

JISC

Effective Practice with e-Learning

An abstract, artistic composition featuring overlapping playing cards, primarily the Ace of Hearts and Ace of Clubs, set against a background of soft, glowing light rays in shades of blue and purple. The cards are slightly blurred and layered, creating a sense of depth and movement. The overall aesthetic is clean and modern, with a focus on geometric forms and light effects.

# Case Studies

Solve problems

University of Central England (UCE)

## e-Learning in practice case studies

### Solve problems

#### What is the intended outcome?

Learners can apply knowledge to solve problems and seek solutions.

#### What is established practice?

- Practitioners provide opportunities for learners to test their understanding through problems or scenarios based on real life contexts presented in print format
- Learners work in face-to-face groups to discuss solutions and test hypotheses, and then present final solutions for peer and practitioner review

#### What advantages can e-learning bring?

- Online scenarios using digital images and animation provide engaging activities that stimulate learning and help learners to retain concepts
- Multimedia presentation of lectures combined with online discussion boards can support a variety of learners, widening participation in learning
- Learners unable to participate in face-to-face group activities can still enjoy the benefit of problem-based learning through animation and simulation
- Use of online discussion forums can support learners in arriving at solutions and develop their interpersonal and communication skills
- Online interactive activities or virtual worlds can reflect real life situations in which learners can test their skills and understanding safely

## Developing problem-solving skills

University of Central England (UCE)

### Background

The University of Central England (UCE) in Birmingham serves a diverse range of over 23,000 students. UCE is committed to widening access, encouraging people from many walks of life to study in ways that suit their circumstances, by offering flexible programmes in association with accredited colleges throughout Greater Birmingham.

### The challenge

Many further and higher education institutions in the UK have purchased a commercial Virtual Learning Environment (VLE). However, after an extensive evaluation process in 2003, UCE decided not to follow this route, seeking maximum flexibility in terms of pedagogical approaches. What was vital when choosing a VLE was to respond to learners' needs for a flexible curriculum which maximised their learning potential, in particular through the use of problem-based or experiential learning.

### The e-learning advantage

The 'pedagogy first' approach at UCE led to Moodle being chosen as the learning platform in order to develop learning programmes that focused on critical thinking and problem-solving. For example, the Postgraduate Certificate course for staff at UCE revolves around discussion, collaboration and problem-based scenarios. Pilot studies at UCE have demonstrated that Moodle is flexible enough to enable advanced methods of content delivery (such as video lectures), as well as multimedia case studies, and experiential learning via communication tools.

“I’ve read many times that the VLE is a Trojan horse that gets staff to think about how they teach. Once you make the move into e-learning, it definitely makes you think more about your face-to-face teaching.”

Alan Staley, Head of Learning Technology Development Unit, UCE.

Multimedia case studies have been developed using two fictional universities, ‘Crumpton’ and ‘Mullock’, where real life scenarios are simulated in cartoon environments to bring the ‘drier’ elements of content to life. Online communication tools are then used to enable practitioners to discuss the problems raised in the scenarios, to recommend solutions and to link theories with their own practice. The communication tools were used both on and off campus, but were also combined with face-to-face sessions to provide a blended solution.

Other benefits to learners arising from the VLE have been practitioners rethinking how best to use class contact time. Lectures have been converted into video format to be delivered through the VLE. Learners then discuss critical points in after-lecture clinics, both online and face-to-face. This has freed up class time for activities such as group discussion based around clinical practice.



### Key points for effective practice

- Technology should not dictate learning solutions. The aim at UCE was to first get the pedagogy right by determining whether an approach would work online before implementing it. For many adult learners, the ‘right pedagogy’ means having access to online problem-solving resources and scenarios backed up by communication tools, and then being able to use these when and where suits them best.
- Experimentation may be necessary to achieve the right blend of face-to-face sessions, online discussion tools and interactive resources.

### Final word

The multimedia case studies can make subjects ‘come alive’ and simulate situations that learners may not have had an opportunity to experience for real. In solving the problems, learners become more independent. Research often suggests that this approach can lead to a deeper understanding than a content-driven approach.

