Crossing the threshold
Moving e-portfolios into the mainstream
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Follow the stages of an implementation journey supported by guidance and insights from the Jisc e-portfolio implementation toolkit and video case studies, stories of e-portfolio implementation:

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The Jisc e-portfolio implementation toolkit and its supporting video case studies, draw on the experiences of 18 case study institutions in the UK, Australia and New Zealand.
Guidance at a glance

Planning and procurement

» Research stakeholder requirements
» Evaluate the affordances of different tools
» Identify and communicate a purpose(s) for the implementation
» Match the technology to the purpose and context
» Identify roles and responsibilities
» Imagine how the vision will be realised
» Consider strategies for sustaining outcomes
» Prepare for the wider implications of successful implementation

Facilitating adoption

» Set up pilots using early adopters
» Involve learners in decision making and support activities
» Engage the support of a senior manager or academic
» Ensure a single login to all learning systems
» Forge links with other student support services as appropriate to purpose
» Collect evidence of emerging benefits

Embedding effective practice

» Set up and support communities of users
» Appoint champions
» Design e-portfolio-based learning activities to suit the purpose
» Embed learning activities into course design
» Develop a wide range of support strategies
» Share transformative practice
» Aim for consistent use across all programmes and courses

Sustaining progress

» Review and evaluate provision and support
» Plan for improvements to infrastructure
» Build on established expertise
» Embed e-portfolios into institutional strategies and curriculum design and review processes

Find out more
jisc.ac.uk/eportimplement
Introduction

Much has been achieved in the last decade to establish the value of e-portfolios in a variety of learning-related contexts.

As outlined in Effective practice with e-portfolios (Jisc, 2008) and the Jisc e-portfolios infoKit, a range of benefits have been experienced by both learners and practitioners, from time savings in information management to increased learner autonomy and the development of employability and lifelong learning skills. As a result, most universities and colleges and some professional bodies in the UK now support the use of one or more e-portfolio tools with pockets of good practice occurring across the disciplines.

Nonetheless, for many institutions, successful large-scale adoption remains elusive and, where it has occurred, little has been shared to inform the work of others. Now a recent Jisc-funded study led by the University of Nottingham into wide-scale e-portfolio implementation has identified the building blocks for effective implementation of e-portfolio tools. Recognising that the lessons learnt from existing large-scale implementations need to be distilled into widely available, accessible guidance, Jisc has produced two online resources from the study to enable more institutions, programmes and courses to cross the threshold from localised to mainstream use of e-portfolios.

The first resource, the e-portfolio Implementation Toolkit, offers clarification and guidance on the purposes and benefits of e-portfolios, their role in relation to virtual learning environments (VLEs), and a model to assist effective implementation. Guidance is drawn from the experiences of 18 further and higher education institutions in the UK, Australia and New Zealand. Five of the case study institutions subsequently recorded their stories on video in a series of short clips entitled Stories of e-portfolio implementation, which yield personal insights into the challenges and benefits of e-portfolio implementation.

How to use this publication

Crossing the threshold is designed to support use of the e-portfolio implementation toolkit and video case studies by those involved in wide-scale implementation of e-portfolios in their institutions. As the resources address the needs of both managers and practitioners, the publication has relevance for a wide range of readers in further and higher education and work-based learning.

To assist the planning and effective management of a large-scale e-portfolio implementation, Crossing the threshold follows the stages of an implementation journey with insights and guidance drawn from the toolkit and its supporting case studies. Links are provided throughout the publication to more detailed information in the two online resources.

“We have captured through the toolkit some of the best that has been achieved in e-portfolio practice in the UK and elsewhere. Imagine how much further forward e-portfolio use would be if what emerged from these implementation journeys could have been shared earlier.”

Dr Gordon Joyes, University of Nottingham

Find out more

» Toolkit and videos  jisc.ac.uk/eportimplement
» Overview of Jisc work on e-portfolios  jisc.ac.uk/eportfolio
The first stage in conducting a large-scale e-portfolio implementation is careful consideration of the pedagogy and clear communication of the aims of the initiative.

Preparatory activities also involve clarifying the purpose(s) and providing evidence of the benefits for key stakeholders, a strong case in the early stages of the initiative based on practice-based evidence does much to gain and sustain stakeholder support. Of equal importance is achieving alignment between the purpose(s), context of use, users’ needs and the selected system or combination of tools.

Exploring purposes

The Jisc e-portfolio implementation toolkit outlines a wide range of educational purposes for e-portfolios. As a result, a single definition of this complex technology remains elusive. e-portfolios are perhaps best described in terms of the functions they perform:

The wide-ranging nature of e-portfolios enables them to cross the boundaries that normally exist between personal and institutional dimensions of learning. Learners might use their private personal learning space for formative activity then present the outcomes as public presentations; they might later draw on these items to support applications for employment, a further stage of learning or professional accreditation. But e-portfolio tools also provide a private space in which to reflect, make plans and set personal goals. Thus e-portfolios developed over time can become an articulation of a unique personal journey.

“In an e-portfolio, you can hyperlink to different assets thus bringing in digital sound files, images and video files. You can even present a different story for different people.”

Emma Purnell, University of Wolverhampton

The reflective nature of much e-portfolio work has a natural connection with formal learning. Supporting transition, promoting personal professional development planning (PDP) and target setting and, more recently, enhancing employability are common purposes behind large-scale institutional implementations. But e-portfolios can also have a simpler vocational purpose: for example, competency mapping e-portfolios present achievements against vocational or industry standards. In all cases, the digital environment offers advantages over paper-based equivalents.

“My NVQ students use their phones to capture evidence of what they have done and then upload it into their e-portfolios. This has really helped progression among lower achieving students.”

Paul Manning, Thanet College

However, in an increasing number of disciplines, such as education, business, health, social care and law, and in contexts such as continuing professional development (CPD) and staff appraisal, the potential for e-portfolios to engage individuals more deeply in the process of learning is what is valued most highly. Working on an e-portfolio enables learners to forge their professional identities and develop attributes and skills appropriate to their career pathways.
“We let people play with the tool first then set up an open forum in Moodle so that they could tell us what they wanted. From that we drew up a list of requirements.”
Professor Alan Staley, Birmingham City University

Dealing with diversity
The diversity of purposes supported by e-portfolios can lead to misunderstandings about the focus of a fresh implementation initiative. Even if use is linked to strategic aims such as enhancing graduate attributes and employability, other equally valid purposes are likely to exist concurrently across the institution which may make acceptance of a further role for e-portfolios difficult to establish. That e-portfolio tools are often seen as suiting different purposes adds a further layer of complexity. Thus implementers need to recognise the validity of different approaches and tools within the same institution while clearly articulating the purpose and desired outcomes of the new initiative.

Identifying what matters
When selecting a tool for institution-wide use, seamless access under a single login and an easily operated interface can be important to learners. However, the overriding consideration has to be good alignment between the purpose, the tool, its suitability for different contexts of use, and the intended outcomes. In some cases, this has proved difficult to resolve, resulting in institutions supporting more than one e-portfolio system or even the development of a new system for the purpose. High-quality exemplars and guidance for academic staff and learners are important in establishing the direction users should take, especially where the use of e-portfolios is optional:

“If something is assessed, it’s mandatory, but if it’s voluntary, students need more persuasion to do it. So you need good examples. When students see advantages, take-up increases.”
Roger Emery, Southampton Solent University

Careful preparation, planning and consultation are key to an effective implementation story. Consider whether:
» The e-portfolio initiative meets institutional strategic aims and has a clearly defined purpose
» The purpose is linked to programme or course objectives, meets a defined need and supports learning outcomes
» Benefits can be demonstrated through practice-based evidence and testimonies
» The technology supports the purpose(s)
» Key stakeholders including learners and employers are involved in planning
» There is shared understanding of the rationale behind the initiative and what can be gained from it

Procuring an e-portfolio tool
The University of Edinburgh engaged in a year-long procurement process to find an e-portfolio tool that could be offered as a central service across the university. Systems were evaluated against the aims of enhancing reflection and developing graduate attributes. Students took an active part in the evaluation bit.ly/I845rQ

Find out more
The Jisc e-portfolio implementation toolkit provides an overview of potential uses of e-portfolios in the Exemplar taster section. Examples submitted by the case study institutions range from reflective journals to courses for professional accreditation. bit.ly/IyZy42
Facilitating adoption

An effective e-portfolio implementation initiative has to take into account how best to promote and then support adoption of the technology and the purposes it supports.

Driving forward the initiative
The Jisc e-portfolio implementation toolkit identifies three approaches to implementing e-portfolios at scale: an initiative can be driven strategically by senior managers (a top-down model), by practitioner and learner demand (a bottom-up model) or led from the middle by managers with responsibility for technology-enhanced learning and teaching (a middle-out model).

In all cases, implementation leads to a ‘middle-through’ process. In universities, this has involved central support units for technology-enhanced learning and teaching; in further education, implementation has depended more heavily on enthusiasts. If coordination and support are insufficient, however, the initiative carries a higher level of risk. The importance of aligning e-portfolio use with the institution’s strategic aims and engaging senior manager support is clearly signalled whichever model is adopted.

Establishing the ground rules
Where the purpose for e-portfolios includes personal reflection, a distinction needs to be drawn between the e-portfolio and other institutional learning systems. While VLEs may contain learner-centred content, their primary purpose is to support formal learning. In contrast, reflective e-portfolios are owned by learners who can choose to share aspects with their tutors, peers or employers while keeping other aspects private.

Thus e-portfolios are often described as ‘disruptive’ or ‘transformative’, since e-portfolio-based learning places the locus of control with the learner. For practitioners, this can mean a loss of control over the direction of learning. Learners can find the emphasis on reflection and collaboration that typifies e-portfolio use on higher level courses equally challenging. Hence both tutors and learners need time to familiarise themselves with e-portfolio-based learning.

“Implementation can fall down if students dislike sharing. Setting up use of e-portfolios can also take time. You have to demonstrate the benefits to students, but that really isn’t any different to working with paper-based portfolios.”
Paula Stroud, Thanet College

Pilot schemes have proved essential in demonstrating benefits, addressing misconceptions and establishing the level of support required. Pilots also raise awareness of what constitutes effective practice with e-portfolios and showcase the benefits of working in a digital environment.

“We have always had paper-based systems for personal reflection. What we wanted to do was to make the same processes work within a digital environment. There is a need for a space that fits seamlessly with the other things students use.”
Dr Barbara Lee, Southampton Solent University

Where the main purpose behind the implementation focuses on learner employability rather than PDP, integration with other institutional systems and branding has been found to improve learners’ perception of e-portfolios. Ease of access is also a fundamental requirement for learners.

Engaging early adopters
Southampton Solent University set up small-scale pilots with early adopters, including students. Once evidence of the value of e-portfolios could be demonstrated, senior managers were engaged. MyPortfolio was made prominent on the VLE homepage along with seamless access to employability-related resources provided by careers advisers. bit.ly/KrTGrT
“The more evidence you have of successful adoption the more use you will get. The support you put in place for students can also be picked up by staff. Most people learn by doing.”
Dr Barbara Lee, Southampton Solent University

Promoting ownership
Learners are more likely to engage in e-portfolio-based work if they are involved in the initial decision making and can place their personal stamp on their e-portfolios. Learners may prefer tools that allow personalisation of the interface. Thus both the choice of tool and the design of initial activities can be important in establishing a good relationship between learner and e-portfolio:

“To get the student to take ownership we required a system that they could influence. It was at this meeting that [it was decided] using a blogging system with some sort of developed educational structure would suit our needs.”
Dumfries and Galloway College, Implementation Journey
bit.ly/J26DIN

Equally important is the point at which learners are first introduced to e-portfolio-based activities:

“In general, when students are introduced to their e-portfolio during induction or very early in their course they accept the e-portfolio as part of their course and not an add-on.”
Dumfries and Galloway College, Implementation Journey
bit.ly/J26DIN

Setting up support
Once online guidance and exemplars are in place, most institutions have found that support and testimony from peers has the greatest impact on early adoption. As e-portfolio use can involve fundamental changes to curriculum design and delivery, advice from experienced peers and mentors is likely to be perceived as helpful by both practitioners and learners.

To promote fast adoption of e-portfolios, be prepared to:
» Set up pilot schemes and disseminate outcomes and benefits
» Support communities of users
» Develop understanding of the boundaries between e-portfolio and VLE-based learning
» Embed links to the e-portfolio tool in a prominent place on the VLE
» Engage early adopters in designing e-portfolio-based learning activities
» Utilise the influence of a senior academic and work in partnership with learners and key support services such as careers

Peer support
Curtin University, Australia, has appointed students with experience of the institution’s iPortfolio system as student support officers. Their role is to provide frontline help desk support for new users, answer email requests and assist practitioners in creating opportunities for e-portfolio use.
bit.ly/IopQXS

Find out more
The Jisc e-portfolio implementation toolkit offers an eight-point implementation summary and a series of initiation models for senior managers.
bit.ly/IhzHyS
e-portfolios form a core and natural part of the learning experience once their use is embedded appropriately in curriculum design, when a range of support mechanisms are in place, the infrastructure is mature and there is clear direction for learners and practitioners on the purposes and benefits of the technology.

Crossing the threshold
As a mainstream service, it is assumed that the e-portfolio system has the necessary functionality to support different purposes and is integrated with other relevant learning systems and services. The infrastructure can support simultaneous use by large numbers of learners. Plans may also be in place to make e-portfolios accessible from any location on mobile devices. Key purposes are aligned with institutional and pedagogic aims and the requirements of professional bodies taken into account. Practitioners have opportunities to gain expertise in curriculum design with e-portfolios and have become users themselves. Planning for such eventualities needs to occur at an early stage in the implementation journey.

Embedding into the curriculum
Nonetheless, it may take time to fully embed use of e-portfolios; typically, it took case study institutions three years, and some remain uncertain over the extent of take-up. However, much can be learnt from their experiences to make embedding a more efficient process.

Practitioners who are themselves e-portfolio users are much more likely to be aware of the affordances of the technology and to show greater confidence in designing e-portfolio-based learning. Thus engaging practitioners in e-portfolio use at the same time as learners has some merit as an implementation strategy. Thanet College, for example, leveraged staff experience of Reflect, an e-portfolio-based CPD initiative from the Institute for Learning, to establish use of e-portfolios. Where benefits were experienced, the practice became embedded:

“Now using an e-portfolio is automatic for me. And it’s had a big impact on my teaching... As I teach on short courses, there is less time to get to know students and break down barriers. e-portfolios help unify groups.”
Paula Stroud, Thanet College

Where opportunities are designed into the curriculum to explore the collaborative and dialogic potential of e-portfolios, stronger progress has been made towards embedding e-portfolio use. Experienced practitioners have maximised this potential by setting up peer review activities at an early stage:

“Students can gain from peer assessment, they move further forward as a result of reflecting on each other’s work and by giving each other feedback.”
Sara Reeves, Thanet College

Further opportunities to familiarise practitioners with e-portfolios lie in teacher training, staff appraisal, induction for new staff and mentorship of learners on work placements. Encouraging experimentation has also proved a means of building enthusiasm amongst academic staff:

“We enthuse staff by letting them see what they can do with it. Having conversations is important. Depending on what they want, we work with staff to explore the opportunities.”
Nora Mogey, University of Edinburgh

At the University of Auckland, New Zealand, assessment of teaching practice involves peer review followed by an oral presentation using items from MyPortfolio accounts to demonstrate achievement of teaching standards. By using e-portfolios in their training, student teachers acquire understanding and expertise in e-portfolio use. 

bit.ly/JHUYkK
Ensuring quality
Embedding is not just about the extent of e-portfolio use. Larger institutions have appointed e-portfolio advisers who combine pedagogic and technical expertise to ensure e-portfolios are used effectively across the board. Appointing a senior academic to lead the initiative and locating champions in the faculties has also proved beneficial in terms of embedding good practice:

“The biggest thing we can do is to work with staff to help them see that it’s not about implementing e-portfolios in itself, it’s about the way in which e-portfolios are used to support different aspects of the student learning experience.”
Dr Jon Turner, University of Edinburgh

Planning for transformation
One of the most challenging aspects of e-portfolios is that ownership remains with the learner yet there are many ‘touch points’ with formal learning at which elements from personal e-portfolios may play a role. Reflection on experiences in the workplace as part of work-based learning or work placements is one example.

If e-portfolio use is integrated into courses by means of assessed activities that recognise both the value of the technology to formal learning and the primacy of the learner, there is greater likelihood that e-portfolios will be more widely and skilfully used. For this reason, many institutions elect to provide a secure, institutionally supported e-portfolio tool rather than encourage use of Web 2.0 tools and services for formal assessed activities:

“We need an institutionally based e-portfolio that we can integrate into Moodle and so close the loop on assessment. Students can submit aspects of their e-portfolios through Gradebook in Moodle. You cannot do this on Facebook.”
Professor Alan Staley, Birmingham City University

The outcomes can be both unexpected and transformative, highlighting the experiential nature of implementation:

“The outcomes of our first implementation were stunning... [Students’] work was far better, more selective and original. Seeing the creativity of students was an insight.”
Jon Curwin, Birmingham City University

Find out more
The Jisc e-portfolio implementation toolkit provides guidance for practitioners aligned with five implementation principles. It is important to think through the implications of these principles at each stage of an implementation journey. bit.ly/ICOQuB
Sustaining progress

The potential for changing user requirements, the development of new purposes for e-portfolios, increased demand or improvements in technical feasibility mean that a continuing process of review and adaptation needs to be part of any e-portfolio implementation.

Seeking feedback
Regular collection of user feedback helps identify new purposes for e-portfolios as well as indicating where refinements to the existing service are required. Access to e-portfolios via mobile devices may be one such improvement; equally, enhancements to the structure or guidance to meet disciplinary needs may take precedence. In addition, e-portfolio systems need to be reviewed alongside the VLE in formal evaluations of institutional systems.

Breaking new ground
Increasingly, learners have expectations that their course of study will prepare them effectively for employment. Flexibility is a further key requirement, particularly for mature learners studying in the workplace. Thus recent e-portfolio developments have focused on supporting institutional responsiveness to learner and employer needs.

For example, a Jisc-funded project at the University of Wolverhampton, an e-portfolio based Pedagogy for Small and Medium Enterprises (ePPSME), has demonstrated the viability of delivering, assessing and accrediting short courses for industrial partners via e-portfolios. This innovative approach provides a personalised and flexible route to accreditation for work-based learners. The project built on existing knowledge and expertise of supporting PDP and mentoring learners on work placements, but forged new pedagogic models that can shape delivery in other contexts:

“There is also a possibility of foundation degrees based on the ePPSME model and more five-credit courses, but this will depend on the market. There may also be e-portfolio-delivered units of study within other courses.”
Dr Alison Felce, University of Wolverhampton

Developing the infrastructure
As learners increasingly use e-portfolios during their studies, so demand will grow for continued access post-course. Lifelong and life-wide learning requirements should be supported either through opting for Leap2A-standards-compliant tools or selecting tools that allow post-course use free of charge or at minimal cost. Increased use will also necessitate additional server capacity.

To sustain progress into the future, consider:
» Regularly reviewing and evaluating current provision
» Using experience adroitly to meet new institutional goals and markets
» Planning for improved infrastructure
» Embedding e-portfolio-based activities in all types of institutional provision, including work-based learning

Keeping in touch
Queensland University of Technology’s Student ePortfolio has been a mainstream service since 2009. Regular data collection informs continuing development of the technology to maintain its relevance and to update pedagogic and support strategies.
bit.ly/IuRBih

Find out more
The Jisc e-portfolio implementation toolkit includes workshop activities which can be combined with the video case studies to explore implementation issues and benefits.
bit.ly/IIE4E9
Understanding innovation

“... true ‘innovation’ is about how... ideas go beyond the pilot/test phase and are applied and adopted appropriately throughout an institution.”

Jisc sustaining and embedding innovations good practice guide

The Jisc sustaining and embedding innovations good practice guide offers general guidance on implementing new tools and processes which can be applied to e-portfolio implementations. The guide identifies three stages for the embedding of any new practice: the generation of new ideas (invention), early practical application, for example, in particular disciplines or modes of learning (early innovation) and institutional embedding (systemic innovation).

While a large-scale implementation of e-portfolios could be described as systemic innovation, continuing enhancement and improvement may generate further instances of invention and early innovation. Thus the process of implementation is described in the toolkit as a journey rather than a single event. Change management strategies form a key element in the process or journey.

Strategies from the toolkit case studies

Widely established practice

» Linking to wider national initiatives such as employability or cross-sector collaboration

» Integrating e-portfolio use into assessed curricula

» Forming communities of practice

» Providing access through the institutional VLE

» Showcasing outcomes from successful pilots

» Ongoing evaluation and research into user perceptions

» Strategic use of externally funded projects

» Underpinning implementation with a change management and quality assurance framework

Other approaches

» Embedding e-portfolio entitlement into the Student Charter

» Delivering work-based distance learning via e-portfolios

» Introducing academic staff to e-portfolios via CPD and teacher education programmes

» Developing an online animation to induct learners into independent e-portfolio use

» Engaging learners in self-assessment of graduate and employability attributes in the early stages of e-portfolio-building

“... true ‘innovation’ is about how... ideas go beyond the pilot/test phase and are applied and adopted appropriately throughout an institution.”

Jisc sustaining and embedding innovations good practice guide
Understanding innovation

"An establishment meeting is conducted with the e-portfolio project manager and a curricula design document used as a framework to discuss... transformation and quality assurance.”

Royal Melbourne institute of Technology

"Tutors look at everyone individually and see where they are. At the beginning, everyone is at a different level but the team is there to get you on the same level.”

University of Wolverhampton

"We looked out for early adopters to take things further. Students sometimes fell into that category”

Southampton Solent University

"The student e-portfolio contributes to the vision and goals of the institution”

Queensland University of Technology
Further information and acknowledgements

Further information
The e-portfolio implementation toolkit and video case studies have been funded by the Jisc e-learning programme to advance knowledge and expertise in large-scale e-portfolio implementation. Both resources are freely available to assist managers and practitioners in further and higher education and work-based learning.
jisc.ac.uk/eportimplement

References
jisc.ac.uk/effectivepracticeeportfolios

Jisc infoNet e-portfolios infoKit
jiscinfonet.ac.uk/e-portfolios

Jisc (2011) Sustaining and embedding innovations good practice guide
sustainembed.pbworks.com

Leap2A specification for e-portfolio portability and interoperability
leapsspecs.org/2A

University of Wolverhampton e-portfolio based Pedagogy for SMEs (ePPSME)
bit.ly/JuFStZ

Links
Jisc e-learning programme
jisc.ac.uk/elearningprogramme

Jisc The design studio
jiscdesignstudio.pbworks.com

Overview of Jisc work on e-portfolios
jisc.ac.uk/eportfolios

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