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SOCIAL:LEARN – WIDENING PARTICIPATION AND SUSTAINABILITY OF HIGHER EDUCATION

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Abstract

What would a new university look like if we started with a blank sheet of paper, capitalising on the very best of what we know about good pedagogy coupled with harnessing the potential of new technologies? The paper will consider the challenges Higher Education faces in the light of new technologies and in particular the potential of Web 2.0 technologies as a means to transform education. It will describe a project, Social:Learn[1], which is attempting to develop a sustainable educational framework to harnessing the best in new technologies in an educational context; to create a new, dynamic and engaging learning environment for tomorrow's students.

Introduction

The advent of the Internet marked a watershed in the impact of technologies on education – enabling easier exchange of resources and communication. As a consequence the Internet is now a core feature of educational provision, from institutional marketing web pages, through email as the standard means of communication to implementation of institutional Virtual Learning Environments (Weller, 2007). Many argue that we are on the cusp of a similar revolution in terms of the impact of so called 'web 2.0' technologies and suggest that the new possibilities of these social networking tools are resulting in a fundamental shift in the way we work and learn (Alexander, 2006; Downes, 2006; O'Hear, 2006). Indeed recent research on students' actual use of technologies provides some empirical evidence to support this – suggesting that students approaches to learning (the way they learn) and their attitudes and expectations are changing (ECAR, 2007; Kennedy, 2006; Conole et al., 2008).

Therefore, Higher Education institutions face a challenge and opportunity presently, which can be summarised as 'how to respond to the new social, web 2.0 technologies and approaches?' These seem to have potential within the educational arena, for example as a means of creating communities, generating content, discovering resources, learning collaboratively, and utilizing the power of the network. However, many of the values and approaches in the web 2.0 world do not sit easily within a higher education context. Indeed it is not just a changing external technological environment that is challenging Higher Education; there is an increasing realisation that education can no longer be seen in isolation; a changing societal context, the impact of globalisation versus localisation, the changing funding streams and business models, changing demographics, as well as the increasing impact of new technologies are complex and fast moving (see for example Andrew and Haythornthwaite, 2007; Conole and Oliver, 2007).

At the UK Open University (OU) a project termed 'social:learn' has been established which seeks to address this question and the related issues for the OU itself and for higher education in general. We believe that despite the exponential growth in web 2.0 applications and the use of social networking tools, there is a gap, i.e. that there is little in the way of large-scale application of social networking to learning. The Social:Learn project is a proposal to explore how web 2.0 technologies can be harnessed for learning. Social:Learn expresses the University's aspiration to develop a new web-based educational offering with the potential to achieve significant business growth globally in ways which are consistent with OU values, which is responsive to future conditions, and which is cost-effective and scaleable.

The paper will critique the apparent dichotomy between the philosophical values inherent in Web 2.0 against current practices and approaches in Higher Education. It will outline an ambitious project at the Open University, which aims to harness and apply the best in web 2.0 to an educational context. It will describe the approach we are adopting, work to date and planned activities. The conference is timely as it will provide us with an opportunity to demonstrate progress to date and to discuss with delegates the implications of adopting such an approach and the potential of a wider expansion of a more "open" cross-sector web2.0 driven approach to education. A very detailed set of papers outlined the background to the project and the context within which it occurs, outline of work to date and planned activities has been produced (Walton, et al., 2007). Of particular note is the initial work done on the conceptual design underpinning

Social:learn, including the development of a range of user scenarios and use cases for the system, as well as some initial small scale prototypes demonstrating some of the ideas of the project within existing social networking subsystems. Details for the technical architecture and the first set of applications are also provided in the document. Finally a key aspect of this work is the development of a sustainable business model to support these activities. Tibbs has taken the lead on this; detailed appendix of progress to date has been produced.

Learning in social networks

How learning occurs in web 2.0 environments and in traditional higher education settings is, if not in directly opposition, at least in marked contrast (Weller and Dalziel, 2007). Perhaps most significant is the belief in education that there is a right way to do things, that essentially the educator holds the knowledge about how the students should learn and provides the pathway. In web 2.0 diversity and personalisation are championed. However, can this miscellaneous approach apply to education? There has been a shift towards more constructivist approaches in education recently which acknowledge the role of the individual's experience in the learning process, but the key function of education remains to overcome Meno's paradox, which states 'how can I inquire about something which I don't know anything about?' (e.g. Laurillard 2001). The issue for many in education now is how do we successfully combine techniques that are undoubtedly useful, for example Giles et al. (2006) found that teacher-centred approaches produced better results for less able students than student-centred ones.

Much of the focus in social networks is on dialogue and communication, which often underplays the role of content. In order to facilitate effective learning it is essential to ensure that learners have access to good content. The proposition sometimes advanced that content is no longer important in the sense that it is ubiquitous and can always be found fails to recognise that there is available large amounts of poor content and that learners need support in identifying good content and finding coherent ways of using it. At the same time, it is also clear that making content available is not by itself sufficient to prompt the scale of usage necessary for achieving major income generating business models. While the open educational resource (OER) movement has had success, it has not led to the dramatic changes in higher educational practice envisaged, or hoped for (Marguiles, 2005; Johnstone, 2005; Downs, 2007; Hylén, 2006). This may be because the content exists in isolation, without the pedagogic framework around it. Providing pedagogical driven scaffolds and narratives for learners to support new forms of learning is essential (Conole, et al., submitted) and is one of the key areas of focus for social:learn.

However a close inspection of the best in pedagogy (See Dyke et al., 2007 for a recent review of learning theories and their relationship to technology in education) against key web 2.0 characteristics suggests that there are great potential synergies. There has been a general trend in education over the last decade or so towards more constructivist and social situated approaches to learning, emphasising learner control and foregrounding the importance of the dialogic dimensions of learning; these educational principles are surprisingly closely aligned to the patterns of behaviour of use if web 2.0 technologies which have emerged in recent years. Below provides a summary of the web 2.0 principles against pedagogical aspirations, which underpin our thinking for social:learn.

Table 1

"Web 2.0" characteristics	Key pedagogical characteristics
User-generated content	Personalised, adaptive
Power of the crowd	Authentic, 'real', situated
Data on an epic scale	Active, experiential,
Architecture of participation	Collaborative, sum > parts
Network effects	Communicative, peer supported
Openness	Reflective, cumulative

Therefore in order to create a learning framework that meets these needs several components are required:

- Technology – learning will move away from centralised, institutional systems to more loosely-coupled, personalised environments which consist of third party applications and bespoke developed tools to facilitate learning, such as a learner's profile
- Content – users need to be encouraged to generate content, participate in the process and discussion around content, and be able to remix and share content. For this they need access to content which does not have restrictive rights access, is available in a variety of formats and tools to aid discovery.
- Pedagogy – currently learning as it occurs in social networks is very informal, based around peer to peer dialogue and independent study. The key challenge is to bring some of the value of scaffolding and structure which is valued by learners to the more unstructured, personalised world of social networks. This can be achieved through the use of appropriate tools, easily shareable learning designs, and narrative structures.
- Community – social networks and web 2.0 applications succeed through the strength of the communities they foster. There is the potential for large global communities in the educational arena. This is particularly true in the 'long tail' of subject interests, the needs of which are not well met in current education, since there are not enough

students to meet the needs of a physical course, but globally there are enough interested people to form a subject community.

These needs can be met by creating a range of learning scenarios that seek to combine the four components. For example, a 'learning club' is analogous to a reading club. The club would need technology, for example a suite of third party and bespoke applications that help foster dialogue and annotation in the group, and help track and record activities and goals for the individual. It would require good quality content to form the seed for the community to work around. In terms of pedagogy, learners could use a range of structured learning sequences providing guidance and a focus for the community (and potentially a means of providing some formal recognition of their learning activity). Lastly, it requires a community, which a partnership of universities and an established social network for learning would provide.

The Social:Learn project

The overarching vision for Social:Learn is to apply the best in current patterns of behaviour in technology developments (and in particular social networking) to a learning context – to provide a flexible and innovative, technology-enabled framework for learning. Social:Learn is predicated on a number of assumptions. Firstly, that there is a seismic shift in society and education and we need to seek radical new models for how we develop and deliver our educational provision, as well as rethinking the very purpose and value of education. Secondly, that most Higher Educational institutions, to date, have not really addressed how to engage with these fundamental shifts and their impact on the institution's core business model. Thirdly, that the status quo is not feasible, we need to apply the best of our expertise and experience to address these issues – through developing something radical which embraces the best of the new possibilities offered by modern technologies. Fourthly, competition for the learner sphere is ever more complex, multi-faceted and fragmented; if we don't do it someone else will. Finally, that the principles embodied in Social:Learn reflect the essence of our core philosophy, namely – harnessing social networking for learning and include adopting an approach which is open, flexible, disruptive, democratic and most importantly pedagogically driven. The social:learn project has four main areas of activity (alpha release July 2008) (see table).

Table 2

Area of activity	
A learning profile	Social:Learn learners will have a learner's profile, which records activity across a range of 3rd party tools that can be used for learning. This is a social profile so they can share goals, resources and activities.
An open API	in order for applications to write to the social:learn profile an API will be required that allows third party applications to operate as social:learn tools. For example if someone has used an instant messaging tool for a chat session, they can record this in their portable, personal learning profile. For this to work an open API is necessary that 3rd party developers can work to. The aim is to allow developers of different software to integrate with Social:Learn, thus allowing the creation of loosely-coupled, customisable personal learning environments, which consist of a range of applications working together.
A suite of web 2.0 learning applications	building on some initial prototypes already developed in Facebook the aim is to develop a range of tools that will help facilitate the web 2.0 learning approaches which are central to the philosophy and approach of Social:Learn. These will be based on the Social:Learn API.
A site	bringing the Social:Learn tools together around open access content will act as both a proof of concept, and also a hub for developers and content providers. Initially this site will be constructed around the open educational resources provided in the OU's openlearn project.

Social:Learn is not a proposal to develop yet another web-based platform for learning. The vision is much broader than that; we see it as an organisational pedagogical and technical platform for experimenting with disruptive technologies. Dynamic change and unpredictability are inherent assumptions which have shaped our thinking. Figure 1 reflects this: changing societal trends (work patterns, cultural norms, boundaries, etc), educational trends (lifelong learning, personalised, purposeful) and technological trends (pervasive, social, personalised, mobile/smart).

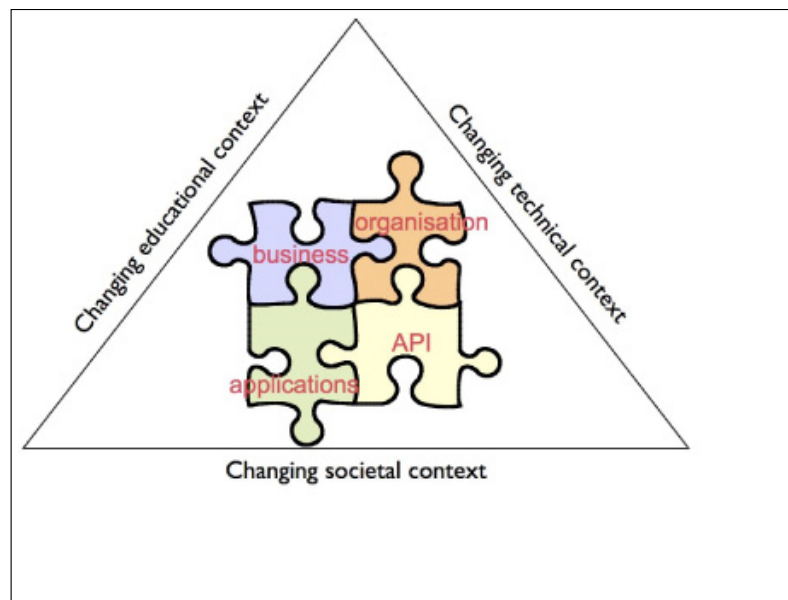


Figure 1

Sustainability and the Higher Education Environment

The pedagogic arguments for integrating the social web and learning have been set out in earlier sections of this paper. What may be less clear are the strategic and organisational purposes which underpin doing so. If an ambitious initiative such as Social:learn is to succeed, it needs to be grounded in strategy and it needs to have the prospect of being sustainable over the long term. In doing so it needs to take as its key drivers (a) emergent features of the higher education environment, and (b) the impact of new technologies.

Given the increasing financial pressures on HEIs, it is clear that future sustainability and success will be heavily dependent on them devising the means by which they can contribute to the advancement of the Information Society. In short, HE must be relevant, in tune with emergent learning needs, and offered with the technologies which are shaping social and cultural processes. Radical new approaches to the delivery of teaching and learning using the new technologies provide the key to doing this. Social:learn at the UK OU seeks to provide such a radical approach by breaking down the barriers between formal and informal education, creating learning opportunities embedded in everyday life, and offering learning opportunities only available using the best of internet technologies. Doing this also means responding to the challenges presented to HE to widen participation; that is, to extend educational opportunities to those who for one reason or another have been excluded, or who need access to higher education in order to develop their employment skills whether that is for updating or because new skills are needed to be successful following migration to new territories. A fundamentally different approach is needed if the principles of openness and increased participation are to be achieved, and if the participation challenges presented by cultural diversity are to be addressed. New pedagogic strategies are needed for new groups of learners as a condition of the future sustainability of higher education.

Conclusion

While it is not clear that traditional HE practices, hierarchies and delivery methods are yet crumbling in the face of the pressures on them, what is the case is that the emergent changes in the environment in which higher education operates present significant challenges to the hierarchical and 'producer-led' drivers underlying higher education. The aspirations of the supporters of the internet – and of Web 2.0 particularly – in terms of individual empowerment and reciprocal community may or not be fully realised. It is nevertheless clear that new generations of learners are coming along whose experience has been fundamentally influenced by the impact of the internet. However grandiose some aspirations may be, it is still the case that the internet provides opportunities for individuals to upload their own content, to engage in participatory networks with others, and to create personalised learning programmes. All of these factors will to a greater or lesser extent impact on education. The future sustainability of higher education will require institutions to respond to this strategic challenge.

In this context there is an urgent need to establish new forms of learning using internet technologies which release the potential for learning which many groups currently excluded from learning have. There is a need for forms of learning which are embedded in everyday experience and which acknowledge cultural diversity within increasingly complex socio-cultural contexts. Unless higher education can do this its long term sustainability is in doubt. Social:learn provides a valuable testbed to take forward the challenges outlined in this paper and potentially realise a radically new technology-enhanced learning environment for tomorrow's students.

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