than this". The advice, therefore, is to get it right first time!

The second issue with the more enthusiastic sections of the college (in spite of much advice to ensure that they created a meaningful structure to their folders on the shared drive) has been that some areas are now realising that they have allowed too anarchic a system to develop, and random folders have been allowed to pollute their structure. The difficulty here is that any high-level folder reorganisation will invalidate the links to student resources on the VLE. The advice is, therefore, that a more rigorous imposition of a basic top layer folder structure needs to be agreed with section leaders at the outset.

## 5. Contact details

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