Creation of a learning landscape: weblogging and social networking in the context of e-portfolios

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This paper is under development, so please send in all comments

Abstract

The e-portfolio is for many a recognised tool employed for a multitude of purposes: employment; assessment; life-long learning; professional development; accreditation of prior learning. The number of institutions adopting some type of e-portfolio system has risen dramatically over the past two years. The e-portfolio is altering learning pedagogy and for some creating a truly learner-centric knowledge environment. Countless institutions are pushing ahead setting up systems to act as e-portfolios, others have grand visions; every citizen in the EU will have an e-portfolio by 2010.

Still questions remain: how can we promote student engagement in the process? In the pursuit of assessment data adopted by a positivist model are we missing an opportunity to support deep learning? This short report will explore one idea which could help address the problem of learner engagement creating a scenario where students *want* to use the system therefore be at the centre of the whole e-portfolio process and in turn, through engagement, benefit from the deep learning potential.

Keywords: weblog, social networking, e-portfolio, engagement, learner-centric, reflection

Introduction

Suggestion
This report will attempt to outline that in order to capture learner and tutor enthusiasm the system should not be an '*e-portfolio*' but rather a complete online landscape. It will suggest the e-portfolio should follow the philosophy behind social networking such as LiveJournal[1] and Orkut[2]. If learners feel part of and engage with an online community

[1] http://www.livejournal.com

connected to other learners, course leaders, tutors, resources, digital artefacts, social peers etc. inclination may exist to use the service. Learning is not a solitary pursuit; the value of connection and interaction greatly enhances both the experience and outcomes.

Acknowledgement
We feel it is possible for standards, controls and criteria to be built into an e-portfolio system suiting a particular setting however if you start the e-portfolio process with these 'barriers' in place this could hinder user engagement due to a constrained system. We would like to explore an alternative scenario where the e-portfolio follows a constructivist paradigm allowing the user to completely control and manage their e-portfolio.

Not an e-portfolio?

Already within some sectors it seems the term e-portfolio has become synonymous with another learning hurdle for students and staff to overcome. Many institutions view the e-portfolio as a replacement for traditional high stake assessment, the object of the exercise being coverage of all standards and criteria. Looking at a Penn State University study[3] we can see forty-four percent of students say they will not use the e-portfolio once they have finished the course to which the e-portfolio related and the rest say they 'were likely to do so'. This is a problem: if the e-portfolio is a course requirement and the motivation for use is because it is mandatory, how do you maintain learner motivation once the course has expired?

Institutions, where the emphasis is enhanced online resumes - students put their best examples into their portfolio to impress potential employers - really miss out on major benefits of the e-portfolio such as, 'power in the process' and reflective thought leading to deep learning. You do obtain tangible products throughout the '*process*' examples include online resumes, however intangible products are arguably more important in a system designed to facilitate learning.

Two nodes
Sometimes it feels as though the discussion concerns two different nodes. The 'e-portfolio' used for final assessment / job seeking where the emphasis is on the product(s) and then the '*e-portfolio*' used for reflection, deep learning, knowledge growth and social interaction where the emphasis lies on the process. Can the two actually be the same thing or are we talking about two separate systems that interconnect?

One argument could be as follows. E-portfolios following the social networking model will still handle: assessment; job searching; personal development and critical reflection in a way which places learners at the centre of the process. It is debatable whether an e-portfolio developed with strict parameters of assessment or job seeking could accommodate other uses such as true reflection and social interaction.

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[2] http://www.orkut.com
[3] http://eportfolio.psu.edu/

Jumping through hoops
Some in the field of e-portfolio research are concerned that the e-portfolio is heading in the direction of high stakes assessment only. In effect the tool is an alternative to traditional testing. Commentators Helen Barrett[4] and Jeremy Hiebert[5] express such concerns and feel we, the education community, could miss an opportunity to develop a powerful tool supporting deep learning. In effect learners are going through the motions, doing what they have to do, and completing something because it is a course requirement. The e-portfolio is used as a skills checklist. Once the course is over, discontinued use; what a waste.

Engagement

Weblogging
A weblog is a frequently updated website, organised in a diary form with individual chronologically ordered entries or posts. Due to the high quality of the underlying technology, this has been incredibly popular, and many Internet users are familiar with some form of weblogging. Webloggers currently include members of government (both US election candidates have weblogs for their 2004 campaigns), businessmen such as Bill Gates, and entire corporations like Google. The draft paper, 'ePortfolios and weblogs: one vision for ePortfolio development[6]' discusses incorporating weblogs, XML and e-portfolios and outlines the potential of this combination.

Social Networking
Social networking is a Web technology which allows people to discover new business or personal contacts by traversing relationship links between people.

Creating a sense of community
Using the social networking model learners could create their own learning or social communities which may greatly improve engagement – learners may use this for everyday activities, keeping in touch with each other, finding the latest resources and sharing their own experiences. Strength of community belonging and the ability to share problems, experiences, resources etc with other learners could harbour a sense of confidence. New learners need not feel they are alone and slowly this process will build up a trusted system, a network of knowledge transfer, benefiting all.

A brief synopsis of existing technology and terms

Blogger and Movable Type
Weblogs existed before Blogger[7] was created, but each HTML file had to be updated by hand. Blogger simplifies this by storing a database of weblog entries on its own site, and then logging into the user's web server and automatically changing the HTML whenever one of those entries is added, deleted or changed. This was ground-breaking at the time,

[4] Helen Barrett weblog: http://electronicportfolios.org/blog/
[5] Jeremy Hiebert http://headspacej.tripod.com/blog.html
[6] http://www.eradc.org/papers/ePortfolio_Weblog.pdf
[7] http://www.blogger.com

because it allowed average users with no technical ability to easily maintain a regularly updated web presence. However, the original Blogger software had no support for comments or feedback.

Movable Type[8] changed all this by providing features such as commenting straight "out of the box". It also brought with it a new technology called trackbacks: when a weblog links to an entry on another weblog, an automatic link is created in the other direction. This allows users to follow the conversation on other sites – a function that has proved so popular that the latest version of Blogger has it built in.

Friendster and Orkut

When the dotcom bubble burst in around 2001, a site called Six Degrees was one of the first to go. Its premise was entirely new: users added some details about themselves and then established links between themselves and their family members, business associates, acquaintances and friends. They could then traverse these links to find new contacts.

More recently, two sites have risen to replace Six Degrees. The first is Friendster[9], an independent site that made waves in 2003 by attracting $15 million in funding. The second is Orkut[10], a side project by a Google programmer which immediate assured itself fame and desirability among the weblogging community by only allowing members to sign up if they had been invited by an existing user.

Neither of these sites makes any distinction between link types – you either know a user or you don't and anyone can navigate through all of each individual user's links to other people. The information a user supplies about his or herself is an e-portfolio in everything but name; it includes skills, background and CV information in addition to more personal items.

Friend Of A Friend

Friend Of A Friend[11] (FOAF) is an XML standard that allows website owners to define who they are as well as their relationships with other website owners – effectively creating a wide area social network. Unlike traditional social networking software, FOAF does not require relationships to be within a single system; resources can be associated with each relationship within the XML, so while one relationship link might lead to a weblog, another might lead to a photo album or a portfolio page.

Additionally, this standard gains the strength of standardised XML: it can be very easily written and read by a wide variety of clients, and the programming overhead in including FOAF capabilities in software is very small. However, the benefits can be large; following the links in FOAF files and merging the data can result in a large, continually updated directory of users.

LiveJournal

[8] http://www.movabletype.org
[9] http:// www.friendster.com
[10] http:// www.orkut.com
[11] http://www.foaf-project.org/

LiveJournal[12] bridges the gap between weblog systems and social networking. The term *journal* is used instead of weblog to emphasise the personal nature, and users typically write about their lives and feelings as opposed to links and resources.

Importantly, it allows users to create lists of "friends" whose journal entries they would like to read on a regular basis and further categorise these into small groups. They can then view these entries on a single page in chronological order. Additionally, it allows users to create community journals which a number of users can post to; these can be added as a "friend" as if they were a single user. Any user can leave comments on any other user's journal entries.

Each user has their own portfolio page which contains a biography, possibly a photograph, their interests and then links to each one of their friends. Users can traverse those links as they would on a traditional social networking site; they can also click on each interest to see a complete list of other users and communities interested in them.

These features take the traditionally isolated view of the weblog and transform them into a powerful communications mechanism, while retaining the reflective aspects of the medium. As a result, the service now has over three million members. The underlying server software is both free and open source; given the computing resources, anyone can start their own LiveJournal site, and currently around a dozen are in operation.

Learning objects
A learning object is any entity (for example images, videos and text documents) that can be used to facilitate learning. Each object is tagged with metadata, enabling categorisation and enhancing the ability for searching. The learning object is often granular and reusable with one primary learning objective.

Digital repository
A digital repository refers to the personal, private area belonging to a learner where they upload and manage their digital artefacts. Typical repository functionality enables users to access, upload, search and manage their learning objects and artefacts. In their initial uploaded state all items in the repository are private to the student; the learner can then assign access privileges to any object, granting viewing to groups, individuals or the entire web community.

Digital Artefacts
A digital artefact is any electronic media, for example; a Word document, a video clip, a digital photograph. Production of these artefacts involves digitizing materials such as scanning an illustration. A student wanting to demonstrate debating skills could insert a video clip, showing their participation in a debate with a group of peers, into their e-portfolio. This artefact could be shown to tutors or employers to demonstrate the student's ability to debate.

[12] http:// www.livejournal.com

Incorporating into e-portfolios

It can be argued e-portfolios are more valuable when used continuously throughout a course as an integral part of the learning experience, as opposed to a reporting mechanism used after the main body of learning is completed. To affect this, there are three important aspects a system would need to encompass:

- *Reflection* – the student can map out his or her thoughts on a course, a piece of work, or more general experiences.
- *Communication* – the student can communicate his or her reflections to other students, staff, tutors and lecturers.
- *Sharing* – the student can give selected other users access to their digital objects.

Learning is not as effective in isolation; there is a great deal of discussion involved in traditional courses, and this would need to be reflected in any electronic learning aid. The importance of linking together people, ideas and resources cannot be overestimated.

Weblogs are a great reflective tool. A student can write something about their course, perhaps categorise it in terms of subject or the piece of work concerned, and that reflection can be accessed and searched by both date and context.

However, weblog functionality comes into its own when mixed with social networking, as with LiveJournal: the student can then mark certain reflections as being for public consumption, or viewable by certain groups of other users. They can then make comments and perhaps add their thoughts in their own journals, with a link between the two established via a trackback. Students then have use of not just their own reflections, but those of their peers, and potentially teaching staff too: a much wider realm of thought, which might produce conclusions a student may not have arrived at on their own.

A student could then, within a weblog post or portfolio page, provide a link to any object in their digital repository. Perhaps a trackback link could be made from that object to all the posts and pages mentioning it. This would allow a student or tutor to instantly see, when looking at a piece of work, the personal reflections and inter-student discussions relating to it.

Furthermore, it can also affect learning in the "real world"; through a social networking enabled system, a student could find and communicate with a number of like-minded individuals, who might then organise study or social groups. If an establishment's system was linked to other systems in other parts of the country (or the world), groups of students doing similar courses could all compare notes and learn from each other.

Deep learning through engagement

Deep learning: "…learning that promotes the development of conditionalized knowledge and metacognition through communities of inquiry, this can further enhance with the advent of 'knowledge rooms', areas of cyberspace that allow students to collaborate" [13]

The use of e-portfolios to promote deep learning is really interesting - deep learning reflects a greater, more complex understanding of a subject. Some argue "the experience of deep learning better equips the learner to excel in future learning opportunities because the learner can discern both familiar patterns and critical variations in entirely new surface conditions. Thus, learning at both the individual and collective level involves coming to see familiar phenomena in new ways, 'thereby widening the world we experience'"[14]

The combination of e-portfolios, social networks and weblogs may have immense benefits for the learner. These tools and the ethos behind them enhance the prospect for deep learning. Creation of a *learning landscape* where learners engage in the whole process both academically and socially should increase the opportunity to build one's learning instead of just being the recipients of information. This ability to engage with other learners, pull in information from various resource sources, share thoughts and feelings, form communities of learning or social activity, interact with peers and tutors within one or more institutions, would create a milieu promoting user engagement and we feel, in turn, a level of deeper learning.

Power in the process
Many commentators highlight the main benefit of the e-portfolio arising from the process rather than the product. The *learning landscape* created by fusing e-portfolios, weblogs and social networks will be further enhance this process.

During the process of e-portfolio construction and reflection the information one has sinks in to a deeper level meaning the learner is not relying on memory but rather deep routed knowledge – if this process of construction is more compelling for the learner through their desire to engage due to functionality like social networking the phrase '*power in the process*' takes on even more meaning.

Conclusion

The thinking behind this short draft is driven by a concern that if e-portfolio development continues down the road it is currently travelling we will end up with a tool - still useful - which learners and teachers can use to manage learners materials, essentially a content management system with the ability to display artefacts for a range of purposes.

This would be a shame as the potential could be far greater. Incorporating weblogs, social networking and the e-portfolio to create a new *learning landscape* may fashion a system

[13] http://teachopolis.org/library/deep_learning.htm
[14] http://www.unca.edu/et/br110698.html

allowing the management of material and creation of public interfaces but also an opportunity for reflection, engagement and the formation of communities of learning and socialising providing a means to promote deep learning.

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Notes:
ELGG community concept
This is an open-source project available September 2004.
Completely customisable – built in weblog – built in repository – create your own communities – manage your own learning – connect to existing systems eg. Webct – import and export via an XML schema – adheres to disability standards where possible – double as a learning tool and a life tool.