5. E-assessment case studies

5.1 Introduction

A substantial number of organisations and awarding bodies now offer e-testing as part of their assessment methodologies. In addition, a number of organisations are starting to consider which e-portfolio system to select, and how to manage the associated processes. Others are already using e-portfolios, but may wish to review their processes.

This guide has been piloted in selected centres in England, Wales and Northern Ireland, and resulting case studies and examples from these organisations have been included in this section. These experiences may be of interest and assistance to others looking at e-testing and/or e-portfolios, whether with a view to introducing them within their own centre or improving existing practice and staff skills.

It should be noted that all the organisations involved were at various stages of their own projects on which these case studies are based. There are, therefore, significant differences between the case studies, the amount and type of information available, and the extent to which the developments are 'complete'. Revisions and updates will be posted on the efutures website.

The pilot process was undertaken by the qualifications regulators for England, Wales and Northern Ireland, and where appropriate the results will be reflected in changes to this guide. SQA would welcome case studies from centres involved in e-assessment in Scotland. If you have experiences you would like to share of either e-testing or the use of e-portfolios in assessment, please contact Christine Wood (**christine.wood@sqa.org.uk**). We may be able to include them in future versions of this guide, or on SQA's website (**www.sqa.org.uk**) or the efutures website (**www.efutures.org**).

5.2 Case studies

Advice NI

Area	E-portfolios
Programmes supported	NVQ levels 2, 3 and 4 in Advice and Guidance
Awarding body	Open University (OU)
Number of learners covered by this case study	20
Contact	Fiona Magee

Background

Advice NI is a voluntary sector organisation that provides a range of services in Northern Ireland to support a professional advice and guidance service across the community. One aspect of providing this support is to offer professionals working in the sector the opportunity to gain appropriate qualifications. Advice NI undertakes this through programmes of supported distance learning. This includes a number of relevant NVQs which are accredited by the OU awarding body.

Advice NI is based in Belfast and its learners are spread throughout Northern Ireland, which has proved challenging for Advice NI both in terms of providing support to learners and undertaking assessment. In 2006, this led the centre to consider how it might use an e-portfolio system to address these challenges.

Issues

The first issue that needed to be addressed was the choice of system. Ideally, the organisation wanted a VLE that would enable it to combine the provision of learning material with an e-portfolio system. A major barrier was cost — as a small voluntary organisation many of the commercially provided systems were beyond the budget available. Furthermore, Advice NI felt it did not want to be 'tied in' to a bespoke system.

For these reasons, Advice NI chose Moodle, a free, open source software package. While there is a strong online community for Moodle, Advice NI felt that contract support was needed in the first instance to ensure the system was up and running successfully and to populate the learning materials. Consequently, the organisation put out the tender to a number of companies to both develop online learning material and provide Moodle support.

The first group of 20 learners started their programme in January 2007 and are due to complete in June 2008. Issues to date have included:

♦ Ensuring that all the learners were confident in using the system. Advice NI decided to run a half-day workshop to introduce the group to

the system and ensure that they all had the minimum IT skills necessary to use it, for example, using a scanner. A further IT skills workshop was held in early May.

♦ Ensuring that everybody using the system was aware of the facilities Moodle offered and how Advice NI was expecting them to be used.

♦ Undertaking one or two 'fixes' or 'workarounds' where it would appear that the system could not offer a particular facility. For example, Advice NI wanted to use the blog facility within the system as the particular area of work required assessors to see journals of learners' thoughts and activities. However, it had not been possible for the blog facility to be configured so that the assessors could view individual learner blogs.

♦ Ensuring that learners had access to support from other learners, not just from the assessors and tutors. This has been achieved by a 'buddy' system and use of the discussion forums within the VLE.

Progress

Advice NI is still learning what the system can offer and how it can be used.

In this sense the process is different from introducing a commercially based package. A significant amount of learner material has been produced and this is integrated with the assessment requirements in a very effective and engaging way. This ensures that the collection of evidence is not seen as separate from the learning support. Advice NI has also begun using the system to monitor learner progress and assess learner evidence.

The organisation found the guide to be a very useful document to raise awareness of a number of issues within the team that may otherwise not have been considered.

At the time of this case study (April 2007) it is too early to assess whether learners prefer the electronic system to the use of paper. However, feedback from learners so far has been very positive about their overall online experience. Advice NI cannot yet assess whether some learners might complete early, as they are only a third of the way into the programme. But there is no evidence to suggest that learners will need more time and early evidence suggests that some will need less.

Advice NI has actively involved its awarding body, which has been very supportive of the development. The organisation is currently awaiting feedback from the OU on its use of Moodle.

The CADCentre UK Ltd

Area	E-testing
Programmes supported	7262 IT Users and Practitioners 4353 Auto CAD 4412 Business and Administration
Awarding body	City & Guilds
Number of learners covered by this case study	800
Contact	Wayne Fisher

Background

The CADCentre UK Ltd offers training for employed and unemployed candidates, specialising in IT and Engineering, and has training centres strategically positioned along the M4 corridor. It set up an e-testing system four years ago upon which it is now heavily reliant, with around 800 candidates currently using e-testing.

Issues and actions

Generally, the CADCentre has found the e-testing software to be reliable. However, when trying to deliver the e-tests 'on-site' at an employer's premises, there are issues with the reliability of the software, which sometimes fails to download exams correctly. Wayne Fisher says, 'Having the option to deliver the e-test on-site is brilliant as it falls into line with the assessment strategies in place. However, due to the potential unreliability of the software this can prove somewhat difficult. Overall, the e-testing idea is a brilliant one, however the software needs to be more reliable in order to give assessors confidence in the delivery of the tests on-site.'

To combat this unreliability, the CADCentre has liaised with the manufacturer of the software, who has taken steps to overcome this issue. The original version of the testing software has undergone numerous updates and changes to ensure that candidates are able to sit the tests without any major problems. The CADCentre also keeps the awarding body informed of any problems, so that the body can feed these back to the e-testing software developers.

Using the guide

The CADCentre had already implemented its e-testing software before the guide was developed. However, they believe that if the guide had been available then, it would have been very useful in providing some indication of the personnel required in order to set up a successful e-testing process and the individual roles and responsibilities.

Feedback from candidates

The CADCentre reports that all candidates have found the e-testing method a lot easier and more user-friendly, and the majority of candidates commented on the ease of use of the software and the ability to review their answers.

The feedback generally received from candidates has been that they are happy to carry on with e-testing. However, not all qualifications offered currently support this and the CADCentre hopes that developments will enable e-testing to be implemented for more qualifications and at all levels wherever possible.

Success rates

Although candidate success rates have not improved in themselves, the introduction of e-tests has enabled the CADCentre to have a quicker turnaround of completed candidates. The tests can be sat when the candidates are ready rather than when designated by an awarding body, and learners can register and sit the exam whichever day and time suits them.

Benefits

Generally the CADCentre is happy with the e-testing package, as its flexibility brings many benefits for both the training centre and the candidate. The centre feels that e-testing works extremely well with the qualifications it currently offers, and that a successful e-testing operation can be achieved with minimal cost.

For other centres wishing to start implementing e-testing, the CADCentre would suggest using the guide to help make the transition period from paper to e-testing run as smoothly as possible, as the guide gives a clear indication as to the personnel, responsibilities and infrastructure required.

In relation to running e-tests, the CADCentre suggests that the process recommended in the guide is given serious consideration by other centres, 'as it allows the assessor to fully accommodate the candidates' needs, with tests carried out seven days a week and 24 hours a day if necessary!'

Chartered Institute of Purchasing and Supply

Area	E-testing
Programmes supported	Level 2 introductory certificate in Purchasing and Supply
Awarding body	CIPS
Number of learners covered by this case study	500–600 in 2007/8
Contact	Amanda O'Brien

Background

The Chartered Institute of Purchasing and Supply (CIPS) is a small awarding body with learners spread across both public and private centres in the UK and worldwide. CIPS offers a wide range of qualifications, primarily at level 3 and above. However, CIPS recently decided to introduce a level 2 qualification and deliver the associated examination via an e-test.

One reason for deciding to use e-testing was the expectation that a number of the learners for the qualification would be based outside the UK, and they considered that it would be both flexible and cost-effective to use an e-testing system from the beginning of the new qualification. This qualification is the first to be offered at this level and the first to use e-assessment.

CIPS is now in the process of signing up centres to offer the new qualification and undertake the approval process to offer e-testing. The tests will initially be available on four weeks' notice within a 9am–5pm support window, using fixed papers from a test bank. The market for the qualification will be primarily those in employment and, with this in mind, assessment is through standard multiple choice question (MCQ) papers. Following the initial period of system testing and familiarity, CIPS intends to offer tests on a 24/7 basis (world-wide and across time zones) and to extend their use outside the UK beyond an initial small group of overseas centres.

Issues

Initially, CIPS found it difficult to find impartial advice and guidance on how to approach e-testing as a small awarding body, and it is still concerned that the smaller awarding bodies find it difficult to access impartial e-assessment advice and guidance. There was also concern that the overall reputation of CIPS qualifications should not be compromised by any negative perceptions of the use of e-testing, either in terms of test content or of the way the e-testing was conducted.

Having chosen a technology partner and designed a system to meet its needs, CIPS found the guide extremely valuable in providing:

♦   the necessary information to develop its own e-testing guidance documentation
♦   an application process for centres wishing to become test centres
♦   the design of the training programme that centre staff will need to undertake for approval to offer the qualification and use the e-testing system

CIPS has used appropriate parts of the e-testing sections in full to ensure that the centres will meet its requirements and standards. Each centre will be required to install and test the software prior to live testing and the centre staff will use guidance based on the role matrix to ensure that they meet CIPS's quality standards.

Progress to date

At the time of this case study (June 2007) the application process is well advanced and the initial tests have been written to meet the needs of the qualification specification. An initial, small group of centres will pilot the system and the tests later in the summer. CIPS then wants to ensure that it can provide adequate geographical coverage of test centres that will enable candidates who are not attached to a learning provider to access the tests.

Future developments

CIPS is keen to ensure that its examination staff undertake the appropriate LLUK units as these become available, and will encourage staff in its centres to do the same.

CIPS also wants to investigate further use of e-assessment, perhaps using an e-portfolio system to assess some aspects of its higher level qualifications.

EAGIT Ltd

Area	E-portfolios and e-testing
Programmes supported	NVQ level 2 in Performing Engineering Operations
Awarding body	EMTA Awards Ltd (EAL)
Number of learners covered by this case study	30–40
Contact	Keith Franklin

Background

EAGIT is a long-established private sector training provider based in Norwich. It is primarily engaged in training for the engineering sector and runs a wide range of programmes including working with schools at 14 to 16, apprenticeships and bespoke industry-based training.

Traditionally, learners have attended EAGIT's Norwich facilities for training and assessment. However, in some cases this requires learners to travel significant distances, and also restricts the area within which EAGIT can operate.

EAGIT has been operating e-testing for some time for areas such as key skills testing. Last year it decided that one way to provide a more flexible offer to employers and their employees would be through the use of an e-portfolio system to capture evidence in the workplace. EAGIT saw a number of advantages of using e-portfolios, particularly for the group of adult learners it was planning to use them with initially.

♦ Learners would not have to maintain a large portfolio of paper-based evidence.

♦ All the assessment observations undertaken could be put directly onto the system and signed off immediately.

♦ Evidence could be collected in a variety of forms, including:
  — photographic or scanned evidence of documentation
  — video evidence of performance tasks
  — video records of answering knowledge questions

♦ Trainees could upload evidence for the assessor using the internet.

♦ Indications of progress would be on-going and immediately available.

♦ Assessors, verifiers and external verifiers could carry out their work remotely.

Progress to date

EAGIT undertook a detailed procurement process for its e-portfolio system. The final choice was based on one key consideration: that the system chosen enabled the assessor to mirror portfolios on the e-portfolio system server by synchronising them to a laptop. The assessor could then take the laptop to the workplace, work with the learner, add evidence through the laptop and, if an internet connection was not available, synchronise it back to the e-portfolio system server on returning to 'base'.

In late 2006, the system was set up and the first EAGIT staff trained. A small group of learners on Train to Gain programmes based at a number of employers began developing e-portfolios using the system. Initially, the assessor would collect the evidence on visits, review it with the learner and upload onto the laptop for later synchronisation. However, a number of the learners have now gone one step further and begun sending evidence to the assessor by e-mail, and EAGIT is confident that, in due course, some learners will gain the confidence to access the system directly and upload their own evidence.

EAL has worked alongside EAGIT to monitor these developments and is actively discussing how it might engage with the system to undertake external verification. EAL is also encouraged by the ability of the alternative types of evidence being gathered to immediately demonstrate appropriate and verifiable learner competence.

Issues

The relatively modest level of activity to date has not raised many issues, and EAGIT is very pleased to have moved forward fairly quickly, with a number of learners having populated significant proportions of their portfolios. However, while most employers have been supportive of this way of working, one or two have been less so. Extending the use of the system to other programmes will require some active 'people engagement'. This will include other staff within EAGIT, employers and awarding body external verifiers, as well as the learners themselves.

While there have been no insurmountable technical issues, if learners begin to actively access their own portfolios, or even wish to use e-mail to submit evidence, the issue of access may become important, and for a number of older learners using technology may present a skills issue. However, to date the learners have been very positive, with no problems in using video or photographs to collect performance evidence and only one or two not happy to be audio recorded.

Next steps

EAGIT has deliberately kept the initial introduction of e-portfolios to a manageable number of learners and wishes to see the issues raised by a complete cycle of activity before extending their use to other groups. However, the training provider is already considering which other learners

could benefit from the use of e-portfolios. For example, there are advantages for level 3 learners who, in addition to performance evidence, produce other evidence using word processing.

EAGIT has also begun to consider how to change its patterns of work and visits. Its 'operational' area has already been extended with the Train to Gain group, where learners have been recruited across eastern England and the East Midlands because they do not need to attend the facilities in Norwich.

Other developments

EAGIT has used the guide as a way of benchmarking its processes, particularly for e-testing. It has used the roles and responsibilities model as a way of changing the way it organises e-testing. For example, it helped the training provider to confirm a change that it had already initiated by bringing in a person to administer e-testing on an organisation-wide basis.

Hyfforddiant Mon Training

Area	E-testing and e-portfolios
Programmes supported	E-testing currently operates for the following qualifications: ♦ technical certificates for Hospitality and Catering, Retail and Customer Service ♦ basic skills diagnostics on desktop and laptop computers ♦ European Computer Driving Licence (ECDL)
Awarding bodies	City & Guilds, EDI/Goal, GQA (Glass and Glazing), EAL
Number of learners covered by this case study	6 Catering and Hospitality (e-testing)
Contact	Alan Jones

Background

Hyfforddiant Mon Training is a DCELLS-approved work-based learning provider that operates under the umbrella of the Isle of Anglesey County Council. Almost all students recruited are placed/employed within industry, commerce and business, or within the local authority.

The objectives of its pilot were to:

♦ provide initial feedback on the guide related to its use for the centre (desk research)

♦ provide an improved e-testing process for six Catering and Hospitality learners

♦ use the guide to help select a suitable e-portfolio system

Use of the guide

As Hyfforddiant Mon has been operating an e-testing facility for the last three years, the guide helped the centre to plug the gaps in its existing strategy. It found that the e-testing role matrix was particularly useful. The guide was also used to improve on existing systems and structures of the team and the centre is still in the process of adopting most of the guide's suggestions.

Commitment to e-testing

Hyfforddiant Mon has made further financial commitments to e-testing by providing internet access within other training rooms at its centre, which will enable further capability for e-testing.

For Catering and Hospitality learners, laptops are being provided to staff to enable them to visit work placements with a view of carrying out online

e-testing at the place of work. Careful planning will be needed to take into account requirements for examination conditions and the guide will help with this.

Selecting an e-portfolio

For the pilot the administration/IT team were asked to look at and use an e-portfolio system, as this team were best placed to determine which system would be the best for their use.

At present, Hyfforddiant Mon is still at the stage of deciding which e-portfolio to pilot. To help decide which system to select, the centre will be using the functionality checklist in annex A6. The cost of the systems will also be taken into account.

Due to the relatively short interval of time of the pilot period the centre has not moved as far forward as it would have liked. However, three systems have been demonstrated. Two were relevant for the purpose but the third was not. Before making a final decision, the centre wants to look at more systems.

This careful approach is partly due to the need to consider the council's procurement rules if purchasing above a certain limit. Costs will have a major influence on choice. One quote so far is for £3,500 for 20 users, which would have major implications in terms of on-going costs, so the decision is not to be made lightly. Hyfforddiant Mon says, 'From experience we know that this sort of decision can be costly and time-consuming if we get it 'wrong'.'

In the meantime, this has prompted the centre to develop a system devised in-house, which it admits is far more basic and offers at the moment a bank of resources. However, it gets Hyfforddiant Mon started down the e-portfolio route.

Key issues encountered to date:

1. Convincing staff that e-assessment is better than conventional systems has been a challenge. Current achievement rates have increased but other factors as well as e-assessment may have contributed to this.

2. Staff development issues in learning how to use new software systems and new technological advances are proving costly. It is hoped, though, that this investment will pay dividends in the returns that the centre and learners will receive as a result of e-testing.

Staff who have been identified as having a significant role in e-assessment are well-qualified and have considerable experience. These members of staff attend forums and events linked with e-learning. The centre looks to these people to provide training and assistance for other members of staff.

Feedback on the guide

Hyfforddiant Mon says that the guide is helping with decisions on matters which need to be addressed, and it believes that without the guide less informed decisions might have been made. However, the centre also feels that the guide is heavily weighted towards larger organisations, and that it would be helpful if a condensed/summarised version for smaller organisations could be developed.

Conclusions/next steps

The centre is comfortable that e-testing has been appropriate for its uses. It hopes to expand this facility within the organisation to cover other vocational areas.

In the main, e-testing has been used for MCQ. This is seen as an excellent way to carry out this kind of assessment as the results are fed back quickly. The centre has also indicated that it would like to increase its e-testing provision steadily in future years.

In relation to e-portfolios Hyfforddiant Mon needs to conduct more research to determine which system suits its needs best. It recommends the guide to others as an 'excellent' resource that will give providers the questions they need to ask before they commit to any system.

Lambeth College

Area	E-testing and e-portfolios
Programmes supported	Basic and key skills levels 1 and 2
Awarding body	NCFE
Number of learners covered by this case study	40 completed tests by end May 2007 1,100 learners completed tests by end of July 2007
Contact	Julia Hoyte

Background

Lambeth College is a large, urban further education college based at a number of sites in south London. The college has a significant programme of basic and key skills (BKS) delivery, both to full- and part-time learners. To date, Lambeth has been using traditional paper-based tests at levels 1 and 2. However, last year the college embarked on a college-wide strategy to improve its BKS performance and outcomes. One element of this strategy was to move towards using online tests for learners at levels 1 and 2.

The college took the opportunity to review the overall offer from each of the BKS awarding bodies and decided to use NCFE as its online provider. The aim was to have the system installation and training completed in time to use e-testing for the majority of learners at the end of the 2006/07 academic year.

Progress to date

The system was set up and the training completed during the early part of 2007. The first 40 learners successfully took their tests in mid-May. Between late May and July the college planned to use the system to test a further 1,100 learners.

Issues

Overall, the feedback from Lambeth was that the first set of tests had 'gone better than expected'. The college information learning technology (ILT) manager made extensive use of the guide to train staff, and the college also received awarding body training in the use of the system and access to support from its local manager, all of which helped with the smooth introduction of the system. While some staff had been concerned about the changes, most welcomed the opportunity to improve BKS outcomes and offer more flexible testing and faster results, and were reassured by the level of preparation.

While it is too early to judge changes in learner performance, results from the initial batch of learners were broadly as expected. NCFE provided practice tests and the college used other, widely available BKS practice material. Using the technology did not prove to be an issue for younger learners, but the staff still have some concerns about adult learners and their IT skills. The college will monitor issues and address them as necessary.

Lambeth has used existing IT facilities to accommodate the testing and has not, therefore, needed to undertake any significant investment specifically for this development. However, this may become an issue if volumes increase significantly and use of the system and IT facilities spreads more widely across the year.

The college will continue to use the guide as a benchmark for good practice and it is likely to be used to benchmark other e-assessment developments.

Next steps

Following this development, Lambeth is thinking about introducing e-portfolios, and other parts of the college are looking at the BKS development to see if further online testing should be introduced.

Northern Ireland Civil Service Centre for Applied Learning

Area	E-portfolios
Programmes supported	NVQ levels 2 and 3 in Business and Administration
Awarding body	OCR
Number of learners covered by this case study	7 candidates, 4 trainee assessors, 3 qualified assessors, 1 internal verifier
Contact	Lorraine Thomson, Martinia Jefferies

Background

The Centre for Applied Learning is part of the Northern Ireland Civil Service (NICS). It was formed in 2006 and is designed to be the 'one-stop shop' for generic training within NICS. Based in Belfast, the centre has 'clients' throughout Northern Ireland, many of whom are scattered over a wide area.

By forming a central service, it was anticipated that staff across departments would be able to access training and accreditation more easily.

The centre uses OCR as its awarding body for NVQ Business and Administration and, on a number of occasions, has arranged for centres to see demonstrations of e-portfolio systems. Workplace 2010 is the NICS project which aims to meet one of the organisation's corporate objectives by introducing electronic storage of all documents and records. The introduction of an e-portfolio system into the Centre for Applied Learning fitted into this objective

The Centre for Applied Learning agreed to pilot an e-portfolio system during 2006/07 with the aim of evaluating the effectiveness both of e-portfolios generally and of the specific system chosen.

Procuring a system

The system chosen had been procured by a Northern Ireland department shortly before the Centre for Applied Learning was formed, using the standard NICS procurement process which requires bids from three providers. It was decided that the pilot would continue to use this system and OCR supported the centre in its choice, which was based on the evaluation of the following key criteria:

♦ **Suitability:** Was the system consistent with the centre's NVQ procedure and, if necessary, could it be adapted to meet the centre's needs?

♦ **User-friendliness:** It was important that the range of users — staff as learners, assessors, the internal verifier and external verifier — could use the system easily and that it could be easily managed by other centre staff.

♦ **Accessibility**: The chosen system needed to be accessed by staff in a

variety of locations and the system needed to allow access for different functions by a variety of staff.

♦ **Security:** The system needed to be secure and protected by passwords, administrator functions and so on.

♦ **Value for money:** The system needed to represent value for money both in terms of start-up and on-going costs.

Outcome and expectations

The pilot has now been running since September 2006. Two groups have been using the e-portfolio system — the first on a one-to-one basis and the second on a group basis. In addition to the staff using the e-portfolio system, others are using traditional, paper-based portfolios and this has provided a useful comparison.

The issues to date have been primarily concerned with the following:

♦ Preparing all users — staff/learners, assessors, verifiers and administrators — to ensure that they could both manage and use the system effectively. The centre wanted to ensure that it undertook a fair assessment of the use of e-portfolios and has therefore been monitoring, as far as reasonably possible, the difference between issues associated with the introduction of a new system and those directly attributable to the use of e-portfolios.

♦ Training in the use of the system has been vital. Assessors and others involved in the delivery of the NVQ found it difficult to handle both a new system and a revised set of standards at the same time. Learners also needed to be confident in using the system; some reverted to using paper for certain activities when they could have used the e-portfolio system. However, this was not surprising when both staff and learners were getting used to the system, its features and its limitations.

♦ Staff users being able to access the system at a local level was an issue as not all staff have open access to the internet or access to the internet away from work.

♦ There have been some technical difficulties and some processes that the centre currently operates, but which the system could not provide. These have been addressed with either process changes or 'work-arounds'.

A mid-project review will be undertaken in spring 2007 and this will look at progress, compare the delivery issues between the groups and identify issues to date. However, there is already anecdotal evidence that some learners using the e-portfolio system are completing their NVQ more quickly than those using a paper portfolio.

The centre has been able to use the guide as a reference for good practice. Following the conclusion of the pilot (autumn 2007), should the centre pursue the e-portfolio route, it will consider how best to follow through and organise for wider use of an e-portfolio system.

Northumberland County Council Adult Learning Service

Area	E-portfolios
Programmes supported	A1 Assessors Awards ITQ ECDL testing
Awarding body	City & Guilds, OCR, BCS
Number of learners covered by this case study	18 in A1 Starting 98 in ITQ and 498 in ECDL testing
Contact	Jacquie Hodgson

Background

Northumberland County Council Adult Learning Service provides a wide range of programmes to adult learners in Northumberland, delivered in centres spread across the county.

For some time the service has been engaged in addressing how best to harness technology, where appropriate, to support learning and assessment. It has already introduced e-testing in a number of programmes and wanted to consider the use of e-portfolios.

The service has a learning platform which is a spoke from the main county council hub platform. This is a county-wide system that has been developed by Northumberland in conjunction with Durham University Business School. The system started life in the Business School as a content management system. Working in collaboration with Northumberland high schools, the platform evolved into a managed learning environment (MLE) and the project has now grown into a collaborative initiative between Northumberland, Newcastle and Gateshead local authorities, and the Business School. This regional group meets regularly and prioritises further development of the system.

Bringing the Adult Learning Service in as a user has added a further dimension in terms of the types of programmes and learners using the system and the assessment methodologies that many of these programmes use. The Adult Learning Service has used the information in the guide as a means to create stronger links between adult learning and the schools provision. The service feels that the guide shows that the needs of both are the same, giving a more connected vision for developments of the platform and greater understanding of what work the service does.

Progress to date

One of the first things the Adult Learning Service did was to deliver a course for its own tutors using the platform, with electronic storage and submission of work for assessment. Delivering the course this way meant that the tutors had first-hand experience and were likely to try it for themselves with their own students.

As this course was the A1 Assessors course for staff who wish to offer the ITQ, the Adult Learning Service also started developing the ITQ course on the platform to encourage the further use of e-portfolios. All but one of those involved with the A1 course expressed a wish to develop the use of e-portfolios in their sessions.

Another early step was for those responsible for the learning platform to see the guide, which the Adult Learning Service found useful in providing unbiased advice. The developers could then discuss the amendments needed for the platform to be used as a fully functional e-portfolio system. In doing this, the service tried to highlight the wider needs, showing how this would be beneficial for both the service and the schools in the county.

The Adult Education Service has also had contact with the external verifiers for City & Guilds and OCR. They were supportive in that they could see the benefits of using an electronic method of evidence collection. Further developments in the system are needed, however, before this becomes a clear process for internal and external verification.

Issues

In addition to the development work needed on the MLE for it to fully operate as an e-portfolio system, there are a number of other issues which will need to be addressed as more programmes and learners consider using the system.

One concern is that many busy staff will not take the time to read the guidance produced, at best skimming it. Therefore, ensuring staff become familiar with and confident in the use of e-assessment will be a key factor in ensuring its success.

There is also some concern that not all courses/assessments will suit this delivery method. There will continue to be a need to provide for the adult learner who wants a more traditional delivery, and planning for a 'mixed economy' will need to be undertaken carefully, with a balance being the most likely outcome.

This will be a particular issue as budgets tighten and there may only be the funds to offer one option. The service has already changed to an online test only for ECDL, to reduce costs. It is felt that organisations will need to take care when planning provision to ensure that it is fit for purpose.

Next steps

The Adult Learning Service will continue to work with those responsible for the development of the platform to ensure that the wider uses of the system are considered in the development process and to promote development that meets its needs, which are becoming more closely aligned with those of schools.

At the same time, the service will encourage tutors to use the e-portfolio system where appropriate, and plans to add more programmes to the system.

North West Institute of Further and Higher Education (North West Regional College from August 2007)

Area	E-portfolios
Programmes supported	NVQ level 3 in Early Years NVQ level 3 in Caring
Awarding body	City & Guilds
Number of learners covered by this case study	15
Contact	Rosemary McGill

Background

The North West Institute of Further and Higher Education (NWIFHE) is a large further education college based in Derry/Londonderry, Northern Ireland. From August 2007, the college will become part of the North West Regional College, one of six area-based colleges being formed in Northern Ireland.

The initial e-assessment developments have been led by the Caring team within the Caring, Hairdressing and Beauty Therapy department in the college. The Caring team offer a range of full- and part-time Care programmes to a range of learners who are based across a wide geographical area, covering most of the north-west of Northern Ireland and Donegal in the Republic of Ireland. Many of the NVQ part-time learners are in full-time, shift-based employment with small caring sector organisations.

The team has recognised for some time that to enable a more flexible approach to accessing the NVQs, they need to improve the use of technology. They decided to work initially with two groups, both engaged on City & Guilds level 3 NVQ programmes, in Early Years and Caring respectively.

Strategy and vision

The team felt that the use of an e-portfolio system would encourage learners to achieve their programmes. They wanted to use an e-portfolio system that would enable learners, assessors and tutors to manage their NVQ portfolios electronically and, where necessary, allow the portfolio to be accessed remotely and at times best suited to the working patterns of the learners. At the same time, the team also wanted to develop innovative ways of assessing these programmes and considered that this would be possible using an e-portfolio system. The vision of how both learners and staff would use and benefit from the system was an important element in driving the project forward.

Issues

The main issue that the team had to address was that of finding support, either internally or externally, with the necessary experience and expertise to ensure that they approached the problem effectively.

It was at this point in the development that the college joined the QCA NI project. From here, the team used the material in the guide and on the efutures website to gain an understanding of what was needed if they were to successfully introduce an e-portfolio system.

Initially, they were encouraged to explore using the college VLE as a platform for e-portfolios. However, a number of operational and technical issues arose which prevented them from doing so and this finally led the team to bid for the necessary funds to purchase a suitable e-portfolio system. At the time of this case study (April 2007) this process has started and the team is using the guide as the basis for deciding which system to procure and what features they require.

The college has also agreed the necessary staff development process to ensure that, when operational, the e-portfolio system is used effectively.

Next steps

Although the team have not yet been able to introduce a full e-portfolio system into the NVQ programmes, they have been encouraging the learners to collect evidence electronically. This has already given them an understanding of a number of the issues that will need to be addressed. To date these have included:

♦ access to IT — many of the learners have no home access to IT, nor are they able to gain access at either the college or local community facilities because of the hours they work

♦ working with workplace employers to ensure that learners are able to collect electronic evidence and addressing issues such as the confidentiality of material

♦ how it may be possible to provide learners with, for example, laptops that could be used for portfolio building

The team have involved their awarding body external verifiers to a limited extent but feel that they will not be able to fully involve them until a system is up and running.

Other issues

From this year the Department for Employment and Learning in Northern Ireland is requiring all the new regional colleges to develop an ILT strategy and implementation plan. The ILT strategy encompasses e-assessment as well as e-learning. This will enable Northern Ireland's colleges to develop a college-wide vision and strategy for the use of e-assessment. As a result of the work undertaken by the Caring team at NWIFHE, they have been asked to take the lead on developing this vision and strategy for the wider college.

Open College Network London Region

Area	E-assessment survey
Programmes supported	n/a
Awarding body	OCNLR
Number of learners covered by this case study	n/a
Contact	Linda Dicks

Background

The Open College Network London Region (OCNLR) is one of the Open College Network regions, offering a variety of qualifications to providers in the London region. OCNLR is working with a number of these providers to assess the potential uses of e-assessment within its qualification offer. As part of the activity, along with all OCN regions, OCNLR has undertaken a survey of a number of its providers. The survey assessed their readiness to use e-assessment, the likely support needed and what providers considered the priorities were in developing e-assessment capability. An overview of this survey is included here, as it provides a useful insight into the current thinking from a range of e-assessment providers.

Survey details

The OCNLR survey covered five further education colleges (two of which are specialist designated institutions); three community organisations (a voluntary organisation, a local authority and an adult education service); one university; and one prison. This is a reasonable representation of OCNLR membership, and the results reflect the different views and concerns of organisations with different levels and types of funding.

Some centres are moving quickly to provide opportunities for all learners to use IT.

♦ In one college each learner has an e-mail address; the college is equipped with 200 computers; broadband access is available on campus; and a new building includes an internet café.

♦ Two other colleges are in the fortunate position of embarking on building programmes that include maximising IT capacity.

♦ One borough, responsible for community education, is supportive with resourcing because widespread access to IT fits in with its widening participation brief.

♦ Another borough supplies all voluntary sector organisations with several PCs, cameras and internet access.

Centres expressed interest in and enthusiasm for the introduction of e-portfolios and were able to identify many advantages to both centres and learners. Easier and cheaper internal verification, ability to record progress, and the necessary IT training for staff and learners were seen as benefits.

Many learners would also welcome e-portfolios, for reasons including:

- ♦ e-portfolios would give them flexibility in submitting evidence
- ♦ feedback could be recorded and their progress traced
- ♦ they would have a portable record to take away with them to use for applications/interviews

A common concern was that disadvantaged learners may be disadvantaged even further through the introduction of e-portfolios, although most respondents could see ways that barriers could be overcome.

Another concern was the huge resourcing implications for training staff and learners to work with e-portfolio assessment. OCNLR expects a number of staff training concerns to be addressed through this guide, and support given through the proposed LLUK e-assessor units and qualifications.

Stockton Riverside College

Area	E-portfolios and e-testing
Programmes supported	see text
Awarding body	City & Guilds, OCR, CACHE, CITB
Number of learners covered by this case study	262 for e-portfolios across a variety of programmes
Contact	Steve Errington, Rick Smith

Background

Stockton and Riverside College is a medium-sized further education college based in Stockton-on-Teesside. About four years ago, the college moved into new premises and embarked on a wide ranging programme to introduce technology into the learning and assessment process. At the same time, the college embarked on a 'cultural transformation', so that for both learner and staff using technology has now become a natural part of the day. For learners this starts with the use of e-testing for screening and initial assessment.

Annually, the college offers around 75 full-time and 500 part-time academic, pre-vocational, vocational and work-based courses to some 13,000 learners, including over 1,400 full-time 16- to 18-year-olds. The college offers a wide range of qualifications including NVQs, first, national and higher certificates/diplomas, accredited specialist courses and a range of subjects at GCSE, AVCE and GCE Advanced level. It also works in partnership with three universities to deliver a range of higher education courses including foundation degrees and teaching qualifications.

The college has a Centre of Vocational Excellence (CoVE) status for Performing Arts. They are one of only two CoVEs nationally within this area of further education provision. They also have two regional CoVEs in Playwork and Early Years and Adult Social Care, in partnership with three other colleges.

This wide range of provision and local collaboration has led to the college adopting and using a number of e-portfolio systems that have been procured through separate developments.

Because the college's use of e-testing stretches back over a number of years, it has built up considerable expertise in running e-tests and now has a dedicated e-testing facility. The college is a Pearson VUE test centre for Microsoft and a number of other tests, and uses the City & Guilds GOLA system, OCR's BKS system and the system from CACHE for foundation Childcare. It has also applied to Thomson Prometric to be a centre for the CITB health and safety tests.

Issues

E-testing

The college has a strategic policy of introducing e-testing as it becomes available from awarding bodies, and has a target of having 95 per cent of MCQ-based tests online by 2010.

One issue that has arisen from using a number of systems is the level of conflict between them. In many cases the systems cannot be run concurrently on the network. This means that there are occasions when the facility is not being used effectively

Although the college is an experienced user of e-testing, the guide has been used as a checklist against current practice and will be used with new staff who need to be briefed on the use of the e-testing facility.

E-portfolios

The college's experience of e-portfolios stems from a number of initiatives that have each used a different system. While this is not seen as ideal, it has enabled a number of programme teams within the college to gain extensive experience in using e-portfolios and for the college to begin to make comparisons between the systems.

The college's experience confirms that the procurement process is important if an organisation is to be confident of obtaining a system that fully meets its needs. The college is now considering how best to move towards one college-wide system, although this may not be entirely achievable as some of the systems are used for collaborative work with other organisations.

Teacher perceptions have changed significantly since e-portfolios were first introduced. Some of the more sceptical early adopters are now strong advocates for their use. There are very positive views that learners work more autonomously and become more engaged.

Overall, the college considers that, despite very good progress, there continues to be a need for e-assessment to be 'marketed' internally and for the cultural change message to be reinforced.

Ystrad Mynach College

Area	E-portfolios
Programmes supported	NVQ in Care Domestic Energy Assessors training
Awarding body	City & Guilds
Number of learners covered by this case study	25
Contact	Kevin Lawrence

Background

Ystrad Mynach is a medium size community college offering a range of further education and adult courses, both on campus and in the workplace.

An e-assessment strategy for the college has not yet been established, but it has been informally agreed that e-portfolios will become a major part of many different courses, especially where NVQs are involved. Consequently, a pilot is being run to assess the effectiveness and suitability of e-portfolios for two distinct types of user:

♦ engineering students (Domestic Energy Assessors)

♦ learners undertaking an NVQ in Care

With a number of e-portfolio solutions available, the college initially invited a selection of organisations to demonstrate their products, in addition to undertaking some internet research. e-NVQ was chosen as the product that met the college's needs and provided a reasonably simple interface.

Key issues

There were a number of key issues to be considered:

♦ **Access:** The main issue for all involved in the pilot (and with implications for the future) has been that of access. Both assessors and learners need access to internet-ready computers, and for the learners this ideally includes at home as well as at college and in the workplace. While this posed little problem for the Engineering group, the Care learners were less able to access the technology.

♦ **Level of skill:** Another big issue has been that of level of skill for using IT and the internet. Staff development and student induction both become key issues, especially in relation to learning new skills and using different technologies to gain assessment evidence. Because of the relatively small numbers of assessors involved in the e-portfolio pilot, staff development was kept fairly informal. The most important element was offering full induction into how to use the system, followed by technical support throughout the pilot, as learners who are confident with these skills are far more willing to embrace the technology.

♦ **Assessors:** Assessor commitment to the system is vital. There were, and are, many obstacles to overcome with assessors, especially those who are a little IT-phobic. The college found that it was best to get at least one enthusiast involved, to help overcome the fears. It also found providing assessors with laptops to be a significant motivator, and that it helped the process to run more smoothly for both the learner and the assessor.

♦ **Costs:** These are currently an issue. The college's current methodology imposes a cost for every learner, so longer term it is hoped that a system using open source software will provide a solution.

View of the guide

Ystrad Mynach did not have the guide when setting up its e-portfolio pilot, but still feels that it has helped it to formalise the concept of an e-portfolio. 'It has been difficult to define what an e-portfolio is; the guide has supported us in identifying the use and scope of an e-portfolio,' says Kevin Lawrence, the ILT manager.

Kevin believes that the guide will also serve as a useful document for those new to e-portfolios and considering using them in the future. He says that, fuelled with the evidence and evaluation from the pilot study, lecturers and assessors at the college will be more knowledgeable and will be able to make an informed decision about whether to use the system or not.

He felt that the guide will also help to identify staff development activities and could be used as part of staff development. In addition, he sees the guide as supporting strategic decisions with respect to e-portfolio use and advancement.

Kevin sums up his view of the guide by saying, 'I think that the guide covers most aspects of e-assessment very clearly. The only issue that needs to be addressed is that of IT skill levels being a potential barrier to users — and hopefully the inclusion of case studies will help with this.'

Feedback

The college chose the user base for the pilot deliberately, knowing that it would present some issues and useful comparisons. Informal feedback from learners was mixed. The learners studying NVQ Care were less happy using e-portfolios than the Engineering students were. This was found to be more to do with comfort with using computers in general and not being used to using e-mail as a communication tool. The Engineering students, in contrast, were far more comfortable with both of these aspects. However, once engaged with the system, students liked the fact that they could view their progress, enabling them to plan their work more effectively.

There has not been time yet to be able to compare success rates between e-portfolios and paper-based portfolios. Evaluation from both assessors and candidates is planned for the end of July.

The form of e-portfolio did not have any measurable impact on the timescales which were kept within the normal parameters of the course. In view of this approach, the college does not expect e-portfolios to be a particularly time-saving tool in terms of completion of a course. However, it does expect to see savings in terms of assessors' time, and to some extent in the learners' time between receiving feedback and receiving instructions for further submission.

An evaluation and comparison between e-portfolios and paper-based portfolios by both assessors and learners is planned for the end of July 2007.

Benefits

The college saw a number of distinct benefits of using e-portfolios:

♦ better communication between students and assessors

♦ easier-to-use forms and documentation

♦ more sharing of information between assessors, internal verifiers and external verifiers

Next steps

The next step for the college in the short term is to investigate open-source e-portfolios that may run alongside or complement its existing Moodle VLE.

It is hoped that this may provide a cost-effective way of developing and using e-portfolios in the future. In the meantime, the college thinks that individual lecturers who want to use e-portfolios will probably continue with e-NVQ.

However, the college has recognised that e-portfolios present a huge staff development issue, and believes that to use them effectively staff will need to be trained. It says that it is proving difficult for lecturers to get on board with technologies such as VLEs and ILT, let alone introducing more online systems. Kevin believes that the enthusiasts will continue to use and champion such systems and that hopefully the idea will cascade over time.

In summary, Kevin says: 'I recommend the use of e-portfolios as an excellent assessment tool, especially where tracking and audit trails are needed, such as in NVQ scenarios. I strongly recommend that the guide be used in the consultation period, when you are deciding who to involve and what system to adopt.'