About PebblePad

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Abstract

ePortfolios are purposeful collections of digital items presented to distributed audiences to present a view of the portfolio author commensurate with the perceived, or articulated, expectation of that audience. Increased eportfolio activity in the UK was largely driven by Personal Development Planning and is, more recently, being driven within and beyond Higher Education by Continuing Professional Development and Professional (Re)Accreditation.

Developing an understanding of the needs of eportfolio users, by reference to prior learning technology experience and direct user involvement, was an essential aspect of the design process which led to the creation and subsequent implementation of PebblePad which is now the most widely used eportfolio/personal learning system in UK HE.

The design, development and implementation stages PebblePad's evolution are discussed herein along with an exploration of a single system is able to be used by teachers and students alike for myriad purposes. It is the versatility of the system that led to its selection by the JISC-funded 'Flourish' project focussing upon staff use of an eportfolio to support their personal e-administration.

Keywords

ePortfolio; PDP; CPD; Learning Technology; eAdministration

Introduction

PebblePad is a web-based system which allows users to make and store records about their learning, achievements and goals. Simple scaffolding helps users create new records for a variety of purposes or they can choose to upload existing files including rich multimedia. Records or evidence is collected over time; it can then be used within digital portfolios that can be created for a variety of purposes. Users choose to share their work with others who can be invited to feedback, comment or collaborate on it.

Digital, or 'e' portfolios, are:

"...a purposeful aggregation of digital items – ideas, evidence, reflections, feedback etc., which 'presents' a selected audience with evidence of a person's learning and/or ability.' (Sutherland and Powell, 2007)

PebblePad is built on a sophisticated architecture which links a unique visual interface with a SQL database and other systems using .Net Web Services. Authentication is facilitated through common access protocols including LDAP, Shibboleth and Single Sign On. The system can be integrated into WebCT, BlackBoard, Moodle and other learning or student management systems. Extensive use of web-services means that PebblePad is able to maximise the use of data in institutional systems; link to social software and publish creations to application or filtering services. In this respect PebblePad is arguably located between institutional systems and social learning systems and is described as a personal learning space or system (Sutherland, 2005). Although PebblePad is technically very complex its ease of use was a key priority for the developers, teachers and students who sat down to design it. The result is a highly visual and engaging interface developed in Flash – and one which can be significantly customised by the user to suit their individual needs (Sutherland and Lavender, 2007).

When developing the system, initially for use by students in Higher Education to address the QAA requirements (QAA, 2001) which flowed from the Dearing Report (1997), we envisaged some possible barriers and designed in simple solutions which have helped make PebblePad a very powerful but easy to use system. The author, and Development Director of PebblePad, previously worked as a teacher educator, staff developer and elearning mentor; his experience of supporting others' use of technology provided a valuable insight into user needs and requirements. However, a single viewpoint can never be enough for a system as complex as PebblePad so the development team have worked closely with teachers, students, elearning champions, students union and other stakeholders throughout the design and build phase (Dalziel et al, 2006). Focussing on design rather than technology has resulted in the rapid uptake of the system by students and, importantly for the Flourish project, by teachers and other professionals (Halstead and Sutherland, 2006; Sutherland, 2007). The issues and solutions, arising from direct experience and from stakeholder discussions, and which provided the design platform follow:

Many users are still terrified of technology...

...make the system easy on the eye, so it doesn't look complex; and easy on the mind with simple easy to follow work flows

Some users will need support in writing meaningful records for their eportfolio... ...design simple 'wizard'-like forms to provide some scaffolding for common tasks like action planning and recording meetings

More learning takes place outside the institution than inside... ...make the system course, qualification and context independent, allow users to record anything they decide is meaningful and allow the system to be used for multiple purposes in parallel

Different audiences will expect different kinds of portfolios... ...portfolios are only evidenced based stories so design a system that supports any kind of story writing whether formal or informal, structured or free form

Users will only use an eportfolio when they have to... ...not if it's interesting, social, easy to use and personal...

The system, then, is much more than an eportfolio: it is a personal learning system (Sutherland, 2005) being used in learning contexts as diverse as schools, colleges, universities and professional bodies; by learners, teachers and assessors; for Personal Development Planning (PDP), Learning and Teaching (L&T) and Continuing Professional Development (CPD).

The design places the user at the centre of the system; no matter what their level or role in an organisation. It moves away from learning systems being institution-centric to being learner- or learning-centric: with experience being an important starting point for recording, reflecting and reviewing. It provides scaffolding to help users create records of learning, achievement and aspiration and has a reflective structure underpinning all of its core elements; reflection being a central tenet of many professional courses and of professional practice.

Over time users can create, store and review multiple assets which can be aggregated into powerful presentational portfolios, called WebFolios, to provide rich stories of learning or achievement for myriad purposes including:

• Assessment (on courses like the PGC)

• Advancement (internal or external promotion)

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- Appraisal (self peer 360°)
- Accreditation (professional bodies e.g. CILIP, ALT and HEA)
- Application (projects, funding, awards)
- Articulation (informative departmental profiles / research profiles)

Using PebblePad for Continuing Professional Development: The Flourish Project

An increasing number of professional bodies now accept eportfolios for (re)accreditation; to evidence professional standards and to demonstrate ongoing and active professional development. Some professional bodies, particularly those in the health-care sector are making accreditation by electronic means and/or eportfolio mandatory. For many of the same reasons that PebblePad has proven to be useful for student-focussed PDP it seemed to be the most suitable tool for supporting and enhancing CPD. In particular, PebblePad's ease of use; the reflective scaffolding; the ability to collaborate with others and, most importantly, the system's inherent privacy and confidentiality led to its selection for this project.

Because of the system's flexibility it will be used for a wide range of purposes including encouraging staff to record and reflect upon conference attendance; workshops; teaching; research and other development opportunities. It is anticipated that a wealth of personal records of learning and development will be generated over time which can be 'aggregated' into electronic portfolios for some of the broader purposes outlined above. Working with the project team it will be possible to determine any additional tools or features required to support CPD that differ from other uses of PebblePad. Importantly close collaboration with 'staff' as end users will help identify specific support needs or (re)assurances that differ from student users. We also hope to establish the affordances of submitting electronic portfolios for professional purposes and to work with member bodies to overcome any handling difficulties both technical and cultural.

The privacy and security of the system means that important personal records can be created and archived by staff in PebblePad that they wouldn't contemplate creating in a VLE or other 'institutional' system. Whilst the system is technically 'secure' it is likely that some users may limit their use of the system because of inherent suspicion of electronic tools.

The development team began development of a new tool to coincide with the start of the Flourish project. The Form Builder tool allows the project team to create bespoke forms which can be accessed directly through PebblePad or from links in the VLE or on staff development and corporate websites. Proforma can be designed to replicate existing paper forms and, once completed, can be saved directly to PebblePad for using like all other assets. It is hoped that those forms routinely used for CPD, HR and by professional bodies will have proforma analogues which benefit from integration in the personal learning space.

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