

PebblePad: PIOP Mini-Project Submission

Project name: **MABLE: Moving Assets Between Learner's Environments**

Start Date: 01 November 2008 - End Date: 31 March 2008

Introduction

Pebble Learning is an established PIOP partner and a recognised leader in e-portfolio interoperability. As part of the original project we helped develop the LEAP2A specification, working closely with colleagues to help establish its utility.

PebblePad is undoubtedly the most comprehensive and complex system of its type in the UK; it also has more active users than any other system in UK HE. The complexity and breadth of the system means that a proportionally greater amount of work is required to successfully implement this emergent specification. The extension project will provide the necessary resource to implement Leap2A across the wide range of learner-owned assets supported by PebblePad. In the original project we contributed new extensions to the Argotic Library; additional extensions will be developed; documented and published as part of this work.

We will continue working closely with the established partners; a necessity if the specification is to be developed into a viable alternative to IMS eP. Additionally we will support new partners through technical consultancy provided both in the form of project documentation and the provision of telephone and email support.

System Information

PebblePad is a Personal Learning System being used in 80+ institutions including colleges, universities and professional bodies; by approximately 400k learners, teachers and assessors; for PDP, CPD and L&T

The system has been designed with the learner at the centre of the system. It provides scaffolding, in the form of asset *wizards*, to help users create records of learning, achievement and aspiration: it has a reflective structure underpinning all of its core elements.

PebblePad supports personal learning whilst providing a suite of tools to support learning in institutional contexts e.g. assessment, appraisal and accreditation. PebblePad assets can be shared with trusted individuals, published to group pages or made public to the world-wide web. Over time users create, store and review multiple assets' which can be aggregated into powerful presentational portfolios, called WebFolios.

Increasingly users transfer their assets into PebblePad; between instantiations of PebblePad; and between PebblePad and other tools or systems. Providing an easy means of transporting learner-owned assets has been a core principle throughout the development of the system.

Interoperability

PebblePad's interoperability was first demonstrated in October 2005 when complex assets were imported and exported between instantiations of PebblePad and simple assets were transferred between PebblePad and ePET at the EIfEL Conference. The spec used at that time was IMS LIP which is still mapped internally within the system.

Latterly IMS eP was implemented (2006) and PebblePad is widely held to have the most comprehensive implementation of IMS eP worldwide. Recent work has seen the development team working as an originating partner on PIOP as well as the contemporaneous development of an HR-XML web-service as part of the JISC-funded PortisHEad project.

Support for Shibboleth; LDAP; IMS Enterprise and various forms of single sign-on are indicative of the wider interoperability of the system.

Intellectual Property Rights

PebblePad is wholly owned and developed by Pebble Learning from whom this submission originates. Outputs arising from work funded by JISC will be shared with the wider community. Specifically Atom extensions will be freely published to the Argotic Library.

ePortfolio Items

PebblePad contains 7 *simple* asset types:

- activity - typically a planned learning event
- achievement - something a user has recorded as a particular attainment
- ability - a physical, emotional or intellectual skill, capability or competence
- action plan – a record of a planned activity or sequence of activity
- experience – a general record of a past event
- meeting – a record of a planned activity involving others
- thought – recorded as either a 'journal' entry or a 'structured' reflection.

Additionally the system contains 3 *complex* asset types, referred to in LEAP2A as selections:

- blog – a thematic, chronologically ordered selection of other assets
- webfolio – a presentational portfolio typically containing more than one page
- CVs – a complex selection of user-owned assets and data about the user

LEAP2A will be fully implemented for all assets with the exception of CVs which are not fully within the scope of the spec.

This project will also implement LEAP2A for a new *complex* asset type 'CPD Record' which will be used extensively in the Learning and Skills Sector.

Scenario of Practice

The range of contexts described above require PebblePad to be interoperable in diverse contexts e.g.

- learners transferring assets from FE to HE;
- teachers transferring assets from a college CPD tool to REfLECT (the bespoke version of PebblePad used by the Institute for Learning);
- graduates transferring assets to a professional body system.

As an extension of the PIOP project we expect to work closely with our original partners to fully test the utility of LEAP2A in support of two particular scenarios:

1. A graduating student leaving an ePET institution for further studies at an institution using PebblePad. The ePET system provides, by design, strong support for competency development; PebblePad does not. Managing the transfer of related competences and the hierarchical relationships between them and their evidence will provide an important test for the real-life implementation of the specification.

2. A teacher working in the Learning and Skills Sector in Nottinghamshire may be using Passportfolio and REfLECT contemporaneously. The ability to move assets from one system to the other and back will provide a valuable test of LEAP2A's ability to minimise actual data loss and the loss of 'meaning' as a result of structural or relationship degradation.

Roles and Responsibilities

Shane Sutherland will act as Project Manager and will ensure adherence to the timeframe; stated outputs and programme commitments.

Primary development work will be carried out by **Andrew Everson**; Senior Technical Developer. Andrew has worked on a number of JISC projects including ePISTLE; LIPID; and PIOP.

Andrew will provide support and technical consultancy to new partners joining the PIOP project.

Additional development work will be carried out by **David Pearce**; Technical Developer.

David has worked on the PortisHEad project and has recently completed the HR-XML enabled 'FormFill' toolkit.

David will work with partners to provide test environments and to conduct and document import and export routines.

Joanne Edgecombe is a certified Testing Technician. Joanne will support Andrew and David's work by developing and conducting unit tests.

The primary contact is Andrew Everson. Project communication will be directed through piop@pebblepad.co.uk

Outline Budget

Item	Cost
Project Management / Programme Activity	██████
Consultancy / Technical Support	██████
Development / Leap2A Implementation	██████
User Interface Development	██████
Import and Export development with partner projects	██████
Travel Costs / Dissemination	██████
Total ex. VAT	██████
Total incl. VAT	£17,161
PebblePad Contribution	£7,161
Funding Requested	£10,000

Output Summary

- Implement LEAP2A across all current PebblePad asset types (11)
- Contribute additional extensions to the Argotic Library
- Provide support and consultancy to new partners
- Conduct import and export tests on competency-based transfers
- Conduct iterative transfers between systems to avoid data loss/degradation

Declaration

In submitting this proposal we agree to honour the requirements of the commissioning notice, specifically the deliverables outlined in para 19.

Whilst PebblePad is a commercial system we will freely disclose any information about the system's architecture and methods where it will support the work of partners engaged in this project.

Interoperability information is already available to partners and interested others from the PebblePad website at: <http://www.pebblelearning.co.uk/interoperability.asp>

Shane Sutherland

Development Director
Pebble Learning
eInnovation Centre
University of Wolverhampton
Telford Campus
TF2 9NT

01952 288300
shane@pebblelearning.co.uk