

The Road to the Personal Learning Environment?

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Abstract

This short paper attempts to define the concept of a Personal Learning Environment and how it relates to existing online learning spaces such as Virtual Learning Environments and e-Portfolios. We will consider some of the features of a Personal Learning Environment and what a PLE may look like.

Introduction

There is an inherent conflict in formal education: the number of students, each with their own individual needs, always greatly exceeds the numbers of teachers available to teach them. In order that the system is efficient, the teacher is constrained in the pedagogical options open to them.

With the greater use of computers in education, we see the same compromise in the delivery of online learning. Most higher and further education institutions in the United Kingdom now manage the delivery of online course content and provision of student communication facilities through some kind of Virtual Learning Environment (VLE) [1]. But VLEs are fundamentally a conservative technology; they are a solution to a set of organisational problems: managing groups, providing tools and delivering content. When learners are studying full time and primarily face to face, VLEs are sufficient as their main role is in providing support, but do they serve the needs of the learner as well as they serve the needs of the institution? or are the students needs only secondary.

A changing landscape

The economic burden of undertaking study at college or university is significant, and many students combine their study with part-time work. The introduction of tuition fees has exacerbated this situation and it is now unusual for a student not to have other significant commitments besides their studies, even when nominally studying full-time. The current political emphasis on lifelong learning has also enabled more mature learners to enter further and higher education. These learners also have other commitments (work and family) and may wish to learn part-time or combine study with their career through work based learning. Further and Higher Education courses can no longer be as reliant on full-time face to face study, and technology is ideally suited to provide the flexibility that modern learners demand. Can it also provide an engaging environment that facilitates learning?

New Opportunities from Web 2.0

After a period of relative stability, the technologies underlying the world wide web have undergone a flurry of innovation through the emergence of a number of practices collectively labelled web2.0 [2]. Tools and sites such as flickr [3], del.icio.us [4] and Google Maps [5] typify a more interactive web where the emphasis is on collaboration, individualization and decentralisation, and on sharing information and resources through the adoption of a Service Oriented Approach. Such an approach allows different applications to use and share data and is typified by syndication and 'mashups' [6] where, for instance, the location of members of a group are easily visualised on a google map [7] This new web has also been described as 'the read/write web', where creating content (through writing a blog or contributing to a wiki) is just as easy as consuming it, approaching the original vision of the web's founder Tim Berners-Lee. Web 2.0 technologies are potentially disruptive [8], in that they have the potential to fundamentally change the way in which we interact with the web, displacing accepted practice with a new paradigm.

Could the technologies and practices of Web2.0 be harnessed to create tools and systems which are more suited to learning and the needs of learners.

A Personal Learning Environment

In a Personal Learning Environment, the learner would utilise a single set of tools, customised to their needs and preferences inside a single learning environment. The tools would allow the learner to:

- **Learn with other people:** managing their relationships with tutors, and peers, as well as forming links between contacts who are not part of their formal learning network. For work based learners, and continuing learners particularly, the learning network extends beyond the immediate class group and encompasses past and current colleagues who can still contribute to the learning process but who are not associated with any formal course grouping.
- **Control their learning resources:** enabling them to structure, share and annotate the resources they have been given along with those they have found or created themselves, or been given by their peers. In this way they create their own view of their learning, rather than making do with the one imposed by their tutor. The learning extends beyond the curriculum.
- **Manage the activities they participate in:** providing them with the opportunity to set up and join activities such as study groups, bringing together a specific group of people, together with the appropriate resources and tools (e.g. blog and whiteboard) for a specific task.
- **Integrate their learning:** allowing them the opportunity to combine learning from a number of sources (for instance if they are studying at different institutions). integration, through an online portfolio, provides a record of learning that extends beyond a single course or qualification.
- **Contribute to their learning:** creating content and sharing it with their peers, thus demonstrating the extent of their learning and providing a focus for feedback. Tools such as blogs and wikis are ideally suited to simple sharing of content and can be used reflectively, providing a personal record of the learning process.

The key concept of the PLE is that the use of a Service Oriented Approach allows the individual to choose the suite of tools that they want to work with (their Personal learning Toolkit), and the PLE is the glue that brings the individual tools together and allows them to interoperate.

What might a Personal Learning Environment look like.

There are many ways to implement a Personal Learning Environment. It could be implemented as a standalone desktop client, supported by a set of web services. The client may have a plugin architecture, allowing new tools and service interfaces to be developed. Alternatively it could be implemented as a set of web browser extensions or a Portal, for those students who do not own their own computer or who work across a number of computers. Ultimately, the purpose of a PLE is to provide a single locus for learning, where all elements of the learning process can be integrated, and to provide a set of tools which clearly support the actual learning process.

References

1. Managed Learning Environment Activity in Further and Higher Education in the UK, A study by JISC/UCISA. <http://www.elearning.ac.uk/mle/MLElandscapestudy/mle-study-final-report.pdf> (accessed 11 April 2006).
2. O'Reilly, T., (2005) What is Web 2.0? <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html> (accessed 13 April 2006)
3. flickr: <http://www.flickr.com/> (accessed 13 April 2006)
4. del.icio.us: <http://del.icio.us/> (accessed 13 April 2006)
5. google maps: <http://maps.google.com/> (accessed 13 April 2006)
6. [http://en.wikipedia.org/wiki/Mashup_\(web_application_hybrid\)](http://en.wikipedia.org/wiki/Mashup_(web_application_hybrid)) (accessed 26 May 2006)
7. frappr: <http://www.frappr.com/> (accessed 29 May 2006)
8. Christensen, C. M., (1997) The Innovator's Dilemma, Harvard Business School Press.