



EPISTLE - Final Project Report

EPISTLE - e-Portfolios Informing and Supporting Teaching Learning and Evaluation

Report Authors: Dr P Brett, Julia Brant, Shane Sutherland,
Rachel Challen, ePISTLE team,
Centre for Excellence in Learning and Teaching,
City Campus,
University of Wolverhampton,
Wolverhampton

Website: <http://asp2.wlv.ac.uk/ePISTLE>

Phone: 01902 322361
P.Brett@wlv.ac.uk

Table of Contents

	3
Executive Summary	
Background	4
Aims and Objectives	4
Methodology	6
Implementation	7
Outputs and Results	8
Outcomes	10
Conclusions	13
Recommendations	14
References	15

Acknowledgements

This project was carried out through the Regional e-Learning pilot projects around Distributed Learning JISC programme, and the project funded by JISC.

The project partners were:

Higher Education:

University of Wolverhampton
Birmingham New Technologies Institute / University of Central England

Further Education:

Telford College of Arts and Technology
Wolverhampton City College,
Rodbaston College,
Kidderminster College – provided the expertise with Shibboleth

Schools

Shirelands Language College
Leasowes Community College
Midlands Leadership Centre; Black Country Pathfinder 14-19 Networks for Excellence

Executive Summary

The ePISTLE project implemented the use of e-Portfolios in two Schools and three Further education colleges from 2005-2007 in order to gain an insight into four areas crucial to further understanding of the use of Portfolios. These were (i) how best to integrate an e-Portfolio into the curriculum; (ii) the issues with the use of e-portfolios for transition and progression, (iii) issues of access and storage and (iv) the factors which affect use and non-use of e-Portfolios.

The main finding has been that e-Portfolios have to be introduced as part of a considered and planned curriculum, and that uptake and consequent success is based on an understanding of the best fit of an e-Portfolio to the users' curriculum and needs, together with an introductory approach matching user profile and or culture. Without this optimisation of starting point, any subsequent e-Portfolio activity could be difficult. ePISTLE has pinpointed essential criteria for understanding user profiles as users engage with e-Portfolios. Users are at the centre of their e-Portfolios, (despite government policy, PDP, etc). and without tight integration with, and concern for, their uses and needs, e-Portfolios will not be used. All organisational and technological factors follow on from that.

The five outputs from the project can be found at:

<http://asp2.wlv.ac.uk/ePISTLE>

Background

The QAA, taking its lead from the reports of Dearing and Garrick (1997), has been promoting progress files to help students "reflect upon their own learning and achievements and to plan for their own personal, educational and career development" (QAA p.12). A significant aspect of the progress file is Personal Development Planning (PDP) and many HEIs are experimenting with different ways of delivering PDP. e-Portfolios present one such option, able to celebrate all forms of learning; formal and informal; institutional and non-institutional; structured and eclectic. They offer something for all kinds of learners whether at some stage of transition between levels of learning, moving to or seeking employment, or simply recording achievement for the purposes of self-knowledge and self-worth. e-Portfolios are the subject of this project.

In addition, e-Portfolios offer a flexibility independent of whether or not learning is in formal educational phase, and can be revisited and added to at any time to consolidate understanding of past achievement, and to formulate future intentions. This also raises the question of where e-Portfolios are best stored.

The University of Wolverhampton is the lead HEI for the recruitment of students from disadvantaged backgrounds, with more than 50% of its entrants from this sector. In addition it has been working very hard to improve the performance indicators relating to its retention and recruitment of these students. Concomitantly, it has been extending its role to one of 'regional hubs of learning', working closely with those colleges from where the next student body will enrol, and with the schools who provide the students to the colleges. One emerging tool which may assist both with the retention of students and in their progression to higher levels of learning is the progress file and its electronic equivalent the e-Portfolio.

University of Wolverhampton has elected to explore the potential of e-Portfolios with the twin aims of supporting students' personal development and enhancing employment opportunities, by creating and using the PebblePAD e-Portfolio system.

The need for this small-scale pilot project was threefold. The first centres on gaining a better understanding of how learners choose to use e-Portfolios, in terms of the if, what, when, how and why. Clearly this may involve encouragement (or direction) from external agents to promote engagement. The second need for investigation addressed by this project is understanding of how best e-Portfolios can be embedded in the curriculum and what classroom processes and materials might best assist this. The third need is to observe and evaluate if, and how, e-Portfolios support the process of transition and progression between different educational institutions. At the end of the project the community will have a deeper understanding of how e-Portfolios are used, can be embedded in the curriculum, and how they can support the process of transition and progression in the educational context.

Aims and Objectives

The aims and the objectives articulated at the start of the project are described below. There have been no substantive changes in these throughout the life of the project. However, the guidelines produced in outputs 2 and 3, regarding the use of e-Portfolios for transition and progression have been based on information collected from potential participants in this process, rather than from data of observed instances, due to the timescales of the project differing from main phases of transition and progression in the student year.

This project aimed to set up the technical infrastructure needed to supply learners in four colleges and two schools associated with the University of Wolverhampton with access to an

e-Portfolio. This was to be housed at the University of Wolverhampton, but accessed by learners locally (facilitated by Shibboleth authentication technology).

The project aimed to embed this e-Portfolio system as a part of the curriculum for selected small groups of learners in the colleges and schools. This was to be done with the extensive pedagogic support of University of Wolverhampton in the form of workshops for teachers, and further support when the e-Portfolio was introduced to learners. The project then investigated how e-Portfolios were used by learners and what strategies and support are needed to encourage learners' continued engagement with this process. The project aimed to research how e-Portfolios were used to facilitate the process of progression or transition between educational institutions and / or the workplace, although as explained above, the guidelines produced from this were not based on data from actual instances.

There were three specific aims (i – iii) of this project, each with specific objectives (a-c/e):

i) to observe, document and understand how e-Portfolios can be embedded in the curriculum and what tasks, training, processes are useful to teachers and then the e-Portfolio users. This aim had the following objectives:

- a) to set up an e-Portfolio system for colleges and schools to allow local access
- b) to create and implement the training necessary for teachers and learners to embed e-Portfolios into the curriculum and enable both groups to exploit the potential of e-Portfolios.
- c) to produce materials and guidelines as to how best to embed e-Portfolio use into the curriculum

ii) to observe, document and understand how e-Portfolios are used by learners and assessing bodies when submitted as a means of assessment. This aim has the following objectives:

- a) to review the kinds of learning that are recorded by users beyond that which is immediately relevant to their formal/institutional/structured learning;
- b) to evaluate the factors which motivate learners to commit evidence to their e-Portfolio;
- c) to explore the users' intentions in respect of their envisaged e-Portfolio outputs, particularly in terms of their intended stories and intended audiences;
- d) research the kinds of skills or abilities suitable for recording at each level of learning;
- e) evaluate how these competencies are most appropriately (or most widely) evidenced.

iii) to observe, document and understand how e-Portfolios are used by learners and institutions when submitted as evidence towards learning achievements and thus progression and transition between educational institutions or work. This aim has the following objectives:

- a) to appraise the processes in place, or in development, to receive and acknowledge applicational e-Portfolios in educational or work contexts.
- b) to organise and describe the kinds of evidence that institutions or employers value in a learner's e-Portfolio;
- c) to evaluate how institutional mechanisms can be modified to accredit diverse forms of learning.

These aims were to translate into 5 outputs as sets of guidelines and policies for the use of e-Portfolios, by learners and institutions:

- i) A set of materials and guidelines which will assist teachers to embed an e-Portfolio into the curriculum;
- ii) Developmental guidelines to frame the use of e-Portfolios for accreditation for entry into Higher Education;
- iii) Developmental guidelines for the use of e-Portfolios in colleges and schools as artefacts to enable learners' transition or progression to other institutions of education;
- iv) A set of guidelines to frame the issues around storage, and ongoing access of learners' e-Portfolios;
- v) A report on the factors which seemingly affect the use and non-use of e-Portfolios by learners.

Methodology

Summary

The overall approach taken to this investigation of the use of e-portfolios was to integrate their use into the curriculum of groups of school and college students. This involved working with partners to identify tutors, groups and curriculum areas. The tutors were then trained in the pedagogic aspects of e-Portfolio use as well as the software features of e-Portfolios used in the study. Tutors and learners received on-going support during the project. Data sets were thus naturally the tutors and the learners who participated in the e-Portfolio use.

The rationale for the approach was to be able to derive guidelines for, and an understanding of the issues in e-Portfolio use from user experiences.

The issues addressed in the project and the data collection and evaluation are those key in the understanding of institutional implementation of e-Portfolios and of the factors which will or may affect the success of such an initiative.

A variety of research methodologies were used to focus upon the needs of each of the five deliverables. These are summarised in the table below.

Deliverable	Research methodology and data sets
A set of materials and guidelines which will assist teachers to embed an e-Portfolio into the curriculum	<p><i>Data sets:</i> Materials used Experiences of tutors and portfolio consultants</p> <p><i>Methodology:</i> Interviews; focus groups</p>
Developmental guidelines to frame the use of e-Portfolios for accreditation for entry into Higher Education;	<p><i>Data sets:</i> HE Admissions tutors External consultant e-Portfolio tutors</p> <p><i>Methodology:</i> Questionnaires, interviews; focus groups</p>
Developmental guidelines for the use of e-Portfolios in colleges and schools as	<p><i>Data sets:</i> HE Admissions tutors</p>

artefacts to enable learners' progression to other institutions or education;	External consultant e-Portfolio tutors <i>Methodology:</i> Questionnaires, interviews; focus groups
A set of guidelines to frame the issues around storage, and ongoing access of learners' e-Portfolios.	<i>Data sets:</i> Server side observation of use ITS expertise
A report on factors which seemingly affect the use and non-use of e-Portfolios by learners.	<i>Data sets:</i> e-Portfolio tutors e-Portfolio users <i>Methodology:</i> Questionnaires, interviews; focus groups

Implementation

The story of the project chronologically

The early months of the project in March 2005 involved the selection of the two e-Portfolios to be used in the project (e-Pet and PebblePad), the hardware purchases and installations of the software. It also involved working closely with the Kidderminster team on understanding and starting to install Shibboleth.

Contacts were made with the partners, an initial project meeting held and partners nominate groups and tutors who would use e-Portfolios. The Birmingham partner used the e-Pet software.

Initial meetings with partners were difficult to arrange over the summer period and although some scoping of the implementation with partners took place, much of this work was deferred until September, 2005. The e-Portfolio consultant began work on preparing materials for staff training and for user training. These are available as one aspect of Deliverable 1 from the project.

September and early October 2005 saw a variety of problems with the implementation of Shibboleth, some to do with technical aspects of Shibboleth installation, some due to control of local networks. More precise details of these can be found in the report from the Shibboleth aspect of the project. These problems caused considerable delay in being able to train local staff and also with the running of hands on sessions with e-Portfolios for students. During this time the project team made many unfruitful visits to the partner institutions, ready to train only to come across access problems. The resulting loss of confidence took considerable and gargantuan effort by the team to restore.

The Shibboleth problems were resolved in all partner institutions bar Shirelands School. Once the Shibboleth problem had been resolved, it was found their network could not handle 40+ users. The main problem was the changing in student profiles affecting PC performance and access, which was later resolved by the University in consultation with the network provider, RM. These students were subsequently invited to the University to use the e-Portfolio in late February, 2006.

In October and November 2005 training of all key staff in partner institutions took place, both pedagogic and technical. A key facet of this was where and how best to integrate use of e-Portfolios in the curriculum. A generic, detailed overview of the factors to be considered in the integration of e-Portfolios to a curriculum is distilled as part of Deliverable 1.

During this time period the consultant led and supported the students' introductions to the e-Portfolios in partner institutions. The extent of the partners' tutors' participation in the introduction and support of student use of e-Portfolios was varied. The factors which seem to have affected this are addressed in Deliverable 1.

The numbers of student users of e-Portfolio systems in each of our partner institution in 2005-6 was as follows: Leasowes – 120; Shirelands – 0 (see sentence below); Wolverhampton College – 9; Telford College of Arts and Technology – 13; Rodbaston College – 11; Birmingham New Technologies Institute – 15

Shirelands endeavoured to use the e-Portfolio with 160 students but their network precluded this. The University of Wolverhampton ran a University based session with 20 students who were trained as e-Portfolio mentors and, at the point of writing this report, all 160 students are now using the e-Portfolio,

Throughout October to February 2006 students continued to use their e-Portfolios and support was given to tutors and learners by the project.

A full time researcher was appointed in December 2005 with the remit of designing the research instruments, collecting the necessary data, analysing it and extracting the significant aspects to include in the outputs. This has all been completed and the researcher has worked closely with the project team.

January to March 2006 involved intensive data collection and analysis and the shaping of the deliverables, together with a project exit meeting involving all partner institutions.

The project was granted a 'light-touch' extension until July, 2007 to examine the project aims over a longer time period.. The user base was broadened within the following project partner institutions. Telford College of Art and technology increased the users by 30 to include the City and Guilds 7407 Teacher Education programme in addition to the Certificate of Education programme.

Leasowes Community College extended their project by 250 users which includes the whole of the year 10 cohort. They intend to use ePortfolio with all Year 11 students in 2007-8 year,

Rodbaston College continued with the Certificate of Education cohort of 9 students but are used the ePortfolio for staff CPD purposes in semester 2, 2007.

Despite enthusiasm for the project, Shirelands Language College withdrew from the EPISTLE project due to separate funding being provided to participate in a pilot exploring the use of Microsoft Sharepoint Environment. Additionally, due to the departure of the lead lecturer of teacher education, Wolverhampton College also withdrew from the project.

Two dissemination events entitled "Telling stories: real people, real ePortfolio's" were hosted by the University of Wolverhampton on the 13th July 2006 and in June 2007. More than 200 participants attended and key papers were given by ePistle participants,

Outputs and Results

The five deliverables from the project, which include an update from the extension project, can be read in full at:

<http://asp2.wlv.ac.uk/ePISTLE>

There are four major areas of insight into some of the factors surrounding the use of e-Portfolios in FE Colleges and in Schools.

1. EPISTLE has provided valuable insights to the major factors which predicate successful implementation of an e-Portfolio into the curriculum in FE Colleges and in Schools. This is discussed in much greater detail in the Guidelines for integrating an e-Portfolio into a curriculum. The key factors which need to be addressed for a successful integration surround entry points and stages of embedding:-

To give as flexible a starting point as possible, four entry points of subject, timetabling options/constraints, students and resources have been identified. These represent the practical considerations which any teacher or lecturer would face when commencing integration of e-Portfolios into any curriculum.

Acknowledgement of different entry points for teachers depending on belief in the value of reflection in learning, the nature of the curriculum, their student cohort, and the opportunities, constraints, intentions, and learning outcomes sought, are all fundamental elements of successfully enabling use of e-Portfolios in the curriculum.

2. Two of the project deliverables concern the issue of the use of e-Portfolios as evidence of a learner journey, learner skills and achievements for transition to another institution or to further progress within the same institution. No data could be gathered from observation of such use in action due to the timing of the project, and there is a difficulty concomitant with the personal nature of any e-Portfolio data in illustrating this evidence, however interviews and questionnaires with key participants showed that the key issues will be:

- admissions tutors' time;
- how to establish and equitably apply criteria for e-Portfolios,
- how, and if e-Portfolios are combined with traditional admission methods/modes (application forms, interviews etc)
- the likely effect of these criteria on learners' e-Portfolio construction,
- concern about authenticity of the e-Portfolio,
- levels of entry;
- the diversity of e-Portfolio needs from different subjects / disciplines / professions,
- incorporation of authenticated transcripts,
- lack of clarity of the role of the awarding bodies,

3. The use of e-Portfolios will involve secure preservation, storage and access to users' individual evidence stores. This has implications for the IT infrastructure and processes in institutions. Using the observation of the requirements of the ePISTLE project users, key results surround:

- access & authentication,
- interoperability,
- storage, - including the nature of e-Portfolio use e.g., evidence vs competency
- issues of confidentiality,
- security of data
- its continuation/continuity and prudent stewardship.

In particular, the clear need for a single login and seamless access to e-Portfolios from any network connection was conspicuous in project participants' responses. The evident emphasis placed by them on the need to minimise technology management issues was central to user engagement. In a school infrastructure network speeds and capacity would be an essential consideration for engagement. The earliest engagement with site systems

administrators/network managers on a consultative basis is essential, and preceding this there was an observed need for senior managers to have had internal discussions with stakeholders and gatekeepers.

The use of Shibboleth highlighted the need for further development of tools to enable robust assignation of authentication components, and ultimately to put these in the hands of users themselves. Advanced expertise in secure networking protocols would be essential assistance for any organisation implementing e-Portfolio software.

The project successfully exchanged data between the two e-Portfolio systems used, ePet and PebblePad. UKLeaP should be further extended as the basis for interoperability, and variations on data exchanges tested.

Long term, the need for some independent body to oversee storage of users' e-Portfolios would be inevitable. Central storage of the Lifelong Learner Record might be desirable with users having access to this data as described below. The most likely scenario is for users to maintain their e-Portfolio storage offline with 'working space' online for current projects. However, exactly which components of an e-Portfolio would qualify for this requires further discussion. It needs to be borne in mind that not all parts of an e-Portfolio need to be stored in the same place, that is if some elements are stored in location x, others can emanate from locations y, z and a. The key criteria is for the user to be unaware of the origins of a seamless presentation and for computational efficiency to be maximised.

Some ePISTLE project users expressed an expectation that the organisation involved should be responsible for hosting of authenticated transcripts as a minimum, as the organisation would be the body to which other parties would look for verification of achievement.

Storage issues can be characterised as less of a major concern than authentication and access, as these latter present more acute problems for implementation. The solution to these access problems are more central to gaining and maintaining user confidence.

4. The final results of the project concern a description of the factors which seem to affect the use of e-Portfolios by users and a set of actions which may help mitigate non-engagement. These factors will be important as institutions can use this list to assess how best to approach implementing e-Portfolio facility with reference to their users' profile and that of the institution. The main factors mitigating in favour of e-Portfolio use were:-

- National policy drivers
 - Organisational / Institutional perspectives
 - Infrastructure / access / authentication!
 - Staff commitment
 - Rationales, namely the relevance and / or fit to different subjects, reasons for wanting to use an e-Portfolio and expectations of the benefits,
 - Individual user factors include: Perceived relevance; Motives, incentives; Available time for teachers' and students'; Group factors; Social networks; Lifestyle / peer influences
-
- A Senior manager champion
-
- Introduction to ePortfolio which includes hands-on use in the first session

Outcomes

a) *List project achievements against the aims and objectives set.*

Overall, acknowledging that the project aims and objectives are quite broad and cover many dimensions of e-Portfolio implementation, the overall most valuable achievement is best characterised as enabling tutors and students to see the potential of an e-Portfolio, as a participative, reflective and evaluative tool that can extend in benefits for individuals and organisations beyond other kinds of evidence of learning.

The specific aims and objectives of ePISTLE and the outcomes are detailed below:

i) to observe, document and understand how e-Portfolios can be embedded in the curriculum and what tasks, training, processes are useful to teachers and then the e-Portfolio users. This aim had the following objectives:

d) to set up an e-Portfolio system for colleges and schools to allow local access

- e) to create and implement the training necessary for teachers and learners to embed e-Portfolios into the curriculum and enable both groups to exploit the potential of e-Portfolios.
- f) to produce materials and guidelines as to how best to embed e-Portfolio use into the curriculum

The project achieved the set-up of an e-Portfolio system for colleges and a school to allow local access, although this proceeded at differing rates according to local circumstances.

Via an e-mentoring system, the project achieved the creation and implementation of training to enable embedding of e-Portfolios into the curriculum and thereby enable their exploitation, in almost all participating sites. Exploitation was most effective when there was synergy between the processes promoted by use of an e-Portfolio and the processes inherent in the course, such as the Medionics course at Leasowes Community College and at Telford College with the PCE. Materials and guidelines for optimum embedding are incorporated into Guideline 1 of the project deliverables.

ii) to observe, document and understand how e-Portfolios are used by learners and assessing bodies when submitted as a means of assessment. This aim had the following objectives:

- f) to review the kinds of learning that are recorded by users beyond that which is immediately relevant to their formal/institutional/structured learning;
- g) to evaluate the factors which motivate learners to commit evidence to their e-Portfolio;
- h) to explore the user's intentions in respect of their envisaged e-Portfolio outputs - particularly in terms of their intended stories and intended audiences.
- i) research the kinds of skills or abilities suitable for recording at each level of learning;
- j) evaluate how these competencies are most appropriately (or most widely) evidenced;

The project observed that generally, e-Portfolios were widely used to record and review personal reflections on learning, but that sharing of this kind of material on a group level was less frequent. One to one sharing with tutors was more prevalent and very highly valued. There was some caution expressed by some users on the topic of sharing material online.

The project achieved an understanding of user intentions and attitudes towards the purposes

of an e-Portfolio, notably towards the realisation that it could be used for employment applications. However, as users varied widely in their general views on e-Portfolios, the achievement of all the above points was inevitably variable.

iii) to observe, document and understand how e-Portfolios are used by learners and institutions when submitted as evidence towards learning achievements and thus progression and transition between educational institutions or work. This aim had the following objectives:

- c) to appraise the processes in place, or in development, to receive and acknowledge applicational e-Portfolios in educational or work contexts.
- d) to organise and describe the kinds of evidence that institutions or employers value in a learner's e-Portfolio;
- e) to evaluate how institutional mechanisms can be modified to accredit diverse forms of learning;

The project achieved an understanding of the value of e-Portfolios in selected areas, for example the recording of reflection as part of teacher education. Surveying of project participants, of e-Portfolio using tutors outside the project and of admission tutors revealed a number of concerns and requirements that would be central to specifying how best to deploy e-Portfolios as evidence for progression or accreditation. Those tutors who were both admissions tutors for their courses and project users of e-Portfolios were in a particularly valuable position to advise on best practice for use of e-Portfolios for admission.

Employer concerns did not feature largely as a) the concept is still new for employers and b) employers were not active partners in the project.

b) Summarise project outcomes and their impact on the teaching, learning, or research communities.

The full outcomes of the project and the extension up to July 2007 are available in the 5 sets of guidelines available from the project's web site.

Project outcomes can be summarised as:

Table 1: Possible Impacts of ePISTLE on communities, teaching, learning and research.

Impact on communities Outcomes	Impact on Teaching	Impact on Learning	Impact on Research
Awareness of the importance of e-mentoring as introduction process	Need to equip future teachers with relevant pedagogic skills	Need to equip learners with necessary IT and other skills e.g., reflective	Need further research to determine best approaches
Awareness of the importance of an optimum fit of e-Portfolio software and system to user category	Need to select an appropriate approach tailored to individual group	Need to be aware of criteria for suitable match between subject and e-Portfolio	Need to analyse and research criteria for best fit between subject and e-Portfolio
Awareness of the importance of minimising technology management issues for all users	Should introduce e-Portfolio systems only once technical concerns are addressed	Need to equip learners to work in new ways	Need to research impact of usability and technology management issues on users' learning

Awareness of likely emergence of new learning models from use of e-portfolio	Need to equip teachers to work in new ways - likely emergence of new teaching models from use of e-portfolio	Need to equip learners to understand own preferences and to use e-portfolio to facilitate appropriately	Need to research longer term effects of e-portfolio use across sectors
--	--	---	--

c) *Indicate who will benefit from the work, how, and why.*

Principal beneficiaries will be:

Schools, colleges and HEIs interested in exploring new approaches to learning for general and specific user categories, such as hard to reach learners; and for enhancing employment prospects for students.

Teachers and students should benefit from a key finding of the project, that e-Portfolio use can clinch vital points of understanding through rapid closure of feedback loops; a prompt response from a tutor can consolidate a central point of understanding in the mind of a student, rather than prolonging a hiatus of uncertainty characteristic of time delays in traditional formative assessment cycles.

The ability of a skilled teacher to use an e-Portfolio environment to keep younger students particularly “on task” could be a particularly beneficial model for addressing attention deficit in the face of competing distractions.

HEIs and colleges could benefit from the admissions angle if e-Portfolios enabled a more accurate understanding of the student both before, and even more importantly, after admission stage.

Employers could ultimately benefit from the ability of an e-Portfolio to demonstrate suitability for recruitment with evidence of skills in action, accreditation and other achievements.

d) *Also comment on what you learned that may be applicable to other projects, e.g. whether the methodology worked.*

The methodology used to upskill teachers, to embed the e-Portfolio use into the curriculum, and to introduce and support learner use worked well.

With regard to the research approaches, it was apparent that there was a need to tailor methodology to the profile of respondents. The ability to discuss user experience on a one to one basis is particularly valuable. Focus groups need to be used with care. Questionnaire surveys were useful in capturing the views of a selected population.

The earliest possible consultation with the relative IT support departments is essential, even before principal signatories commit to participation. Resolution of all relevant technical mechanisms well before users engage would be ideal.

Conclusions

Briefly summarise any conclusions that can be drawn from the project work.

The overall conclusion would be that while e-Portfolios are of evident and valuable benefit to learners and their organisations, more work should be done on investigating the feasibility of the passport model linking stages of learning, through practical application. Users need to have a clear demonstration of the longer term benefits of using an e-Portfolio, beyond

immediate applications. The key driver would seem to be whether the concept is adopted widescale by employers, to pull through demand along the whole chain. Mentoring as a support process is key to embedding the concept at a number of levels.

In so as learner use is concerned, the key factors are Perceived relevance; Motives, incentives; Available time for teachers' and students'; Group factors; Social networks; Lifestyle / peer influences.

For institutional use a Senior Manager champion is needed.

Implications

Consider the future implications of your work and how others can build on it.

The significance of ePISTLE for the future is that despite variations in user experience across the project, there was general acceptance that the principle of an e-Portfolio was a useful one, particularly when underpinned by concepts of PDP, CDP and so on. E-Portfolio owners expressed an interest in ownership of their work independently of institutional obligations of continuation, and school students particularly appreciated that they could showcase their work and progress within it.

If the central principle of individual ownership can be combined with institutional benefit in incorporating this into evaluation and admission processes, then this would be a good foundation for future development.

Continuation was a participant enquiry/concern; a key expectation of project participants was "what happens next? "

What are the implications for other professionals in the field, for users, or for the community?

Please see Table 1 above for summary of project outcomes and impacts on teachers, learners, researchers.

Please also see the project's detailed deliverables at the project web site.

What new development work could be undertaken to build on your work or carry it further?

In addition to the comment above on practical application of the passport model, it would be essential to conduct further work on optimisation of Shibboleth, particularly as this will replace Athens for federated service authentication. Trouble free operation of underlying authentication protocol is essential to underpin user connection to their e-Portfolio, wherever they may be, and to enable interoperability between systems.

Recommendations

Technical:

Access and authentication

It is very strongly recommended to enable work to refine and harden Shibboleth tools for attribute release, and to test at what point these could be given to users to guarantee secure and robust authentication for access to e-Portfolios.

Interoperability

A superset of e-Portfolio elements for interoperability should be further explored, in tandem with alignment of this superset with a template approach for use of an e-Portfolio in the admissions process, to guide applicants.

Technical optimisation should ideally precede other developments in e-Portfolio usage, in order to minimise technology management issues for users and systems administrators.

e-Portfolios and Admissions

Further extension of the use of e-Portfolios in admission/progression/transition should be explored, through alignment of all stages of this from school to employers, in the form of a pilot project to agree and test handover requirements as a practical experience. This should ideally test concepts and criteria as a freestanding mechanism, independently of cohort passage, with a view to evaluating practical outcomes before integration with cohort progression.

Admissions tutors should be encouraged to take ownership of the concept of e-Portfolios as part of the admissions process, as per advice expressed by a participant who was both admissions tutor and e-Portfolio tutor. Some piloting of a small scale trial could be one way to undertake this.

Organisational / Users

Exploration of best fit of e-Portfolio to user group should be undertaken, with particular emphasis on tailoring of interface to lifestyle of age group/typical tasks undertaken/time available/ organisational context/culture.

A pilot programme of training teachers and lecturers in ementorship would be central to any subsequent rollout of e-Portfolios. A training programme of this kind would both build a critical mass of trained ementors to partner provision of e-Portfolios and gather valuable input for iterative cycles of improvement of training.

References

CETIS Reports: <http://www.cetis.ac.uk/members/portfolio/documents/index.html> (accessed 24-03-06)

Getting what you want: Implementing Personal Development Planning through e-portfolio
Getting what you want from e-Portfolios: a starting point for Institutional Managers in HE
Getting what you want from e-Portfolios: a starting point for MIS Managers in HE
Getting what you want from e-portfolio systems: a starting point for PDP practitioners supporting learners in HE
Getting what you want from e-portfolio systems: a starting point for students in HE.
Getting what you want from e-portfolio systems: a starting point for technical developers of e-Portfolio systems in HE

TransPortALL scenario - Student view of PDP moving from FE to HE context
Janet Strivens and Simon Grant, 2005-01-31
<http://www.nottingham.ac.uk/e-portfolio/> (accessed 24-03-06)

Specifying an e-Portfolio: Enhanced learner information for flexible admissions and transitions into higher education: Proposal for a soft template for structured personal statements providing enhanced learner information linked to UCAS course entry profiles and personal development planning (PDP)

University of Nottingham project for the JISC MLEs for Lifelong Learning programme
<http://www.nottingham.ac.uk/rippll> and <http://www.nottingham.ac.uk/epreferencemodel>
(accessed 24-03-06)

Building Scenarios The use of a mentoring service to support learners in their choice of 'Next

Course' and 'Next Institution' <http://www.niimle.ac.uk> (accessed 24-03-06)

[UK LeaP: the Nottingham Experience. http://www.nottingham.ac.uk/epreferencemodel/](http://www.nottingham.ac.uk/epreferencemodel/)
.ppt presentation by Carl Ebrey to BSI IST/43 group meeting (accessed 24-03-06)

A series of papers in the form of FAQs, produced by the JISC Study to Explore the Legal and Records Management Issues Relating to the Concept of the Lifelong Learner Record:

1 .Legal Aspects of e-Portfolios: A Short FAQ -

http://www.jisc.ac.uk/uploaded_documents/Legal_Aspects_FAQ_.pdf
(accessed 24-03-06)

Harnessing Technology: Transforming learning and children's services
www.dfes.gov.uk/publications/e-strategy. (Accessed 24-03-06)

Appendix A

Mid-term project continuation report - February, 2007

1. An update of progress against the deliverables and milestones outlined in the continuation plan.

Including new users in the project institutions has gone smoothly though some considerable effort was required from the technical team to provide a seamless transition for existing users given the move from a Shibboleth authentication method to LDAP/SSO. The user base has been broadened within the project partner institutions. Telford College of Art and technology have increased the users by 30 to include the City and Guilds 7407 Teacher Education programme in addition to the Certificate of Education programme. Leasowes Community College have extended their project by 250 users which includes the whole of the year 10 cohort. Rodbaston College are continuing with the Certificate of Education cohort of 9 students but are planning to use the ePortfolio for staff CPD purposes in the next semester. Despite enthusiasm for the project, Shirelands Language College have withdrawn from the EPISTLE project due to separate funding being provided to participate in a pilot exploring the use of Microsoft Sharepoint Environment. Additionally, due to the departure of the lead lecturer of teacher education, Wolverhampton College have also withdrawn from the project.

All cohorts involved in the extension project have had initial training from either the eMentor or experienced staff within the institutions. A very successful ePortfolio retreat was held on the 10th and 11th July 2006. Representatives from all project partners attended and provided both the institutions and the project team with valuable data on implementation and integration strategies. For example, Leasowes devised a webfolio which was to be distributed to the students which provided a structure for the whole year's assessment in Mediaonics.

Staff and users from 3 of the institutions spoke at an ePortfolio conference "telling stories: real people, real ePortfolio's" hosted by the University of Wolverhampton on the 13th July 2006. All three presentations were well received and created a lot of positive interest in the project from both local primary and secondary institutions interested in the use of ePortfolio's for transition possibilities.

2. What aspects of your continuation activity are you most pleased about?

Familiarity of the software by lead staff in the institutions has led to a smoother integration of the ePortfolio into the curriculum especially at the two FE colleges. This has led to a fuller uptake of the software. Additionally, in institutions where old and new cohorts are combined, an informal buddying system emerged. This has led to more confidence in the experienced users and given the new users useful examples of 'presentational portfolios' to work with. The technical issues, involving the reliability of the authentication system used in the initial pilot, were resolved for the

continuation project, and have made an extremely positive effect on the introduction of the ePortfolio to the new users. The ease of access and sign on has contributed to a noticeable increase in confidence which has enabled the users to concentrate on using the eportfolio as a tool for learning rather than being perceived as an additional technical hurdle or unnecessary extra work.

3. *Has anything surprised you about the way this work has been progressing?*

The new concept of ePortfolio's meant that the original project was seen as experimental for the majority of the cohorts. It is pleasing to see that the ePortfolio as a life long learning tool is now being widely accepted within the projects' institutions. Due to the success of the EPISTLE project, Telford College of Art and Technology have applied separately for the JISC HE in FE project to extend the use of the ePortfolio with foundation students within the college and for use on other courses where there is a professional and vocational element.

Whereas we were unsure of the potential for success of eportfolios, particularly of the type typified by PebblePad, the wide adoption of the system at Leasowes School has been very rewarding – this despite some initial technical issues at the very beginning of the project. The work at this school receives support from the Head Teacher, is championed by the deputy head (who attended the retreat) and is supported through the curriculum by both teaching staff and technical support staff. This level of commitment from within the school means that much less support has been required from the core ePISTLE team and indicates a maturity of use which should ensure sustainability beyond the project lifespan.

4. *What aspects of your project have led to changes in terms of:*

a. People (staff-various groups, learners, practice, knowledge)

The project has undoubtedly led to increased understanding of the purpose and significance of eportfolios as tools for supporting personal reflective learning and for demonstrating learning and achievement. Amongst the student cohort there has been a noticeable shift in confidence exemplified by student users speaking at the 'Real People, Real ePortfolios' conference in July 2006.

As previously reported (Report 5) sceptical and 'non-IT' users who had found the process onerous and unrewarding ended the first phased of the project expressing high levels of satisfaction with their portfolios and the learning evidenced by and through them.

In terms of staff and institutional development it is clear from the 3 active partners still involved that colleagues understand the value and potential for eportfolios with each exploring new opportunities for their use. Feedback from colleagues also indicates the value they place in the eportfolio as a tool for their own personal and professional development.

b. Processes (software and technical systems, working practices)

Neither ePET or PebblePad have been changed as a direct result of this project. Both systems worked as required. The continuation project involves only institutions using PebblePad though support and guidance is still available to our non-active partners.

As a result of the difficulties experienced using Shibboleth work was conducted to allow users to log directly into their eportfolio accounts directly from an internal authentication directory or using LDAP. This necessitated considerable technical work as it also involved disaggregating each institution's 'version' from a single ePISTLE installation so as to aid continuation beyond the project lifespan. This work was completed before students returned and resulted in no loss of data. The Shibboleth WAYF page was also replaced with a pseudo-WAYF page now incorporated in a project website with support information - <http://epistle.wlv.ac.uk/>

5. *Environment (cultural, partnerships, regional developments)*

The ePISTLE retreat was attended by participants from all of the participating institutions for two-days of curriculum planning and eportfolio development. Colleagues from the

regional School's Improvement Partnership and from 3 other schools also took part and were able to share in the experiences of the ePISTLE delegates.

Feedback from the retreat was very positive with each institution leaving with new/enhanced implementation plans. Drawing upon the experience of ePISTLE partners both Dartmouth High School – moving towards Academy status – and Willenhall Sports Academy have implemented eportfolios with their 6th form groups and may become involved in future work around UCAS applications as well as involvement in local schemes through eportfolio such as the regional cashback bursary scheme.

6. *What further development (if any) needs to take place to facilitate the transition of aspects of your project from proof of concept to viable products, systems or processes?*

The system in use is developing independently of the ePISTLE project. The implementation of eportfolios into the curricula and its wider place in an institution is increasingly understood by colleagues engaged in this project. It is anticipated that all partners will continue to expand their use of eportfolios beyond this project.

7. *What indicators of change might an impact study in 2008 explore in respect of your project.*

- Users' perceptions of eportfolios as tools to support lifelong and lifewide learning;
- Extend to which eportfolios are used beyond the formal/taught curriculum;
- User's experiences of using eportfolios for transition and job-seeking;
- Extent to which the use of eportfolios has expanded within the institutions beyond those courses supported by the ePISTLE project