



Surveying Mechanisms for Handling Legal Issues at selected Regional e-Learning Pilot Projects: Are the Lessons learned from the JISC 'MLEs for Lifelong Learning' Programme now being applied?

A deliverable of the JISC Study to explore the legal and records management issues relating to the concept of the Lifelong Learner Record

Version 1.1

Andrew Charlesworth and Anna Home
Centre for IT and Law, School of Law
University of Bristol
Queens Road
Bristol BS8 1RJ
Tel: +44 (0)117 954 5633
E-mail: a.j.charlesworth@bristol.ac.uk



Surveying Mechanisms for Handling Legal Issues at selected Regional e-Learning Pilot Projects: Are the Lessons learned from the JISC 'MLEs for Lifelong Learning' programme now being applied?

Introduction

This part of the JISC Legal Study was devised to survey selected projects from the Distributed E-Learning Strand Regional Pilots Programme in order to:

- scope legal and related issues arising in the context of the ongoing technical infrastructure and e-portfolio application development work and/or testing that partners from FE and HE institutions are undertaking in different regional settings
- to uncover any legal issues not yet identified by the Legal Study researchers, so that appropriate guidance can be produced regarding them

Eight of the 21 regional pilot projects were chosen for the survey on the basis that they were engaged in conceptual and/or technical development or testing of cross-institutional applications and tools that were likely to raise one or more of the key legal issues, including data protection, intellectual property law and accessibility.

The information provided in this report results from material obtained by the Study researchers from project personnel in semi-structured interviews carried out during visits to the selected projects, and augmented by e-mail follow-up questions to clarify particular issues if necessary.

Key findings

- Not all individual partners of different projects had contacted and informed their institutional data protection officer about the JISC project they were involved in.
- Only a few projects were going to transfer live learner data during the lifetime of the pilot project, and had considered data protection issues. However, most partner consortiums intended to continue the work initiated during the pilots, funding permitting, after the end of March 2006 or June 2006, depending on the current project end date. It was apparent that these project partners/personnel had not taken appropriate measures to address data protection requirements and ought to do so well in advance of the next phase of the development work.
- It was perceived (correctly) by some partners that the learner would have IPRs in all learner-created data, e.g. course work, but some also felt that the learner would also have IPRs in a copy of the MIS data regarding them and forming their learner record. It is unlikely that the learner will in fact have any IPRs in the copy of such MIS data.
- Some project partner HEIs take the view that their institution owns the copyright in any student work produced for assessment, which was seen to significantly impact on the ability of research students to utilise their research data contained in their e-portfolio. It is apparent, however, that in the absence of a written assignment of the copyright in a student's work to the institution, which demonstrates clearly that the student understands what they are assigning, it is unlikely that the institution has a viable claim to that copyright.
- It was felt by one project that, despite its extensive use of open source software, the degree of expertise in open source development and particularly understanding of open source licensing agreements (an approach increasingly favoured by JISC) remained limited among the project partners.

- Accessibility issues had not been fully addressed by all of the projects, or by the organisations supplying them with an e-portfolio tool, and some projects thus anticipated problems in this area.
- Three out of the selected eight projects were experimenting with, or employing, metadata tags (EEL, EPIS and LM): only one of them was considering legal metatagging (EPIS).
- Several projects had intended to collect data directly from educational institutions' MIS as part of the ongoing project, or at the latest as part of the next stage of their development work. However, they had all discovered at early stages in their projects that HEI Registry Offices were very cautious of letting MIS data be accessed in any way.

Overall, it was apparent that there was greater awareness of the legal issues potentially involved in the developmental work being undertaken by the regional pilots among project personnel. This is perhaps not surprising given that at least some of the project partners had previously been involved in the 'MLEs for Lifelong Learning' Programme.

However, it was clear that this greater awareness was not always resulting in the incorporation of legal issues into project planning as a matter of course, or translation of understanding into effective and timely action on the ground. For example, despite the work of the Legal Study, JISC Legal, and other JISC support elements, there remain considerable disparities in project and institutional understandings of ownership of intellectual property rights - this may be an issue best addressed by the current JISC Consultancy on Copyright Issues, headed by Professor Charles Oppenheim.

Equally, despite the fact that the HE sector has a relatively good record in data protection compliance, the apparent reluctance of projects to involve institutional data protection officers (DPOs) may leave both projects and their institutions vulnerable to data protection failures. Anecdotal evidence from eLearning projects across the HE sector suggests that projects are often concerned that involving institutional DPOs and institutional administrations will lead to delays in projects which are already time-poor, and that the preferred approach is therefore simply not to 'rock the boat'. This suggests that, as was suggested in the Legal Study Project Killer Report Recommendations, greater efforts need to be made to widen understanding about eLearning/ePortfolio developments within institutions beyond those already engaged in developmental projects, so that delays attributable to the need for institutional administrative oversight can be kept to a minimum.

During the survey process, the range of existing legal guidance (notably the legal FAQs) developed by the Legal Study was brought to the attention of all regional pilot projects' personnel, and this process will continue during the remaining lifetime of the Legal Study.

Key

Code Project Details

EEL East of England Lifelong Learning Support (EELLS)

Lead Institution: University of Hertfordshire.

URL: <<http://www.eells.herts.ac.uk/>>

The project is implementing a technical infrastructure to provide a learner portal and a web services e-portfolio that will be available to learners within a regional context. Through the learner portal, learners will be able to access learning materials and their e-portfolio from anywhere.

ELP Enhancing Learner Progression (ELP)

Lead institution: University of Bradford.

URL: <<http://www.brad.ac.uk/acad/tqeg/resources/eportfolios/elp.php>>

The project is testing PebblePAD e-portfolio with sixth form students from local schools with the aim of evaluating its effectiveness in raising students' aspirations, encouraging their progression to university and helping them to make applications to university. PebblePAD is also tested among some undergraduates who have the possibility to transfer to another university.

EPIC North East regional collaboration around e-portfolio progression pathways with illustrative studies (EPICS)

Lead institution: Newcastle University.

URL: <<http://www.eportfolios.ac.uk/EPICS>>

The project is exploring requirements for a suitable technical framework and infrastructure to deliver the transfer of learner e-portfolio information between educational institutions. The technical framework, to be developed in the future, will transfer learner e-portfolio information from FEIs to HEIs to facilitate lifelong learning pathways.

EPIS e-Portfolios student learning (ePistle)

Lead institution: University of Wolverhampton.

URL: <<http://www.jisc.ac.uk/index.cfm?name=epistle>>

The project is testing the PebblePAD and ePet applications. Most partners are using PebblePAD, and one institution is using ePet. PebblePAD and ePet are used to support learners' PDP processes, including encouraging reflective thinking and writing on learning, progress and development.

FP Facilitating Independent Learning using E-Portfolio and Associated Support Systems (FILE-PASS)

Lead institution: University of Central Lancashire.

URL: <<http://www.uclan.ac.uk/ldu/filepass/index.htm>>

The project aims to find out whether MyPortfolio, an e-portfolio application based on OSP 1.5., works and advanced the objectives of supporting learners' PDP and helping them to engage with lifelong learning.

LM The Learning Matrix

Lead institution: Liverpool John Moore's University.

URL: <<http://www.jisc.ac.uk/index.cfm?name=learningmatrix>>

The project is developing a technical infrastructure called The Learning Matrix for the sub-region of the North West. It allows institutions to make available information on

the courses they have on offer and enables learners enrol to the courses. It also offers people the possibility to record the outcomes of their studies, as a learner record system is available to participating institutions.

MW Wider Opportunities for Reflection, Learning and Development (myWorld)
Lead institution: Oxford Brookes University.
URL: <<http://www.jisc.ac.uk/index.cfm?name=myworld>>

The project partners are using and testing PETAL, an e-portfolio application based on the OSP 1.5. The purpose of PETAL is to allow individuals to gather evidence and to reflect upon evidence of their educational achievements in many different educational contexts.

PDL Personal Development Planning for Lifelong Learning (PDP4Life)
Lead Institution: Bournemouth University.
URL: <<http://www.jisc.ac.uk/index.cfm?name=pdp4life>>

The project is exploring what ought to be included in an informal learner record to complement formal learner records. It is focused on having partners agree on what informal elements they would like to have in a Lifelong Learner Record. The project is also developing a concept for a learner portal to be created in the future.

1. The Project Institutions

1.1. Which institutions are currently involved? From which sector or sectors? (e.g. central government, local government, educational, commercial, employers)

EEL 2 HEIs, 2 FEIs.

ELP 3 HEIs; all 3 HEIs have an ongoing relationship with local schools, where the e-portfolio is piloted, but schools are not official project partners.

EPIC 5 HEIs, 2 FEIs; 1 of two FE partners has a close partnership arrangements with 4 further FEIs; 3 regional partners/stakeholders: UnisNE, NorMAN and the JISC Regional Support Centre Northern.

EPIS 2 HEIs, 6 FEIs;

FP 2 HEIs, 7 FEIs.

LM 5 HEIs, 3 FEIs, 1 local education sector initiative (Liverpool City of Learning); 3 central/local government (Learning Skills Council Greater Merseyside, Connexions and Aimhigher); 1 commercial company (Phosphorix); 1 institution with a charitable status (CRA).

MW 3 HEIs, 3 FEIs; 1 HEI's partnership project (Brighton Community University Partnership Project); 1 local government body (Adult Learning Service); 2 professional association sector bodies: Association for Learning Technology (ALT) and Thames Valley Professional Institutes Partnership (ac-hoc association, not a legally constituted entity); 1 commercial company: Knowledge Integration Ltd.

PDL 6 HEIs, 4 FEIs; 2 consultants (Dave Croot and Terry Rourke); 1 commercial company is indirectly involved (Phosphorix).

1.2. Are other institutions envisaged to be involved at a later date? From which sector or sectors? Why?

EEL The idea is to offer the service to other educational institutions in the East of England region, and possibly also to sector skills councils, after the end of the project April 2006 onwards. If the initially generic application/service is to be customised for specific subject groups, then Sector Skills Council would be an ideal partner. Sector skills councils have set specific requirements for different professions, e.g. midwives, and have links with training providers.

ELP It is only envisaged that more units from existing HEIs partners would be involved, should the project continue in the academic year 2006-2007.

EPIC Some or all of the FE Colleges that currently work in close partnership with one of HEI partners or one FE partner.

EPIS Not known.

FP It was hoped that the Greater Manchester Fire Service would provide a cohort of learners for the pilot project.

LM If the project continued after March 2006, then the involvement of more FEIs was seen as a good idea, and possibly schools as well, to make The Learning Matrix a truly regional application/service.

MW Some kind of reconfiguration of the existing partnership is envisaged if there is to be continuity from this project to another new project for the academic year 2006-2007.

PDL If the project continues after March 2006, it is possible that local government agencies and schools would be invited to join developments around the lifelong learner record. This would be appropriate if the project continued as part of a regional Lifelong Learning Network.

1.3. Which institutional department/primary unit at each partner is the main driver for the project? How are other departments/primary units involved with or informed about the project?

EEL Main drivers: University of Hertfordshire - Learning and Information Services Department; University of Luton - Library and Media Services. Other departments/primary units: University of Hertfordshire - Department of Nursing, Cultural and Creative Studies Department, and Interdisciplinary Studies unit are involved in piloting the service.

ELP Main drivers: University of Bradford - Educational Development Unit (Teaching Quality Enhancement Group). It works with Student Admissions Unit that deals with the school pupils (Compact Scheme). University of Leeds - Centre for Excellence for Teaching and Research.

EPIC Main driver: University of Newcastle - Information System and Services. Other departments/primary units: University of Newcastle - Faculty of Medical Science Computing, Centre for Academic Development, Business School, and E-portfolio Management Group; University of Teesside: Centre for Learning and Quality Enhancement; University of Durham: Academic Office.

EPIS Main driver: University of Wolverhampton - The Centre for Excellence in Learning and Teaching (CELT). Other departments/primary units: University of Wolverhampton - Midlands Leadership Center (MLC) and IT Services. The MLC has a good relationship with CELT, and IT Services is closely involved especially with the Shibboleth elements of the project. Teacher education is the main linking theme between partners. Schools are involved because the project team wanted to see how e-portfolios could support transition.

FP Main drivers: UCLAN - Learning Development Unit, IT department (ISS) and Secretariat. All partner institutions have their own institutional arrangements.

LM Main drivers: Liverpool John Moore's University - Project Manager Dr Roger Clark (not attached to a specific unit) and Project Leader Dr Phil Margham from the Learning Innovation Unit. Drivers in other partner institutions: The Learning Development Units and IT Services Units. Connexions is represented by a high level representative, whereas Aimhigher's role in the project is marginal. Other departments/primary units: Student administration units and, to varying degrees, staff from MIS administration, are informed about the project. It has been difficult to get MIS units involved with the project.

MW Main drivers: Oxford Brookes University - Centre for e-Learning; University of Brighton - Learning Technologies Group.

PDL Main driver: University of Bournemouth - The Academic Services. Registry/Student Record Office at Bournemouth has been informed about, and has expressed a positive interest in the project. The institutional data protection officer may or may not have been informed about the project. The project manager promised to check that the DPO has been informed. However, no live data is involved in this pilot project.

1.4. If particular specialist issues need to be assessed (e.g. pedagogical, administrative, legal) what are the processes for exchanging relevant information with other departments/primary units, or outside agencies? Do these processes work satisfactorily?

EEL At the University of Hertfordshire, the Dean of Interdisciplinary Studies was involved in the bid and the EELLS project director communicates with the Dean regularly. The EELLS project director promised to contact the institutional Data Protection Officer very soon, and expects co-operation to run smoothly.

ELP Not known.

EPIC The project has set up a communications plan, and the partners are expected to contact their institutional representatives, working/teaching groups etc, and bring any issues to their attention. If any issue becomes a risk to the project, the project manager will take responsibility and escalate it through to the advisory board, JISC, Stakeholders and/or heads of units/schools, faculty boards, senates etc within each institution. The processes have worked well, in that partners have communicated their 'specialist requirements' to appropriate individuals/bodies. There has only been some concern with the frequency of partner reading and responding to electronic postings. This is mitigated by the fact that same issues are raised at project team meeting once a month.

EPIS At the lead institution, University of Wolverhampton, if something has needed doing, the project team has spoken with appropriate people and generally have got what was required. However, there have been problems with the partners where ancillary departments have not been informed in advance and get 'shirty' when required to support the project. This is almost exclusively the IT departments, but the lead institution's own IT service has worked very hard to smooth the waters. Regarding the key outside agency, JISC, all of the project team's contact with it has been positive.

FP The UCLAN/project team used an external Law firm in the process of creating the Consortium Agreement. This and other related processes have worked well.

LM The exchange of information on specialist issues takes place through the project management group that consists of representatives from each of the educational partner institution. The process works very well, and the members of the project management group have been supportive.

MW Not known.

PDL Generally speaking communication processes have worked well so far. Regarding partner representatives, the original contact person may have changed and some institutions have had difficulty deciding who should be in charge of PDP. This has caused a sense of discontinuity on part of the project team.

2. The Project Application/Tool

2.1. What is the project application/tool?

- EEL** The starting point of the application to be developed is the SHELL Learner Record, which will be complemented with an e-portfolio and a learner portal. The purpose of the project is to implement a technical infrastructure to provide a learner portal and a web services e-portfolio available to learners within a regional context.
- ELP** Application used by University of Bradford and Leeds Metropolitan University: PebblePAD e-portfolio. Application use by University of Leeds: Bodington e-portfolio, although Leeds is likely to give it up. This report of ELP focuses on PebblePAD.
- EPIC** The aim of the project partners is to develop a technical framework to transfer learner e-portfolio information from FEIs to HEIs to facilitate lifelong learning pathways. Four of seven partners are using/piloting ePet e-portfolio application and three of seven are using/piloting the Blackboard e-portfolio. Regarding the messaging architecture, there is an intention to experiment with ioNodes software at the start of 2006. A few partner institutions will send some dummy data to JISC test-bed using ioNodes. It should be noted that among the regional partners, there are already several different system architectures in place. This may not pose a problem, if different systems use the same standards, e.g. UK LeaP.
- EPIS** Most partners are using PebblePAD, and one institution is using ePet. The ePistle project is about 'field testing' the PebblePAD and ePet applications.
- FP** MyPortfolio, a modified version of OSP 1.5.
- LM** The Learning Matrix technical infrastructure, including course information service, learner record, PDP tool (LUSID) and a messaging architecture.
- MW** MyWorld partners use PETAL, an e-portfolio application based on the OSP 1.5., although the original OSP 1.5 has been quite significantly modified.
- PDL** There is no project application, as the purpose of the project is to explore what ought to be included in an informal learner record to complement formal records. The PDP4Life project is entitled to use the Learner Record database developed and used in the context of the SHELL project. The project is not developing a portal *per se*, but developing a concept for a portal to be created in the future. The project is focused on having partners agree on what informal elements they would like to have in a Lifelong Learner Record.

2.2. What is the main purpose or function of the application/tool?

- EEL** The purpose of the learner portal is to enable learners to access learning materials and their e-portfolio from anywhere.
- ELP** The purpose of PebblePAD is to engage pupils more with the process of PDP, supporting them in becoming more independent, self-directed learners and especially helping them to make choices about Higher Education, i.e. what institutions to apply to, and which course to choose.
- EPIC** The main purpose of the technical framework, to be developed in the future, will be to transfer learner e-portfolio information from FE to HE to facilitate lifelong learning pathways.
- EPIS** PebblePAD and ePet are used to support learners' PDP processes, including encouraging reflective thinking and writing on an individual's learning, progress and development.

- FP** The purpose of MyPortfolio is to support learners' PDP and to help them to engage with lifelong learning, although some see it just as a CV builder. The purpose of the project is to find out whether MyPortfolio works, and advanced these objectives.
- LM** The Learning Matrix technical infrastructure has a two-fold purpose. On the one hand, it allows institutions to make available information on the courses they have on offer to learners in the sub-region of the North West, and enables learners enrol to the courses. Other the other hand, it offers people the possibility to record the outcomes of their studies, as a learner record is available to participating institutions.
- MW** The Open Source Portfolio system, and PETAL, in particular, is designed to allow individuals to gather evidence and to reflect upon evidence of their educational achievements. It is designed to be used in many different educational contexts, and is configurable to some degree.
- PDL** The purpose of a possible future application, some form of learner portal/Learner Record, will be to enable learners to have not only formal records but also records of informal learning.

2.3. What are its main elements, functions and/or uses?

- EEL** The main elements are the SHELL structures, i.e. ioHub, ioAgents and database. The new element will be the learner portal that Phosphorix will develop. Through the portal, learner can access a Learner Record (based on SHELL), learning materials and an e-portfolio, which Phosphorix will develop as well. In the pilot phase, use of the learner portal services will be part of the modules pilot learner cohorts are undertaking. The aim of the pilot is to find out what learners consider as useful e-portfolio elements and functions. Once an e-portfolio application has been developed, the service will be made available via the portal to people in the East of England region.
- ELP** The PebblePAD e-portfolio is used at Bradford as part of a new module called IT skills and PDP. At Leeds it is used to support an existing module called Progress, and at Leeds Met a Progression module. Bradford is also looking at changing the delivery of a one-week Summer Access module into one delivered on-line over a longer period of time.
- EPIC** Elements of the proposed regional technical framework: E-portfolio applications; institutional databases, including the MIS and/or Student Records System; ioNodes. At some partner institutions, e-portfolio tools, and possible separate PDP tools, are part of the institutional VLE. At other institutions e-portfolio tools are sitting outside the VLE, and might or might not be accessible via the VLE. Some relevant PDP systems are still paper based.
- EPIS** The main function of PebblePAD is to work as a "reflective web publishing tool for the masses". The version of ePet used by one partner contains questions that function as prompts for students to reflect on their course, their progress in it, their learning style and what they have learned.
- FP** MyPortfolio is currently a generic e-portfolio that can be used to record information on one's personal data (e.g. name, address), education, career, skills, and professional practices. It is planned to develop more subject specific versions of it in the future.
- LM** On the technical architecture side, the main elements of the Learning Matrix are the Hub (a database based at Liverpool John Moore's University), ioAgents that provide means to pass information around the ioNetwork (= joined ioNodes) and the opportunity for institutional MIS to connect and pass data to and from the Hub. The Learning Matrix also includes a learner portal. The Learning Matrix will be web

services or eFramework based, distributed system. On the learner interface side, its main elements encompass a course information system, learner record, and PDP service (LUSID), which learners can access via the learner portal. In pilot phase, early in year 2006, there will be snapshot courses on different areas for young people from communities where nobody, or only a few, has been to University (cf. government widening participation agenda). A possible future application of the Learning Matrix could be in the area of NHS staff continuing professional development, where NHS staff could take modules from several different universities.

MW Users can profile the e-portfolio tool elements to suit the e-portfolio to their needs and preferences. Individuals can enter data regarding their personal information, education, career, skills, and professional practices. In a simplified version for particular user groups they read: Work, jobs and employers, professional interests, references, skills, community and voluntary service. Users can also view data, create presentations, make presentations available to others, and invite comments on any aspect of their e-portfolio content. There are tips for users regarding different elements of the application.

PDL This seems to be the question that the project partners are engaging with. Coming to a shared view on the question will be one of the key outcomes of the project.

2.4. Does the use of the application/tool involve transfer of data between multiple institutions? If so, what formal (e.g. IPR and data protection requirements or formalities) and practical/operational issues (e.g. accuracy, security, interoperability) arise from the transfer of that data?

EEL In the course of the pilot, transfer of data will definitely take place between the University of Hertfordshire MIS and the learner portal. Also, other partner institutions' MIS systems should provide data for the central hub, although the consent of MIS administrators had not been secured yet. The data transfer takes place as follows: ioAgents host transformation libraries for plug-in data, e.g. CSV to IMS-LIP Java Transform. ioAgents accept IMS data on a message table, assemble SOAP messages with XML attachments and post these as envelopes to an ioHub. The project involves multi-institutional data transfer, and some of the purposes for which learner personal data are processed are novel, i.e. not covered by institutional registration with the Information Commissioner (esp. Hertfordshire). Hence, the project will need to register with the Information Commissioner. IPR issues are not seen as a problem in this context. ioNodes ensure that data transferred accurately and securely. Interoperability is an issue, but dealt with via IMS LIP and XML. The accuracy and security of data transfer is solid in the ioNodes system.

ELP Transfer of data will only take place if any student taking part in a foundation degree in Clinical Sciences at Bradford (PebblePAD) applies for a Medical Degree at Leeds (Bodington). This is unlikely. Project partners might still try transferring dummy learner data.

EPIC It is likely that only dummy learner data (no live data or MIS data) will be transferred during the lifetime of the project using ioNodes.

EPIS The use of PebblePAD and ePet do not involve data transfer at least during the lifetime of this project. Regarding PebblePAD, institutions making it available to students are not involved in the transfer of data. Students orchestrate the transfer of any data, and grant access to any 3rd parties.

FP No data transfer.

LM It is envisaged that there will be no direct transfer of data between different institutions. However, data will be transferred from individual institutions to the

Learning Matrix Hub. It will be possible to transfer data from the hub to another institution. It is not certain at this stage whether such transfer of data will take place in the course of the pilot project. If the pilot becomes a regional service then Data Protection officers would need to be involved so that institutions take responsibility for the management of the institutional portion of the data associated with each student. The ioNodes system developed by Phosphorix guarantees the accuracy and security of data transfer, and is based on current interoperability standards.

MW Within the time scale of the project, only ALT CMALT live e-portfolio data will be transferred from PETAL 1 system (old ALT e-portfolio) to PETAL 2 system (new ALT e-portfolio). The systems have different architectures, but the data does not move from one institution to another.

PDL Student enrolment records (dummy data) will be transferred between institutions by using both ioNode and VPN (= virtual private network) architecture for the purpose of testing and comparing them. Some dummy data in the new informal data fields, which partners are seeking to agree on regarding a Lifelong Learner Record, will be transferred during the project as well.

2.5. Is development or implementation of the application or tool a pilot project? Is it, or is it envisaged that it will be, an institutional, regional, national or international application/tool?

EEL The EELLS project is implementing a pilot regional service, and developing and testing a national service. One small work package of the project involves testing whether the project can make data they hold available nationally, i.e. send it somewhere else. EELLS is working with Learning Matrix on the national test, involving a transfer of a sub-set of personal data from both databases. This will involve meta-data. This purpose will also be cleared with the Information Commissioner (cf 2.3.B). Also, data subject consent for the transfer will be acquired through a paper consent form.

ELP As part of the ELP project, University of Bradford is piloting PebblePAD with the view of possibly introducing it across the institution. Also, schools in the area have expressed interest in it. The project might also expand via the University of Leeds Centre for Excellence in Teaching and Learning.

EPIC EPICS is a regional pilot project.

EPIS ePistle is a pilot project examining issues arising from the implementation of PebblePAD and ePet, both of which already exist. ePET is the result of JISC/FDTL funding. PebblePAD is proprietary and is being used in the pilot because it is the system in use at the lead institution.

FP FILE-PASS is a pilot project. UCLAN Learning Development Unit would like to develop subject specific applications to support PDP, if found useful. It would need to convince institutional decision makers about the benefits of doing it. The project now covers the sub-region of Lancashire and Cumbria. It is in discussions with Merseyside and Manchester. These four sub-regions would amount to the North West region. Also, it is talking to Leeds and Bradford.

LM The Learning Matrix is a pilot project. It is hoped that there will be a wider regional take-up of The Learning Matrix beyond the current partner institutions after the pilot phase ends. The Learning Matrix is working with EELLS project on a small-scale national test, involving a transfer of a sub-set of personal data from both databases. This will involve meta-data.

MW MyWorld is a pilot project. There will be approximately 100 users in 10 different contexts. As PETAL e-portfolio is an open source application, in principle anyone

could adopt and implement it anywhere in the world. The aim of the project is allow a number of partners to try out the open source e-portfolio, and to report on its shortcomings. It is currently seen as unlikely that the e-portfolio, at least in its present form based on OPS 1.5., would be taken up across the South East region.

PDL PDP4Life is a pilot project. Once a learner portal has been developed, a wider range of regional partners might take it up.

2.6. How is its development or implementation funded, and for how long is funding available? If the project is funded for a limited time, how is it envisaged that future funding will be obtained?

EEL The project is funded by the JISC until the end of March 2006. There are ongoing discussions with the Association of Universities in the East of England (AUEE) on possibilities for future funding from Eastern Region Lifelong Learning Network. Future funding from the University of Hertfordshire, and FE colleges in the region, is also possible. If the service (i.e. learner portal/e-portfolio) will be developed as bespoke sector specific applications, then funding from relevant professional associations may also be possible.

ELP Current JISC funding runs until end of June 2006, i.e. end of current academic year. It is hoped that the work of the project partners could continue for another academic year, but a source of funding has not been secured yet.

EPIC Funded by JISC until end of March 2006.

EPIS The current funding from JISC is available until the end of June 2006. The project partners are discussing with JISC the possibility of continuation funding for the regional project.

FP The project is funded by the JISC until end of March 2006. Also, UCLAN funds some extra people working on the project.

LM Funded through JISC Distributed e-Learning strand until 31 March 2006. If the project is to continue as a regional service it will need broad-based support from the region's institutions. "Liverpool City of Learning" may be able to help mobilise such support.

MW Current JISC funding is available until end of March 2006.

PDL The current JISC funding is available until 26 March 2006. It is possible that Bournemouth University will be able to continue the project as part of a Regional Lifelong Learning Network or through JISC extension funds.

3. Ownership and Intellectual Property in Project Application/Tool

3.1. Who currently owns the intellectual property rights (IPRs) in the application/tool? Is there a formal agreement between any partners in the project with regard to future ownership or licensing of IPRs? What are its terms?

EEL Phosphorix owns the IPRs in the application, but makes it available on open source basis. The same applies to all new elements of the application developed as part of the EELLS project.

ELP Pebble Learning Ltd has the IPRs in the tool. The pilot project gets to use PebblePAD for free (under licence). Also, University of Bradford has another licence on PebblePAD for which it pays, as the University is testing it for its suitability to become an institution wide system.

EPIC IPR for e-Pet is held with University of Newcastle. All current and future developments of ePet will be made available to all partners as defined in e-Pet terms and conditions and in accordance with UK Law, the NorMan and EPICS consortium agreements. IPR for the material that is entered into the tool is still under debate. It is recognised that this is a matter for each institution, and will be highlighted in Wp5. There are tools built in to Blackboard, which may support the objectives of EPICS. These tools and licences are owned by Blackboard and institutions pay to use them.

EPIS PebblePAD is wholly the IPR of Pebble Learning Ltd. ePET is open source, and licensing terms were not known.

FP MyPortfolio is Open Source. The project partners are OSPI members. However, they are running a version of the Open Source Portfolio that the OSPI group is not supporting anymore. This is version 1.5.

LM There are no formal agreements regarding IPRs. Software development is carried out by Phosphorix (IPR holder) and made available to the community under open-source license. There was uncertainty about who owns the IPR in the "system" developed jointly by Phosphorix (Selwyn Lloyd) and The Learning Matrix project manager.

MW The Open Source Portfolio that PETAL is a derivative of is Open Source Initiative Certified open source software. The project's use of OSP 1.5. complies to Open Source Software Foundation Educational Community License. Terms are available online (<<http://osportfolio.org>>). Future licensing will have to follow the same terms.

PDL The project is building on some of the ideas developed in a previous JISC project (SHELL) and the project is not developing a new software application or tool. Hence, there appear to be no IP issues at least during the lifetime of the project.

3.2. Is the application/tool based on proprietary or open source software? What were the reasons for that choice?

EEL The application is based entirely on open source software, because JISC said that projects ought to do so.

ELP PebblePAD is based on proprietary software. It was seen as the right type of application for the purposes of the project, irrespective of whether it is proprietary or open source. Also, Pebble Learning Ltd. hosts it for the project partners for free.

EPIC e-Pet and ioNodes are based on open source software and Blackboard has been developed using proprietary software. As part of JISC guidance, EPICS has been encouraged to use existing tools, and where possible, tools based on open source software. More importantly, EPICS has been tasked to investigate tools that are being

used within the partner institutions, and select the best possible candidates to achieve the aims and deliverables of the project.

- EPIS** PebblePAD is based on proprietary software and ePet on open source software.
- FP** MyPortfolio is based on open source software (OSP v1.5.). The OSPi e-portfolio was chosen because it is free and relatively stable, and quite easy to change.
- LM** All components of The Learning Matrix are open source. The reasons for the choice were that Phosphorix and the JISC are committed to this philosophy. In fact, the expertise in these technologies among the partners is limited and patchy. Open-source technologies based on Microsoft platforms might have been more appropriate for the project.
- MW** Open Source Portfolio was chosen for development and testing, because it was felt in the JISC circles that it would be useful if someone in the UK tested it.
- PDL** The project builds on some elements of the SHELL project and anything developed in the context of SHELL project is open source. See the Memorandum of Agreement for details of the agreement between the PDP4Life partners.

4. Software Standards

4.1. What software standards/protocols/specifications are employed by the project? (e.g. accessibility (Web Accessibility Initiative Standards, W3C), interoperability (IEEE Learning Object Metadata (IEEE-LOM), IEEE Public and Private Information for Learners (IEEE PAPI), IMS Learner Information Profile (IMS-LIP)), etc.) Why?

- EEL** Everything will be based on IMS LIP, including old SHELL elements and new elements. Selwyn Lloyd (Phosphorix) is engaging with accessibility standards expert from JISC circles, and plans to employ the expert to conduct an audit of the application. Learning object metadata is likely to be relevant for courses catalogue, but the project will be using learning object metadata created in the context of JISC XCRI project (Manchester) and/or The Learning Matrix project.
- ELP** Not known.
- EPIC** The project is adhering to relevant standards and specifications as laid out at http://www.jisc.ac.uk/proj_manguide16.htm and the standards document referenced at http://www.jisc.ac.uk/projman_standards.html. The key ones for ePet e-portfolio are: UK-LeaP, IMS-LIP, W3C (at least WAI level A), UK LOM Core (an applications profile of IEEE-LOM) and IMS Content Packaging. Regarding Shibboleth, conformity with v3 of LDAP requirement. Standards used by Blackboard can be found at: http://www.blackboard.com/docs/AS/Blackboard_Whitepaper_Standards.pdf
- EPIS** It was believed that both the PebblePAD and ePet employ IMS ePortfolio.
- FP** MyPortfolio is XML compliant. It is also compliant with IMS LIP 1.5 but it has not been tested, yet. The project is not primarily about software development.
- LM** The project employs IMS-LIP/LeaP, and the newly emerging XCRI specification for course information, and possibly WAIS as well. IMS-LIP is CETIS supported and recently incorporated into LUSID, the PDP system the project has elected to use. XCRI is seen as the only potential choice, in that it will be designed for the UK context and based on previous experience in other countries.
- MW** The project is aspiring to implement interoperability standards. It is likely that it will be using IMS-LIP rather than UK-LIP or UK-LeaP. At the level of data transport standards, the project is planning to build a demonstrator that is strictly LIP compliant to test interoperability with JISC test bed before the end of the project.
- PDL** The project is using IMS-LIP for message formatting. SOAP, ebXML and wSDL are used within ioNodes.

4.2. If metadata tags are being employed to mark-up data to aid interoperability, has the use of metatags been considered by the project as a means of communicating legal rights/obligations that may attach to the data (e.g. to indicate restrictions on use/retention of data for DP or IPR reasons). What rationales for adoption or non-adoption of such 'legal metatagging' were identified, and which were considered most persuasive?

- EEL** No legal meta tagging used, as it does not appear relevant for the application and service that the project is developing at least at the moment.
- ELP** No metadata tags.
- EPIC** No metadata tags are used.
- EPIS** The project is in the process of considering the issue of legal metatagging, particularly in terms of copyright in different domains.

- FP** No metadata tags have been used.
- LM** No, the project team was not aware of this possibility and has not considered it yet.
- MW** No, as Open Source Portfolio system does not allow for metatagging.
- PDL** There has not been any use of legal metatagging within the project or the ioNode system to date. Those involved in the current project may consider it in the longer term.

4.3. If legal metatags are employed, in circumstances where data is transferred between institutions, or to 3rd parties, what measures are, or will be taken, to ensure that 'legal' metadata will not be stripped, lost or corrupted, and that the rights/restrictions are observed?

- EEL** Not applicable.
- ELP** Not applicable.
- EPIC** Not applicable.
- EPIS** Not applicable, yet.
- FP** Not applicable.
- LM** Not applicable.
- MW** Not applicable.
- PDL** Not applicable.

5. Data Collection

5.1. What types of data are collected? (e.g. learner created, formal transcript, other)

- EEL** Student record data, as outlined in the SHELL business categories of data, including personal data and institutional data, and possibly also formal transcript. In addition, learner created data will be collected. Learners will be able to input learner created artefacts in several file formats.
- ELP** In PebblePAD, primarily learner created data is collected into the e-portfolio. Learner can also pull out external resources and upload them into their e-portfolio. Tutors and any other third parties can add comments on parts of the learner's e-portfolio content on the learner's invitation. In Bodington, a wider range of institutional and learner created data will be collected.
- EPIC** ePet and Blackboard e-portfolios: Learner created and tutor created data.
- EPIS** At the moment, only learner created data is collected. In the future, it is possible that PebblePAD and ePet users can attach (a mirror copy of) their formal transcript to their e-portfolio or at least a link to it. The link would break when the learner leaves the institution, but the last mirror copy would remain in the learner's e-portfolio with a date attached to it.
- FP** Only learner created data, as MyPortfolio is a stand-alone system and not connected to MIS.
- LM** Learner created data, including personal information and PDP records, institution created course description data, and institutional confirmation of course completion.
- MW** Learner created data and objects that learner has uploaded to the file store, which could in principle include anything.
- PDL** The majority of data to be collected when a learner portal has been created is likely to be learner created. It may also include formal transcript and related data from institutional database.

5.2. Via which channels are the data collected? (e.g. direct from learner, educational institution, local authority, employer, other)

- EEL** Data will be collected from educational institutions for the SHELL business categories of data, and direct from learner. Perhaps in the future, data will also be collected from sector skills council and/or professional associations.
- ELP** Direct from the learner, and indirectly, in the form of invited comments, from any third parties, although primarily from tutors and peers.
- EPIC** Direct from learner and from employees of educational institutions, especially tutors. It is unlikely that data will be collected directly from the educational institutions' MIS, at least during the lifetime of the project. The Registry Offices are very cautious of letting MIS data be touched in any way.
- EPIS** PebblePAD: Direct from the learner, although 3rd parties can add comments if invited to do so.
- FP** All data comes direct from the learner or via the learner.
- LM** Data will be collected direct from the learner, and regarding institutional confirmation of course completion, from educational institutions.
- MW** Direct from the learner, and from any third parties that the student invites to comment a sub-set of their e-portfolio.

PDL Direct from the learner and from educational institutions. It may be the case that employers will be able to submit e.g. a proof of work placement. Also, professional bodies might be able to input data.

5.3. How is the data collected? (e.g. intranet/internet, Web portal, VLE/MLE, institutional database/records, other)

EEL The data will be collected by transferring it from institutional database and via a web portal (https). For the e-portfolio PDP elements, data will be collected via institutional VLEs.

ELP Regarding PebblePAD used at Bradford and Leeds Met, data will be collected via a web portal, and regarding Bodington used at Leeds, via a VLE.

EPIC The method or channel of data collection varies from institution to institution. At Teesside, for example, at the moment data is collected via specific departmental databases, but it is likely to be collected via a University portal in the future.

EPIS Data is entered to PebblePAD via a web portal.

FP Learners enter data into their MyPortfolio through a web portal.

LM In The Learning Matrix, data is collected via a web portal and secure VPN.

MW Data is entered to PETAL e-portfolio via a web portal.

PDL There is likely to be a web portal that is integrated in a VLE through which data will be collected.

5.4. What methods, if any, are used to ensure the accuracy/completeness of the data collected from various sources? (e.g. data quality control)

EEL Educational institutions are responsible for the accuracy and completeness of MIS data, and ioNodes ensure the accuracy of anything that is transferred. However, the service provider will be responsible that any updates of relevant data in the IMS result in updates in their database.

ELP Not applicable to PebblePAD as all data is learner created.

EPIC When the regional partners start to work with real student data, the accuracy/completeness will become very important if they decide to transfer learner data. Quality management is a high priority on partner institutions agenda. Comparable quality systems are envisaged as and when PDP e-portfolios become more thoroughly embedded, particularly with respect to what might be regarded as institutional data (e.g. transcript). It is envisaged that the accuracy/completeness of the learner data will be the responsibility of the individual learner, and institutional data will be monitored via quality controls and audit procedures.

EPIS Regarding PebblePAD, most data is self-claimed but its authenticity can be enhanced through commentary from significant others, by appending supporting evidence, i.e. files, or by triangulation.

FP Not applicable, as only learner-created data involved.

LM Course description data is being monitored by project staff. Completeness is encouraged through required fields in web forms.

MW Not applicable, as learner creates all data.

PDL If ioNodes will be used, the messaging architecture ought to ensure that the data transferred is accurate and complete. The VPN connection is manual entry and as

such is liable to usual user input error issues. The VPN based terminal entry is inputted on both FE and HE systems, which doubles the potential for error.

6. Privacy and confidentiality of data

6.1. Who is/are the data controller(s) for the data?

- EEL** The EELLS project is the data controller for the MIS data when it gets to EELLS database, and for the learner created data stored in the same database.
- ELP** Data involved in PebblePAD is learner-created, thus the question about data controller is not applicable.
- EPIC** Each partner institution is the data controller for its own learner data.
- EPIS** The University of Newcastle is the data controller for the data in ePet application used by a cohort of about 40 learners at one of the partner institutions. In PebblePAD, all data is currently learner-created, and controlled and managed by the learner.
- FP** All data of those who use MyPortfolio will be held in UCLAN database, as opposed to those few partners who use their own PDP/e-portfolio application. All data is learner-created and managed.
- LM** Each actor, including learners and institutions, has control of the data they supply through The Learning Matrix interfaces provided.
- MW** As only learner-created data is currently involved, the question of data controller does not arise.
- PDL** The project is about exploring ideas, and only dummy data will be transferred. Hence, questions 6.1.-6.5 are not topical yet. The legal study researcher informed one of the two project managers about the relevant issues to be considered in the future.

6.2. How are learners informed about the collection and use of data relating to them? (e.g. collection notices)

- EEL** For the pilot project, a paper-based collection notice will be used. The model for it was taken from JISC funded "Turn-it-in" project. The project director and manager felt that they would need to use electronic collection notices, as paper based ones are tedious.
- ELP** Not applicable.
- EPIC** Newcastle hosts ePet for the three partners who use this e-portfolio application. For example, Teesside will inform its pilot users that Newcastle hosts ePet and stores their data, and will ask for their agreement. By end of September 2005 only dummy data had been entered to ePet. It is likely that live data will be collected before the end of the project.
- EPIS** Not applicable.
- FP** It was acknowledged that this issue needs to be considered.
- LM** A notice is presented and has to be acknowledged by the potential user before registration on the system takes place.
- MW** Not applicable.
- PDL** Not applicable.

6.3. Does any of the data collected require the consent of the data subject? (e.g. sensitive personal data – disabilities, medical data, etc.) How is this addressed by the project?

- EEL** The project defines what learner data it takes. It might choose to transfer sensitive personal data to EELLS database, e.g. re: people with dyslexia. However, the project team will consider the legal implications and risks of doing so before making the final decision.
- ELP** No.
- EPIC** There is no sensitive data being used in the pilot, although the issue will be addressed by work package 5 'Establishing a Regional Governance Framework'. The pilot project is working with dummy learner data. In the future, the individual learner is likely to have control over what to include/leave out. Therefore, there will be minimum issues with sensitive data. This issue will rest with the institutions implementation of the system.
- EPIS** Not applicable.
- FP** The learner inputs all data. They will be informed about their rights.
- LM** No.
- MW** No.
- PDL** Not applicable, yet.

6.4. Where multiple institutions are involved in the collection and use of learner data, where do any legal obligations for data privacy lie, and what formal or informal mechanisms exist to ensure that institutions are in conformity with those obligations? (e.g. data sharing agreements, data processing agreements, joint data controller agreements, data use protocols)

- EEL** The issue of legal obligations for data privacy had not been worked out at the time of interview in September 2005, but the intention was to do it shortly, including the drafting and signing of appropriate agreements.
- ELP** The project manager was informed about the issues involved in this area, but they are not topical yet.
- EPIC** At the moment, no live learner data is collected and used, and thus no legal obligations arise yet. However, student personal data, e.g. name and address, are likely to be transferred later in the project e.g. from Teesside to the University of Newcastle premises, where a Teesside owned database is based and ePet is hosted.
- EPIS** Not applicable.
- FP** UCLAN is the privacy guarantor for the learner created data.
- LM** For this limited pilot, these issues have not been addressed. The project team will discuss these issues with institutional Data Protection Officers in anticipation of continuation. Institutional partners can see only data that a learner actively supplies as part of an application for enrolment. There are no tools provided for institutions to examine the full data set.
- MW** Not applicable.
- PDL** Not applicable, yet.

6.5. Have any legal problems arisen in this area, and if so, what strategies has the project adopted to solve them? Have institutional DP officers been involved in the project? Has legal advice been sought? Have national DP regulators been approached for advice?

EEL No legal problems as of September 2005.

ELP No legal problems have arisen in this area. The DPO has not been involved in the project, but the project manager knows that he is approachable should advice be needed.

EPIC Newcastle: In the course of earlier JISC project, DPO was informed, not 100% sure whether re: EPICS; Northumbria: Legal Services have been involved in considering legal implications of the EPICS project; Sunderland: DPO has been informed and is informed on an ongoing basis; Teesside: Legal Department has been involved in the project, but not 100% sure whether or not DPO is part of the Legal Department, more likely to be part of the Secretary's Office.

EPIS Not applicable.

FP UCLAN's DPO will be consulted about privacy and confidentiality disclaimer.

LM No specific problems have arisen, yet. Institutional DP officer's input will be sought and reported upon. The project team took the view that all data processes are limited, transparent and agreed to by learners, and should not conflict with their rights.

MW No legal problems have arisen in this area. All key senior directors in Oxford Brookes University's Legal Services have been involved in discussions relating to the project.

PDL Institutional DPO will be contacted, especially with the view of any continuation of the project's work.

7. Access to data

7.1. Who apart from the learner has, or is envisaged as having, access to data held in the application or tool? (e.g. past, current or prospective educational or training institution; past, current or prospective employer; other).

EEL Nobody will have access, unless the learner explicitly grants that access to specific third parties.

ELP Nobody apart from the learner can access data on their own right.

EPIC Regarding ePet, learners' personal tutors and supervisors, i.e. specific people in current educational institution, have access. Other than that learners can choose to give access to anyone.

EPIS ePet using institution: Now only the learner, and it is likely to remain so in the future. PebblePAD: Likewise, no harvesting by third parties is envisaged.

FP If the pilot use of MyPortfolio is part of a course, the tutor decides who has access. Learner can make a presentation available to tutor, peers, employer etc based on the wider set of data in their e-portfolio.

LM In the pilot phase, data use is limited and access granted only by learner's explicit agreement. One can envisage a case being made for potential uses at later stages, such as "trawling" for promising candidates. The project team's understanding was that a learner would make their data available to a specific institution in order to supplement an application to a course provided by that institution.

MW Nobody apart from the learner has direct access to the e-portfolio repository.

PDL Learner's current institution will be able to view the formal transcript, as the institution has created it in the first place. No decisions have been made regarding access by third parties.

7.2. Is access granted to all of learner's data or to a subset of that data? Where applicable, who determines the degree of access that is granted? If the user is supposed to determine the degree of access, what safeguards are there to prevent pressure being placed on the users by 3rd parties to grant wider access?

EEL Who gets access to all or any specific parts of the data, is controlled entirely by the learner. The project will educate learners taking part in the pilot about their right to refuse access, and intends to combine electronic data collection consent with an educational notice for any future users. The youngest learners taking part in the pilot are 18.

ELP Learner determines which subset of data they wish to grant access to, and to what degree. The issue of safeguards to prevent pressure being placed has not been considered yet, although pilot users include 16-18 year olds.

EPIC Tutors have access to the records created in the context of tutoring processes, unless learner grants them a wider access.

EPIS In both ePet and PebblePAD, learner determines the degree of access to all or subset of his/her data. It was pointed out that learners' PebblePAD e-portfolios are likely to contain a very eclectic range of information and no-one could reasonably demand to see it 'all' because they would have no idea what 'all' was. Notwithstanding, it was acknowledged that an educative intervention is required both in terms of e-portfolio etiquette and self-disclosure. Regarding ePet using partner institution, learner can choose to share the content with the course director/tutor.

- FP** The learner grants access to any subset of data selected by the learner. Learner determines the degree of access. The question of safeguards was discussed and acknowledged.
- LM** Learner grants access on an “all or nothing” basis at this stage. PDP data will not be included in the “all or nothing” area.
- MW** Learner determines what the access level to any or all of their e-portfolio data is, i.e. whether something is public to all, public to a specific individual(s), or private.
- PDL** It is envisaged that learner will have full control over their informal learner record, and decides which third parties get what level of access to the formal and informal parts of the learner record/e-portfolio.

7.3. What conditions are placed on the use of the data by 3rd parties? (e.g. reuse of data, secondary uses of data, time limits on retention, accuracy and completeness etc.) How are these conditions monitored/enforced?

- EEL** There will be a copyright notice. Also, the learner specifies case by case who gets to access which parts of the data, and is likely to be able to indicate for how long.
- ELP** PebblePAD: Tutors and assessors can in principle copy subsets of data, e.g. a webfolio presentation, that students give them access to for assessment purposes.
- EPIC** The transfer of dummy learner data has no conditions, apart from the partners involved ensuring that the data is identifiable as test data. The use of live learner data is under discussion, and there will be a consultative period to establish the scope of such data to be used. Some institutions will retain an archived copy of the data for a period after the learner leaves the institution. Mechanisms are in place to allow the learner to download a copy of the data prior to leaving the institution. All institutions have complaints procedures, which can be used to enforce the conditions placed on the use of data.
- EPIS** Regarding PebblePAD, the learner determines exactly what is shared and with whom, for how long and with what permissions.
- FP** Learner can only be made aware that their presentation may be passed on, and that they should write a note saying confidential.
- LM** Third parties have no access at all.
- MW** Not known.
- PDL** Not applicable yet.

7.4. Have any uncertainties or disputes arisen with regard to access? What solutions have been proposed or adopted by the project?

- EEL** No.
- ELP** No.
- EPIC** Access to systems is controlled by user ID's and passwords. Shibboleth technology (which related to authorised / authenticated access) has caused some uncertainties and disputes. Shibboleth has being explored by some of the partners but all regional institutions will not adopt it within lifetime of the project. The concerns and disputes will need to be solved before a viable regional e-portfolio solution can be implemented.
- EPIS** No.

- FP** Some concerns have come up in project meetings regarding comments that other people write as feedback on learner's presentation. There was uncertainty as to whether they go to all people that the learner made the presentation available to or just to the learner. It was acknowledged that the issue needs to be clarified to the learners.
- LM** No.
- MW** No.
- PDL** Not applicable yet.

8. Ownership and intellectual property in data

8.1. Who owns the intellectual property in the data (or specific elements thereof) contained in the application or tool? (e.g. the learner, educational institutions, sponsors, employers etc.) What implications will this have for the ability of the learner or third parties to utilise that data?

EEL Learner has IPRs in all learner-created data, e.g. course work, and possibly also in the copy of the MIS data regarding the learner that forms their learner record. [Authors' Note: It is unclear what the implications of this position are but it is unlikely that the learner will in fact have any IPR in a copy of the MIS data regarding them that forms their learner record.]

ELP University of Bradford currently takes the view that the University owns the copyright in any student work produced for assessment. This policy is likely to significantly impact the ability of research students to utilise their research data. [Authors' Note: In the absence of a written assignment of the copyright in a student's work to the institution, which demonstrates clearly that the student understands what they are assigning, it is unlikely that the institution has a viable claim to that copyright.]

EPIC Most partner institutions own the IPRs of all material entered in to their systems, but have flexible conditions so that students can use their work as they wish. These issues are covered in the institutions' regulations. The regulations would be invoked if a student used work in a way, which, for example, brought the institution into disrepute.

EPIS In principle at least, the learner has a copyright in any materials produced by them and stored in the e-portfolio. In PebblePAD, all contributions made by others are traceable, so if others have input ideas to a learner's e-portfolio, this can be proved. The institution using ePet encourages the pilot cohort of about 40 MSc students to store their course work and materials relating to the final project in the ePet e-portfolio. Some of the students are in full time employment. Their employer can block any work or data being stored in learner's e-portfolio or being published, if they feel it is against their interests. This obviously limits the ability of learners to use such data.

FP This issue had not been considered yet.

LM If a learner were to create a significant work in their PDP reflections (e.g. design for faster-than-light vehicle, text of a novel), it was not seen that anyone else would have rights over it.

MW As far as students upload their own coursework, it was believed that the IP is owned either by the learner or by their educational institution, depending on the individual partner institution's policy on this issue. [Authors' Note: See the comment above for ELP]

PDL This question is not applicable yet.

8.2. Have any uncertainties or disputes arisen with regard to ownership of the data? What solutions have been proposed or adopted by the project?

EEL No.

ELP No.

EPIC No disputes have arisen so far. Proposed solution: Learners will need to be educated about their rights and responsibilities.

EPIS No.

FP Likely to come up as project goes live.

LM No.

MW As no research students are testing PETAL e-portfolio as part of this pilot project, no burning IPR issues have arisen.

PDL Not applicable.

9. Accessibility

9.1. Has the application/tool been developed to accommodate the requirements of individuals with special needs? How have accessibility issues been addressed?

EEL Selwyn Lloyd (Phosphorix) is addressing accessibility issues regarding the application. As was mentioned in 4.1., he is engaging with an accessibility standards expert from JISC circles, and plans to employ the expert to conduct an audit of the application.

ELP University of Bradford is very keen to ensure that all their learning technology is made accessible. However, PebblePAD could pose problems especially for people with physical impairments. This problem needs to be solved by the Pebble Learning Ltd.

EPIC ePet has been developed to accommodate such requirements. Accessibility issues are a formal part of the project.

EPIS The institution using ePet is aware of, and gearing up to implementing, SENDA. At least for now, the accessibility of ePet is the responsibility of its developers at the University of Newcastle. Regarding PebblePAD, University of Wolverhampton has students with special needs (including ones with a short attention span), and PebblePAD is envisaged to help them. However, there is more work to do in this area. One person is employed fulltime to make PebblePAD accessible.

FP OSPI has considered accessibility issues, but UCLAN had not re-tested their version of OSP 1.5. MyPortfolio by September 2005. One pilot user cohort at Burnley College will test it.

LM Selwyn Lloyd (Phosphorix) is addressing this as part of the development work. The project team is also monitoring the accessibility of any application. Interfaces have already been tested with the help of some individuals with special needs, and the project may engage a consultant to make a final assessment.

MW Accessibility issues are being explicitly addressed in the project. The project team is working with TechDis. At present, PETAL enables text entry into fields by using voice recognition software, and works for the users of TextHelp Read and White. It contains a link to TechDis Toolbar, through which it is possible for users to change the font and colour properties of the PETAL interface. It is planned to move the accessibility statement link to a more visible place on all pages. It is envisaged that the statement will include a link to information on how to customise font/size/colour and a link to TechDis tool download. It has also been suggested by some project partners that 'Customise settings', i.e. user preferences, function ought to be available on the Welcome page and that there ought to be a key to what different symbols mean on Enter data pages.

PDL There is an intention to follow latest accessibility guidelines.

9.2. Have any uncertainties or disputes arisen with regard to accessibility issues? What solutions have been proposed or adopted by the project?

EEL No.

ELP No.

EPIC No.

EPIS No.

FP One of the cohorts from Burnley College testing MyPortfolio has visual impairments, and will use the system with assistive software and JAWS. There may be problems in this area.

LM Not yet.

MW No.

PDL No.

10. Opt-in/Opt-out/Exclusion

10.1. Is the application/tool seen as optional or compulsory? (e.g. is it envisaged that all learners at an institutional, regional, national or international level will have to engage with the application/tool at some point, or is it designed for a specific sub-set of learners?)

- EEL** Tutors decide whether the use of the application is compulsory or not during the pilots with small groups of learners, including 50 from the area of health care studies (nursing), and 50 from multimedia studies. In the future, it will be optional in the region to support lifelong learners.
- ELP** At this stage, the use of PebblePAD is seen as optional at the University of Bradford. It will be up to individual schools and departments to choose whether they make any e-portfolio tool optional or compulsory as part of specific modules or across the board in the future.
- EPIC** There is a strong debate going on about the uptake of support for PDP processes within each institution. How this is being addressed within each institution differs across the region. Engagement in the PDP process will be compulsory for some learners. However, it is not self-evident that all institutions will use, or require the use of, electronic tools in those processes. It is envisaged that some institutions (and subject departments) will require all full-time students to develop an e-portfolio. For part-time students this may be optional. Much work would be required before such tools will be able to transfer learner data across the region or nationally.
- EPIS** At the moment, the use of the tool depends upon individual module requirements. There is no institutional compulsion to use the tool, although the institution has asserted that it is unwilling to fund any other PDP-type systems.
- FP** MyPortfolio is delivered to pilot cohorts as part of module in most cases. Learners' should be able to opt-out, but perhaps obligatory in practice.
- LM** The use of The Learning Matrix is optional.
- MW** During this pilot, the use of PETAL e-portfolio has been made an obligatory part of a module in some contexts, but an alternative means of engaging with the module is available.
- PDL** There is currently no application relevant to the PDP4Life project. The project partners each have a different approach to engaging learners with PDP processes and recording their evidence, so it is unlikely that the applications developed by the project will be compulsory in the foreseeable future. The outcomes of the project will be taken forward through the South West Lifelong Learning Networks. As is well known, the provision of PDP is not optional for HE institutions, although how they provide it might be.

10.2. What are the implications for a learner who does not wish to, or cannot, interact with the application/tool?

- EEL** The project director and manager will raise this issue with tutors before the tool is introduced to learners.
- ELP** Not applicable.
- EPIC** This question has not been specifically identified or addresses within the EPICS project. It is envisaged, however, that other tools will be made available to support students who cannot interact with the tool because of disability. Institutions may see as acceptable for learners simply to choose not to use the electronic tool. It has been

suggested that as an alternative, paper-based portfolios may be utilised as an alternative for e-portfolios.

- EPIS** Not known.
- FP** At UCLAN, paper based options will always be available.
- LM** No implications.
- MW** Alternative means of engaging with the relevant modules is available.
- PDL** Not applicable.

11. Other legal and related issues raised by the regional pilot projects

- What information should be provided to learners on institutional forms regarding the security and confidentiality of data about learners that are stored in an institutional database? (The Legal Study has produced an informal FAQ on this issue and brought it to the attention of regional pilot projects.)
- What approaches to the design of forms and types of appropriate wording ought to be used when asking students for necessary consents for their enrolment in the type of research involved in the regional pilot projects, and for informing them about how data concerning them will be, and will not be, used?
- With regard to 16 to 18 year-old users, the ability to censor certain websites is seen as a necessity, but this type of access control does not currently take place on HEIs' systems, as a matter of course. There is also the issue of how to deal with school age users, i.e. the under-16s. What are the relevant issues and how to address them? An FAQ on this would be helpful.
- It was thought by the project personnel of one project that the ethics of sharing and commenting on others' e-portfolio presentations would need serious consideration. For example, if a student were to write a reflection "I am feeling quite vulnerable, as this (course; studying at the university etc.) is all so new to me", and their tutor were to respond to this with the comment "Get a grip!" If the student felt that this was not an appropriate attitude on part of the tutor, but the tutor has marked that comment as private, i.e. not be shared with others - can the student still print the correspondence out and show it to a senior tutor or head of department?
- The question was raised whether staffing issues could be, and ought to be, included in the consortium agreement of any future projects, as some project partners were sharing project staff and there had been some disagreements about how many hours per week such staff were in fact working at each institution.
- It was suggested that the JISC Legal Study, or JISC at large, brought the legal guidance documents (FAQs) relating to the Lifelong Learner Record/e-portfolios to the attention of institutional data protection officers to increase their knowledge base.

Acronyms

ALT	Association for Learning Technology
ALT CMALT	ALT certified membership scheme
AUEE	Association of Universities in the East of England
CETIS	Centre for Educational Technology Interoperability Standards
DP	Data Protection
DPO	Data Protection Officer
ebXML	Electronic Business using eXtensible Markup Language
FAQ	Frequently Asked Questions
FDTL	Fund for the Development of Teaching and Learning
FE	Further Education
FEI	Further Education Institution
HE	Higher Education
HEI	Higher Education Institution
IEEE	Institute of Electrical and Electronics Engineers
IEEE-LOM	IEEE Learning Object Metadata
IEEE PAPI	IEEE Public and Private Information for Learners
IMS	IMS Global Learning Consortium
IMS-LIP	IMS Learner Information Profile
IP	Intellectual Property
IPRs	Intellectual Property Rights
JISC	Joint Information Systems Committee
MIS	Management Information Systems
MLE	Managed Learning Environment
NHS	National Health Service
OSPI	Open Source Portfolio Initiative
SOAP	Simple Object Access Protocol
SENDA	Special Educational Needs and Disability Act 2001
PDP	Personal Development Planning
TechDis	JISC-funded educational advisory service for accessibility and inclusion
UKLeaP	United Kingdom Learner Profile
VLE	Virtual Learning Environment
VPN	Virtual Private Network
wSDL	Web Service Definition Language
XCRI	eXchanging Course-Related Information
XML	eXtensible Markup Language