

Appendix B – Summary of case studies

Abingdon and Witney College (Further Education)

Title: Using assistive software to personalise learning

Assistive software can help overcome some of the obstacles encountered by students with learning difficulties, recognised or hidden. Often, however, such software is applied as a specialist solution aimed at a particular disability, and is available only in limited locations.

In contrast, Abingdon and Witney College has embedded assistive software as a mainstream application to aid learning for all. This has helped to provide individualised solutions to learning problems across the whole college population.

Queen Elizabeth Sixth Form College, Darlington (6th Form College)

Title: Using e-learning to support individualised learning

Queen Elizabeth College had previously used an intranet-based system for their e-learning provision, only limited use was made of this by either staff or learners. It was only accessible on-site and the college wanted to provide access to learning both on and off-site to giving increased flexibility and independence of study.

The college has implemented a VLE which allows the established pedagogical models of learning and teaching at the college to be applied online. By enabling problem-based learning and group collaboration, rather than just serving as a content repository, it allows knowledge to be developed and shared by learners. Access to teaching notes, presentations and assignments anytime and from anywhere is seen as a valuable resource for learners, while the use of bespoke learning materials and archived discussion boards allow for reflection which aids learning.

Fermanagh College (Further Education)

Title: Putting the teacher into online learning

The use of presentational aids can enhance the delivery of learning for those attending the session, however, they may be of limited use for those unable to be present. Although presentations can easily be made available online, they may have little value if the viewer did not attend the session, or is unaware of the wider context.

A team at the college has investigated how adding audio and video to static presentations could make them an integral part of the teaching process. In effect, the aim is to turn class lectures and practical sessions into in-house devised “learning objects”, directly linking e-learning with classroom practice, allowing use and re-use by students time and again.

North Trafford College (Further Education)

Title: Developing practical skills and underpinning knowledge through blended e-learning

Increasing demands placed on industry in terms of safety and modern equipment complexity means there is an increasing amount of knowledge required by today’s engineers. With learners attending engineering courses at the college only one day a week, time must be well managed if they are to maximise learning and achieve the necessary grades. When time is so limited, producing engineers who are well qualified in both theory and practice is a huge challenge for tutors.

To help in overcoming these problems the college is now using a VLE, which has proved easy to use and fits the learner’s needs well, particularly in the way that

content is uploaded and structured. This delivery mechanism was well suited to the type of visual content required for effective learning in this subject area. The tutor incorporates a mixture of technologies and resources including notes and handouts, images (diagrams and photographs) and videos showing real-life situations, and embedded NLN materials, practice assessments and discussion boards. Different resources and functions are used to support and reinforce learning at critical times.

University of Central England in Birmingham (Higher Education)

Title: Delivering problem-based, experiential e-learning through a social constructionist platform

Many Further and Higher Education institutions in the United Kingdom have purchased a commercial VLE, however after an extensive evaluation process, UCE decided not to follow this route. Many factors affected this decision, including practical issues relating to costs, integration with existing institutional software such as student records systems or library catalogues and the potential for 'lock-in' to one vendor. Most importantly, it was felt that some systems lacked flexibility in terms of their pedagogical underpinning and the learning and teaching methods that could be supported.

The 'pedagogy first' approach at UCE led to *Moodle* being chosen as a VLE, because of its pedagogic design which is guided by a social constructionist philosophy. Focussing on critical thinking, the core activities revolve around discussion and collaboration and more broadly reflect the desired learner-centred approach to teaching at UCE.

Their use of online problem-based learning is proving useful for learners where the multimedia case studies can make subjects 'come alive' and simulate situations that they may not have had an opportunity to experience for real. In solving the problems, learning must become more independent and learners must collaborate and participate in discussions.

Kemnal Technology College (School 6th Form)

Title: Improving Cognitive Learning with LAMS

KTC aims to raise educational standards and learner achievement. This requires staff to continually evaluate their teaching in fine detail so that they can make the changes necessary to improve learning. However, this can only occur if teachers are given sufficient time to carry out this process in addition to their existing duties. The management team at KTC therefore looked at how e-learning might help to improve teaching and learning and create extra capacity in teacher workloads.

To achieve its aims the college has implemented *LAMS*, which provides a visual authoring environment for the design and delivery of a sequence of collaborative learning activities. These activities may include discussions, reflective question and answer, polling, sharing of resources such as documents or web sites, and file submission. By focusing on collaboration and reflection, rather than content delivery, cognitive learning can be promoted.

Oxford Brookes University (Higher Education)

Title: Enhancing Learning through Online Assessment

First year undergraduates in Law arriving at Oxford Brookes begin their legal studies with the compulsory module, Legal Methods. The course employed traditional teaching methods of weekly lectures and regular seminars. Despite the lecturer's best efforts, learner performance has tended to be disappointing. The reasons for this

appear to be mostly logistical. The module is taught in just eight weeks, during which time learners must manage their learning effectively to cope with the material covered. As the module also runs during the very first term at university, distractions outside the classroom make this particularly difficult for some learners who may miss taught sessions and are not prepared for the first assessment.

In an effort to overcome this problem the tutor has implemented online assessment quizzes using a VLE. The assessments are configured to be released to learners following a lecture, ensuring that when they next access the VLE they are automatically notified of a relevant new assessment. Learners can revisit the released assessments as often as they like, at any time, from any location, enabling them to study in more flexible ways. The quizzes were also accompanied with guidance on the module examination in the form of sample questions, model answers and marking schemes for self-assessment.

Newcastle United Football Club Learning Centre (Adult and Community Learning)

Title: Using individualised learning to engage and motivate adult learners

Following the Centre's success with schoolchildren, demand arose to provide similar access to learning for adults. The successful formula that worked for younger learners was used to attract adults who would not attend traditional educational institutions. The focus is on raising literacy, numeracy and ICT standards using the e-learning environment and the medium of football as motivational and curriculum tools. Online materials used include interactive tutorials in basic skills and learning objects in a variety of subjects with learning contextualised around a focused activity. In addition, a range of simulation packages are available which allow learners to apply knowledge in a meaningful context. The aim is to empower learners by adopting a user-centered approach to e-learning.

University of Highlands and Islands at Perth College (Higher and Further Education)

Title: Promoting critical thinking and reflection through collaborative learning

The BA in Child and Youth Studies programme prepares learners for working with children in a range of education, pre-school, health and care settings. Learners are attracted from across a wide geographical region in which the learner population is dispersed in a number of remote locations. These learners also tend to be from diverse backgrounds and have a range of family or work pressures which influence their approach to learning. As a result of these pressures, most learners enrolled on this course elect to study mainly from home.

Despite the support infrastructure provided through partner colleges and resident student advisors in regional learning centres, the level of face-to-face contact between learners, their peers and tutors tends to be relatively low.

An online component has been provided for the course as a means of engaging learners in discussion and collaboration. This model suits many learners in the region for practical reasons, but also serves to maximise high order learning. This is facilitated by providing resources such as lecture notes, papers for critique, learning objects and bespoke materials through a VLE.

An innovative aspect of this approach is to link these collaborative activities with assessment. For each topic, learners are required to make at least three contributions to the discussion each week, one of which must be substantive.

Working Men's College (Adult and Community Learning)

Title: Improving literacy and numeracy for disenfranchised groups through e-learning

Based in an area of great ethnic diversity with a high proportion of asylum seekers and refugees, WMC delivers an extensive outreach provision. The college provides access to education for excluded and disadvantaged learners through their Adult and Community Learning (ACL) programmes. Recruitment and retention among learners from wide-ranging ethnic backgrounds has proved problematic. It was thought that e-learning offered the potential to overcome some of the problems faced by the college in engaging and retaining learners from widely differing social and cultural backgrounds.

An interactive whiteboard is used to get learners more actively involved in learning, with tutors encouraging learners to come up to the whiteboard and contribute. In this way, learners actively participate physically and mentally, rather than sitting passively in the classroom.

A hand-held interactive voting system allows images, along with related questions and answers, to be projected onto the whiteboard in whatever sequence the tutor wishes. Each learner has their own hand-held unit at their desk, which is used to answer questions. Responses are tallied by computer and feedback is instantly available to the whole class. This enables the tutor to elicit a response from every learner simultaneously, without embarrassing anyone who selects the wrong answer, making learning fun but also highly productive.