Enhancing Practice: exploring innovation with technology in further education
A picture of further education in the UK

The increasing pressure on further education (FE) to deliver high quality learning with reduced budgets and support prompts us to consider how technology can help us achieve more with less.

The capacity to collaborate and build networks irrespective of location means we can explore new ways of using readily available technologies to engage learners.

With an emphasis on providing flexible curricula tailored to individual needs, and the possibility that, like their higher education (HE) peers, some FE learners will have to contribute to the cost of their learning, we also need to investigate how technology can enhance learning. Technology has a role to play in meeting learners’ expectations of 21st century learning experiences, and it can give them greater involvement in the design and management of those learning experiences.

Further education – a diverse sector

The further education and skills sector provides education primarily for learners over the compulsory school age. Providers include colleges, work-based training providers, community learning organisations, specialist independent colleges and offender learning institutes. The breadth of provision is extensive: some general institutions offer very broad curricula, while others specialise in one or more areas of vocational excellence.

In FE, learning usually takes place within a specific funded programme of study, leading to specific unit[s] of credit or qualification. The levels supported by FE range from Pre Entry Level 1 to HE Level 5.

This guide primarily addresses FE in colleges in the UK.

Key facts 2011

- In England there were approximately 128,000 teaching staff in 245 FE institutions, teaching 3.3 million people¹
- In Northern Ireland there were six FE institutions, teaching 144,421 people²
- In Scotland there were approximately 21,800 staff in 41 FE institutions, teaching 347,336 people³
- In Wales there were approximately 13,500⁴ staff in 20 FE institutions, teaching 200,000 people⁵

Innovative solutions

Ever more intuitive technologies continue to emerge that people incorporate into their everyday lives with little or no training – for example, they use smartphone applications (apps) to stay up to date, and overcome distance to interact with friends and relatives using internet voice and video calls. The task is to explore how we can harness the opportunities that these new technologies bring to address some of the challenges facing FE, and how we can support staff and learners to use their technological proficiency in their learning. The projects featured in this publication sought innovative ways of using technology to enhance learning; they aimed to engage learners and help them achieve their goals, and to help providers deliver high-quality learning efficiently.
Innovation in context

The term innovation is used in many contexts and can mean different things to different people.

“Innovation is the process by which new ideas are successfully exploited to create economic, social and environmental value.”

Department for Business, Innovation and Skills (BIS)

In most cases, the desire to innovate arises from an identified problem that needs to be addressed or an aspiration to improve an aspect of the organisation’s business. In FE, our business is learning.

Innovation in FE can vary from small-scale exploratory innovations at subject or curriculum level to strategically engineered innovations that are designed to have an impact across a whole organisation. Small-scale innovations may focus on new courses, the introduction of new technologies, or the development of new pedagogies or new delivery methods, while organisational innovations may focus on policies, business systems or a re-organisation of the learning environment.

This guide focuses on innovative applications of new or existing technologies to support learning, rather than on technological innovation as such. In recent years, JISC has funded projects in FE which have explored the innovative use of technology – in particular, projects that have the capacity to benefit not just those directly involved but also the wider community, encouraging collaboration and the sharing of effective practice. This approach extends the learning gain so that people can replicate and build on the successes of others and avoid failures.

How JISC is supporting innovation in FE

Since 2003, JISC has funded over 100 projects that involve FE either as a lead institution or through an HE partner. This guide predominantly features work commissioned through the Scotland, Wales and Northern Ireland (SWaNI) FE Learning and Teaching Innovation Grants programme and the Transforming Curriculum Delivery through Technology programme.

The SWaNI FE Learning and Teaching Innovation Grants programme (2011) supported seven projects in FE colleges in Scotland, Wales and Northern Ireland to explore the institutional implications of using and embedding their chosen technologies for learning and teaching. www.jisc.ac.uk/whatwedo/programmes/elearning/swaniltig

Transforming Curriculum Delivery through Technology (2008–2010) investigated how technology can support transformative models of delivery in a range of contexts in FE, HE and continuing education, including distance and work-based learning. www.jisc.ac.uk/curriculumdelivery

JISC has also funded or is funding FE projects in the following schemes:


Course Data: Making the Most of Course Information [Phase 2, 2012–2013] www.jisc.ac.uk/whatwedo/programmes/elearning/coursedata/stage2projects


Greening ICT programme (2009–2012) www.jisc.ac.uk/whatwedo/programmes/greeningict


Higher Education Academy and JISC Open Educational Resources programme Phase 3 (2011–2012) www.jisc.ac.uk/whatwedo/programmes/ukoer3


Lifelong Learning and Workforce Development (2009–2011) www.jisc.ac.uk/workforcedev

Strategic Management of Institutions programme (2011) www.jisc.ac.uk/whatwedo/programmes/strategicmanagement
Engage

Technology offers new ways of engaging and communicating with learners, employers and communities, opening up opportunities to extend support and learning beyond traditional boundaries as well as overcoming obstacles to participation.

The cost of training – which includes the cost of course fees, resources and travel and subsistence, as well as time away from the workplace – can be prohibitive for employers and learners. The changing needs of industry and society mean that employers need to up-skill or retrain employees more frequently than before. Employers therefore expect high quality flexible training delivered when and where they need it at a competitive price. Selective and considered use of technology is one potential solution.

Learners expect high quality learning that reflects the working environment they hope to enter. With technology now pervasive in most industries, it is unthinkable not to take advantage of common-place technologies to promote and support learning, to improve advice and guidance, and to extend learning to those who may otherwise find it difficult to participate.

Try Before You Apply

North West Regional College

The challenge
Falling retention statistics led North West Regional College working with Northern Regional College to investigate why learners drop out of their courses.

Innovation in context
The innovation for North West Regional College and Northern Regional College was to explore whether using technology to provide learners with information before they enrol helps them make better course selection decisions and improves retention.

The colleges developed and trialled detailed online pre-entry information for three courses that had previously experienced retention problems: National Diploma in Construction and the Built Environment; National Diploma in Travel and Tourism; and Access Foundation Studies Health and Welfare. Prospective applicants for these courses were able to view video clips of learners talking about their experiences and to find out more about the course – what was involved, the time commitment required, the support available, the type of assessment activities, and career and progression opportunities – and to take a virtual tour of the college.

How technology is making a difference
Retention statistics rose by an average of 23.5%, with one course achieving 96% retention.

The interview process is more efficient: learners are more informed and ask deeper questions. This releases tutor time for other learner support and guidance activities.

The Try Before You Apply approach is now being extended to other courses across the college.

You might like to know
The project was conceived as a technology project, with input from marketing, quality and student support teams; with hindsight, it might have been better to give these teams a central role and move technology to a supporting role.
"Try Before You Apply has allowed us to look at how we provide support for students in selecting a course that best suits them. We have found that there might be richer ways of providing online information to improve course and career selection."

Martin Peoples, Head of Technology Enhanced Learning and Support, North West Regional College

Synchronous Web Enabled Employee Training (SWEET)

Jewel and Esk College

The challenge
Jewel and Esk College covers a broad geographic area, and it can be costly for learners to attend courses on campus.

Innovation in context
The innovation for Jewel and Esk College was in designing and providing a course that was simultaneously delivered in the classroom and online to learners in their workplaces. The college used open source web conferencing software integrated into its VLE to bring together remote and on-campus learners on a basic food safety course for taught sessions and for assessment.

The college worked through issues such as connectivity and time lags, how best to design inclusive learning activities, minimum equipment specifications, and support for remote learners and their employers. The college also worked with the Royal Environmental Health Institute of Scotland (REHIS)6 and employers to develop and agree protocols for invigilated online assessment.

How technology is making a difference
For courses such as Elementary Food Hygiene – where enrolments are low, but where frequent training sessions are required to meet employers’ needs – bringing together on-campus and online learners using web conferencing software removes barriers such as transport costs and facilitates viable group sizes.

Successfully proving the concept has enabled the college to consider marketing the course – which is an income-generating course – not just locally but further afield.

You might like to know
The technical, pedagogical and support processes the SWEET team worked through are well documented, and the information is available to others who want to replicate the approach.

Connectivity issues are almost inevitable – it is vital to have a ‘plan B’ for these occasions.

"The real innovation is in working with a group of tutors with no experience of this technology who were used to more traditional ways of teaching, and bringing them to the point where they could design and deliver learning experiences for on-campus and online learners simultaneously."

Donald Steele, SWEET Project Manager for Jewel and Esk College

6 Royal Environmental Health Institute of Scotland www.rehis.com
Technology provides opportunities to enhance learning; for example, using the social and collaborative features of mobile and games technologies enables us to create deeper and richer learning experiences. Technologies that encourage greater communication between peers and between learners and teachers increase opportunities for pastoral support, which creates a sense of community and extends learning beyond taught sessions.

**MOtIvATE: Mobile Messaging and Community Education**

**Coleg Gwent**

**The challenge**

Coleg Gwent wanted to explore how learners could be supported using mobile technologies to scaffold learning both within and outside taught sessions.

**Innovation in context**

Although use of SMS text messages is not new, the innovation for Coleg Gwent was to go beyond using it for reminders and explore effective pedagogical use to support community education.

**How technology is making a difference**

Learners found messaging outside class times motivating and engaging. For example, a GCSE mathematics tutor sent mathematical problems to learners between sessions to reinforce learning or to prepare learners for the next session. Learners looked forward to the texts and began messaging each other to discuss solutions.

Pastoral support and communication between learners and staff increased, and there were occasions when learners were able to discuss obstacles to their learning discreetly with staff.

**You might like to know**

Learners benefited most from messaging outside the class sessions and from one-way activities like polling. Erratic signals and variable time delays on learner-owned devices made interactive two-way communication disruptive within class.

Creating opportunities for tutors to experiment and collaborate to develop effective pedagogical use at monthly tutor meetings and via project discussion forums helped develop their confidence and competence.

“I have always got my phone on me, and when a text message comes through saying ‘change this to grams, use algebra’, straight away it gets you thinking. I’ll go home and be thinking about it still for half an hour to an hour afterwards, trying to do other examples in my head, so I think it is a really good way. It just gives us that little kick mid-week so when we come back for the next class we have already got it in our head and it is fresh.”

Learner, Coleg Gwent/Torfaen Adult Community Learning

**Using Peer Guides to Promote Digital Literacy (PEDL)**

**Coleg Llandrillo Cymru**

**The challenge**

Coleg Llandrillo Cymru recognised that many learners get their advice on technology from peers rather than staff. The college acknowledged the essential role that digital literacy plays in supporting learning and progression to employment or further study and wanted to ensure that learners receive high quality, accurate advice.

**Innovation in context**

The innovation for Coleg Llandrillo Cymru was to identify those acting informally as peer e-guides and support them, improving the quality of the advice they give, using them as advocates and a link to formal support systems.
How technology is making a difference
The simplicity of the project concept has made it easy to roll out across the college. The initial 20 e-guides has grown to 70, supporting approximately 1,000 learners. There are also 1,356 learner enrolments on the accompanying Tools And Resources for a Digital Society (TARDIS) course on the VLE.

Learners were very willing to engage with the project and acknowledge the benefits: they know how to access support, report increased confidence in their digital literacy skills and note the relevance of these skills to their future academic and professional lives.

You might like to know
The pilot and the development of the TARDIS course have enabled the training for e-guides to be streamlined and tailored to individual need, making it more engaging and cost-effective.

“I had a question relating to social networking at my university interview, asking how it should be used as a professional health practitioner. As an e-guide who had attended the training session on Digital Life, I was able to answer the interview question confidently, ensuring I mentioned professionalism and confidentiality. I feel I answered the question well and I am so happy I attended the session, as it is already a benefit to my future studies.”
Learner, Coleg Llandrillo Cymru

Innovation in context
The colleges developed a low cost, easy-to-use flexible system using games templates, which works with existing Windows-based PCs and relatively inexpensive Xbox wireless controllers. A question editor enables teachers to create and edit their own games, making interactive games accessible to all teaching staff. The games provide opportunities for practice through drill and test, reinforcing learning and providing immediate non-judgemental feedback.

How technology is making a difference
Critical thinking and higher-order problem-solving skills are promoted, while collaboration and discussion are encouraged.

Most learners (90%) involved in the project – on computing, social care, hospitality, construction, travel and tourism, and support for learning courses – feel that their motivation, interaction, engagement and participation have all increased.

You might like to know
Training was offered to help teachers create effective questions and to overcome concerns that objective questions can result in testing knowledge more than understanding. A brief guide has been produced by the project team.

There is potential to involve learners more closely in the development of games, offering a constructivist approach to learning that is transferable to any subject. Learners seeking careers in games technology could contribute to future iterations.

“This type of game has improved collaborative working and communication in a fun and exciting way. It also provides opportunities to reinforce individuals’ learning processes by giving immediate feedback in a non-judgemental manner.”
David Renton, Developer, Reid Kerr College

xGames
Reid Kerr College
The challenge
Reid Kerr College, working with colleagues from Anniesland College, wanted to explore the use of collaborative games to enhance learning and teaching and increase attainment, by making the theory-based elements of vocational courses more interactive and engaging. However, specialist equipment and software can be prohibitively expensive and complex to set up.
Learners who are engaged, motivated and well supported are more likely to achieve their learning ambitions. Most of us appreciate that technology can do things faster, more easily, more accurately and more efficiently than before, and have an expectation that the technology we use in other areas of our lives will be harnessed to support both our learning and the management of our learning.

Although technology is becoming increasingly intuitive, some learners need encouragement and support to develop confidence to use it effectively for learning. The rewards when they do can make a huge difference to their learning and earning potential.

The growth in open source systems has made it possible for providers to achieve organisational and efficiency savings by designing bespoke systems with comparative ease, although the design process may require technical expertise. The true test of these systems is the impact they have on the overall learning experience and how they support learners’ progress.

Without a Paddle
Pembrokeshire College

The challenge
Research from the Welsh Government7 and NIACE,8 and local labour market intelligence highlighted three problems, which Pembrokeshire College wished to address:

- Approximately 785,000 adults in Wales were digitally excluded
- Problem-solving was one of the most lacking skills areas among employees in Wales
- A high proportion of former long-serving public sector workers were unemployed and seeking new employment

Pembrokeshire College set out to explore ways to address these overlapping problems and contribute towards the Welsh Government’s vision to ‘help people acquire the confidence, motivation, skills and competencies that allow them to communicate more easily through digital technologies, reducing their isolation and social exclusion’ and to find employment.

Innovation in context
The college designed a research project to explore whether providing minimal guidance encouraged self-learning.

Participants were identified who might benefit from interaction with a smart phone preconfigured with applications. They received little or no guidance as to how they could use the phones and applications, and were asked to complete a series of activities developed using these minimally invasive principles. Participants’ use of the phones was observed and recorded.

Finally, the team designed and trialled an alternate reality induction game to familiarise learners with key college facilities.

Approximately 100 participants took part in the project overall.

How technology is making a difference
Most participants feel that exposure to the technology and engagement through structured activities has improved their problem-solving capacity and their confidence in using the smart phones.

Pembrokeshire College found that mobile applications can play an important role in the development of problem-solving skills across a broad range of participants, either through a simple engagement activity or a set of carefully constructed tasks.

You might like to know
The subject matter of an alternate reality game must be carefully thought-out and implemented.
The final project report includes three methodologies to develop problem-solving skills using mobile devices that can be used and amended by others.

“We were inspired by Sugata Mitra’s Hole in the Wall experiment9 and wanted to see if we could create a similar context where you let intrigue and inquisitiveness develop into appreciation of the technology, and learn through the process.”

Dr Geoff Elliott, Director of Marketing, Skills and Development, Pembrokeshire College

Secure Work-based Learning Administration through Networked Infrastructure

Coleg Sir Gâr

The challenge

Coleg Sir Gâr wanted to develop a secure online management, administrative and learner support system for work-based learning to replace its inefficient and time-consuming paper-based system. Common data had to be entered many times and large files transported from college campuses to the workplace, making the system vulnerable to errors and lost data.

Innovation in context

An open source content management system was used to create, store and present digital versions of paper documents in an intuitive and user-friendly way, with automatic population of common data fields to reduce time and potential error.

Digital pens were used to create a secure alternative to traditional signatures. Digital pens are easy to use to capture and store digital signatures online, providing a reliable and readily accessible audit trail viewable by learners, employers and training advisors.

How technology is making a difference

The system provides live data, accessible to auditors, that enables it to more accurately track learners’ progress and identify those who need support.

Traditionally, paper-based portfolios were sent away for digitisation; the online system saves time and money by automatically creating a digital portfolio.

You might like to know

The digital pen solution is flexible and scalable; it can be implemented at a local level or integrated within institutional management information systems.

To overcome difficulties in meeting the requirements of both the EU Directive on Electronic Signatures10 and the Welsh Government within the project timescale, a compromise was agreed to use a pen that creates both a handwritten signature and a digital signature that is transmitted wirelessly to the secure online server hosting the system.

“This was an opportunity to apply common sense using technology to improve a heavily paper-based system. The result is a ready-made open source tool applicable to most FE institutions in the UK.”

Dave Howells, Director of Business Development, Coleg Sir Gâr

---


3 Hole in the Wall www.hole-in-the-wall.com

JISC’s key principle of sharing with the wider community can best be achieved by planning to share from the outset and by engaging with the broader community.

Planning to share involves considering the most appropriate way of presenting the benefits and outputs so that they are meaningful to others. Consider practical aspects such as: how easy it will be for others to follow your example; how scalable the initiative is; any pre-requisites that need to be in place before the project can commence; and whether the initiative is likely to provide value for money.

You may want to provide some of the following: tools; guides; strategies; case studies or scenarios; summary reports; briefing papers; illustrative models; access to online systems; training materials; technical specifications; research findings; and implementation plans.

Engaging with the wider community provides a broader perspective and can be mutually beneficial, enhancing the capacity of all involved and enabling your organisation to move even further forward.

Consider: seeking stakeholders’ views; collaborating to share knowledge, expertise and resources; testing and validating concepts and outputs in different environments; customising outputs to meet the needs of others; running a workshop or hosting a conference to disseminate your findings; providing advice and support; and making use of community-based networks to disseminate and develop our project.

Making the new Diploma a Success

Lewisham College

In preparation for the launch of a new qualification, Lewisham College developed eME, a learner portal that delivers personalised information from different systems to learners through a single sign-on. The college uses open source solutions delivered through a service contract, and included other cloud-computing systems to support the academic, social and pastoral needs of its learners.

Senior managers approved a comprehensive training plan with supporting training materials.

Stakeholders – learners as well as staff – were involved from the start, and attention was given to ensuring robust communication methods served all those involved.

A whole-staff conference was held before proceeding from pilot to full-scale roll-out, to enable staff to take part in the decision-making process. Heavy users of existing systems were consulted and offered individual support during the transition phase.

Other colleges have benefited from advice and on-going support with implementation and technical issues.

A review of those learners who completed the qualification last year reveals a correlation between use of the eME and success: those who succeeded in their studies used the eME more than those who did not succeed, and those who used the eME more got a higher grade – merit or distinction.

The college is now exploring opportunities to use the data it captures to develop systems that enables staff to better identify learners at risk of non-completion or low attainment and to support them with timely interventions.

“The funding allowed us to evaluate the effectiveness of eME. We gathered staff and learner feedback through forums, questionnaires, video and case studies. It really paid off and we were able to get a really good insight into what was working, what wasn’t working and what learners really liked about the system.”

Patricia Forrest, Head of e-Learning and Innovation, Lewisham College
From innovation to enhanced practice

Innovation is an essential process in moving forward. It helps us adapt to changing circumstances and reassess how we teach and learn in the light of new knowledge and new technologies. Inevitably, innovation involves an element of risk, but this can be handled through strong project management and from learning from those who have already successfully moved from innovation to enhanced practice.

“Does technology enhance learning? It’s not unreasonable to ask this question, but unfortunately it’s the wrong question. A better question is: how can we design technology that enhances learning, and how can we measure that enhancement?”

Professor Richard Noss, Director, Technology Enhanced Research Programme, London Knowledge Lab

Further support:
The Design Studio http://jiscdesignstudio.pbworks.com
Emerging Practice in a Digital Age www.jisc.ac.uk/digiemerge
JISC Sustainability Toolkit www.jisc.ac.uk/sustainabilitytoolkit
JISC infoNET www.jiscinfonet.ac.uk

“We received excellent support from Regional Support Centre and were guided throughout the project.” xGames project

“Key to our success is that we started by identifying the problem before looking at the technology” M0tIvATE project
What the projects want to share

The final project reports and access to all supporting resources are available from www.jisc.ac.uk/whatwedo/programmes/elearning/swaniltig and www.jisc.ac.uk/curriculumdelivery

**MOTlVATE: Mobile Messaging and Community Education**
Coleg Gwent
- Brief screen cast overview of MOTlVATE outcomes
- Five video clips detailing staff and learner experiences
- A series of ten screen cast tutorials for staff and learners on how to use the Texttools messaging system
- Project blog: [http://ilt.coleggwent.ac.uk/swani](http://ilt.coleggwent.ac.uk/swani)

**PEDL: Using Peer eGuides to Promote Digital Literacy**
Coleg Llandrillo Cymru
- For guest access to the Tools And Resources for a Digital Society (TARDIS) Moodle course, please email Dr Andrew Eynon: a.eynon@llandrillo.ac.uk

**SWANI: Secure Work-based Learning through Networked Infrastructure**
Coleg Sir Gâr
- SWANI project website comprising a repository of all project documents and outputs including: Project blog, Range of digital forms, Digital signature testing report
- [https://sites.google.com/site/jiscswani](https://sites.google.com/site/jiscswani)

**SWEET: Synchronous Web-based Enabled Employee Training**
Jewel and Esk College
- SWEET project website including hardware and software recommendations, user guides for staff and learners, guidance on troubleshooting, case study and other support materials
- [http://mycourses.jec.ac.uk/wordpress/sweet](http://mycourses.jec.ac.uk/wordpress/sweet)

**Try Before You Apply**
North West Regional College and Northern Regional College
- Online pre-entry information for prospective learners
- Access Foundation Studies Course [www.nwrc.ac.uk/tbya](http://www.nwrc.ac.uk/tbya)
- National Diploma in Travel and Tourism [www.nwrc.ac.uk/trytourism](http://www.nwrc.ac.uk/trytourism)

**Without a Paddle**
Pembrokeshire College
- Appendices that accompany the final project report include details on methods, apps and activities used, and participant application and feedback forms

**xGames**
Reid Kerr College and Anniesland College
- xGames project website including five exemplar templates, instruction manuals, case studies, and a guide to question construction using Bloom’s taxonomy
- [www.xgamesproject.org.uk](http://www.xgamesproject.org.uk)

**Making the new Diploma a Success**
Lewisham College
- Project website comprising a comprehensive set of resources including: case studies, training guidance materials, technical guidance, cost benefit analysis, evaluation and dissemination reports, dissemination materials, videos and simulations
- [www.lewishamdiplomas.co.uk](http://www.lewishamdiplomas.co.uk)

**Moving forward: support from JISC Advance and the JISC Regional Support Centres**
- JISC Advance helps the education sector to get the most from information technology and to see how effective use can improve performance by: reducing costs and maximising efficiencies; coping effectively with a changing society of learners; creating new opportunities through external partnerships; addressing sustainability issues; and providing access to high quality research.
- [www.jiscadvance.ac.uk](http://www.jiscadvance.ac.uk)
- Part of an integrated UK-wide support network, 12 JISC Regional Support Centres (RSCs) provide locally delivered practical support and expertise on a wide range of topics for providers in England, Wales, Scotland and Northern Ireland. [www.jiscrsc.ac.uk](http://www.jiscrsc.ac.uk)

**JISC Advance supports resource enhancement and development for FE**
- **JISC Advance FE and Skills Development and Resources programme (2012–2013)**
  - The JISC Advance FE and Skills Development and Resources programme aims to enhance or repurpose existing resources, and identify gaps and create new resources for use in the FE and skills sector across the UK. The focus for the programme is to improve the learner experience and increase efficiency and effectiveness of providers. The programme runs from February 2012 with the support of JISC Regional Support Centres, who will provide advice and guidance in developing and implementing projects.
  - [https://jiscsupport-feskillsdrp.pbworks.com/w/page/50869004/Overview](https://jiscsupport-feskillsdrp.pbworks.com/w/page/50869004/Overview)
Enhancing Practice: exploring innovation with technology in further education

Further information
Web: www.jisc.ac.uk
Email: info@jisc.ac.uk
Tel: +44 (0)117 331 0789

References
JISC e-Learning programme
www.jisc.ac.uk/elearningprogramme
JISC SWaNI FE Learning and Teaching Innovation Grants programme www.jisc.ac.uk/whatwedo/programmes/elearning/swaniltig
JISC Transforming Curriculum Delivery through Technology programme
www.jisc.ac.uk/curriculumdelivery
JISC resources
The Design Studio http://jiscdesignstudio.pbworks.com
JISC services
JISC Advance www.jiscadvance.ac.uk
JISC CETIS http://jisc.cetis.ac.uk
JISC infoNet www.jiscinfonet.ac.uk
JISC Regional Support Centres www.jiscrsc.ac.uk
JISC Advance FE and Skills Development and Resources programme https://jiscsupport-feskillsdrp.pbworks.com/w/page/50869004/Overview

Other references
London Knowledge Lab
www.lkl.ac.uk
The Higher Education Academy
www.heacademy.ac.uk

Acknowledgements
JISC would like to thank all those who contributed to this publication: Paul Bailey, JISC e-Learning Programme Manager; Fionnuala Carmichael, JISC RSC Scotland Manager; Sal Cooke, Director JISC TechDis; Nigel Ecclesfield, JISC Advance Programme Manager; Robin Englebright, JISC e-Learning Programme Manager; Janette Hillicks, JISC infoNet Researcher/Analyst and colleagues at JISC infoNet; Sarah Knight, JISC e-Learning Programme Manager; Marion Miller, JISC RSC Yorkshire and Humber Manager; Professor Richard Noss, Director, Technology Enhanced Research Programme, London Knowledge Lab; Matt Smith, e-Learning Manager, Coleg Gwent; John Webber, Professional Learning and Development Manager, Sussex Downs College; participating projects from Anniesland College, Coleg Gwent, Coleg Llandrillo Cymru, Coleg Sir Gâr, Jewel and Esk College, Lewisham College, Northern Regional College, North West Regional College, Pembrokeshire College and Reid Kerr College; colleagues from JISC Advance and the JISC Regional Support Centres.

© HEFCE, 2012

bit.ly/enhancingpractice
www.jisc.ac.uk/whatwedo/programmes/elearning/swaniltig/enhancingpractice