Commission on Adult Vocational Teaching and Learning

Technology theme evidence

Introduction

JISC, the UK's technology consortium for higher and further education and skills, welcomes this opportunity to contribute to the Commission on Adult Vocational Teaching and Learning our evidence on how technology enhanced learning and teaching practices are having a positive impact on learner success. We look forward to answering any of your questions about this evidence or our work.

Through JISC Advance which includes a network of JISC Regional Support Centres and services such as JISC TechDis and JISC Digital Media, JISC helps organisations get the most from technology, enabling them to enhance the quality of learning, teaching and research, reduce costs, work efficiently and adapt to change. JISC also includes JISC Collections which negotiates and procures e-resources on behalf of the further and higher education sectors, and Janet, providing the network connecting universities, FE colleges, research councils, specialist colleges and Adult and Community Learning Providers. In addition, we fund various innovation projects within universities and colleges across the UK.

During 2012-13, we will be working with our sectors, our customers and our Board to deliver a 'reshaped and impactful' JISC. Therefore work is in hand to review our strategic vision and a business review is underway to inform our future structure and priorities. See our web site (http://www.jisc.ac.uk/aboutus/hefcereview.aspx) for more information.

JISC	http://www.jisc.ac.uk/
JISC Advance	http://www.jiscadvance.ac.uk/
JISC Regional Support Centres	http://www.jiscrsc.ac.uk/
JISC TechDis	http://www.jisctechdis.ac.uk/
JISC Digital Media	http://www.jiscdigitalmedia.ac.uk/
JISC Collections	http://www.jisc-collections.ac.uk/
Janet	http://www.ja.net/

This Evidence

The evidence here comes from JISC Regional Support Centres' (RSC) work with and knowledge of individual FE and Skills providers, supplemented by other JISC Advance and JISC projects, programmes and services. RSCs work with FE and Skills providers, individually and collectively, to stimulate and support their effective use of technology.

It comes from many parts of the FE and Skills sector, including FE colleges, independent specialist colleges (ISCs), Adult and Community Learning (ACL) and Work Based Learning (WBL). The evidence is in a variety of formats, including text, video and audio.

Contents

The evidence

1. Technology in context

This evidence is a précis of notes from a telephone interview with Tony Lau Walker, Principal and Chief Executive of Eastleigh College, Hampshire. The interview was conducted by Amanda Riley, Assistant Manager of the JISC Regional Support Centre in the South East on 26th September 2012.

It places much of the more directly technology related evidence which follows in its teaching and learning context. The précis is structured using the highlighted aspects of the Commission's call.

a) Evidence on the characteristics and features of excellent adult vocational teaching and learning:

- Excellent teaching for adults recognises the quality of **community** – adult learners form communities of learners in that they engage with each other as well as the subject, they learn from and support each other as well as the tutor, and they apply what they learn to the working and other contexts within which they operate – this latter, far more readily than do younger learners in most cases. This process operates throughout the vocational learning sphere, within both learning providers and employers, and is something that the Commission needs fully to recognise as a key aspect of adult learning.

- Excellent staff are aware that adult learners are themselves a course resource, often having responsible jobs and with relevant knowledge and skills to bring to the group. It is extremely important not to 'talk down' to adult (vocational or otherwise) learners. Eastleigh College works actively with its staff to make sure they have the personal skills and confidence to work with their adult learners in ways which recognise and celebrate those learners' contributions to the group.

- Excellent vocational courses for adults, as at Eastleigh College, are reviewed by the learners themselves, as a way of encouraging them both to own their learning and to provide support for other learners. As one example, some particularly IT-aware adult learners have set up chat rooms in the College Virtual Learning Environment (VLE) for use by other members of their course, so furthering the peer group support available.

b) Examples of effective, innovative and exemplary approaches:

- We ensure that staff are up-to-date and aware of the current vocational context for their courses and that they are enthusiastic (not just knowledgeable) about their subject. Eastleigh College regularly sends staff on industrial placements and involves them in topical case studies using action research processes, the results of which are shared with the whole College. (More details of such schemes are available if required).

- We ensure that vocational staff recognise that their teaching skills are just as important as their vocational skills and experience.

c) Tried and tested teaching, training, assessment, and learning practices that are having a positive impact on learner success:

Eastleigh College puts considerable resource into the development of its Moodle VLE, in order to make resources available to all its learners outside formal learning times and as a way of encouraging them to review and re-purpose materials as part of peer support networks. Adult learners are strongly encouraged to share their own knowledge and skills as part of their course, with the active support of the course tutors.

With adult learning in particular it is important to identify and implement the most effective balance of face-to-face and online learning in a blended learning course. Looking forward to what is needed for such mixes now and in the future, not back to what worked in past years is critical.

d) Evidence that helps the Commission explore how the quality and impact of adult vocational teaching and learning can be further improved for learners and employers:

It is extremely important that the Commission includes representatives from outside FE, in order to avoid a bias towards FE standard approaches that may go unrecognised if experts from the specific field of adult vocational learning, and from employers, are not fully engaged with its work. All the aspects of community-based learning, a key feature of effective adult vocational learning (particularly so for those who may just have found the courage to return to literacy and numeracy learning decades after very negative school experiences), need to be seen for the key element of excellent teaching and learning that it is."

2. JISC RSC reviews of good practice

The evidence in this section is provided by JISC RSC staff reflecting on activity at the learning providers they support. It points to the significance of the use of technology in teaching and learning in FE and Skills and therefore the required evolution in staff skills, understanding and attitudes. Advisors in other regions or with differing sector focus could provide similar reflections if required.

2.1 Work based learning and Adult and Community Learning in the South West of England

This review of the current use of technology in the Work Based Learning (WBL) and Adult and Community Learning (ACL) sectors in the South West of England is by David Rowe, WBL Advisor in the JISC Regional Support Centre in the South West.

The importance of the use of technology within the Post 16 educational sectors has increased in line with the exponential growth over the last 5 or 6 years in the use of information technology by all education providers but especially those within work based learning and adult and community learning. It would not be I believe a major generalisation to state that in 2006/2007 it was the exception to find a work based learning provider routinely using ICT or e-learning extensively in the delivery of qualifications to their learners. The use of technology within adult and community learning was perhaps greater largely due to the availability of technology within these larger and at the time generally better funded organisations. In 2012 the situation has changed and the use of technology by work based training providers and adult and community learning is now much more on a par as the WBL organisations have caught up and in some cases overtaken their ACL colleagues in the breadth and depth of their use of technology. Therefore we are now at the stage where the use of technology is fundamental to the teaching and learning processes and delivery architecture of Post 16 learning, whether within an informal adult learning environment or as part of a Qualifications and Curriculum Framework (QCF) work based vocational qualification or within even more specialised learning environments like independent specialist colleges who largely work with learners with a wide range of learning difficulties and disabilities where the use of technology is irreplaceable.

The role of the RSC and its advisors involves the ability to deliver advice, support and guidance to providers on the uses to which technology can be put, not to be the fount of all knowledge but as a conduit for discussion between providers from different sectors, delivery areas etc. Inherent in this process is the opportunity for providers to gain valuable information from advisor's discussions with other providers both within the RSC host region and beyond. Information from these discussions covers all aspects of the use of technology and not just those areas which directly impinge on teaching and learning. For example the extract below is from an impact statement from a Work Based Learning provider.

"One good example would be the meeting in which our RSC advisor signposted us to a particular e-portfolio resource as a possibility to explore. We had spent some time evaluating other e-portfolio packages and were not fully convinced of their worth to the business; however, following the advice from our RSC advisor we contacted the organisation and after some discussion we discovered that this system did indeed offer us a fully working solution to the problems we were experiencing with three separate paper based systems. I am sure we would not have discovered this solution unless our advisor had made us aware of its existence

and its possibilities. This development alone will save the company £30K/ annum for the foreseeable future in administration, assessment and operating costs."

The kind of development above underpins the importance of the use of technology within Post 16 education sectors in meeting the requirements and operating procedures the funding organisations now have in place, as those few providers who are yet to adopt full technology based solutions are rapidly finding out.

Some organisations have been kind enough to share with the RSC examples of cost savings following the development of technology based solutions to existing procedures and problems as the statement below outlines.

"Completing the RSC-SW Moodle programme allowed Focus to re-develop its existing Moodle based VLE without having to rely on external support, which we estimated at a cost saving of a minimum of £3K/annum (the difference between the cost of internal and external support).The ability to re-develop our own version of the VLE and populate it with organisation specific learning materials, instances of open source and free learning materials supplied by the RSC was invaluable in its impact on our teaching and learning processes but perhaps most importantly on our learners.

Examples of further benefits which would not have been possible without the use of technology are:

- a saving of a minimum of £4k annually on printing costs/hard copy packs for learners

- use of the VLE has allowed the move to an 8 week interval between team meetings, resulting in significant savings in the travel budget of £5K/annum plus a reduction in staff time

- a significant reduction in the staff time required to deliver the average qualification: each work based assessor can therefore take on significantly more learners whilst improving the quality of the qualification"

As you might expect, organisations see the impact of the use of technology in a variety of ways. For example, a large WBL provider based in Bristol has since the introduction of their VLE maintained a 99% timely completion rate for all work based learning qualifications. The figure prior to the introduction of the VLE was between 55% and 66% depending on the level. Similarly a small WBL provider based in Exeter has seen a year on year rise for the last 5 years in applications for its qualifications due primarily to the fact that a large proportion of the qualifications are delivered with the use of technology, reducing the need for their 16 to 17 year old learners to travel.

As more and more providers develop more and more technology based solutions to their qualification delivery mechanisms and seek to constantly improve their teaching and learning processes, so the use of technology assumes greater and greater prominence within these organisations. This prominence has two major aspects. Firstly the breadth of the use of technology now covers all major aspects of the operation of the average provider. Secondly the pace of the development of technology leaves many providers still trying to catch up with what may be perceived as the norm in terms of the usage of technology. On the other hand, many others are going forward rapidly with forward thinking developments, the results of which can in time be usefully disseminated to other provider organisations. All of the above boils down to the fundamental point that all Post 16 education providers require on-going advice and support and will continue to do so

for some time to come if the pace of the adoption of technology is to be maintained and indeed accelerated.

2.2 ACL in the East Midlands

Phil Hardcastle, Advisor in the JISC RSC East Midlands, surveys the areas of current attention in the ACL sector in the region – for which staff will need appropriate knowledge, skills and values.

Derby Adult Learning Service

Derby Adult Learning Service won a couple of awards last year, including one from NIACE, and provides good examples of "innovative and exemplary approaches."

The Service has developed an 'e-mentoring' scheme that involves a tutor who is experienced and confident in using technology providing peer support on a one-to-one basis to a less experienced colleague. There is also a team dimension, with mentees working together in groups as well as receiving individual support. This initiative is having a cascade effect, and only a few months after the start of the scheme one of the initial mentees has already become a mentor.

In another related development, Derby Adult Learning Service is developing a video podcasting system that will enable single click access to video clips. So it will be very easy for staff to use the learning platform to access staff development material in video format. The video podcasting will also, of course, be used to make resources available direct to learners.

It is all too easy to think of staff development just in terms of putting on conventional face-to-face courses, but other means can often be just as effective, if not more so. One-to-one support has been shown to be successful in bringing about lasting change; and the use of video clips can be very useful to reinforce learning or as an alternative to face-to-face learning when this is not practical.

Derbyshire Adult Learning Service

DALS is using webinar software to improve communications between staff and cut meeting costs in a rural service. This is an LSIS funded project which is still under development.

The project brief was:

"This project will give tutors, mentors, coaches, managers and learners the opportunity to take part in effective e-learning using webinar software in various situations; - by participation in meetings, tutorials and learning situations. The use of this technology will impact on teaching and learning and the sustainability agenda and increase effective CPD opportunities and sharing of good practice."

The RSC in the East Midlands helped with lots of advice, equipment loans, testing of equipment, software and other means.

Other examples are:

- **Leicester City**, which is pushing to make its online courses more interactive and interesting and drawing on training support from the RSC in the East Midlands to support them in doing it

- **Nottinghamshire,** where some tutors are using IPads with learners, particularly for ESOL and English

- **Northamptonshire** took all their interactions with learners online. This is the Report from the JISC RSC ACL network group

"Frances Jones from Northampton ACL spoke about how she and her team had transformed their systems in Northampton so that much of the basic administrative work is automated. Their management information system contains all the data necessary to manage tutors, classes and venues and provides reports on all aspects of the service for managers.

Frances described how the implementation of this system had saved thousands of pounds for the service in fee income which had formerly been lost due to poor data and had created a much more efficient system which catered for the needs of their learners.

All staff and 50% of learners were now using email as their sole means of communication with the service, which has cut paper, mailing and staffing costs considerably.

The talk initiated a debate which considered the merits of centralising administrative functions onto one database, as opposed to a dispersed system which gave more flexibility but could be more prone to error."

2.3   ACL in the Eastern region

Gerard Hayes, Manager of the RSC Eastern Region, selects three informative ACL examples.

Suffolk Association of Voluntary Organisations: Shared online toolkits
SAVO (www.savo-elearning.org) delivers a significant amount of its learning online. Its online learning programme TrusteElearning http://trusteelearning.org/ which currently has 2,700 registered users, has been endorsed by the Charity Commission which now signposts the site as a reference source for 'good practice' for Trustees. There is some international interest; SAVO has had a request from New Zealand to provide them with a copy.

Savo has also recently been successful in a bid for JISC Advance funding to improve the interactivity of the content, convert the materials to "open source formats" (such as, for example, Xerte Online toolkits) and make them available to other providers via a shared VLE.

ACL Essex: Extensive use of Moodle and e-portfolios for vocational learning
ACL Essex is using the Learning Assistant e-portfolio system for all of its vocational learning provision. Already established users of Moodle, tutors make extensive use of technology to support learning and teaching, achieving Grade 1 in a recent Ofsted. This culture of innovation has led to Essex ACL becoming a sector leader in the use of Xerte, QR codes and, most recently, Augmented Reality applications.

Cambridgeshire ACL
Cambridgeshire has made extensive use of a wiki to share resources and communications. One of its colleges, Parkside, has been using the Edmodo platform to deliver a variety of learning, including vocational courses. It is now starting a project to use the Edmodo platform across the county, to share administrative and curriculum resources and to support adult learners. It is putting in place:

- an online induction process for learners, compatible with all Edmodo and Moodle platforms (direct delivery and contracted)

- initial assessment and individual learning plans completed online

- blended tutor training with part of the course on the Edmodo platform

The project aims to include a maximum of 8 tutors from a range of districts.

2.4 Colleges in London

Telephone conversations by Graciano de Santana Soares, Manager of RSC London, with three London providers, two from FE and one from ACL, provide this evidence of the benefits of technology in vocational education and training.

CityLit, Simon Beard, Head of Learning Resources and e-Learning

The Institute is an adult education college where there is no 16-19 provision. Vocational courses taught at the Institute are sought not because of a qualification, but because people are interested in gaining the skills to set up their own business. Subject areas include music, drama, visual arts, health and massage.

Technology

- makes good teaching even better;

- gives a range of new tools and opportunities to enhance teaching and learning;

- provides differentiation to support and challenge learners at different sides of the spectrum;

- teacher training uses a blended model with four out of ten sessions face to face but all the theory on line.

Examples include

- a music teacher recorded audio of lessons for those who missed lesson or needed to catch up;

- jewellery making learners are now using high quality docs blown up to enhance viewing of minute details;

- more interactive teaching and fewer boring hand-outs;

- the use of JISC Collection Physiology resources considered to be fundamental in providing further practice in topics that cannot be covered in two hours a week.

Martin Compton, Teacher Trainer at EHWLC

- using blogs for reflective teaching;

- creation and use of multimedia audio and video evidence of learning to help external assessors see the potential of technology for assessment.

College of North West London, Grethe Woodward, Head of Staff Development

The use of technology in vocational qualification areas such as Construction has helped enhance the learning experience. Videos are being used in practical sessions to further develop or introduce new concepts.

3. Case studies of good practice

A key element of the support provided by RSCs is to share practice. This may be through formal case studies, such as those shared on the Excellence Gateway (see section 3.3 below); alternatively it may be through other means, including networks, forums, regional awards, events and newsletters.

3.1 Evidence from the JISC RSC Yorkshire Humber

Video clip: passionate about learning
These videos show why providers in the region are passionate about teaching and the role technology plays in teaching and learning.

In this video a construction tutor from Hull College talks about his passion for teaching and how he applies technology to enhance the experience for his learners, and two teacher educators and a health & social care provider talk about the importance of good teaching and the use of technology. The video includes a brief insight into the personal journey of the teachers, how they have applied their own experience and the importance technology plays in that role.

http://bit.ly/PHPcRw

Hull College (Construction, Sports & Leisure)
Ross Anderson, tutor at Hull College, produced an e-book following a JISC RSC Yorkshire–Humber Roadshow about the use of technology within the College. It features work within the construction department and digital literacy.
http://issuu.com/rossanderson/docs/digitus_bitesize_issue_1/9

RSC Yorkshire–Humber Summer Conference 2012 - The Learning & Teaching Olympics
Descriptions of workshops on teaching, learning and technology delivered on the day and which indicate some of the work showcased in the region.

http://issuu.com/jiscrscyh/docs/lto12guidebook?mode=window&backgroundColor=%23222222

Independent Training Services, WBL Provider.
This video from the Technology in Action project funded by JISC RSC YH shows how a Motor Vehicle tutor uses head cams for assessment of Motor Vehicle apprentices in the workplace.

http://bit.ly/PHKdQT

In Touch Care
The strategic use of technology, including the use of three dimensional (3D) technology, is on-going in this organisation, particularly the current exploration of innovative assessment methods to maximise time with learners in the workplace and teacher training and less time spent on paperwork through the use of tablets.

http://www.youtube.com/watch?feature=player_embedded&v=sfy0WY1VGDQ#!

http://www.excellencegateway.org.uk/node/3605

Doncaster College - 3D resources for vocational learning
As part of Doncaster College, Fusedworks produces 3D resources which are commissioned and produced on a commercial basis as well as for the College and wider community. The resources are used within Doncaster College in teaching

Health & Safety in construction in addition to other elements of the construction industry (building from foundations upwards) to provide visualisation of key concepts for enhanced understanding.

http://www.fusedworks.com/?p=866 Health & safety resource - paper to 3D.

Askham Bryan
Askham Bryan College runs a course for farmers in dispersed locations.   Each farmer/group gets four cattle purchased by the College to 'look after'. The groups have to work out a feeding regime and Askham Bryan feeds following each group's requirements. Each group's aim is to sell its cattle for the most profit. Communication is through email and the blog, with the farmers coming into the College once a month to check and weigh their cattle.

The following video examples illustrate excellence in inclusivity in both specialist and mainstream provision:

Blueberry Eco café: Cameras and Widgit to help with portfolios and employability
Many learners have barriers to self-expression and understanding the text-based learning and work environments. The technology has focused on addressing these barriers through improving the learner experience and engagement process and by raising the standard of the tools and skills available to support staff

http://inclusivity.rsc-yh.ac.uk/case_study?id=319

Henshaws: Employability skills through Enterprise
By setting up a social enterprise with the relevant technology, learners can develop skills around digital media but more importantly learn the employability skills needed to work in this industry.

http://inclusivity.rsc-yh.ac.uk/case_study?id=257

Hull College: 100% retention rate!
The engineering area is extremely well equipped at a professional level which sometimes inhibits students with special needs. They needed a safe resource base to motivate and interest them which was special to them, rather than borrowed from others.

Effectively reaching any one sub-group has its unique challenges. Success rates had been significantly lower than the overall success rate at the College. ILT based technologies in a blended context satisfied our requirements and have led to 100% retention rate.

http://inclusivity.rsc-yh.ac.uk/case_study?id=137

Joseph Priestley College (now Leeds City College): Using Camcorders and Games technology to help LLDD and Hearing Impaired Learners
The project aims at helping LLDD students to progress into the workplace. It supports the RARPA process by building an online video e-portfolio, including evidence from handheld devices. Learners can then show it to potential employers; teachers could also use it to build links with local firms to provide placements.

http://inclusivity.rsc-yh.ac.uk/case_study?id=139

Northern College: Using technology to support learners outside the classroom

The project was approached as a chance to experiment with different types of hardware and software, offering a wide range of accessibility opportunities for the wide range of needs present at the College. The ethos was to get the resources to the learners as easily as possible, so most of the resources are accessed through the learning resource centre, with only a few of the more specialised items being accessed through the formal learning support mechanism. Most of the resources are intended to be taken away on a short term loan basis by the learners.

http://inclusivity.rsc-yh.ac.uk/case_study?id=274

3.2 Adult vocational learning achievers at the JISC RSC South East Hi-5 Awards

The JISC RSC in the South East runs an annual awards process to recognise, celebrate and share effective practice in the use of technology.

Thanet College
E assessment with Motor Vehicle Students

http://moodle-rsc.ukc.ac.uk/course/view.php?id=111&topic=5?username=guest

Fareport Training
Learning Library

http://moodle-rsc.ukc.ac.uk/course/view.php?id=111&topic=24?username=guest

Guildford College
Video Assessment: National Diploma in Countryside Management

http://moodle-rsc.ukc.ac.uk/course/view.php?id=111&topic=58?username=guest

3.3 JISC Digital Media

JISC Digital Media provides advice, guidance and training on digital media resources - creating, delivering to users and using them to support teaching, learning and research

Barony College

This land based College introduced a College-wide drive to embed blended learning across the curriculum. To enable this, the College's Learning Materials Development Unit has produced a variety of visually rich learning and training materials.

http://www.jisc.ac.uk/whatwedo/services/about/casestudies/jiscdigitalmedia.aspx

Derwen College, Shropshire
Specialist College for learners with learning disabilities

This case study describes the production and creation of video illustrating best practice in teaching students with learning difficulties and disabilities

http://www.jiscdigitalmedia.ac.uk/casestudy/video-assist-at-derwen-college

This case study illustrates the creation of a series of videos showing various hair and beauty treatments

http://www.jiscdigitalmedia.ac.uk/casestudy/video-assist-at-jewel-and-esk-college

3.4   Excellence Gateway case studies

RSCs populate the "Case studies in good elearning practice" section of the Excellence Gateway. They illustrate effective use of technology in learning and across the whole business of learning providers.

Contact: Contact the RSC that compiled the case study through the "Useful links" section at the end of each case study.

Thanet College
Carpentry is not a subject that traditionally lends itself to e-learning. However, in the space of just 18 months, a carpentry lecturer at Thanet College has transformed the teaching and learning of this vocational area into a model of ILT delivery by interweaving Web 2.0 technologies such as Google Docs into sophisticated and advanced Moodle courses - carpentry classes with a difference!

http://www.excellencegateway.org.uk/node/3592

Ashton Sixth Form College:
Ashton Sixth Form College had a good standard of dance teaching which utilised CDs and DVDs to enhance instruction. The problem with these resources was that either they were just held in one place, or they had to be copied. Using iPods, flip cameras and learners' own devices alongside the College's VLE has enabled access to these resources on an anywhere, anytime basis. In doing so, they have also improved the learners' self-evaluation skills and ability.

http://www.excellencegateway.org.uk/node/19493

Hopwood Hall College:

Hopwood Hall is adopting the use of touch screen technology and gradually replacing its interactive whiteboards to improve access to interactive learning. The touch screen monitors connected to LCD TV's provide a cheaper classroom build with technology that's more user-friendly and better suited to classroom delivery. Until now, interactive boards had been the mainstay of classrooms but they created teaching barriers for staff including the additional software to learn and master.

http://www.excellencegateway.org.uk/node/21149

Newcastle City Learning:
This is a case study in the use of e-readers with adult literacy learners

Overall, the learners' experience was very positive and enjoyable. The Kindles have encouraged some learners to read more and have helped to develop their skills with digital technology. The Kindles are in constant use in the Skills for Life (SfL) provision at Newcastle City Learning and a significant number of learners stated

that, when offered the choice, they preferred to read from the Kindles. Cathy Stark, SfL tutor, said; "Kindles have encouraged learners to give peer support in the classroom, with the more confident and technology literate students being able to support the less confident. The project has been very positive and encouraged people to read more than they would have done without the Kindle".

http://www.excellencegateway.org.uk/node/20459

Stourbridge College:
At Stourbridge, the use of an E-portfolio system and tablet device saves time and reduces workload

Work-based learning assessors often face challenges surrounding time spent on travelling, administration and reviewing student's work. Thanks to the implementation of a tablet device (part of a project devised by JISC RSC West Midlands), Stourbridge College has addressed these challenges which has resulted in time saved, an increase in efficiency and the potential for tablet devices to be used more widely across the College. Coupled with a new e-portfolio system, student assessment feedback is more timely, submissions have increased, and evidence takes less time to gather.

http://www.excellencegateway.org.uk/node/19385

Lincoln College
At Lincoln, turning a course paperless engaged learners. Using additional e-learning tools and making a fuller use of the Moodle open source learning platform has enabled Lincoln College to make its CTLLS teacher training course entirely paper free. At the same time it has led to learners becoming more engaged in the course as it encourages greater sharing, richer submission of evidence for assignments and the development of a broader skill set.

http://www.excellencegateway.org.uk/node/18337

Whitby Fishing School
This learning provider has found using technology has helped with all aspects of a course – from induction and engagement to retention and assessment. The use of a range of equipment – from basic PCs to headcams and 3D software – has made a striking impact on learning.

http://www.excellencegateway.org.uk/node/3577.

South Staffordshire College:
Staff at South Staffordshire College took part in a project devised by JISC RSC West Midlands called 'The Learning Journey Made Mobile'. The project allowed the College to purchase iPod Touches and Flip Video Cameras which were used with Hair & Beauty and Catering students. The technology changed the way learning, teaching and assessment took place

http://www.youtube.com/watch?v=89qIGp08Txo

4. The 2012 FE and Skills technology funding call

The current FE and Skills technology funding call is very strong evidence of what FE and Skills providers see as current priorities in their use of technology. The Programme is managed by Nigel Ecclesfield.

4.1 Background

During 2012, JISC Advance has been managing the FE and Skills Development and Resources Programme for providers across the UK. This programme is funded by JISC from its UK-wide FE funders as part of their core financial contributions - the Department of Business Innovation and Skills (BIS), Scottish Funding Council, Department for Education and Skills Wales and Department for Employment and Learning Northern Ireland. The programme has made £1,350,000 available for projects to initiate and develop innovative uses of technology supporting:

1. improvement in the learner experience;
2. increasing the efficiency and effectiveness of provider activities;
3. repurposing and updating of existing learning resources.

By the closing date, JISC Advance had received 252 bids representing 1,200 providers, approximately 55% of the FE and Skills sector funded by the Government agencies in each of the countries in the UK.

While the funding focus of the Programme was the three areas stated above, subsequent analysis of the bids has indicated that providers see other key elements essential for the successful use of technology for learning and the management of their organisations. In the context of this Commission, three clear themes focused on professional recognition and development in the sector emerged.

4.2 Theme 1 – Capability in the use of technology is a requirement for teachers in the sector

This theme emerged in all bids and reflected the need of providers to be able to deliver learning and teaching activities in a range of different contexts and circumstances to meet the diverse need of learners e.g. those based at work. Technology was seen to be central to the planning, delivery and assessment, making better use of learners' own equipment, such as smart phones and tablets, requiring teachers to produce learning materials, design learning experiences and assess the outcomes of those learning experiences for face to face and distance learning. Providers appeared to indicate that their plans require teachers to make more complex and professional uses of technology in the future, supporting learning and business processes through greater integration of activities and systems. These requirements can be summarised as providers requiring higher levels of digital literacy of their professional staff as technology becomes critical in meeting future demands.

4.3 Theme 2 – Greater learner engagement in learning

Government policy in each of the UK's devolved administrations stresses the need for greater learner involvement in the design and review of learning activities. Technology is seen in the bids as being a key component of more individualised and potentially complex learning activities that will be conducted through learning programmes that encompass work-based activity and assessment, classroom

activity, individual negotiation and planning for learning and the provision of individualised feedback and tracking for learners. While the technology will support the administration of learning, teachers will be required to develop their professional skills in contexts where learning activities, instruction, coaching and assessment will take place in different locations and where some contact will take place using asynchronous communications. These changes will place an increased premium on the use of technology as integral to relations between teachers and learners and the professional profile of teachers.

4.4 Theme 3 – Technology to support collaboration and partnership

What has been striking in this programme has been the predominance of collaborative bids by providers, identifying the opportunities of using partnership activity to make better use of existing resources and build capacity of staff to create, adapt and re-purpose resources, developing skills for a wider range of specific contexts and learner needs. The bids indicate that the incorporation of a these skills to support collaborative working between colleagues both within and outside a single provider will be required, as well as the skills needed to work collaboratively with learners as contributors to their own learning. Central to these developing skills will be the use of social and communication technologies and with these the need to work within a professional framework that will need to be adaptable to changes introduced by the evolution of the technologies and their associated practices.

4.5 Funded projects

Of the 252 bids received, 32 projects are to receive funding to develop new learning resources and practical approaches, and open up opportunities for post-16 learning across the UK. A table of the successful bids is shown here: https://jiscsupport-feskillsdrp.pbworks.com/w/file/58772972/Successful%20Projects-Thumbnails%20FINAL.pdf

The 32 successful bids represent all countries of the UK and aspects of the UK further education (FE) and skills sector including work-based learning, adult and community learning, colleges and specialist providers. They also involve 90 partners drawn from across the sector and numerous local links and partnerships.

Ian Southwell, Online Technologies and Accessibility Development Manager at the West of England College for Young People with Little or No Sight, said: "We are elated to receive the JISC funding which will help us to make online resources more readily available for our learners. This will help to improve their experience of working with technology. Our aim is to simplify access to technology as much as possible to assist this group of learners. We are also delighted that our work will be shared with other educational organisations to assist people across the UK."

Susan Easton, Lead for Digital Learning at The National Institute for Adult and Continuing Education (NIACE), said: "This funding is fantastic news for NIACE. We have long advocated the on-going development of digital capabilities for adult learners. With our partners, including the Workers Education Association, (WEA), Coleg Gwent and Bolton Metropolitan College, we see this funding as a real boost to our work, bringing real benefits to the FE and Skills sector as a whole."

5. Accessibility and inclusion: JISC TechDis

JISC TechDis, with Sal Cooke as its Director, is the advisory service on technologies for inclusion. It explores and promotes inclusive practices, resources and advice for learning and teaching in UK higher education and further education & skills, including independent specialist colleges. It has many practical examples of the ways in which technology transforms teaching, training, assessment and learning, and how that has happened.

The TechDis experience highlights key requirements for effective use of technology in inclusion.

The Commission should be ensuring that understanding the deployment of technologies at strategic level and the practical skills of staff must be at the top of the agenda in order to meet the diverse needs of their users. Accessible technologies can now include personal devices, game consoles, domestic goods, and personal computers, rather than simply traditional specialist assistive technology.

The DART projects show the importance of inclusion. DART 2 is funded by JISC Advance and was preceded by the original DART project funded by the LSIS Flexibility and Innovation Fund. This project, led by Beaumont College, was co-ordinated by both Beaumont and National Star Independent Specialist Colleges. The project involved working in a 'deep support' capacity with eight other Specialist and General Further Education Colleges to up-skill their staff in using assistive technology. In addition, the project has resulted in the production of a series of case studies on innovative uses of assistive technology and the most effective processes for managing and delivering assistive technology provision. A description of the project including case studies on how each of the participant providers was supported by Beaumont College and National Star can be viewed at: http://dart.beaumontcollege.ac.uk

5.1   Staff understanding

Staff must have an understanding of age, language and approach which is appropriate for adults with Learning Difficulties and/or Disabilities (LDD), in the broadest sense of the terms, for both teaching and learning. Xerte and other tools give excellent opportunities for this.

Access to learning is not only restricted by disability, so ESOL and other learners are also affected.   Epping Forest's use of Xerte with Learners with multiple languages and difficulties highlights this. Souad Kouachi is an excellent teacher and very, very insistent about technology for all to use. It is an example of students driving the content and staff having the confidence to let them.

http://www.youtube.com/watch?v=WC7qk8NSJxc

5.2 Senior Managers with appropriate skills and vision

Senior Managers having appropriate skills and vision makes a difference.

Working with Learners with complex needs and ensuring staff are equipped with appropriate technology and skills to deploy them results in such things as the Learner Voices recorded here in these videos

https://vimeo.com/45520401

This is as a direct result of appropriate planning by Senior Managers of such matters as deployment of appropriate technology in the college (e.g. in the tack room at Fortune) and the use of such tools as In-folio. In-folio is a sector lead and learner driven system for recording progress of learners with very different and complex needs and where text is not always the most suitable vehicle. The use of video and images for evidence of achievement is essential for most adult vocational learning and significantly this topic has been quoted as moving the ISC sector forward quicker than most.

Others include:

- recording information during the 'Expressive Arts Group' at Cumbernauld College;

- supporting the 'Moving on to Independence' group at Cardonald College;

- as part of the 'SkillStart' course at Dumfries and Galloway College;

- adding value to the 'New Skills Link Course' at Perth UHI College;

- providing evidence for validation as part of the 'Lifeskills' City and Guilds programme at Borders College - with External verification.

5.3 Capturing the learner voice

It is very important for adults with LDD to reflect and discuss their progress on a daily/hourly basis and most Independent Specialist Providers will do this anyway.

Staff must have the skills and confidence to make sure that appropriate technologies can be deployed in order to ensure that ALL of the Learner Voice is heard loud and clear WHATEVER THE CIRCUMSTANCES. They tell stories such as:

- a learner in a Hampshire Job Centre: at age 42 his use of In-folio gave opportunities for first time for really working with him in ways to help him obtain work;

- Patricia, a lady with mental health issues: although she was told she would not learn to walk or do anything, now she is driving and working.

https://vimeo.com/13884106

A further illustration would be the new East Midlands e-safety site and all the videos of learners with complex needs driving the project

http://www.em-esafetyproject.co.uk/

Appropriate technology is readily available through Access Apps in its various forms. However, staff must know how and when to introduce it to learners.

http://www.jisctechdis.ac.uk/techdis/keyinitiatives/organisationaleffectiveness/enablingtechnology/accessapps

5.4 Influencing others

Many of the examples here show that hearing about tried and tested teaching, training, assessment and learning practices that are having a positive impact on learner success is infectious.

The HEAT project report and the Targeted Funding paper are good sources of evidence and impact, with some good statistics on usage and take up by staff who influence others in their practice.

An independent Impact evaluation of three different small grant schemes published in 2012 demonstrates that relatively modest, carefully targeted and appropriately supported grants can result in disproportionately effective outcomes and developments. The Higher Education Assistive Technology (HEAT) Scheme, Innovation Fund and Kickstart Programme (the latter two examples being within Specialist Colleges) all support and encourage the use of technology to embed inclusive learning and teaching practices. Research indicates that these three initiatives have had far reaching, sustainable and cross-sector benefits and therefore represent exceptional value for money. It is clear that where small targeted funding streams are administered and managed by a national service such as JISC TechDis, fundamental changes to practice can be achieved with modest amounts of funding.

http://www.jisctechdis.ac.uk/techdis/resources/detail/learnersmatter/Targeted_Funding

www.jisctechdis.ac.uk/heat

6. e-books for FE and Skills

In 2009, JISC Collections (https://www.jisc-collections.ac.uk/) 'e-books for Further Education' project licensed 3,000 e-books, chosen by FE librarians, to be made freely accessible to every FE college in the UK. Usage has been high: 35 million page views to date with over 30% of access off-site. Unlimited, concurrent access to e-books 24 hours a day has helped part-time and distance learners, and has solved problems caused by high demand on print versions held by libraries. A further collection of content will be procured in 2013.

JISC Collections is now broadening its involvement with skills providers by running the 'e-books for skills' project to make e-books and other e-resources available to work-based learners and adult and community learners. This includes working with learning providers in the private sector as well as the public sector. The project aims to reach learners who do not have direct access to resource centres or libraries and who are studying a wide range of non-academic subjects. While we are currently researching the requirements of this sector, we expect skills learners will benefit in that they will not only have a broader range of learning resources at their disposal, but they will also learn how to use e-resources as part of their skills development.

7. Further JISC programmes and services

Many JISC funded programmes and projects are about teaching and learning. Although they have focused previously on higher education, they have involved further education colleges, especially those with substantial HE work. Whilst the HE context differs from FE, there are often messages that are very applicable to the FE and Skills sector. Two relevant examples are set out here.

7.1 Innovation

The JISC publication Learning in a Digital Age explores the ways in which technology can help meet the challenge of lifelong and work-based learning and may be of interest to providers and teachers of adult vocational learning. It includes findings from work in colleges looking at, for example, how technology can foster self-directed learning, widen access to learning, enhance learning in the workplace and provide a seamless learning environment. Supplementary video case studies are available at:

http://www.jisc.ac.uk/whatwedo/programmes/elearning/digilifelong/digilifelongresources

Learning in a digital age is available at:

http://www.jisc.ac.uk/digilifelong

For example, using e-portfolios can enable learners to capture the individual stories of their learning while meeting a common set of learning outcomes. The ability to support reflective, self-directed learning alongside evidence gathered for accreditation makes an e-portfolio increasingly the tool of choice for those involved in learning and assessment of learning in colleges and in the workplace. More information on the use of e-Portfolios can be accessed at:

http://www.jisc.ac.uk/publications/programmerelated/2012/crossingthethreshold.aspx

Case study: Acquiring an award via an e-portfolio
Thanet College extended the role of reflection in the continuing professional development (CPD) of its teachers. The College made the Information Technology Qualification (ITQ) in Accessible IT Practice available via the PebblePad e-portfolio system. In so doing the College pioneered the use of e-portfolios for capturing personal reflections and simultaneously recording the evidence required for accreditation. This pilot project showed that e-portfolio-based reflective practice enabled learners to demonstrate learning, assemble evidence in different formats, give and respond to feedback, reflect on lessons learned and submit work for accreditation. See Learning in a Digital Age for the full case study.

7.2 Digital Literacies

Many learners enter further education lacking the skills needed to apply digital technologies to education. Improving digital literacy (of staff and students) is an essential component of developing employable learners as 90% of new jobs will require excellent digital skills - those capabilities which fit an individual for living, learning and working in a digital society: for example, the skills to use digital tools for writing, for critical thinking, as part of personal development planning and as a way of showcasing achievements.

Case study: The Wordle project, Worcester College of Technology
http://www.jisc.ac.uk/whatwedo/programmes/elearning/developingdigitalliteracies/wordle.aspx

Evaluation of a pilot blended learning approach in the present year has shown that teachers and learners at Worcester College of Technology have a varied range of skills in their digital literacy. This is very much in line with research findings by JISC and other projects. Blended learning courses developed by teachers with strong digital literacy skills tended to be more effective than those who had weaker skills and more digitally literate students were more successful at learning than their colleagues with lower level skills and confidence. The College subsequently developed four open learning modules on topics related to digital literacy for staff and students:

- Module for staff: First Steps: Structuring your VLE (Moodle)
- 3 modules for students, aiming to give students the skills they need to both benefit from their studies and improve their effectiveness in their working life.

The modules will be freely available to all via the National Open College Network (http://www.nocn.org.uk/) next year.

7.3 Netskills

Netskills is a training and staff development service partly funded by JISC. It provides training across the UK both online and face to face. In addition to modelling effective use of technology in its own online and face to face delivery, its experience will illustrate the changing technology skills priorities of further and higher education staff. David Hartland is the Netskills Director.

An illustration of the impact of appropriate, high quality training promoting tried and tested teaching, training, assessment and learning practices that are having a positive impact on learner success can be seen at:

http://www.netskills.ac.uk/content/about/publicity/news/articles/article361.html