Effective Practice with e-Learning

Case Studies
Build and test theories

North Trafford College
Managing your learning

North Trafford College

Background
North Trafford College offers a wide range of provision in specialist vocational areas. The College has developed links with local employers and training providers in the gas industry in particular. The College was the first to receive Centre of Vocational Excellence (CoVE) status in Gas Services Installation and Maintenance, and has built up extensive resources for supporting learning and teaching in industrial and domestic gas engineer training.

The challenge
Learners on the final year advanced Modern Apprenticeship course attend the College on a day-release basis, spending four days a week working for local employers. In order to progress on to full employment, learners must gain accredited Gas Engineer status, where exams test both practical skills and theoretical knowledge. Over recent years, requirements for safety and complexity of modern equipment have increased training requirements for gas engineers. With learners attending college only one day a week, time must be well managed if they are to be successful.

The e-learning advantage
Brian Keating, course leader for Gas Services Installation and Maintenance at North Trafford College, found that most learners on the course were visual learners who favoured a traditional approach to learning, with theoretical concepts and practical competencies being delivered via tutor-led sessions. This meant that all learners had to progress at the same pace during the time available. However, some needed additional time to grasp difficult concepts if they were to complete the course.

Build and test theories

What is the intended outcome?
Learners can identify component parts of knowledge, predict outcomes, follow instructions and apply knowledge.

What is established practice?
- Practitioners organise learning into component units and provide opportunities for modelling
- Learners have opportunities to devise trials of their skills or knowledge
- Practitioners give clear feedback on each stage to correct learners’ performance

What advantages can e-learning bring?
- Online resources can support different learning styles and provide self-paced learning
- Media-rich resources in different formats can provide more efficient learning when linked to face-to-face sessions in a blended learning programme
- Online quizzes give learners opportunities to self-test prior to summative assessment
- Online assessment tests can provide immediate feedback in a non-judgemental way
- Individual learners can be more easily supported through differentiated resources
All the learners who used the online component reported increased confidence in their application of knowledge and there has been a 25% increase in pass rates in 2004.

Brian began by setting up a course area on the Virtual Learning Environment (VLE) and enrolled learners into groups defined by the module they were studying. He incorporated a mixture of technologies and resources for learning support, including notes and handouts, images (diagrams and photographs and videos) and then embedded National Learning Network materials, practice assessments and discussion boards.

In addition to providing support materials, Brian has explored blending e-learning with taught sessions, to assist learners in managing their own learning. Each week, they work through prepared material online which expands on concepts discussed in the course textbook. Links are also provided to outside web resources. These activities are then made the focus of discussion in the following week’s taught session.

Mock examinations are also delivered online. Learners take these in their own time, but with time restrictions to simulate exam conditions. The submissions are automatically marked and if a learner performs poorly, built-in feedback, provided by the tutor, gives an explanation and provides links to relevant learning materials. Further feedback can take place in face-to-face sessions, providing a blended learning solution.

Key points for effective practice

- Being able to reinforce difficult concepts at their own pace, often from home, and to follow these up in class, is a feature highly valued by learners on this vocational course.
- The development of e-learning has enabled tutors to devote more time to individual learners during their time at college, while also addressing the needs of the whole group.
- Learners on the course have the opportunity to offer feedback at the end of each term on what worked well and what did not. Their comments are then used to improve the course for subsequent terms.

Final word

Reliable and efficient networks and systems are key, but often forgotten, components of successful e-learning. A poor network and systems infrastructure can greatly inhibit the benefits of e-learning. Learners will lose patience and confidence if the infrastructure is of a poor quality. The systems support team at North Trafford College have worked hard to ensure the systems support for learners is in place. Brian Keating feels this has been an important component in the success of e-learning at North Trafford College.