Transferability of e-Portfolios in Education: Phase Two Protocol

Derek Young

Kylie Lipczynski

Table of contents

Transferability of e-Portfolios in Education: Phase Two Protocol

Purpose

The purpose of the research project is threefold:

- evaluate the inclusion of e-portfolios in teacher training programmes;
- identifying how e-portfolios impact on enhancing learning;
- identifying how e-portfolios support CPD and encourage lifelong learning among teaching staff.

This paper has been prepared to provide further information to those involved with the project and those whose students are participating in the evaluation of e-portfolios.

Background

In the field of Education there is currently a requirement for learners undertaking Initial Teacher Education and PGCE to compile a competency based portfolio of work which can then form part of their continuing professional development as they move into and through a professional teaching career.

With the wholesale introduction of the electronic medium there has evolved a wide range of e-portfolio and PDP software with an accompanying drive to move learner portfolios into the electronic medium. However, uniformity in both design and content of e-portfolios is at best limited. With universities and individual education departments making unilateral decisions as to which e-portfolio software package to adopt, the best scenario at present is represented by groups of colleges franchised to a central university, or a group of regional based universities, which might adopt a similar design or software package. There is in general a problem regarding the transferability of e-portfolios across sector and between institution and workplace. It is now appropriate therefore to look at the types of e-portfolio software in use within the field of Education and identify common ground which might be used to introduce a measure of standardisation and transferability.

The benefits of e-portfolios have been clearly recognised. According to Levin and Camp (Levin and Camp, 2002), students reflective practice skills can be supported by the use of e-portfolios while an e-portfolio enables the student to utilise tools that are considered to facilitate lifelong learning (Love and Cooper, 2004; Jafari, 2004, Richardson & Ward, 2005, Mason et al., 2004). The process of developing a portfolio is not confined to simply showcasing work, but involves the "learners reflection on individual pieces of work, as well as an overall reflection of the story the portfolio tells" (Barrett, 2006). The electronic nature of e-portfolios allows peers and instructors the opportunity to comment and reflect on the students' work during the development process. Clark, Topp and Goeman (2002) noted the use of e-portfolios for students to document their reflections while on teaching placement provided more opportunity for rapid feedback from staff. Equally important in this context, the social network of an online e-portfolio allows learners to digest the feedback they have received and alter work accordingly to resubmit for further review (Ahn, 2004). The dynamic approach of developing an e-portfolio allows the learner to incorporate many different media types, (Web links, podcasts and video) directly into their e-portfolio, providing evidence of achieving their learning objectives (Barrett, 2006, Abrami & Barrett, 2005, Whitsed, 2005). By integrating e-portfolios into Education, students are afforded the opportunity to develop their technology skills as well as showcase their learning.

However, various limitations with regards to e-portfolios have been identified including; assessing reflection, unclear learner objectives, student anxiety, transferability, usability, technical issues and staff and student engagement. There are indications that a lack of understanding by students of the learning objectives of an e-portfolio can hinder their success and according to Darling (2001) a flexible approach to structure of the portfolio

caused anxiety in some students as they had a sense of 'helplessness' by not knowing where or how to start. Similarly Carney (2002) found students who developed traditional portfolios were anxious about the prospective audience and consequently avoided including personal reflections in their portfolio, a factor which hindered the student's ability to develop their reflective thinking skills.

Ultimately the successful use of e-portfolios as a tool to support reflective practice is limited by how much ownership the learners themselves feel they have in the process. That is, they themselves need to see the benefits and value of developing an e-portfolio for themselves (Siemens, 2004). Clearly the learner needs to form an understanding of the technology themselves, thus it is important that time is dedicated to the training of staff and students of the technology (Hall et al, 2005). BECTA's (2007) recent evaluation of e-portfolios and learning revealed teachers are not currently considering how e-portfolios may be managed to support learners' transitions from one learning situation to another. In addition the results suggested that teachers had considered the application of e-portfolios to their own CPD but had failed to adopt e-portfolios due to time constraints.

History of the project

The first phase of this project evaluated the current uses and designs of e-portfolios in Higher Education Teacher Training courses within the UK. The study identified practitioner's views of the successes and failures of implementing e-portfolios into the curriculum on a large scale and in turn investigated the existing e-portfolio packages and tools currently used in education, the current use of e-portfolios in teacher training, and the present use of e-portfolios to support learner PDP. All HEI's offering Teacher Training within the UK were invited to take part in the study. The first phase of this project, evaluating the current uses and designs of e-portfolios in Higher Education Teacher Training courses within the UK, has now been successfully completed. http://escalate.ac.uk/217

The results suggested that respondents felt very positive about the possibilities of e-portfolios within their teacher training programme with 93% of respondents either using e-portfolios or planning to do so. A number of considerations were recognised by respondents, these are summarised as follows:

- I.T. training for students is imperative at the implementation stage;
- E-portfolios should be fully defined and embedded into the curriculum for all students and staff;
- A flexible approach to e-portfolio requirements is required;
- E-portfolios can be time consuming if not fully embedded into the curriculum;
- The respondents displayed strong aims of what they would like the e-portfolios to achieve. This is reflected in current literature;
- Technical implications – Implementation requires a consensus between all stakeholders.

Aims

This phase of the project involves developing an understanding of staff and learner expectations and the actuality of e-portfolios as a teaching and learning tool. The aims for this project are summarised below.

For the Learners:

- Evaluate learner expectations on their use of the selected e-portfolio tool;
- Evaluate ongoing learner experiences during their introduction to the use of e-portfolios to facilitate learning;

- Evaluate learner reflection on the impact of e-portfolios as a tool for learning (including uptake of e-portfolios);
- International collaboration on e-portfolio use;
- Training offered to the learners.

For the Teacher Educators:

- Evaluate teacher educator views on their use of the existing e-portfolio tool;
- Prior experience with tools;
- Training with tools;
- Expectations of the e-portfolios software tool;
- Views on educating new teachers and how it may impact on e-portfolios.

For the Teachers/Practitioners:

- Evaluate practicing teachers views on current CPD practice;
- Experience with e-portfolios;
- Use of e-portfolios to enhance learning.

Scope

Step	Activities	Date
1.	Surveying students prior to their introduction to e-portfolios (in the beginning of the academic year)	September 2007
2.	Maintain ongoing contact with the learners through a project Blog and discussion board prompted by monthly research questions	Throughout academic year 2007-2008
3.	Survey teacher educators and practitioners on their use of e-portfolios	January to April 2008

Procedure

Participants

All UK Higher Education Institutions (HEI's) offering Teacher Training were invited to participate in the initial scoping study. From the results of the scoping study, participants who had agreed to be contacted were invited to take part in a more in depth study of the use of e-portfolios in teacher training. The institutions who agreed to take part in phase two of the research include:

- University of Newcastle
- University of Aberdeen
- University of Sussex
- University of Bath
- Canterbury Christ Church University
- St Martins College, Lancaster
- University of Dundee

Data Collection and Methodology

The preferred method of surveying is by use of an online survey hosted by Bristol On-Line Surveys. Paper based versions of the surveys can be sent out during this time should the involved institution prefer it.

Learner questionnaires
Learner questionnaires will be conducted through online surveys using the facilities at Bristol Online Services and will be anonymised to all. The initial surveys will look at the demographic background of the learners, prior learning and educational experience, and prior experience with IT and with e-portfolios (see Appendix 1 for sample questions).

Learners will be surveyed prior to their introduction to e-portfolios (in the beginning of the academic year). The surveys will aim to identify the:

- perceived learning benefits;
- their definition of an e-portfolio;
- perceived components of an e-portfolio;
- general expectations and anxieties.

The end of project questionnaire will revisit some of the points from the initial survey in order to identify change.

Discussion board
Students participating in the initial survey are asked to indicate their willingness to participate in a year-long discussion board. The identities of those learners contributing to the discussion board will remain known to the research team only.

The discussion board will be used to highlight issues of e-portfolio 'usability' as they occur across the academic year and will give us an insight into the learner issues as their interaction with e-portfolios develops – highlighting issues as they arise. The discussions will be prompted by research questions sent at monthly intervals highlighting relevant issues as the learners develop their e-portfolios. These questions will relate to different aspects of e-portfolio development and usage - aspects such as Help & Training, Engaging with Technology, Sharing Resources, and Reflective Learning. (see Appendix 2 for sample issues and questions).

Research staff will closely monitor the content of the discussion board to ensure suitability of content and will actively engage the participants in semi-structured discussion.

Blogs
Students participating in the initial learner survey are asked to indicate their willingness to participate in a year-long Web-Log (Blog). The identities of those learners contributing to the Blog will remain known to the research team only. Use of a Blog will highlight ongoing learner interaction with the development and use of e-portfolios in a more detailed and reflective manner. The research team will not advise learners on issues arising from the Blogs and will act only in the sense of a non-participant observer.

Teacher Educator questionnaires and interviews
The staff at the universities will also be surveyed regarding their use of e-portfolios to support students learning and their own CDP. Teacher Educator questionnaires will be conducted through online surveys using the facilities at Bristol Online Services and will be anonymised to all. The survey will examine the interaction of Teacher Educators with e-portfolios and how they use and develop them as an aspect of their teaching practice. Areas of investigation include; e-portfolio tool functionality, issues surrounding student

assessment, usability of software, perceived student benefits and how the staff support their own CDP. Staff willing to participate further with the project will be interviewed by telephone and will be known only to the research team.

Practicing Teacher questionnaires and interviews
In addition to the research taking place within the higher institution we will be conducting research in the workplace. Practitioner questionnaires will be conducted through online surveys using the facilities at Bristol Online Services and will be anonymised to all. Practicing teachers will be surveyed on aspects relating to how the use of e-portfolios can be, and in many cases has been, developed as a tool for in-service Continuing Professional Development and highlighting their needs for supporting CPD using e-portfolios. Including:

- Current Practice;
- Reflective Practice;
- Understanding of e-portfolios;
- Local education authority requirements for CPD.

Practitioners willing to participate further with the project will be interviewed by telephone and will be known only to research team

Data Analysis

Method of Analysis

A mixed method approach is being used within this project. Cross-sectional surveys will elicit both quantitative and qualitative data from staff and learners to determine individual experiences and uses. Education departments are also surveyed in order to determine current uses, facilities, institutional and individual aims, and extent to which e-portfolios have been embedded within the curriculum. Surveys will be followed up by interviews, focus groups, online discussion boards and Web Logs. Sectoral comparisons will be made at the disciplinary, individual and institutional level, highlighting the needs and concerns of the survey groups.

Dissemination of research

The results of the study aim to provide a descriptive sector evaluation supporting the development of a core template model. At the conclusion of the research the findings will be published as a set of recommendations and disseminated via the HEAcademy subject centre network. In addition events will be held for practitioners and further presentations made at conferences.

References:

Abrami, P. & Barrett, H. (2005). Directions for Research and Development on Electronic Portfolios. *Canadian Journal of Learning and Technology*. 31(3).

Acker, S. (2005) 'Overcoming obstacles to authentic eportfolio assessment' [online], *Campus Technology*. Retrieved October 4, 2006, from http://www.campus-technology.com/news_article.asp?id=10788&typeid=155

Ahn, J. (2004). Electronic Portfolios: Blending Technology, Accountability and Assessment. THE Journal, 31 (9). Retrieved October 10, 2006, from http://www.thehournal.com/the/printarticle/?id=16706

Barrett, H. (2006). Using Electronic Portfolios for Classroom Assessment. Connected Newsletter, 13, 2, pp. 4-6.

Becta (2007). Impact study of e-portfolios on learning. Available at http://partners.becta.org.uk/index.php?section=rh&catcode=_re_rp_02&rid=14007

Carney, J.M. (2002) The Intimacies of Electronic Portfolios: Confronting Preservice Teachers' Personal Revelation Dilemma. In H. Barrett (Ed.), *Electronic Portfolios (SITE 2002 Section)* (pp. 544-548). Retrieved December 8, 2006, from http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/28/09/b6.pdf

Clarke, P., Topp, N., & Goeman, B. (2002) Web-Based Electronic Portfolios: A Systemic Approach. In H. Barrett (Ed.), *Electronic Portfolios (SITE 2002 Section)* (pp. 549-550). Retrieved December 8, 2006, from http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/28/09/b6.pdf

Darling, L. (2001). Portfolio as practice: the narratives of emerging teachers. Teacher and Teaching Education, 17, 107-121.

Hall, T., Kiggins, B., & Weimer, G. (2005). E-portfolios in Teacher Education Using TaskStream. Proceedings of the 2005 ASCUE Conference, www.ascue.org, June 12-16.

Ingram, R. (2006). An electronic learning curve: implementing ePortfolios. Retrieved March 16, 2007, from http://newsletter.alt.ac.uk/e_article000519261.cfm?x=b11,0,w

Jafari, A. (2004). "The Sticky e-Portfolio System: Tackling Challenges and Identifying Attributes." Educause Review (July/August 2004): 38-48.

JISC (2006). E-Portfolios: An Overview of JISC activities. Retrieved March 16, 2007, from http://www.jisc.ac.uk/publications/publications/pub_eportfolio_overview.aspx

Levin, B.B., & Camp, J.S. (2002) Reflection as the Foundation for E-portfolios. In H. Barrett (Ed.), *Electronic Portfolios (SITE 2002 Section)* (pp. 572-576). Retrieved December 8, 2006, from http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/28/09/b6.pdf

Love, T. & Cooper, T. (2004). Designing Online Information Systems for Portfolio-Based Assessment: Design Criteria and Heuristics. *Journal of Information Technology Education*, 3, 66-81.

Mason, R., Pegler, C., & Weller, M. (2004). E-portfolios: an assessment tool for online courses. *British Journal of Educational Technology,* **35** (6), pp. 717-727.

Richardson, H.C., & Ward, R. (2005*). Developing and Implementing a Methodology for Reviewing E-Portfolio Products*. The Centre for Recording Achievement.

Roberts, G., Aalderink, W., Cook, J., Feijen, M., Harvey, J., Lee, S., & Wade, V.P. (2005). "Reflective learning, future thinking: digital repositories, e-portfolios, informal learning and ubiquitous computing". Research Seminar at ALT Spring Conference 2005 in association with ILTA and SURF, 1 April 2005, Dublin Institute of Technology (http://www.alt.ac.uk/docs/ALT_SURF_ILTA_white_paper_2005.pdf. accessed 15 January, 2007).

Siemens, G. (2004). ePortfolios. *Elearnspace*. Retrieved on October 4, 2006, from http://www.elearnspace.org/Articles/eportfolios.htm

Whitsed, N. (2005). Learning and Teaching. *Health Information and Libraries Journal*, **22**, pp. 74-77.

Appendix One: Student E-portfolio experience – Initial survey

The survey will be undertaken on line using Bristol Online Survey

ESCalate Learner Survey: E-portfolios to support student learning.

This survey aims to report on current use and integration of e-portfolios on Education courses delivered within Higher Education Institutions.

The survey is completed anonymously and takes around 10 minutes to complete.

'''All data collected in this survey will be held anonymously and securely. No personal data is asked for or retained.'''

If you have any further queries please do not hesitate to get in contact with the research team at
escalate@stir.ac.uk

Transferability of e-Portfolios in Education: Phase Two Protocol

Section 1: Background Information

Please indicate your gender: Male ☐   Female ☐

Age-band: under 21 ☐   21-25 ☐   26-30 ☐   31-35 ☐   36-40 ☐

                          41-45 ☐   46-50 ☐   51-55 ☐   56+ ☐

Level of study: Undergraduate ☐   Postgraduate ☐

Degree programme you are currently on:

[ ]

What year of study are you currently in?

1st ☐   2nd ☐   3rd ☐   4th ☐   Other ☐

If other please describe: [ ]

Mode of study: Full time ☐   Part time ☐   Distance ☐   E-Learning ☐   Other ☐

Which of the following categories most closely describes your ethnicity?

White ☐   Black or Black British ☐   Asian or Asian British ☐

Chinese ☐   Other ☐

Do you consider yourself to have a disability?   Yes ☐ No ☐

How much did you know about the institution before you enrolled?

Nothing ☐   Very little ☐   A moderate amount ☐   A lot ☐

How much did you know about your programme of study before you enrolled?

Nothing ☐   Very little ☐   A moderate amount ☐   A lot ☐

Are you the first person in your immediate family to attend university?   Yes ☐   No ☐

Have you attended any course in Higher Education before enrolling on this one?

Yes ☐ No ☐

If yes, what was the level of HE course?

>

Have you previously attended any course in Further Education?

Yes ☐   No ☐

If yes, what was the level of FE course? (e.g. HNC, NVQ, etc.)

>

Highest current qualification

Access Course ☐   'A' Levels ☐   Scottish Highers ☐   Higher National ☐   Degree ☐

Section 2:

Do you know what an e-portfolio is?   Yes ☐   No ☐

If yes to previous question - How would you define an e-portfolio?

>

How did you learn about the availability of developing an e-portfolio at University?

>

Do you consider yourself to be computer literate? Yes ☐   No ☐

Do you feel you have the technological know how to develop an e-portfolio? Yes ☐   No ☐

Level of previous IT experience

None ☐   Very Little ☐   A Moderate amount ☐   A lot ☐

Do you expect to have any training on how to develop an e-portfolio?   Yes ☐   No ☐

What do you perceive as the potential benefits from developing an e-portfolio?

Do you have any previous experience of using an e-portfolio?   Yes ☐   No ☐

If yes to previous question, please describe:

Please rate how useful you feel the following features will be in your e-portfolio.
Please rate on a scale of 1-5 (1=Not Useful, 5= Very Useful).

	1	2	3	4	5
Collation of files					
Storage of files					
Professional Development Planning					
Career Development					
Reflective Learning Log					
Using your e-portfolio as a basis for Assessment					
Developing a CV					
Study Aid					

Appendix Two: Sample Questions

Ongoing discussion questions – delivered on a monthly basis through the discussion network and project Blog

Help & Training

Have you been given adequate training in the use of e-portfolios?
Is this training an ongoing process?
Do you have access to support – 24/7?

Technology

How easy is it to access the technology?
How easy is it to use the technology?
Do you have access to technical support 9-5 or 24/7?

Sharing

Who is able to contribute to your e-portfolio (add content) - self, teachers, friends, etc
Who sets the levels of access the e-portfolio?
Do you share your e-portfolio with other people?
What type of people see it – teachers, parents, friends, employers?

Use

Do you consider creating an e-portfolio as a good use of your time?
Do you enjoy creating your e-portfolio?
How often do you access your e-portfolio?
How do you use your e-portfolio to think about your learning?

Learning

How do you feel about yourself and your learning when looking at (thinking about) your e-portfolio