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JISC FINAL REPORT

ComPort:

A **Comparative** Study of e-**Portfolio** Implementation in Work-Based Learning

FINAL PROJECT REPORT

Compiled by **Phil Robinson, Project Manager**

March 2009

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Comport was a consortium project involving the following N.E. regional F.E. colleges: Gateshead College (lead Partner), City of Sunderland College and South Tyneside College. Tyne Metropolitan College were involved in planning the project proposal, but did not proceed to implementation.

Throughout the project support was provided by JISC regional RSC (Northern), in particular Bob Bell (H.E. Co-ordinator and Work-Based Learning Consultant) helped to frame the original project and was a member of the project steering group. The other steering group members were: Andrew Robson (e-Learning Development Manager, Gateshead College), Merv Stapleton (Director of Learning Resources, City of Sunderland College) and Craig Scott (IT Manager, South Tyneside College). These partners also directly supported the project in their own institutions. The group would like to thank Rob Archer for his contribution as a member of the steering group during the initial planning stages. The project was also supported by Alix Pearson, Associate Director. Foundation Degrees Forward.

James Burke and Jocelyn Upendran, of DeBurca Ltd developed the Metrics Framework and undertook the independent ('external') evaluation. The 'internal' project evaluation was advised by Dr. Elizabeth Hartnell-Young (University of Nottingham) and Janet Strivens (University of Liverpool)

Within each institution the project team were grateful for the support of the following people;

David Duell, Director of H.E. City of Sunderland College; Gillian Forrester, Teaching & Learning Development Manager, Gateshead College; Gary Hindmarsh, Head of Marine Engineering Faculty, South Tyneside College; Simon Cotterill and Paul Horner, JISC EPICS Project, Newcastle University.

The project leaders in each institution were Julie-Ann Stobo (Gateshead College), Richard Hodgson (City of Sunderland College), and Dave Elsy (South Tyneside College, supported by Ralph Holland)

EXECUTIVE SUMMARY

The main aim of the COMPORT project was to provide a comparative analysis of the introduction of contrasted e-portfolio/PDP systems in a range of H.E. in F.E. courses with work-based learning components to assist the HE in FE community with future implementation choices. Three N.E. regional F.E. colleges - Gateshead College (lead Partner), City of Sunderland College and South Tyneside College - worked in partnership to pilot the introduction of three different e-portfolio technologies with three different target groups of H.E. work-based learners.

The specific focus was on how these tools can support and enhance learning on programmes such as these and on how the HE in FE learner can be supported most effectively in achieving their learning goals.

A key element of the project was to define a Framework of Metrics that could be used to provide an objective comparative evaluation of the technologies and approaches in use. An independent evaluation, using the Metrics Framework, was undertaken and an additional internal project evaluation, focusing on a more subjective 'illuminative' approach, was also carried out.

The project strands were implemented between September 2008 – June 2008. In the early stages a number of problems were encountered which were characteristic of F.E. institutional situations. These did not prevent broadly successful implementation, but the extent to which the learner experience was enhanced varied between colleges, with the greatest success found at City of Sunderland College where a clear relationship between the use of e-portfolio technology and the effective support of students in the work-place was established. At Gateshead College, although some implementation issues reduced take-up of the technology, there was evidence that the use of online learning journals had increased students' interest in, and capacity for, reflective learning. At South Tyneside College the deployment of the e-portfolio technology was restricted (due to access problems for students working at sea) but the work achieved will act as a basis for further development with subsequent year groups.

For a number of reasons (including the loss of a key project partner) the project was not able to provide a full comparison of the technologies in use, although a growing perception that there is no one 'best' tool for the job has been highlighted. The comparative study of the partners' different approaches to implementation was more successful and hopefully the case studies produced will provide a valuable insight for colleagues in the sector about the best ways to implement e-portfolio systems and some of the problems that can occur.

The application of the metrics framework was only partially successful, due in part to inconsistencies in the way partners applied it, but also because its quantitative, objective metrics were felt to be more suitable for larger, more focused research projects. It would be useful to develop the tool further in a different context.

The findings of the project are necessarily subjective, but there is agreement among participants that key factors in successful implementation include: careful matching of technology and tools with the requirements of each programme, the timing and quality of introduction (particularly with regard to induction and training) and tutor support and commitment.

Areas for further investigation include the difficulty of quantifying the role of F.E. tutors in e-learning environments, ways to support and develop reflective practice in e-learning and strategies for engaging employers and mentors in the e-portfolio process.

All published material from the project is available at:

<http://comport.gateshead.ac.uk/comportreport/>

BACKGROUND

As part of its e-Learning Programme the JISC 'HE in FE' strand (2007-2009) funded nine Further Education based projects to examine the implementation and evaluation of a range of existing technologies to support and enhance learning, with an emphasis on the evaluation of the learner's experience of the implementation. Within this strand the COMPORT project has been concerned with exploring different approaches to the use of e-portfolios and online professional development plans (PDPs) to support learners in the workplace.

Many HE in FE students are undertaking programmes of study in which attendance at college is part-time, with the majority of their study time (up to 90% in some cases) spent in work-based learning, often far removed from the institution. As part of their assessment work-based learners following HE programmes are required to provide evidence of and reflect upon their experience and the skills and learning they have developed in the workplace.

In the target courses chosen (as in the majority of such programmes within the partner institutions) this activity has to date been recorded on paper, usually in the form of a journal which forms part of the learner's PDP. The H.E. course managers in the Tyne and Wear consortium colleges considered that these paper-based mechanisms for capturing, validating and integrating the WBL elements of the HE provision were insufficiently flexible and reliable to meet the requirements of those involved in the learning process: although intended to be available to and contributed to by all participants - students, mentors, employers and college tutors – this interaction is seldom apparent and even students themselves use the format inconsistently. There were suggestions from some participants that they found the paper format restrictive, in access and in the nature of material that could be included.

Staff were also concerned that the systems used needed to be more flexible and personalised, in order to promote wider access to higher education for non-traditional and learners with limited academic experience, varying support needs and different learning styles. Research into e-Portfolios¹ had shown that this technology has the potential to provide a more effective way for the learner to maintain and reflect on the evidence they collect of their work-based-learning, not least through its capacity to bring together in one place the variety of media, including video and photographic images, that play an increasing part in the recording of this evidence. They recognised the need to identify pedagogies, assessment practices and support mechanisms for work-based learners that encourage them to reflect effectively and to recognise and document their achievements.

The project was therefore considered to be of interest to the wider HE and FE sectors, by providing a cost effective means of significantly increasing the HE/FE sectors' understanding of the role of e-portfolios in work-based learning.

¹ About e-Portfolios: an overview of JISC activities'. JISC Executive
http://www.jisc.ac.uk/publications/publications/pub_eportfolio_overview October 2006 Lisa Gray and Sarah Davies,.aspx

AIMS AND OBJECTIVES

The main aim of the project was to deploy contrasted e-portfolio/PDP systems in H.E. courses across four collaborating colleges and provide a comparative analysis of their effectiveness and efficiency in order to assist the HE in FE community with implementation choices in the future.

The specific focus was on how these tools can support and enhance learning on programmes which include substantial work-based learning (WBL) elements and on how the HE in FE learner can be supported most effectively in achieving their learning goals. Within this context the following specific aims were identified:

- Extend employer participation in Work Based Learning,
- Improve the process for learners, supervisors, mentors and lecturers
- Identify approaches and strategies that work best.

These aims directly address the following anticipated outcomes of the JISC's e-Learning Capital Programme:

- Pilot new e-learning technologies to support lifelong learners, including support for HE courses in FE, widening participation, work-based learning, flexible delivery and personalised learning experiences.
- Build capacity, knowledge and skills in the use of e-learning to support lifelong learning through institutional and collaborative cross sector projects.
- Provide guidance to practitioners, institutions and subject communities on the use of e-learning.
- Gain knowledge to inform future JISC e-learning developments, through a collaborative e-learning research programme.

They were also consistent with the aims of the DfES 'Harnessing Technology' e-strategy² which encouraged investigation into the potential of e-Portfolios for supporting personalised learning, assessment for learning and tracking of achievement and with the HEFCE Strategy for e-Learning³ '*which supports the use of technology 'to transform higher education into a more student-focused and flexible system, as part of lifelong learning for all who can benefit'*.

Within the partner institutions it was hoped that the project could help to accelerate the pace of change in e-learning and build upon a strong record of collaboration in e-learning research and practice.

² 'Harnessing Technology: Transforming learning and children's services', 2005. DfES.

³ 'HEFCE strategy for e-learning'. March 2005/12. Higher Education Funding Council for England, Joint Information Systems Committee, Higher Education Academy.

The specific objectives of the project were initially focused on evaluation:

- Define a framework of project metrics
- Use the framework of metrics to collect evaluative data during the planning, introduction and implementation of e-portfolio systems
- Evaluate the project outcomes, reporting upon the successes and issues around e-portfolio implementation, and upon learner, practitioner and mentor experiences of working with e-portfolios.

These would subsequently be employed to achieve the following project outcomes:

- Create short rule-of-thumb definitions of good practice in establishing WBL support
- Produce case studies of the contrasted approaches
- Generate a report defining key issues and success factors

METHODOLOGY

The four further education colleges initially involved in the proposal have collaborated successfully on a variety of regional e-learning initiatives, so the idea of a consortium approach to this project, providing a wider range of experience and research opportunities, was attractive. H.E. programmes within each college were well established and, responding to government priorities, becoming increasingly important: in particular programmes aimed at H.E. students who want or need a more flexible form of study, including work-based learning, have become the fastest growing area within each college's H.E. provision.

THE PROJECT 'STRANDS'

Each partner college looked at particular aspects and implementations of e-portfolios/PDPs, using different target groups and technologies (*see appendix 1 Partner College Project Outlines*). In addition to ensuring a suitable range the criteria for their choice of technology included cost, availability, familiarity, interoperability with existing systems (primarily VLEs) and functionality. This range would hopefully allow a valid comparison of technologies, approaches and their suitability for different learners.

The early loss of one partner, Tyne Metropolitan College, due to institutional re-organisation, reduced the range of technologies and learners available for comparison, as their intended e-portfolio application (PebblePad) and target group (FD in Counselling) were regarded as key elements of the comparative study.

In response the Steering Group noted that, in the short time the project had been in progress, there had been growing use of social web-spaces by students to create their own learning portfolios, an approach (commonly called 'web 2.0') which was very different to the conception of e-portfolios that had informed the genesis of this project. It was felt that an investigation into these approaches, focusing on FD Music and Music Technology courses within each institution, could offer a different perspective on comparison between the project strands. A change to the project proposal was therefore suggested, and agreed by JISC: *'By way of a comparison to the institution-driven approaches in the three Colleges, a fourth strand of the project will investigate existing student initiated use of on-line spaces as a form of e-portfolio'*. Although no longer actively participating in the project Tyne Metropolitan College were invited to project meetings and included in key communications.

Full profiles of each project, including target groups, are provided in Appendix 1: *Partner College Project Outlines*.

PROJECT MANAGEMENT

The project was overseen by a **steering group** consisting of the e-learning managers/directors from each partner college, the H.E. Co-ordinator from JISC RSC (Northern), the Project Manager

and the JISC Programme Manager. The three e-Learning managers also took on the role of internal co-ordinator within their own institution, with responsibility for managing the progress of their project strand. In each case the course or module leaders for each of the target courses took on the role of internal project leader, responsible for managing the curriculum dimension, with additional members of their course teams forming the remainder of the internal project team:

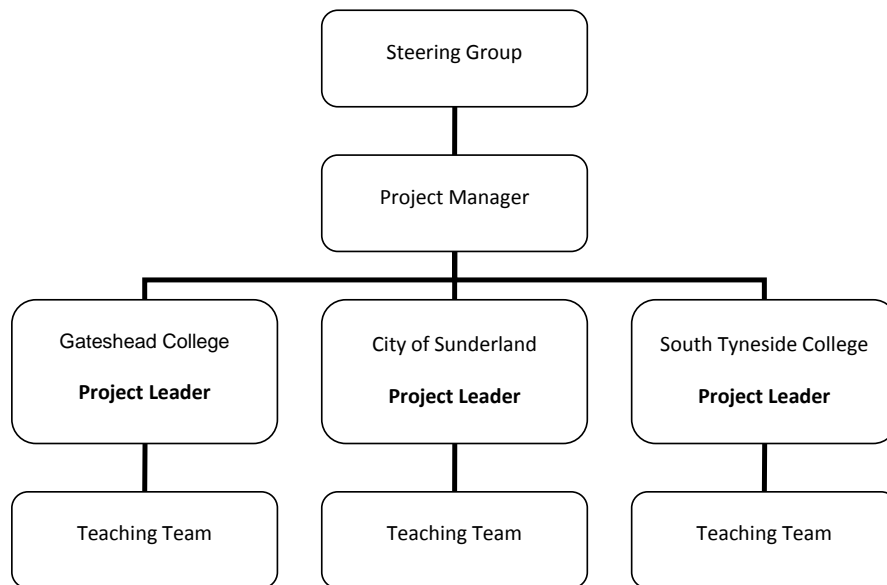


Figure 1 Project Management Structure

Although some time (typically 2 hours per week) was allocated for the project leaders' contributions no remission time was available to support the contribution of other team members. As each institution has its 'own way of doing things' each project was managed independently and it was the task of the project manager to liaise with each team and ensure that the overall project direction was maintained. Over the course of the project the time allocated to the Project Manager's role averaged 1.5 days per week. Within a busy F.E. environment this time allocation proved difficult to manage and some degree of flexibility was necessary.

The Steering group met monthly throughout the project period to review progress and keep plans on track. It was helpful that the internal project co-ordinators were in a position, as college managers, to use their internal influence to make decisions, mobilise resources and obtain support as needed: throughout the project this saved a lot of time. The group member from RSC (northern) was able to provide additional expertise through his work with Foundation Degrees Forward (FDF) and involvement with regional and national H.E. and work-based learning initiatives – a perspective which proved invaluable. As these colleagues had also framed the original project proposal they were fully familiar with the project at both institutional and

consortium level and were able to undertake the task of co-ordinating internal progress effectively.

A **project web-site** (<http://moodle.gateshead.ac.uk>) was set up using Moodle to facilitate communication between partners and other interested parties, to store and share project documentation and material generated by the project and to collect evaluation data via discussion forums.

The project was divided into three time-frames: A six month period for planning/development and installation within each institution (March – September 2007), followed by implementation for one academic year (September 2007 – June 2008). The review reporting and dissemination stage was then planned for completion by March 2009. Implementation at South Tyneside College was planned for a shorter and later period as the extended work-placement period does not begin until March, although it can continue for up to five months.

APPROACH TO THE PARENT PROJECT

The time frames noted above were broken down into the following stages:

Table 1: Project Plan

Preparation March- May 2007	Building knowledge (<i>review of previous JISC projects: ePistle, ELP, EPICS, identify and explore possible tools</i>), Purchasing, identify and confirm target groups, form project teams, develop links with stakeholders, engage external evaluators. Work schedule defined, establish evaluation framework & methodology.
Pre-implementation April- October 2007	Installing and testing technology and training staff in readiness for project implementation. Develop project website
1st stage implementation August 2007 – June 2008	Implementation of e-portfolio systems with learners in each institution. Interim review of progress and independent evaluation report. Review and develop Metrics and Measures Framework.
2nd stage Implementation July 2007-March 2009	Monitoring and reporting activity.
On-going Evaluation May 2007 – January 2009	Interim Evaluation Review (see above), Internal data collection. Final Evaluation and Dissemination of project activities
Web 2.0 Enquiry June 2008	Investigate student-led use of e-portfolios (a separate data collection activity)

EVALUATION METHODOLOGY

As previously stated the project was framed as a 'comparative study' which would 'compare and contrast' different e-portfolio technologies and their implementation. The aim was to produce a report that would help others in the community make informed choices about their own e-portfolio development.

Recognising the difficulties in collecting comparative evidence from four different project strands the partners agreed that a purpose-built **evaluation framework** was needed in order to capture valid and objective comparative data and evaluate the efficiency and effectiveness of the chosen systems. This was duly defined as a output in the project plan: 'a framework of metrics designed at the outset and refined progressively through the life of the project will be used to ensure that a consistent and accurate comparative analysis is available to report on the sub-projects'.

As no partners in the consortium had the necessary skills for this task, and because it was felt that an independent approach to evaluation could provide a more balanced comparison, the evaluation consultants De Burca Ltd were employed to design and apply the framework. They defined a series of **metrics and measures** that could be used to provide a consistent framework for comparison of the four sub-projects. Eight Metrics were defined: (table 2 below):

Table 2: Project evaluation metrics

Metric Ref	Metric Name	Description
M1	Tool Cost	Quantitative data that records the costs relating to licence, infrastructure, setup, configuration and ongoing maintenance and support.
M2	Learner Cost	Quantitative data that records the costs in terms of learner induction and support required to enable a learner to be competent in using the ePortfolio.
M3	Staff Cost	Quantitative data that records the costs in terms of learning support staff costs directly associated with supporting learners including induction and training.
M4	Web Statistics	Quantitative data that records the key website statistics relating to use of the ePortfolio tool.
M5	Registered Learners	Quantitative data that records the registered learners

M6	Interaction	Quantitative data that records the participation (interactions) of learners, tutors, mentors and employers
M7	Journal	Qualitative data that relates to the quality of entries from learners, tutors, mentors, employers and project team
M8	Student Group	Qualitative data that relates to an overall description of the student group (including mentor and employers)

As can be seen most of the data collected was quantitative but there was also a qualitative dimension (M7, M8) which aimed to capture the perceptions and feelings of stakeholders through distillations of their contributions to personal journals and discussion forums. This approach was adjusted over time, most notably through a series of stakeholder focus group meetings, which were convened to address limitations in the amount and quality of data that had been gathered via the journals.

Quantitative data from each partner was collected monthly and collated and shared using a **'GoogleDocs' spreadsheet**. Records of qualitative data were tracked in the spreadsheet and full records were stored for easy access on the Comport website.

As the **Web 2.0 strand** was essentially a snapshot of activity in the chosen areas the external evaluation team undertook a series of structured interviews with course teams and learners to collect the required information.

The external team used the data generated by the eight metrics to produce reports for 5 measures, using the format: introduction – analysis - discussion. These reports form the basis of the independent evaluation of the overall project.

The data collection methods employed and issues arising are discussed under 'Implementation'.

Table 3: Project Evaluation Measures

Report Category	Definition / Composition of Report
Baseline	Report that provides a baseline from the outset of the project. Analysis of initial learner, tutor, mentor, employer and project team member survey / response questionnaires
Technology	Report that provides a technological overview of the e-Portfolios in terms of cost and usage Analysis of metrics: <ul style="list-style-type: none"> ○ Cost of technologies (M1) ○ Usage of e-Portfolios (M4)
Service	Report that provides a service overview in terms of costs incurred inducting learners and staff.

	Analysis of metrics: <ul style="list-style-type: none"> o Cost of inducting learners & staff (M2 & M3)
Capability	Report that provides a capability and usage overview Analysis of metrics: <ul style="list-style-type: none"> o Learners registered and using the e-Portfolio (M5, M6 & M7)
Requirement	Report that provides an overview of the 4 student groups Analysis of metrics: <ul style="list-style-type: none"> o Student group and requirement needs for e-Portfolio (M8)

Running along side of this work an '**internal project evaluation** methodology was developed, using a more 'illuminative' approach to capture the qualitative dimensions of the learner experience. In developing this approach the internal evaluation team were advised by Janet Strivens (University of Liverpool) and Elizabeth Hartnell-Young (Learning Sciences Research Institute, University of Nottingham), experienced researchers in the field of e-portfolio/PDPs:

- An online **baseline survey** was undertaken and repeated at the end of the year. Each partner college ran the same survey questions, but independently via their own VLE.
- **F2F end interviews** (video recorded) were undertaken with all users, using a 'three best, three worst' approach to involve all participants and stimulate wider discussion.
- Data for the **tutor perspective** was collected via blogs and Discussion forums.
- Additional data was collected directly by the Project manager through regular meetings with course teams.
- Online forums were set-up on the website for stakeholder discussions..

All data collected was stored on the project website.

MENTOR AND EMPLOYER PARTICIPATION

The engagement of Employers and Mentors was a major focus of interest for this project. It was intended that they should be encouraged to participate in the project by keeping them aware of project activity, introducing them to the e-portfolio software and where possible giving access to the e-portfolio systems in order that they might contribute directly to their employee/mentee's e-Portfolio building. A combination of f2f meetings and telephone/email contacts were planned and it was intended to explore the possibility of online collaboration. However it proved very difficult in practice to engage employers and mentors in this process (See 'Outcomes').

APPROACHES AT EACH PARTNER COLLEGE

Each partner planned and implemented their project strand independently, in response to the particular requirements of their situation. Table 4 (below) compares strands in detail, followed by a brief comment on the approach at each college.

Table 4: Comparison of the Three Project Strands

	City of Sunderland College	Gateshead College	South Tyneside College
Target Course (no. of students)	Foundation Degree in General Service Management, Yr 2 (35)	Certificate in Education/PGCE Yr 1 (35)	Foundation Degree in Marine Engineering Year 1 (17)
Assessment Function of e-portfolio/PDP component	The PDP module provides 50% of year 2 marks.	The PDP is a core component of both years of the programme and provides and/or collates the assessment evidence for 2 modules in each year.	No direct assessment of PDP component
Study Pattern	Mixed: Students are in full-time employment: one group attend college 2 days per month, the other one evening per week. 1:1 tutorials are carried out F2F or by email.	Employment profile is mixed: some are full-time teachers/trainers, some part-time but all spend a minimum of 60 hours in the first year on teaching practice and attend college for four hours each week. Note: It was intended that both years of the programme (50 students) should be involved, in the event year 2 did not participate	These are younger learners who spend six months in college, followed by up to five months on placement at sea. Previously there has been no contact with students whilst on placement. The PDP may provide an opportunity to monitor and support progress.
Prior experience of Professional development planning or e-Portfolios.	Used a paper-based PDP in yr 1, so familiar with the concept and purpose of the PDP. Hopefully and perhaps would be able to compare their experience with the new technologies to their previous experience.	30% of group indicated prior experience, 12% of these with online systems. As teachers, most had a clear understanding of the purpose of PDPs.	None.
Prior Experience of Wikis/Blogs/social networking tools	<25% stated any experience	<25% stated any experience	60%> (a younger profile for this group)

e-Portfolio Technology being Piloted	Blackboard VLE utilising additional PDP templates (developed in-house to replicate existing paper-based). Students already familiar with Bb VLE. Use of mobile devices (PDAs) as subsidiary strand – students to keep and use to take notes, record images and sound	ePET , hosted and supported by Newcastle University's EPICS project team. Format (partly) modelled on existing paper-based PDP forms	Blackboard VLE with Campus LX Tools to provide Journal functions.
Existing Employer/Mentor Engagement	All students have an appointed workplace mentor (often Head Teachers or Deputy Heads) to provide guidance and feedback. Mentors do not assess.	All students must have Curriculum Mentors, who assess elements of their practice. Employer engagement at individual level is very limited	No mentors. At the individual student level Employers are mainly interested in monitoring performance of their trainees

CITY OF SUNDERLAND COLLEGE

At CoSC the PDP module is the responsibility of one tutor, supported by the programme leader and the Director of Learning Resources. The module is central to assessment in year 2 of the course, and that determines the approach taken. Students must demonstrate their learning by collecting evidence of their practice and reflecting on it, completing a minimum number of learning logs and reviews during the year. A personal response to the reflection process is encouraged by an open and non-prescriptive teaching approach. In this context the team wanted to see if the technology will help students to express themselves effectively. Operating mainly in a tutorial capacity staff maintained a 'hands-on' approach to ensure technical and practical support was available throughout. The key elements of the implementation plan were:

1. Early introduction to technologies (during the end of year 1 review)
2. At the start of the academic year different strategies for induction were used for each component:
 - a. for PDAs: play and find out
 - b. for e-portfolio: formal group induction. An initial presentation with repeat demonstrations as required. Supported by purpose-made online guides;
 - c. for blogging: an online forum was set up to discuss feelings about the new technology, with tutor directly involved throughout.
3. No F2F Tutorials – all handled online.
4. On-going technical and academic support was provided on-demand
5. Use optional: given the importance of the module for assessment the paper-based system will be available for anyone not wishing to use the e-system.

GATESHEAD COLLEGE

At GC two tutors and two managers formed the core team. The PDP contributes to two modules and is developed throughout the year. The PDP is a core element of tutorials and is assessed via milestone reviews and presentations. In addition students will use the completed PDP to review their experiences in a summative reflection which is also formally assessed. The approach was to provide a short induction at the beginning of the academic year, followed immediately by deployment. As it usually takes students a while to get used to the PDP concept (and to critical self-reflection) it was felt that this period (September-December) would also serve for familiarisation and ironing out any technology problems that arose, before engaging with the system in earnest from January. The planned approach was;

1. September 07: brief Induction period (presentation plus two weeks free practice);
2. September-December 07: Familiarisation and system adjustments;
3. January- May 08: full integration of technology into PDP and tutorial activity;
4. June 08: Staff and Student Reviews.
5. Use optional: it was not felt to be appropriate to insist that all use the online PDP when a paper-version already exists in the student handbook and not all learners are confident with IT;
6. Regular F2F tutorials;
7. Academic and technical support (semi) on-demand.

During the year students were supported academically by personal tutors and technically by the e-Learning Development Team and e-Learning development Manager. A high level of availability was planned and achieved.

SOUTH TYNESIDE COLLEGE

This was the first year of this course, building on a highly successful HND. The previous course did not include a PDP element and the concept is fairly new to the project team. The PDP is not formally assessed but can contribute evidence to other units. The key component is the reflective journal of work-placement. Records of assessment progress will be maintained by tutors using a purpose made excel spreadsheet.

There is a large course team, but each member is responsible only for their input - no one tutor is responsible throughout. The internal co-ordinator has the only full-time involvement.

The key elements of the implementation plan were:

1. Students will not be introduced to the technology until one month prior to placement: Implementation phase March 08- June/July 09.

2. Induction consisted of formal introduction, followed by practice use of system for one month. Students were requested to reflect on what they think their experience at sea will be like. A cash prize was offered for 'best blog'!
3. Use on placement was optional (has to be – ships may have no technology available). A combination of online/offline usage may be possible.
4. As placements extend into the summer the student experience cannot be reviewed until the beginning of the second year.
5. Support on placement will be very limited, due to the nature of the work.

CROSS-COLLEGE 'MUSIC' STRAND

The identified learners for the project were from the Popular Music and Music Technology Foundation Degrees in each partner college. This strand looked at what students were already doing in terms of using web technologies to enhance and demonstrate their learning. Existing practice was likely to include student use of sites such as *MySpace* and *Youtube* to build an on-line portfolio. The intention was simply to provide a possible contrast with data from main project. Information will be collected by semi-structured interview and undertaken by the external evaluation team.

IMPLEMENTATION

Separate case studies are available of the City of Sunderland and Gateshead implementations. Available at: <http://comport.gateshead.ac.uk/comportreport/>

PROJECT MANAGEMENT

The minutes of monthly steering group meetings are available at the project website. The interim reports (also available on the website) chronicle the major issues that developed in more detail.

Immediately prior to implementation the project was dealt a blow when, after some months of uncertainty which caused difficulties in moving the project forward, a major re-organisation took place at Tyne Metropolitan College. Changes to the management structure meant that there was no longer anyone who could take responsibility for e-learning project development. In addition the (only) PebblePad expert had retired and the rigours of re-organisation had left lecturers and managers with other immediate priorities. It was therefore agreed that the Tyne Metropolitan project strand would not go ahead.

Instead the Steering group began to firm up the alternative 'web 2.0' Music project idea that would involve all three remaining partners.

South Tyneside College also ran into management difficulties in the pre-implementation phase when the e-Learning Manager decided (at short notice) to retire, and was not replaced, leaving that project also without an internal advisor and steering group member.

At that point in time the STC project was particularly dependent upon their internal advisor to effect progress to implementation, as the make-up of the internal project team had not yet been finalised, but it was to be some time before that role was filled. In the meantime the project manager liaised directly with faculty management and staff in an effort to keep the project viable. Although this approach was successful (in that the project did not fold) there was a lack of internal direction, until the college's IT manager took on the internal responsibilities for the project. The subsequent efforts of the STC team ensured project completion with at least some of their outcomes achieved, but it is reasonable to say that the early period without internal direction adversely affected team and project development and led to most of the problems with implementation that the project had to deal with.

A number of other **Institutional factors**, common to most F.E. situations, caused difficulties for project implementation:

Uncertainty over student numbers. In two partner institutions course viability was not confirmed until September, making detailed planning difficult. In response the colleges identified alternative target groups and project teams committed themselves to the extra work required to

fast-track project inductions. At GC much higher than expected enrolment created its own workload problems.

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Early Course start-up. The start dates for the courses involved are in early September, immediately following staff holidays, which allowed little time for adequate preparation. CoSC overcame this with careful forward planning to introduce the project prior to the summer break. GC were unable to do the same due to delays in installation of the technology (see the Gateshead College Implementation case study, at <http://comport.gateshead.ac.uk/comportreport/>) and this had a limiting effect on the outcomes that were achieved. The STC team, faced with their own start-up difficulties, were able to hold back their introduction as the technology was not scheduled for immediate implementation.

Staff workloads. Key members of staff were allocated some time to work on the project (typically two hours per week), but their workloads remained heavy, especially in the May/June and September periods, which created on-going availability issues. Added to this recent contract changes had further increased class contact hours and effectively cancelled out the time provided for project activity. In response to this issue the Project Manager stepped in to provide direct support as required to ensure some progress was maintained and internal advisors monitored workloads and adapted their project planning as necessary.

It was helpful that the overall Project Co-ordinator and Project Manager were both based in the lead institution, so were able to meet weekly and respond quickly to issues that arose. The Project Manager kept in regular contact with course teams and visited their institutions as required, collecting evaluation data. He was also the main point of contact with the external evaluation team, and other interested parties.

As a comparison of the different approaches to implementation was a key output of the project these are described in separate case studies, (<http://comport.gateshead.ac.uk/comportreport/>)

Brief summaries only of each partner's implementation are presented below.

IMPLEMENTATION AT CITY OF SUNDERLAND COLLEGE

The importance of the PDP module to overall student success, plus the potential value of the project work to other areas of the college's H.E. provision meant that the team were able to engage senior management support from the Director of H.E., who provided additional funding for PDA equipment to support work-place evidence collection, and the Director of Learning Resources who undertook to provide initial and ongoing technical and logistical support.

With this support in place they were able to meet their project development targets: the technology was installed and introduced to staff and students at the end of year 1; at the beginning of year 2 the induction process (outlined under Methodology) was implemented successfully over a one month period.

As expected there was some variation in IT experience among the target group and this was addressed by making support available 'on-demand', in the home or workplace if required. Only two students needed to take advantage of this support, indeed, as the project progressed, there was a notable increase in peer support. The technical blog (known as the 'blog-roll'), where students could report and share technical issues, recorded many instances of students making substantial developments in their IT skills and relating this to their professional learning requirements:

"Have just uploaded 2 photos of the training session that I had with J re Benchmarking, definitely getting the hang of this now!!"

"My early indications are that I prefer the online version to a paper PDP. (might change later!!) My reasons for this are, my love of technology, getting to grips and conquering new technology definitely appeals to me. Technology is here to stay and be developed, keep up or be left behind. Being on a management course I not only have to think about preparing others for change but I have to do it myself"

Implementation proceeded smoothly during the academic year, with no major technical, practical or educational issues: 33 (out of 35) learners made extensive and enthusiastic use of the e-portfolio to collect evidence of their academic and workplace learning in written, visual and audio formats and most were also keen to reflect on these experiences, especially their work-based learning and their use of new technologies –

"I feel comfortable with the way my E-Portfolio is progressing and feel confident I will be able to complete an insightful and comprehensive E-Portfolio for this part of the PDP module. I also believe by completing the E-Portfolio I have allowed myself to create much of the investigation and information I will need for my final PDP Report."

"I have made some amendments to my e PDP, I hope you like them I have tried to make it more professional and organised. I am very disappointed that I cannot seem to link a page to my opening welcome page, I wanted to add a link or some photographs but it is coming up with an error. Can you tell me how to do it please?"

Initially there were some individual IT related issues around synchronisation of the PDAs with home and work PCs but as the project moved into the second half of the year these were either resolved or, in the case of work environments where virus concerns prohibited connection, accepted as an unfortunate limitation on use. Overall the blog gathered substantial evidence that some learners found the technology stimulating to use and there were no instances of technical issues causing insurmountable barriers to progress.

"I am really enjoying using the e portfolio although I had some difficulty in the beginning probably because I had never done this before and it was trial and error before I got it right. For me it is a new skill learned and I have even been able to assist my husband, who is doing another qualification using this method, to get started. I think it should be kept in the course for future cohorts"

Use of the **PDAs** proved to be less successful. The initial enthusiasm dampened a little as students realised that, although the device had many features it wasn't particularly good at any of them:

“The PDA in my opinion has been a complete waste of time and money. I have not used it because it for the camera as it is so big to carry and I always have my phone, also I have a good camera which is of better quality than the PDA.”

“Re: the PDA I love it and I am using it as much as possible as a phone, calendar, diary etc, however I am not finding it useful for my course as yet”

It proved difficult to engage **employers** in the e-portfolio experience. Students were recruited directly as individuals, not through an existing employer engagement mechanism. The level of support they receive from their employer (if any) is unknown at the outset. Although the project might have provided an opportunity to begin this process the learners chose not to share e-portfolios with employers. One reason for this was a concern that any critical comments the learner made about their employment could be used against them by employers. Confidentiality was a big issue for many learners. With regard to **mentors**, both parties seemed to value a more informal face-to-face arrangement and chose not to communicate online.

IMPLEMENTATION AT GATESHEAD COLLEGE

The project team at GC found that their lack of e-portfolio experience made it difficult to make initial decisions about technologies and configuration. Installation of the ePET system proved to be a more complex task than envisaged and by late August, with time counting down to the start of term the team agreed to take up the ePET team's original offer to host the system on the ePET servers at Newcastle University.

Although this still left time to train staff prior to course commencement, training (and testing) opportunities were limited at this busy time of year. Once the team did start to test the system seriously it became apparent that the components of the ePET PDP, although tried and tested with a variety of H.E. programmes, were not suitable in their current form for the PGCE PDP.

Having learnt a good lesson about not taking the suitability of the tools for granted, the GC team asked the ePET technical team if they could re-design the forms along the lines of the existing paper-based components of the PDP. ePET were happy to take on these tasks, and completed them quickly, but it did cause further delay.

The customisation work was successful in broad terms, i.e. the full range of existing paper-based PDP components were replicated online. Some students began to make full use of them, but the majority (75%), having used the paper-based forms in the interim, preferred to stay with those and used the online system solely for their personal reflective journal (the 'Learning Autobiography'). Other reasons for 'staying with paper' were:

- students did not think that the format of the online forms was user-friendly;
- they were concerned about validation (logs of practice should be validated by a line manager) and printing the more complex forms;
- they still saw the final portfolio outcome as hard copy in a file and were not confident about relying on the online records.

"I didn't use it. It seemed a lot of additional work without obvious value.. I assumed we needed a hand copy for assessment"

"I think the e-Portfolio is something that I WOULD use personally, but I wouldn't want all the complicated extra Bits and pieces, for CVs meetings and the tasks to do etc" (both comments from end interviews)

The focus of engagement in the second half of the year passed, therefore, to the use of online journals or 'learning autobiographies'. The team had always felt this was the most important part of the project and were keen to discover if online blogging might increase the frequency or quality of self-reflection and if it could encourage peer discussion, sharing and support.

The difficulties encountered with the PDP forms had, however, created resistance to the whole e-portfolio concept amongst some users. Concerned that this issue might have wider repercussions for student engagement the team encouraged the 'early adopters' of the Learning Autobiography component to share their experiences with others. These motivated learners were keen to 'sell' the benefits to others and did so with some success: in the final project reviews it was notable that although many students were critical of the implementation delays only a couple retained a negative view of the system itself or what it was trying to achieve, as these comments from the end course interviews demonstrate:

Really good to be able to immediately reflect on a good session – motivational.

For part-time teachers there can be an extra advantage in the blog as it provides some continuity for your practice.

"My tutor responded to mine. I was having an issue with a one of my students and it was really helpful. I got quite a surprise when it came up because, well. I didn't think the tutors would have the time. So that was really helpful but... it's unrealistic to have it as a tool and expect tutors to be able to read every single one, and comment"

Blogging isn't for everyone- it's not for me at all

In general going through the process has made us more confident with it. It has to be beneficial if doing something new.

Other aspects of practical implementation were successfully handled. Access to the system was provided via a link provided on the front page of the course Moodle VLE site and students appreciated having the two systems in one place, indeed some felt that the e-portfolio system in use should be fully integrated into the VLE, providing a one-stop-shop for all digital/online tools and resources.

In total 45% of the cohort used the learning autobiography regularly throughout the course.

Employer and Mentor Engagement. Employers are involved to some extent in the professional development process, but there was no interaction through the e-portfolio. As with the CoSC course these students enrol as individuals and, although there are expectations of employer support, there is no formal arrangement for this (other than a commitment to provide the

necessary minimum number of teaching hours): full-time trainee teachers find that the level of support their curriculum managers are able to provide varies and is often limited; part-time teachers, who may be employed semi-casually, often find there is no explicit support. There are evidently wider issues to explore concerning the role of employers before we can consider the value e-portfolios can bring to the relationship.

Mentors are closely involved with trainees, both in an assessment and supportive role but again this engagement was not transferred online. Both parties preferred to meet informally, face-to-face, in the workplace and write up their records afterwards.

IMPLEMENTATION AT SOUTH TYNESIDE COLLEGE

STCs implementation was potentially straightforward: they were using a tool they knew (Blackboard VLE) with a group who appeared to have a clear need for it. Further the team had plenty of time to develop and prepare as the system would not be properly deployed until the students went away to sea in March, six months into the course year. The team also had high hopes that the third-party 'Backpack' tool for Blackboard would enable students to continue working offline if/when internet access was not available at sea.

The project was initially being driven by the e-Learning Manager who then retired at short notice during the planning stage, leaving the project without an internal co-ordinator. The post was not filled and there was no-one else in a position to provide direction and co-ordination for a project team whose members and roles had yet to be fully defined, which slowed progress. This was the first year of the new foundation degree in Marine Engineering and, although generally supportive and positive about the potential value of e-portfolios, the Faculty's main concern was to get the new course successfully off the ground. As the PDP component was new to both staff and students and is not directly assessed, there were concerns about how motivated the students would be and how much time tutors could spare from very heavy teaching and assessment loads to contribute to it.

In the period leading up to their extended placement in March students were encouraged to practice with the system by completing personal reflections on their feelings about the work experience which will take them away at sea for the rest of the academic year. This type of data has not been collected before and, on the assumption that young engineering students might not be naturally inclined to reflect in this way, financial incentives were provided to encourage involvement!

As the students were preparing for their placements it became apparent that, in practice, it would be very difficult to maintain contact with students and monitor their progress once at sea:

- Access to the internet, or even computers, on board ship for trainee seamen is limited. Given the costs involved and the vessel's communication priorities it is doubtful that internet access, if available, would be granted. Online access cannot even be guaranteed in port (this depends on language, systems and how long the ship docks for).

- The 'Backpack' offline tool, on which much depended, proved to be unusable. The technical team spent some time trying to install the product, but without success. When they contacted Blackboard for support, the team discovered that the company had withdrawn their support for this third-party. As a result they were unable to pursue use of this software.
- When students go on placement tutors are assigned to other teaching duties and are no longer available for support and monitoring.

In practice these concerns were borne out. Only three students (out of 17) maintained an online personal reflective journal. They, and others, reported that the difficulties of gaining online access at sea, or in foreign ports, were as described above and in practice it was easier to maintain an offline record and post it later. Those who did post found it valuable to record and reflect on their experiences in what was a whole new world for them. There were no posting by tutors.

As placements lasted into the summer months the students did not return to college until September, by which time they were looking ahead to the next stage of their progression. A review of the PDP experience was undertaken by the technical support officer but, as so few of the group had actively used the system, it was no surprise that contributions to the face to face reviews and end survey were limited.

On the HND course which had preceded the new foundation degree it was usual to lose a small percentage of students following placement, as some found the experience not what they expected. It is therefore notable that all 17 of the current cohort did return to start their second year, although we cannot say at this point if the PDP activity influenced their behaviour in any way.

Employer and Mentor Engagement. Students are sponsored by companies who are, in general, interested in results and only want to know if a student is not progressing satisfactorily. Students indicated a strong reluctance to share their reflections with employers for fear that critical comments about their work experience might have a negative effect on their subsequent career. Concern was also expressed among some lecturers that if employers, who are after all sponsoring the students, were more involved they might ultimately want more control of the process. Employer engagement was not seriously pursued. Similarly, in this course, the role of mentor not clearly defined. The college has no control over where a student is placed and for how long (they may move from ship to ship) and there is no designated mentor, rather a series of informal relationships are formed where possible.

OUTPUTS AND RESULTS

The agreed project outputs and where they are located are summarized in table 5.

Table 5: Project Outputs and Deliverables

OUTPUT	LOCATION
Project plan (including an Evaluation Plan, QA Plan, Dissemination Plan, and Exit/Sustainability Plan)	http://comport.gateshead.ac.uk/comportreport/
Consortium agreement	http://comport.gateshead.ac.uk Documentation section (log in required)
Project web site	http://comport.gateshead.ac.uk
Progress reports, including financial statement	http://comport.gateshead.ac.uk Documentation section (log in required)
Completion report, including financial statement	Not available for publication
Final report	http://comport.gateshead.ac.uk/comportreport/
Case studies	http://comport.gateshead.ac.uk/comportreport/
Project Information (A5 'Flyer' leaflet)	http://comport.gateshead.ac.uk/comportreport/
Project web page on JISC web site	http://www.jisc.ac.uk/whatwedo/programmes/elearningcapital/heinfe/comport.aspx
Material used for staff development in partner institutions	http://comport.gateshead.ac.uk Documentation section (log in required)
Raw evaluation data (incl. surveys, f2f interviews and video recordings)	http://comport.gateshead.ac.uk Documentation section (log in required)
Material relating to dissemination (e.g. Presentations, information sheets)	http://comport.gateshead.ac.uk Documentation section (log in required)
Independent Evaluation Report	http://comport.gateshead.ac.uk/comportreport/

The three partner colleges each deployed and operated their chosen e-portfolio system for one academic year, as intended. The implementation was relatively successful in each case, but the extent to which the process and practice of individualised learning was enhanced varied. It is important to remember that this project, although concerned with 'what works' and identifying 'best practice', did not seek a simplistic view of success. These were complex educational milieux and there were many events, large and small, which may or may not prove significant for future development, indeed in educational encounters success is always relative and cannot always be easily - or immediately - determined. The key output is the experience gained, which is intended to help the sector make 'informed choices' about future directions. This is detailed in the various project reports, case studies of Implementation at each college and also in the material collected on the project website: all raw evaluation data, records of meetings, and material from on-going dissemination events.

APPLYING THE METRICS FRAMEWORK

Following the loss of a key project strand a comparison of technologies and approaches proved difficult to undertake comprehensively and objectively. The **Framework of Metrics** was designed to enable this but the tools proved difficult to administer and were able to collect only partial data, from which limited conclusions can be drawn. The full Independent Evaluation Report is available separately at <http://comport.gateshead.ac.uk>. In this section we will briefly describe its findings in relation to the five measures identified (baseline, technology, service, capability, requirement) and illustrate some of the problems and issues encountered with data collection.

BASELINE

A baseline questionnaire was designed to capture the existing knowledge and experience of learners at the beginning of the project implementation. This was repeated, with a retrospective dimension at the end of the academic year. Each institution ran their own questionnaire via their VLE (see Appendix 2: Baseline and End Survey Questions). The data from these surveys are available on the project website.

The responses to the baseline survey revealed wide variations in the level of experience and knowledge, but the majority had no experience of e-portfolios or conception of how they might support their learning. Those who had previously used paper-based portfolios were not positive about the extent to which these had supported their learning: most viewed them as a time consuming course requirement. 40-45% of respondents had used online chat rooms, blogs or wikis, but fewer than 10% had considered the potential of these communication tools for their learning. Trainee teachers at GC had the least experience of online communication (other than email), although almost half had used blogs, chiefly as part of social networking sites. A significant number of the respondents who had limited online experience expressed concerns about the level of IT skills required.

The **end surveys** revealed that usage had been regular and experiences mostly positive. 100% of users at CoSC used the system. At GC the 40% who chose not to make use of the online systems gave a range of reasons:

Because it wasn't made compulsory I didn't find it so important and therefore never used it. I think blogging is quite a new area for me and I find it a bit 'wooly' for my liking.

It wasn't rolled out soon enough.

Lecture time was limited and I did struggle to fit everything around my day job.

The majority of users responded positively to the key question 'Did the online PDP system help to achieve your learning goals?' At CoSC:

Yes as it was set out in an easy to use format which was easy to access and update at all times.

I think it did, as I found it easy to use and you could access the portfolio anywhere, At home, work or college.

No, but my IT skills are all the richer!

At GC the responses were a little more complex:

'It did, however some more time in early sessions could have been spent with helping us to write the right kind of stuff in it'.

'In a way. I did refer back to entries to see if I was developing'

'No. It did however, allow me to record reflections, thoughts and ideas that I could review. It also allowed me to develop my thinking'

At STC there were only three respondents, perhaps not surprisingly those with a positive view.

Both GC and CoSC students reported improvements in their IT Skills (with some reservations), although there were ongoing concerns about access, back-up and privacy. Most of those students at GC and CoSC who had not used social networking tools prior to their e-portfolio experience had now begun to use these and, interestingly, the majority now stated that they had been doing so to support their learning, rather than for purely social purposes.

TECHNOLOGY

This measure was intended to provide an overview of costs and usage of the technology.

Costs: Licensing, infrastructure, configuration, and maintenance costs were recorded. These costs were generally low as much of the implementation was based around existing college VLE infrastructures. GC incurred most of their costs in customising and configuring the tool, CoSC in purchase of PDAs whilst STC in general low.

Usage: Capturing data on usage proved problematical as it was not possible to implement a common web statistics tool due to security restrictions in the individual institutions. Without this consistency the data collected has limited application - much of it is approximated.

SERVICE

This measure reported on the costs incurred in induction and training for teaching staff and students.

In practice the teams found this data difficult to provide. Each group carried out a series of inductions and staff training sessions that incurred widely varying costs, depending on who delivered the training, how long for and to how many people. It proved difficult to provide figures that would give a worthwhile comparison, again the data provided includes an element of approximation. Additionally ongoing informal and on-demand training, which was substantial, proved difficult to quantify and cost.

At course level internal training activities have not always been scrutinised for cost so it is not surprising that the course teams found the metrics used in this measure difficult to apply. However, when considering wider institutional implementation, these costs assume more importance so it is unfortunate that the measure was unable to provide more valuable data that might inform institutional-level implementation.

CAPABILITY

This measure looked at whether the tools were 'doing their job' and was concerned with counting the number and range of participants and interactions and also considering the quality of those interactions.

There were clear differences in the way staff had contributed to the journals: at CoSC the ratio of learner to tutor postings was almost 1:1; at GC (based on actual reviewed postings, not automatically recorded data) it was 8:1; at STC no tutor postings were reported (the reasons for this are reviewed elsewhere).

There were NO mentor or employer contributions, indeed none were registered on the systems. In an attempt to generate more data from these stakeholders a series of three face-to-face stakeholder meetings were held. The outcomes of these meetings and the issues surrounding stakeholder engagement are discussed in the following section.

It was intended that the *quality* of interactions should be captured as a series of regular brief summaries by teaching staff. There was some confusion amongst the tutors about how this should work and they found it impossible to take regular 'snapshots' of learner performance, a) because they did not have time to undertake the analyses and b) because they did not know what they were looking for. By the end of the project, however, tutors had gained a clearer understanding of the nature of student postings and were able to offer summative comments about progress and improvement during implementation. Unfortunately there is no clear picture of how this understanding was developed in practice.

REQUIREMENT

This measure is concerned with providing a comparative overview of the 3 target groups. This is provided in Appendix 1: *Partner College Project Outlines*

OVERALL COMMENT

The metrics used in this framework generated insufficient data on which to base a full comparative study of the technologies in use. There was some confusion and inconsistency between project teams about data collection methods and some colleagues felt that the tools were more suited to larger scale projects with more focused objectives. Although data is partial it has nevertheless helped to clarify emerging issues and is able to point to lessons that have been learnt. These will be discussed below.

The project partners quickly realised that, given the range of variables involved and the complexity of the learning situations, an objective comparison was not a practical, or (at this stage) a desirable goal. The project was not going to generate any quick answers to the many questions about the potential application of e-portfolios, (or even the basic question of what an e-portfolio actually is) and thus over time both internal teams and external evaluators became more interested in a more subjective, illuminative approach focussed on participant experience and feelings.

All data collected, records of discussions and blogs, and other project information is presented in the documentation section of the **project website** at <http://comport.gateshead.ac.uk> (registration required)

'Rule of Thumb' definitions of good practice are discussed in the Conclusion

OUTCOMES AND IMPACT

See Appendix 3 for Purpose-Process matrix and mini case studies.

COMPARING THE TECHNOLOGIES AND APPROACHES USED

For reasons already discussed the metrics framework was not able to help provide a full comparison of the technologies and approaches being used. In any event, the early loss of the Tyne Metropolitan project strand limited the comparisons that could be made, given that two of the three remaining partners were using the Blackboard VLE as their core technology. We can, however, compare the approaches each partner adopted to introduction and implementation as there were clear differences in the way this was approached and in the outcomes they achieved.

CITY OF SUNDERLAND COLLEGE

Both in terms of efficiency and positive effect on learning the most successful implementation was at CoSC. In the end review meetings the responses were in general very positive and the majority of learners felt that it had enhanced their learning experience. For some the effect was transformative. This may not be unusual in adult learners who recognise the power of new learning to change their thinking, but the statements made by these students indicate that the e-portfolio experience *has* played an important supportive part in their development:

"I enjoyed it: it was a pleasure to do and stimulating... kept you interested in your personal development and motivated each other. I would love to have it for my work team - would like all PDP assignments to be electronic."

"I'm thrilled with it and proud of it. A huge sense of achievement... I have showed it to lots of people."

One student talks of being '*bitten by the e-Portfolio bug*'. Others are talking to their employers about introducing similar professional development systems within their own work situations:

"I would prefer to use this to paper based and have even enquired if they can use it at work after the course."

"...would love to have it for the work team - would like all PDP assignments to be electronic"

Not all experiences were so positive. Confidence remained an issue for a minority of learners:

"I didn't have time and confidence to use it - I would prefer paper based documents"

It was also notable that, even with the extensive induction and on-going support provided, the principal concerns voiced by students in the final reviews were mostly to do with complexity and access issues, indicating that, for mature students learning in the workplace or at home, technical concerns remain important.

"It needed support to be shown how to do it - it took a few go's to get into it; got frustrated from not knowing how to use it."

“Very complicated and took a long time to get going by trial & error & set up - had good support but written guide may have been useful - problems using provided templates once we could use our own it was easier ...I started to feel confident by January time [but] complicated to learn how to give permissions and add content.”

The majority of learners appear to have gone through a similar learning curve, in which developing confidence plays a central part. Once this point is reached there is a powerful sense of achievement, evidenced in many of the learner comments.

The success of the CoSC project is clearly based on careful planning and implementation, coupled with extensive made-to-measure support. A consistent and individual approach to assessment undoubtedly contributed to motivation and the requirement to contribute a minimum of six reviews provided a clear and achievable target. The team also felt their choice of e-portfolio system was important and they believe that it is essential to take the time to match the tools with the needs of the learners and the programme. There has been a growing perception that no-one-size-fits-all, i.e. there is no generic e-portfolio tool that will meet all needs, especially where existing assessment requirements have to be accommodated. Whatever tools are chosen they must be adaptable, not least so that students can personalise their e-portfolios and build them to reflect their interests and concerns: the creative opportunities afforded by the ability to present evidence in a range of media (especially video and photography) together in one place added significant value for some students:

“It brought out the creative aspects of my work – more visual with photos – exciting, colourful. Didn’t have to carry the files and could access it from anywhere”

“Good – you can link websites and PowerPoint presentations.”

But perhaps most valued was the (instant) communication the system afforded with their tutor and this feedback and support was seen by many as central to their success:

“[I] didn’t always have to come to college to get feedback from tutor (saved time and fuel) could use that travel time to do the work as instant feedback was given on the entries.”

GATESHEAD COLLEGE

The delayed start-up at GC meant that the project was always running to catch up. As the statements below show, the online ‘Learning Autobiography’ enhanced the learning experience for the 45% who used it regularly, yet there is a feeling amongst all participants that the potential for this target group remained un-fulfilled, especially with regard to sharing feelings and reflections on work-place experience:

It’s interesting how a new concept can cause confusion in even the most able students! I had an interesting conversation with one our most active bloggers, who didn’t really appreciate the difference between private and public postings, in particular how the dialogues that might open up (and what they might get from those) would be different. Although he doesn’t care who sees it, at this stage of his understanding of blogging it is entirely about HIS contribution - no-one seems to have yet appreciated the potential for dialogue. With hindsight this is something we should perhaps have kick-started, perhaps by opening and driving an initial discussion. (From the staff discussion forum)

"The reflective diary had value... at times I wanted others to respond to me & they didn't so I felt a little isolated. Constructive feedback from peers was really wanted." (student comment from the end Interviews)

I asked for feedback from my peers regarding their thoughts on some of my ideas and got a really poor response. Either they were simply not using the system or were not interested. (student comment from the end survey)

The lessons from the GC project are that

- systems/tools must be fully prepared and tested prior to implementation;
- staff must be fully trained in use;
- there must be agreement about the approach to implementation;
- the benefits and purposes of the system must be clearly explained to the learners.

Most importantly the tools have to be introduced when the learners need them, allowing some time for familiarisation and addressing any IT skills issues. On this course students begin to work on their PDPs after four or five weeks, so the system needed to be introduced within the first month. As it was not available at that time the groups began work on the paper-based version. When the e-portfolio was introduced it was still not fully tested, but could not be further delayed. The ongoing problems led to a negative view among some learners who were becoming concerned about the course workload and now saw this as an additional task.

"Introduced at wrong time: some had started using the existing paper based system & as the new electronic version wasn't compulsory some didn't know which to follow. In practice this meant they did the blog, but with less commitment" (Comment from Interview)

More time required to use them. They should be introduced into the course early so that people are familiar with them and what they are used for, not weeks into the course when everyone is busy with assignments. (Comment from End Survey. Punctuation added.)

Once this perception has taken hold it is difficult to overcome. Nevertheless, GC students did report many positives. The value of reflective learning was well understood and, although some felt a paper diary would suffice, most could see the advantages in an online journal:

"It was great to get on at the end of the day and just go 'blurghhh'..! it sort of relieved the tension and made you analyse quite quickly what was good and bad and what went wrong..... and you got your feelings crystalised there and you probably wrote about them more strongly than by going back, so I did enjoy that aspect of it." (Comment from Interview)

"It was great to be able to put down your thoughts without thinking 'is this academic writing?'. You could just let the thoughts flow." (Comment from Interview)

Enabled me to record significant events in my teaching throughout the year. Enabled me to reflect on my reactions to these events. (Comment from End Survey)

Where students had published entries to share with others some colleagues *did* read them, but there was almost no dialogue or sharing of reflection. By the end of the course, however, many had (belatedly) realised that this was where the real potential lay, but too late for the current year:

"I wasn't brave enough to let others read. When others did feed back to me it really worked." (Comment from Interview)

More comments from colleagues would be nice, too - to swap ideas etc. Having said that, speaking from personal experience, care should be taken regarding any comments made, as the written word can be interpreted in different ways, and this could lead to misunderstandings... (Comment from End Survey)

Tutor contributions might have encouraged more dialogue among peers, but they found it difficult to respond regularly due to the very limited time they had available for this task. At CoSC all tutorial contact took place online but the GC team still had regular F2F responsibilities and this used up their timetabled hours. Online feedback relied largely on goodwill but, as the records of tutor postings show, after an initial effort to enter into dialogue tutors realised how time consuming the task was (as each post seemed to generate yet another response from the student) and they could not maintain regular involvement.

There was a perception among some of the more 'strategic' learners that the reflective journal was 'just extra work', to some extent duplicating other tasks they are doing:

"I understand the purpose, but it's just an extra thing to be done..."

"We were told at the beginning it was optional and not compulsory - so I discarded it completely!"

This view is by no means a surprise to tutors, who also recognise a possible solution:

"We should also not forget the students' sensitivity to workload. Anything perceived as extra work has to have very strong benefits to outweigh the work involved. The benefits may have been more obvious to students if we had integrated the e-portfolio work more tightly into the programme." (from the GC tutor discussion forum)

At the end of the project period, despite some positive end review comments, both staff and students said that they would approach the experience differently if starting again.

Many lessons were learnt, and perhaps these were lessons that had to be learnt the hard way, given the participants' lack of previous experience in the application of these technologies. Without this practical knowledge the team were unable, for example, to *demonstrate* the potential benefits of the online PDP over the paper-based version - a key factor in selling the technology to the target group.

The PDP was only one component of a busy WBL programme and the overall workload meant that tutors were unable to devote the interest to the work that they would have wished. Had they been able to give more time to it, to make it central to the operation of the course (as was the case at CoSC) the immediate outcomes might have been more rewarding.

The GC experience confirmed the CoSC view concerning the need to fit the e-portfolio to the needs of the learners and programme. Knowing what we know now ePET could easily be adapted to overcome all the problems met during the pilot. From this year, however, all trainee and qualified teachers will be required to use the Institute for Learning's online 'REFLECT' PDP to maintain records of their professional development activity and the PGCE course has already begun work with this technology.

Might our target group's project experience of e-portfolios, albeit imperfect, help them engage effectively with the REFLECT PDP? Members of the group were interviewed six months after the end of the ComPort project and there was a strong feeling that the experience HAD been positive and they were able to engage more effectively with the reflective tools in REFLECT.

SOUTH TYNESIDE COLLEGE

The outcome of the approach adopted at STC reinforces the view that support and commitment ('buy-in') from staff is vital for success. The early loss of the internal co-ordinator, who had provided the initial strategic direction, was a problem that, given the busy workloads of others involved in the project team, was difficult to overcome. On the curriculum side no-one was available to take a long-term strategic lead on a component of the course which would not be an assessment priority.

Training and practice-blogging went according to plan, with substantial support from the college IT team. This was not a major task as only the online journal tools were being used and the group were by now familiar with the Blackboard environment. The 'practice blogging' was encouraged by providing a cash incentive for 'best blog'. Intended partly in fun and just to get students interested, it certainly had the desired effect for some learners, as this reflective posting shows:

My academic studies so far have been excellent in their theoretical knowledge, however the practical application of the knowledge gained has been seriously lacking. This means we can work out the rate of heat transfer in a shell and tube heat exchanger, but not actually know what one looks like, or how it operates in real life.

Senior staff were already looking ahead, with a growing interest in using the current group's work as an exemplar for future students, to help embed the PDP concept more deeply, and also as a means of sharing and unravelling the hopes and fears that may surround the student's first trips to sea. A glance at the sample postings below show the potential for this.

Given the problems with online access at sea much was expected from the Blackboard "Backpack" add-on but in the event, as described above, this product was not available to the team. Some students found this to be a minor problem as these sample postings show:

I would have entered an entry before now but i have been at sea for the past 4 weeks. as i do 4 weeks on and about 2 weeks off. while onboard my first vessel i did not have access to the internet so therefore i have kept a log/journal of reflections which i will enter upon arriving home which is what is going to follow.

I have just got my first shore leave since joining my ship, I am writing this from an internet cafe, since there is no way to access the internet from on board the ship, at least for non-ship business anyway. After I joined in Abu Dhabi, we sailed to Kuwait, Saudi-Arabia and finally into Dubai to dry dock. This was a fantastic, if incredibly tiring 11 days, with everything being taken apart and repaired before my eyes. This gave me an excellent look into the practical side of all the theory which we had been taught, working 14 hour days gave no time for shore leave, or anything else really. Since drydock we went to Iran for bunkering, which was also an interesting experience then we sailed for Paranagua in ballast to pick up a cargo of chicken for the Gulf ports. Couple of storms on the west coast of South Africa, thankfully not sea sick, but the other cadet was.

It had been hoped that it might be possible to maintain contact with learners on placement to provide support that had not been previously available, but there was no-one available to monitor to learner posts. It is a long placement, during which the students are completely under the control of their employers. Possibly the assumption that it is desirable to maintain contact with learners on extended placement was incorrect: the project leader came to feel that ,as the placement was so long and so 'immersive' (i.e. a varied demanding workload with new learning of all kinds - cognitive, affective and psycho-motor - at every turn), that the learners should in simple terms 'go off and get on with it'.

During this period they 'belong' to the ship and must take responsibility for their own development. Examples from the journals illustrate this:

During the week I witnessed a few cargo calls where we had to start another generator and the bow thrusters. Although I was mainly watching I still found it very interesting as it is done differently from the last ship I was on. I am starting to get on well with the crew and seem to be getting along just nicely.

During the week I have carried out a session of cleaning everyday which I honestly have not minded doing as its part of the job and I am getting paid for it after all. I have traced the sewage and refrigeration systems out and have got it signed off in my portfolio. Towards the end of the week the weather has turned quite bad and gave me a couple of sleepless nights which made me feel ill the next day but I just got on with it, it didn't bother me. During the bad weather not a lot of work was able to be done and I was given Monday afternoon off which I used to get some sleep which helped. Its all part of the job and I was still enjoying life.

Once the last three days arrived the real work began. I was taught how to stop and start the main engines, I then was told to do it. Stopping and starting the main engines was pretty straight forward. I understand how to do it and did it with only one slight problem. When it came to stopping the starboard main engine, the control wheel was very hard to turn to stop and on the first go I accidentally pushed too hard and it went straight to prime so I had to go round again and try it again and thankfully I managed to succeed. The port main engine stopped and started without any problems. All in all this experience was really good as I got to grips with the main engines. I was also instructed to clean the fuel oil purifier, this wasn't complicated but it was very messy and I got absolutely covered in diesel. I didn't mind though as its all in the fun of it. (capitalisation added)

It might be useful for trainees to communicate with peers to share their experiences but perhaps less important to communicate with their tutor, whose role would instead be to help the learner unpack their experiences when they return, after they have had time to reflect on them. At the time of writing the future role of the tutor during placement is still under discussion.

Ultimately the limited response from learners (quantity, not quality!) reflected the nature of the placement rather than problems with the approach: online access and access to computer equipment was limited, both at sea and in port. As the PDP is not directly assessed at this stage it is not surprising that the majority of students chose not to make the effort to upload their work to the online system.

WEB 2.0 STRAND

The records of the interviews conducted with staff from three Foundation Degrees in Music Practice/Technology can be found on pages 32-43 of the final Independent Evaluation Report [at](#);

It had been hoped to find evidence of the application of web 2.0 technologies to support informal learning, driven by the students themselves, which might then be used to inform the main study. It transpired that, although these tools were used, *My Space* and *Facebook* in particular, their application for learning was currently limited and appeared to be still in the early stages of development.

The work was therefore of very limited application to the main project, although the interviewers discovered three interesting, but very different, approaches:

At **South Tyneside College** the Blackboard VLE was used to share work and ideas, and substantial technical support had been made available to achieve this. The process was kept very much in-house – staff do not wish to make use of social networking sites, because of concerns about the other material that opens the door to. The care of students comes first, especially with a typical younger profile. This approach is college driven and controlled although students are encouraged to develop their online areas in a personal way.

At **City of Sunderland College** students (a more mature profile here) are encouraged to make extensive use of My Space as “If you’re not on My Space you’re not in the Industry”. However the course itself plays no part in this vocational learning activity and does not assess it.

At **Gateshead College** students are taught how to make their own e-portfolios, using iWEB software on Apple Mac computers. This becomes the basis for their final presentation of work – music, scores, text, video etc - for assessment. The approach has been very successful: iWEB is not difficult to use and additional support is available from the e-learning team to ensure there are no technical barriers, students are motivated by the flexibility of the presentation methods and see the production task as very relevant to their vocational training. The e-portfolios have now completely replaced the earlier A3 print-based presentation folders, which were impressively academic, but limited in the evidence they could present.

CONCLUSIONS & RECOMMENDATIONS

THE COLLEGES' EXPERIENCE

Each partner completed a project which has informed their understanding of e-portfolios and helped their institutions make decisions about future development:

At COSC the team came to their own conclusion (influenced by ComPort work) that no single e-portfolio tool could meet all needs. They are continuing to use the system with the target course and as a result of their experience on this project are extending e-portfolio development to other WBL H.E. provision, choosing methodologies and approaches that best meet employer needs or the needs of particular age, for example using wikis and blogs to provide reflective and shared learning opportunities for a group of power management trainees whose training is completely work-based.

Influenced by their ComPort experiences, GC have created institutional guidelines (available on the project website) for the use of e-portfolios to support learning. Rather than mandating one tool, the College encourages a flexible approach, with a generic set of tools provided through the VLE or externally (e.g. a blogging tool, wikis etc..) for selection and use by course teams. On the Cert Ed/PGCE target course, use of the REFLECT tool is being adopted to tie in with developments in the education sector generally and there is some evidence that the ePET experience has had positive benefits for learners, who in recent interviews look back positively on their experience which has given them a better understanding of reflective learning and the ability to engage effectively with the REFLECT e-portfolio.

THE METRICS FRAMEWORK.

The metrics used in the framework did not generate sufficient data on which to base a comprehensive comparative study. Between the project teams there was a lack of common agreement on what was to be collected, how and, in some cases, why. Some colleagues felt that several of the metrics were more suited to larger scale projects with more focused objectives.

In a study of this size the metrics framework has demonstrated limitations, but in a larger study, with consistent and agreed SMART objectives data collection among participants it would fare much better. Although data is partial it has nevertheless helped to clarify emerging issues and is able to point to lessons that have been learnt.

CHOOSING AND IMPLEMENTING EPORTFOLIO TECHNOLOGIES

The importance of careful planning & introduction has been clearly demonstrated, particularly with regard to when and how we introduce students to the technology. A comparison of the CoSC and GC experiences suggests that successful implementation is dependent on the

technology being in place, tested, and integrated with existing systems and the rest of the educational experience before deployment with students. Staff should be fully conversant with tools and their application, able to provide a clear demonstration of purpose and have agreed their roles and responsibilities. These are big 'asks' for first time users of e-portfolio systems and the project teams' view is that implementation should not be considered as a one time 'load and go' task: it takes time to get technology and staff support to the required standard, which points to a phased, perhaps iterative, implementation strategy.

The comparisons have also demonstrated the importance of the technology being fit for purpose. The tools must be matched to the needs of all participants, be usable - even CoSC had some users who found it all too complicated – and adaptable. Both CoSC and GC needed to adapt their templates in response to learner feedback and CoSC also needed further adaptability to allow students the opportunity to personalize and be creative with their portfolios. For tutors too customisation is an important issue, as this discussion for the GC discussion forum demonstrates:

AR - The issue of customisation emerging here is interesting. In an ideal system, do we need customisation for the college as a whole, customisation by course or customisation by individual learner - perhaps all three? In parallel with this, when you increase customisation in a system, do you also increase staff/student workload and course planning time?

*JAS - I think customisation is **essential** from the tutor's point of view relating to curriculum designing. I think it is preferred for the learners, but **essential** if we want to encourage ownership of their learning and development of their IT skills.*

A final point of discussion was the choice between paper-based and e-systems, neatly put by one colleague: "Alternatives to paper-based *HAVE* to offer something paper doesn't if we want students to use them." For CoSC that distinction was easy to make, by virtue of the distance nature of the course: the e-portfolio tools allowed students flexibility in when and where they engaged with the task and encouraged the use of audio visual media to record their evidence. At GC, where students attended weekly, there was less reason to use the online tools while they were mainly concerned with recording and reflecting on their own experiences for their own benefit – as some said a diary *would* do the job. Had they been aware of the potential for collaboration with others in this task, or had there been a greater demand to collate evidence in digital media then the choice might have been different. Similarly at STC. once the notion that staff could keep in contact with students at sea was discounted, the online tools were mainly used for collecting evidence that had already been written, offline, in paper form. If evidence in electronic form was needed, or the students chose to share their ongoing experience with their peers then there might be a clearer role of the e-portfolio.

EMERGING ISSUES / IMPLICATIONS FOR THE FUTURE

A number of issues have emerged as important during the project.

1. STAFF BUY-IN

Staff commitment is a key requirement of a successful implementation but a range of factors can undermine this. F.E. staff workloads are heavy and based on traditional, face-to-face, notions of 'contact time'. The contact demands of e-Learning are not so easily quantified, however, and in a system where contact time is closely managed teaching staff can end up providing online feedback and support in their own time. As a result the system comes to depend too much goodwill. Some re-definition of 'contact – time' is required, but to date there had been little progress in this direction.

Staff also need to handle the workload carefully by setting ground rules for feedback, and managing learner expectations. Some students on these courses had higher expectations of online tutor interaction than others, and some were unrealistic. Effective management is difficult to achieve without experience of e-portfolio support – perhaps another lesson that must be learnt the hard way?

Some staff may not be positive about the technology. This could be because they: lack skills or knowledge; feel that they are losing ownership of the learning situation; lack time to achieve the standards they want to set; or do not want to move out of their comfort zone to accommodate new ways of working. These issues can be overcome, e.g. with proper training and a clear understanding of the benefits afforded, and they should not be ignored.

2. ENGAGING LEARNERS AND SUPPORTING THEM IN THE WORK-PLACE

A significant proportion of work-based learners at this level have limited academic experience and lack confidence. In addition the idea of reflective practice in work-based learning is new to many students and the value may not be immediately apparent. As with all learning sensitive individual feedback and support are vital – CoSC students for example valued their on-demand tutor support highly and identified that as a key factor in their achievement. Setting minimum requirements for contributions, e.g. x blogs per semester as at CoSC, ensures some engagement and also provides a challenge that also engages learners, provided that the level is appropriately set.

The need for timely and good quality technical support is obvious, as is access to online resources (at GC the evening closure of the computer resource area an hour before the class finished had a negative effect on the commitment of those students who wanted to complete their reflective journals at the end of an evening's study). IT Skills levels vary in all classes and skills and confidence must be carefully nurtured. The technical blog at CoSC encouraged students to share their lack of knowledge and ultimately work more independently, supporting each other.

3. PROBLEMS AREN'T SO MUCH WITH TECHNOLOGY AS WITH REFLECTION ITSELF

At each college, but especially at GC, it was apparent that some students found it much easier to undertake critical self-reflection than others: whilst some immediately began to write extensive and thoughtful entries, others were perfunctory and factual. The ability to reflect should not be taken for granted and opportunities for practice and development are needed. The month long practice period at CoSC and the 'technical blog' encouraged learners to develop their entries and built confidence.

Entering into dialogue with others would help to develop these skills but, as evidence from their comments show, a significant number of students expressed concerns about privacy and an initial reluctance to collaborate. This too is something that needs to be encouraged, with tutors perhaps modeling their own approaches?

4. ENGAGING EMPLOYERS AND MENTORS

The difficulties in engaging employers and mentors in the online process have been noted above and are discussed more fully in the Implementation case studies (<http://comport.gateshead.ac.uk>). Employers were not actively engaged in these programmes anyway, so we couldn't expect they would engage with the technology.

There was particular concern among learners (at each college) that criticisms they made about their employment in their journals might be held against them by their employers. For this reason some learners stated a reluctance to share their online work with their employer. At CoSC the student's line manager was also usually their mentor. In this instance there seemed to be no conflict of interest, but also no desire to interact through the online system, as face-to-face was easier to manage.

It appeared that the trainee-mentor relationship lent itself more to face-to-face, workplace contact than online. The role of mentors in teacher training is growing however and there is potential for them to reduce tutor workloads. If their involvement becomes more formalised there may be greater use for online interaction to provide records of engagement.

The impact of this project on practice in engagement has effectively been nil, but it has highlighted an existing issue that will now be addressed.

5. SUSTAINABILITY.

At both CoSC and GC the work done for this project is already being further developed. This is described under 'The College's Experience', below. Sustainability is a long term issue, but at this point both colleges are hopeful that the pilot projects are the start of longer term development. At STC the future direction of e-portfolio use, with the target course and more widely is still being discussed and immediate development is uncertain.

'RULE OF THUMB' DEFINITIONS OF GOOD PRACTICE.

In the course of this project the partners have come to realise that they are still in the early stages of e-portfolio development and do not feel that they can confidently define good practice. However the lessons learnt so far may help others in their initial choice and implementation of e-portfolio systems. Any new implementation should consider the following:

IT IS IMPORTANT TO MATCH THE APPROPRIATE TOOL TO EACH LEARNING PROGRAMME (NO ONE SIZE FITS ALL)

These projects discovered that generic portfolio designs used needed substantial customisation before they would meet the quite specific demands of courses at this level. The experience of all

three projects is that the choice of portfolio must be carefully matched to course requirements: CoSC felt they got this right, but are planning different approaches with other courses; GC found that they had not considered the importance of matching tools and needs sufficiently, and the project was less successful as a result; STC have yet to find a way of addressing the access problems of students at sea.

Students were also wary of functions/tools they didn't need and any over-complication was seen, by some, as a barrier to engagement – 'keep it simple' could be the maxim here.

IT IS VITAL TO ENSURE STAFF "BUY IN"

Members of staff who are required to facilitate use of an e-Portfolio system must be given sufficient opportunity to familiarise themselves with the technology and to plan how it can be best incorporated, introduced and supported for their particular learning programme and group. They also need to recognise the potential for individual and collaborative learning, so that they can encourage and support the learner's journey.

The tutor's enthusiasm and commitment can be undermined by excessive workloads: problems around 'contact hours' remain a particular concern.

THE TIMING OF THE INTRODUCTION OF THE EPORTFOLIO MUST BE CAREFULLY CONSIDERED.

The timing of introduction to the e-Portfolio system proved to be significant. Mid-way through the first term of the academic year was regarded by most GC learners as too late into the learning programme; most CoSC students were already becoming confident users before they began work on the assessed course components. The experience of both groups was that time to practice with technology and systems - to explore and make mistakes - is essential, for confidence building particularly: it was notable that few CoSC students saw technical problems as insurmountable or de-motivating.

There is undoubtedly a learning curve which takes time to negotiate before the potential e.g. for collaborative reflection, begins to be realised. How participants are supported through that stage is a key factor in successful implementation (see below).

IDENTIFY STRATEGIES TO ENGAGE AND SUPPORT LEARNERS ON-LINE

Support and feedback for learners is a vital catalyst for learner engagement and commitment to using the ePortfolio. Thought needs to be given to the pattern and availability of both technical and practical support throughout the programme. This may require front-loading support costs, which can be substantial. The aim should be to develop peer support, which seems to be effective with first-line problems. This will also encourage students to take ownership of the system, a crucial factor in engaging their long-term interest.

THE ABILITY OR READINESS OF LEARNERS TO ENGAGE IN CRITICAL REFLECTION SHOULD NOT BE ASSUMED.

Some of the difficulties engaging students in reflective learning, at GC and STC especially, resulted from their problems with reflection itself rather than with use of the technology. Some learners, even at H.E. level, find reflection difficult and may be inhibited about recording/sharing their thoughts. Critical reflection is a skill, which needs to be developed. Learners may have inhibitions about recording their reflections in any format, whether paper based or e-Portfolio. The impact of these inhibitions may be reduced with support and feedback from tutors. Encouraging dialogue and collaboration can improve the quality of reflection.

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APPENDICES

APPENDIX 1 – PARTNER COLLEGE PROJECT OUTLINES

This appendix provides partner college project outlines. Each outline comprises the following sections:

- Course Profile
- E-Portfolio/Professional Development Planning System
- Project Team

Partner college profiles are available for:

- Gateshead College
- South Tyneside College
- City of Sunderland College (course profile section only)

Gateshead College: Course Profile

College delivering programme:	Gateshead College
Full title of programme:	Post Graduate Certificate in Education
Accrediting Institution:	University of Sunderland
Brief description of course content:	Initial teacher training for post-compulsory sector
Total number of learners studying on programme:	58
Of these, indicate the number of learners participating in ComPort project:	58 - 37 year 1 / 21 year 2. Depending on take-up the focus may be on yr 1 learners.
Duration of Programme:	2 yrs
Course Leader Name:	Julie-Ann Stobo
Other Members of Staff delivering on programme:	Phil Robinson, Gillian Forrester, Andrew Robson
Normal pattern of attendance at taught sessions :	Weekly (34 weeks P.A.)
Duration of each session:	4hrs
Indicate any substantial periods away from teaching staff contact	All learners undertake teaching practice throughout the course. Yr min 60hrs, Yr 2 min. 90hrs.
And the nature of support (if any) previously provided.	Support to date has been through direct observation by tutor and mentor (4 in total) and F2F tutorial meetings with Tutor and mentor. These will continue.
Indicate typical Employers and job roles of part-time/placement learners:	F.E. colleges, secondary schools (sixth form only), Public and Private training providers (e.g. NHS, Police) Learners are employed as teachers or trainers.
Typical progression routes for learners:	Part-time and full-time teaching, lecturing and training

Gateshead College: Course Profile Contd.

<p>In what context are e-Portfolio /PDP systems expected to be used in the course? (e.g. modules(s) supported, whether assessed or not, etc...)</p>	<p>Used to support development of Professional Development File which is assessed as part the following modules:</p> <p>YEAR 1- Practical Teaching & Professional Development 1 & 2 (EPF131 and EPF133)</p> <p>YEAR 2 - Advancing Practical Teaching & Professional Development 3 (EPF219/306)</p> <p>The file consists of: Log of teaching - Personal learning Plan - Tutorial Review/Action Plan - Learning Autobiography (Individual Journal/Diary).</p> <p>Currently a paper-based version of these components is used.</p>
<p>What are the expected Benefits</p> <ul style="list-style-type: none"> - To learners, - To employers, - To tutors, 	<p>Learners: encourage reflection and discussion, track progress, transfer experience of e-Portfolio systems to own practice.</p> <p>Employers: Experience as a reflective practitioner will be embedded in professional practice</p> <p>Tutors: encourage reflection & discussion, track progress</p>

Gateshead College: E-Portfolio/Professional Development Planning System

What e-portfolio tools are you planning to use?	ePET (Newcastle University EPICS project)
Will these involve in-house development work (design/ customisation)?	Basic ePET configuration will need to be customized (with addition of forms) to fulfill the same functions as existing paper-based system. Other functions (such as the 'Blog') are being further developed by Newcastle Univ. as part of EPICS 2 project. These may or may not prove useful to this project.
Will they be used in conjunction with any other evidence collection process? (e.g. paper-based)	It is not yet clear how effective the on-line forms functions will be therefore those parts of the paper-based system will be available as an alternative for the immediate future..
How/where will the e-Portfolio/PDP tool(s) be accessed	Internet access anywhere, anytime.
What training is needed/planned to make use of the tools - For tutors - For learners	Course team or learners have very limited experience of e-Portfolio systems and none of ePET. Training is required in use of system and the educational rationale for e-portfolios must be presented. Some learners will need additional IT Skills support - this is already provided as part of the course.
Do you foresee any technical issues in deploying the chosen tools?	The system is hosted by Newcastle University who will provide technical support. No other systems are involved.

Gateshead College: Project team

Name	Role
Andrew Robson	Internal Advisor
Julie-Ann Stobo	Project Leader, Lecturer
Phil Robinson	Lecturer
Alastair Graham	Technical Support
Gillian Forrester	HOD, Lecturer

South Tyneside College: Course Profile

College delivering programme:	South Tyneside College
Full title of programme:	Foundation Degree in Marine Engineering
Accrediting Institution:	Northumbria University
Brief description of course content:	Mathematic and engineering based subject combined with work based learning in practical environment
Total number of learners studying on programme:	17
Of these, indicate the number of learners participating in ComPort project:	17
Duration of Programme: (e.g. 1 academic year)	3 years
Course Leader Name:	Harry Crompton
Other Members of Staff delivering on programme:	T Torbett, S Kouache, D Cowey, I Brown, R Jordan, K Corner, F Davidson, G, Boyd
Normal pattern of attendance at taught sessions:	Daily
Duration of each delivered session:	Approx 4 hours per day 5 days a week.
Indicate any substantial periods away from teaching staff contact And the nature of support (if any) previously provided.	One period of 19 weeks and one period of 40 weeks over the duration of programme Support via email, blog section of blackboard
Indicate typical Employers and job roles of part-time/placement learners:	Marine Industry
Typical progression routes for learners:	Full degree Class 2 and Class one certificate of competency in Marine Engineering

South Tyneside College: Course Profile Contd.

<p>In what context are e-Portfolio /PDP systems expected to be used in the course? (e.g. modules(s) supported, whether assessed or not, etc...)</p>	<p>Reflective Journal</p>
<p>What are the expected Benefits</p> <ul style="list-style-type: none">- To learners,- To employers,- To tutors	<p>Instant communication and support for the students while they are away at sea.</p>

South Tyneside College: E-Portfolio/Professional Development Planning System

What e-portfolio tools are you planning to use?	Learning Object Campus LX Blackboard Academic Suite
Will these involve in-house development work (design/ customisation)?	None
Will they be used in conjunction with any other evidence collection process? (e.g. paper-based)	In-house development achieve tracking system (Excel tool)
How/where will the e-Portfolio/PDP tool(s) be accessed?	Via Internet and facilities provided at college
What training is needed/planned to make use of the tools - For tutors - For learners	1 hour induction session for the learners and tutor on the use of the reflective journals.
Do you foresee any technical issues in deploying the chosen tools?	None at this time

City of Sunderland College : Course Profile

College delivering programme:	City of Sunderland College
Accrediting Institution:	University of Sunderland <small>Accrediting Institution:</small>
Full title of programme:	Foundation Degree in Service Management
Brief description of course content:	The programme is aimed at practicing managers in the service industry. It provides a comprehensive range of subject study to equip practitioners with the knowledge and skill they need to be effective in modern day management role. It includes modules on management and leadership, operations management, service marketing and personal development planning. It is this last module in which e-portfolios will be used this academic year to plan and administer personal development activities.
Total number of learners studying on programme:	34 second year students. (in three groups)
Of these, indicate the number of learners participating in ComPort project:	All the 34 second year students. First year students on this course will not be taking part in this project.
Duration of Programme: (e.g. 1 academic year)	2 academic years. The students taking part in the project are in their second year of academic study on this course.
Course Leader Name:	Course Leader: Rob Whitton PDP Module Leader: Richard Hodgson
Other Members of Staff delivering on programme:	Philip Dodds Jeanette Davies
Normal pattern of attendance at taught sessions: (e.g. fortnightly sessions)	There are two types of attendance for the three groups involved. <ul style="list-style-type: none"> • One group will attend once a week on a Tuesday evening for 30 weeks • Two groups will attend for two full days (9am – 5pm) each month for nine months • One and half hours per week for the Tuesday

<p>Duration of each delivered session: (e.g. 3 hours)</p>	<p>evening group</p> <ul style="list-style-type: none"> • Four hours per week for the two groups attending once a month
<p>Indicate any substantial periods away from teaching staff contact (e.g. time away at sea for Marine students)</p>	<p>The monthly groups only attend once a month. E-mail and telephone support is provided by the tutor on a distance learning basis during the three weeks of non-formal attendance.</p>
<p>Indicate the typical job roles of part-time learners and type of employer: (e.g. IT trainers working for SMEs, counselors working with young children, administrators working for LEA etc...)</p>	<p>Two groups are from the education sector. The students on this stream are either school bursars and school business managers or administration managers.</p> <p>The third group is a generic group and includes managers from the contact centre industry, the health care sector and the marketing and sales sector.</p>
<p>Typical progression routes for learners:</p>	<p>Top-up degree programmes at the University of Sunderland. These take one more academic year of study following the completion of the foundation degree. The two current top-up degrees on offer are in professional practice and in management practice</p>
<p>How are e-Portfolio/PDP expected to be used in the course? (e.g. which unit(s) it supports, whether assessed or not, etc...)</p>	<p>For the second year of the personal development planning unit. The students are required to keep an assessed portfolio which will be in e-portfolio format.</p> <p>The portfolio will be kept for the full academic year during the second year of study. The students completed a similar unit of personal development during the first year of the course. This was a paper based portfolio. Therefore, the evaluation of the project will be enhanced, as the students and tutors will be able to compare and contrast the two portfolio methods.</p>

APPENDIX 2: BASELINE AND END SURVEY QUESTIONS

Delivery via VLE Survey tools.

BASELINE SURVEY - LEARNERS

e-Portfolio and PDP

1. What is your current conception of electronic Portfolios/Professional development planning? (what is it? what is it for?) *(Short Answer)*
2. How do you think the e-Portfolio/PDP process can help you achieve your learning goals? *(Short Answer)*
3. Have you had any experience of using Portfolios or personal development plans (PDP) to support your learning in a course of study? *(Yes/no)*
BRANCH: YES continue, NO go to Q4
 - 1) Was this paper-based or online? *Paper/online/both*
 - 2) If paper based -
Did you find it helped your learning? *Scale 1 > 5 (not at all > helped a lot)?*
In what ways? *Short Answer*
 - 3) If online -
Did you find it helped your learning? *Scale 1 > 5 (not at all > helped a lot)?*
In what ways? *Short Answer*
4. How regularly do you think that you will use the e-Portfolio/PDP system? *Choice: daily, every few days, weekly, fortnightly, don't know*
5. Do you have any concerns about using electronic portfolios/PDPs which lead you to think they might not be successful for you? *e.g. lack of confidence in IT or writing skills, limited access to online resources, concern that others may see your work. (Short answer)*

Using Personal Journals and Blogs

6. Which of the following online communication tools have you used (for any purpose) *(tick)?*
 - *Email*
 - *Chatroom*
 - *Blogs,*
 - *WIKI ,*
 - *Moderated discussion lists,*
 - *I haven't used any online communication tools.*
7. Do you use any of these tools *(tick)*:
 - *Bebo,*
 - *Facebook,*
 - *mySpace,*
 - *other*
 - *none (go to Q4)*
8. If yes – what do you use them for?
 - *socialising,*
 - *supporting learning*
 - *sharing ideas and opinions,*
 - *record details of experiences,*
 - *other*

- COMMENT...
9. Have you made use of weblogs or online personal journals to aid in your study/work before? (Yes /No)
 10. Personal Journals and blogs may be used to express opinions and personal thinking - how do you feel about doing this? *Scale 1> 5 (Not at all happy>very happy)*
 11. How interested would you be in reading other students' reflections about their learning experiences? *Scale: 1>4 not at all, slightly, fairly, very interested,*
 12. The writer of a personal journal has some control over who may read it. Who of these would you grant access to? *(Tick all that apply)*
 - *Personal Tutor*
 - *Other teaching staff*
 - *Mentor*
 - *Selected Student colleagues*
 - *Employers*

BASELINE SURVEY – OTHERS

Format to be decided – probably Verbal Interview (telephone or F2F)

Questions for TUTORS:

1. What is your current conception of electronic Portfolios/Professional development planning? (what is it? what is it for?) *(Short Answer)*
2. How do you think the e-Portfolio/PDP process can help the learner achieve their learning goals? *(Short Answer)*
3. Do you expect that use of the e-Portfolio/PDP tool might make course management any easier? In what ways? *(Short Answer)*

Questions for PARTNERS/STAKEHOLDERS:

1. as above
2. as above

Questions for Mentors:

1. as above
2. as above
3. How do you see electronic Portfolios/Professional development planning supporting your work with learners? *(Short Answer)*

Questions for Employers:

1. as above
2. as above
3. How do you see electronic Portfolios/Professional development planning contributing to the development of the skills and knowledge that you require in the workplace?? *(Short Answer)*

END SURVEY QUESTIONS: LEARNERS ONLY

e-Portfolio and PDP

1. During the current year did you use the e-Portfolio/PDP system to aid in your study/work? (Yes /No)
2. If yes: How regularly did you use the e-Portfolio/PDP system? *Choice: daily, every few days, weekly, fortnightly, don't know* (go to Q5)
3. if No: why didn't you use it? (*Short answer*) (go to Q9)
4. Did it help you achieve your learning goals? (*Short Answer*)
5. If you had any initial concerns about using electronic portfolios/PDPs e.g. *lack of confidence in IT or writing skills, limited access to online resources, concern that others may see your work* did you find these were borne out? (*Short answer*)
6. Since using the tool have you identified any other concerns or issues? *Yes No/ Please comment*

Using Personal Journals and Blogs

7. Which of the following online communication tools have you used for the first time since the start of this academic year (*tick*)?
 - *Email*
 - *Chatroom*
 - *Blogs,*
 - *WIKI ,*
 - *Moderated discussion lists,*
 - *I haven't used any online communication tools.*
 - *Bebo,*
 - *Facebook,*
 - *mySpace,*
 - *other*
 - *none*
8. What did you use them for (*tick all that apply*)?
 - *socialising,*
 - *supporting learning*
 - *sharing ideas and opinions,*
 - *record details of experiences,*
 - *other*
 - *COMMENT...*
9. How did you find the process of reflecting in an online journal in comparison with a paper-based diary? (*choice*)

Accessibility: better worse just the same
Engagement: better worse just the same
Use: better worse just the same
10. Did you use your Personal Journal/ blog to express opinions and personal thoughts/feelings? *Yes/no*

11. Did you read or contribute to other students' reflections about their learning experiences?
Yes/ No +comment

12. Who did you allow to read your Journal/blog? (*Tick all that apply*)

- *Personal Tutor*
- *Other teaching staff*
- *Mentor*
- *Selected Student colleagues*
- *employers*

end

APPENDIX 3: PROCESS-PURPOSE MATRIX AND MINI CASE STUDIES

APPENDIX 3.1: PURPOSE-PROCESS MATRIX

Purpose/ Context	e-portfolio Process	Information capture	Information retrieval	Planning	Reflection	Feedback	Collaboration	Presentation	Technical requirements
Personal Development Planning / Continuing Professional Development									
Transition / Application									
Work Based Learning/ Employment		Evidence from CoSC and GC projects of Reflective Journals used to record learning experiences in the workplace. CoSC also includes use of PDAs (photo/video/audio) to record experience			Evidence from all three project strands can be found in the final report and in raw data on the project website at http://comport.gateshead.ac.uk				
Assessment									
Life-long learning									
Technical progress									

APPENDIX 3.2: MINI CASE STUDY 1**USING E-PORTFOLIOS WITH WORK-BASED LEARNERS TO SUPPORT PERSONALISED LEARNING AND PROFESSIONAL DEVELOPMENT. 1: CITY OF SUNDERLAND COLLEGE.**

Author: Phil Robinson COMPORT Project Manager, Gateshead College

Processes involved: **Information Capture** and **Reflection** in the context of **work based learning**. As these processes were undertaken within a Professional Development Planning module the **PDP** process is also addressed.

Benefits: Enhancing flexibility for learners, Supporting diverse learners' needs, Attracting and retaining learners, Enhancing excellence in teaching and learning, Improving efficiency of institutional processes, Developing institutional e-maturity.

Background: The ComPort project (March 2007- March 2009) aimed to compare and contrast e-portfolio technologies and approaches to implementation by piloting the introduction of three different e-portfolio technologies with three different target groups of H.E. work-based learners. The target course for the City of Sunderland College (CoSC) strand was the Foundation Degree in Service Management, with 38 students, all in employment.

The case: The CoSC sub-project employed the Blackboard VLE with additional HTML templates to facilitate online Professional Development Planning and reflective learning for students based largely in the work-place. Each student was also given a PDA device to provide further options for recording and communicating evidence of professional development and learning.

The level of IT confidence in these mature learners was variable and extensive training and on-going support was provided to ensure they were able to make effective use of the system.

Although use was not compulsory 33 out of 35 students used the system throughout the academic year with regular active and positive engagement from most participants. Student feedback reported increased motivation and enhanced learning. Among the motivational comments were:

"I enjoyed it: it was a pleasure to do and stimulating... kept you interested in your personal development and motivated each other. I would love to have it for my work team - would like all PDP assignments to be electronic."

"I'm thrilled with it and proud of it. A huge sense of achievement... I have showed it to lots of people."

"I have been bitten by the e-Portfolio bug over the weekend and have made several amendments to its content"

Other users described how it enhanced their learning and development:

"I felt pretty weighed down with it all at the start, but now really feel I have learned so much."

"I have enjoyed updating my portfolio whenever and wherever I like and seeing the progress in my management development"

The project team had been keen to discover if the technology could help learners to take a more creative and personalised approach to e-portfolio presentation and the answer to this was yes, as learners confirmed:

"It brought out the creative aspects of my work – more visual with photos – exciting, colourful. Didn't have to carry the files and could access it from anywhere"

"I feel comfortable with the way my E-Portfolio is progressing and feel confident I will be able to complete an insightful and comprehensive E-Portfolio for this part of the PDP module. I also believe by completing the E-Portfolio I have allowed myself to create much of the investigation and information I will need for my final PDP Report."

The use of PDAs proved less popular. When the initial novelty wore off students came to the conclusion that the devices were not particularly effective for any of the facilities they offered: awkward data input and poor image quality of cameras were the key complaints. Students would prefer to use small laptops and separate cameras.

Overall the approach to implementation was successful. There was substantial evidence - from the quality of work submitted, in feedback from the external moderator and in comments from the students in blogs and in final group reviews - that the process of learning had been enhanced. The team will continue with this model (minus the PDAs) and the college is now looking to employing similar strategies in other areas of their H.E. provision. There has also been wider interest from franchise partners.

Further Comment: The team's view was that the e-portfolio technology used fitted well with this particular requirement, but they might use other approaches in other situations - it is important to match the tool to the task.

All materials from the project, including records of surveys, blogs, and sample journal postings, is available on the project website at <http://comport.gateshead.ac.uk>.

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END

APPENDIX 3.3: MINI CASE STUDY 2

USING E-PORTFOLIOS WITH WORK-BASED LEARNERS TO SUPPORT PERSONALISED LEARNING AND PROFESSIONAL DEVELOPMENT. 2: GATESHEAD COLLEGE.

Author: Phil Robinson COMPORT Project Manager, Gateshead College

Processes involved: **Information Capture** and **Reflection** in the context of **work based learning**. As these processes were undertaken within a Professional Development Planning module the **PDP** process is also addressed.

Benefits: Enhancing flexibility for learners, Supporting diverse learners' needs, Attracting and retaining learners, Enhancing excellence in teaching and learning, Improving efficiency of institutional processes, Developing institutional e-maturity.

Background: The ComPort project (March 2007- March 2009) aimed to compare and contrast e-portfolio technologies and approaches to implementation by piloting the introduction of three different e-portfolio technologies with three different target groups of H.E. work-based learners. The target course for the Gateshead College (GC) strand was the Post Graduate Certificate in Education course with 34 students, all working in some capacity within F.E. teaching or private training provision.

The case: The GC sub-project employed the Newcastle University's ePET e-portfolio system to support Professional Development Planning (PDP) and reflective learning for students who are required to review their professional practice and training on both a formative and summative basis. A key tool was the 'online personal journal/blog, described in PGCE terminology the 'Learning Autobiography'. Students use this format to record and reflect upon significant events in their work-place practice.

The level of IT skills varied widely but, as effective use of ILT is an aim of the course, on-going developmental support was available, both from the course team and members of the e-Learning development team. The existing paper-based PDP remained available for those students who did not feel confident about using the online system.

It had been intended to introduce the group to the technology at the start of the academic year but installation and customisation requirements delayed implementation until the third month of the course. For this reason take-up was limited to around 60% of the cohort as a number of students preferred to stay with the paper-based PDP. Those who made regular use of the system, particularly the learning autobiography, were positive about the effect it had had on their learning and ability to reflect:

"It was great to get on at the end of the day and just go 'blurghhh'..! it sort of relieved the tension and made you analyse quite quickly what was good and bad and what went wrong..... and you got your feelings crystalised there and you probably wrote about them more strongly than by going back, so I did enjoy that aspect of it." (Comment from Interview)

"It was great to be able to put down your thoughts without thinking 'is this academic writing?'. You could just let the thoughts flow." (Comment from Interview)

Enabled me to record significant events in my teaching throughout the year. Enabled me to reflect on my reactions to these events. (Comment from End Survey)

Some users were initially very concerned about privacy, others happily opened up their diaries for others to read. However, there were no comments from, or discussion between, peers. It appears that the potential for collaborative learning had not been realised until the year was almost complete. A number of students indicated (in end-course reviews) that they wished they had shared their thoughts more widely and would do so in the future:

"The reflective diary had value... at times I wanted others to respond to me & they didn't so I felt a little isolated. Constructive feedback from peers was really wanted." (student comment from the end Interviews)

The (significant) percentage who did not use the system indicated that the introduction could have been better handled, both in timing and explanation:

"Introduced at wrong time: some had started using the existing paper based system & as the new electronic version wasn't compulsory some didn't know which to follow. In practice this meant they did the blog, but with less commitment" (Comment from Interview)

More time required to use them. They should be introduced into the course early so that people are familiar with them and what they are used for, not weeks into the course when everyone is busy with assignments. (Comment from End Survey. Punctuation added.)

Despite these comments about implementation nearly all students came to recognise the potential value of the process to their learning and after their first experience of using e-portfolio systems all participants feel they have learnt valuable lessons that will help them to make effective use of the technology in the future: a number of staff and students made the point that you have to go through the process in order to appreciate the potential for learning. Trainee teachers are now using the Institute for Learning's 'REFLECT' e-portfolio tool to maintain their reflective journals and they have reported that their use of this has been enhanced substantially by their earlier experience with ePET.

Further Comment: A more detailed case study of the Implementation of this project can be found on the Project website (see below).

All materials from the project, including records of surveys, blogs, and sample journal postings, is available on the project website at <http://comport.gateshead.ac.uk>.

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