# OPEN EDUCATIONAL PRACTICES AND RESOURCES: THE KEY ROLE OF SOCIAL SOFTWARE

Guntram Geser, Salzburg Research, EduMedia Group, Austria

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#### Introduction and background

This paper presents some results of a road mapping study on Open Educational Resources that has been carried out in the framework of the Open e-Learning Content Observatory Services (OLCOS) project. (Geser 2007) The OLCOS project runs from January 2006 to December 2007 and is cofunded by the European Commission under the eLearning Programme. The project aims at promoting Open Educational Resources through its road mapping activity, Web-based services (OER tutorials and examples of best practice) and co-operation with other projects and communities of practice. The project consortium comprises the European Centre for Media Competence (Germany), the European Distance and E-Learning Network (Hungary), the FernUniversität in Hagen (Germany), the Mediamaisteri Group (Finland), the Open University of Catalonia (Spain) and the project co-ordinator Salzburg Research, EduMedia Group (Austria).

Open Educational Resources (OER) are understood to comprise content for teaching and learning, software-based tools and services, and licenses that allow for open development and re-use of content, tools and services. The importance of OER has been acknowledged by recent initiatives of the OECD's Centre for Educational Research and Innovation (CERI 2005-2007), UNESCO's International Institute for Educational Planning (IIEP 2005-2007), and other international and national organisations that are stakeholders in the creation and sharing of such resources.

The OLCOS project considers OER to be an important element of policies that want to leverage education and lifelong learning for the knowledge society and economy. However, the project also emphasises that for achieving this goal it is crucial to promote innovation and change in educational practices. In particular, OLCOS warns that delivering OER to the still dominant model of teacher-centred knowledge transfer will have little effect on equipping teachers, students and workers with the competences, knowledge and skills to participate successfully in the knowledge economy and society.

Therefore the OLCOS project emphasises open educational practices that are based on a competency-focused, constructivist paradigm of learning and promote a creative and collaborative engagement of learners with digital content, tools and services in the learning process. This paper addresses the key role of Social Software based tools and services for open educational practices and resources.

#### Little impact of current generation e-learning on educational practices

For many years now considerable investments have been made to equip educational institutions with computers, software programs, local networks and Internet access. Recently, as highlighted by the European Commission's eLearning Conference "Towards a Learning Society" (2005, 3), "policy emphasis has switched from infrastructure and connectivity to content, services, and practice". Moreover, policy also increasingly demands a stronger commitment of directors, managers and staff of educational institutions regarding educational innovation and organisational change.

Driving the demand to "change" and to "innovate" is the observation that the investments made in ICT-enabled teaching and learning has not yet brought about the profound changes in educational practices that would better align educational institutions with the requirements of the knowledge

society. In fact, there are growing concerns that educational institutions do not support learners effectively in acquiring the competences and skills required to participate successfully in the knowledge society. In particular, expectations that the use of ICT would somehow bring about student-centred and collaborative approaches have not been fulfilled. (cf. Oliver 2005; Zemsky and Massy 2004) Rather there is a considerable mismatch between teaching and learning as framed and maintained by typical educational institutions and the fabric of work in a knowledge-based economy "out there".

In addition, there is an obvious gap between current educational practices and what a younger generation of students uses almost naturally to communicate and form communities of interest outside "the classroom". As Will Richardson, author of "Blogs, Wikis, Podcasts and Other Powerful Web Tools for Classrooms" (Corwin Press 2006) writes: "In an environment where it's easy to publish to the globe, it feels more and more hollow to ask students to 'hand in' their homework to an audience of one. When we're faced with a flattening world where collaboration is becoming the norm, forcing students to work alone seems to miss the point. And when many of our students are already building networks far beyond our classroom walls, forming communities around their passions and their talents, it's not hard to understand why rows of desks and time-constrained schedules and standardized tests are feeling more and more limiting and ineffective." (Richardson 2006)

### Social Software based tools and service: A new window of opportunity for innovation

In a policy paper published by the European Open and Distance Learning Liaison Committee, it was noted that "a new vision of ICT [Information Communication Technology] for learning is needed at policy, management and grass roots practice level if a new window of opportunity is to be found for ICT to become really interesting to innovators in the learning system". Furthermore, a new policy paper published in May 2006 identified "the knowledge gap on learning innovation" as a major problem. (European ODL LC 2004 and 2006)

From the perspective of ICT a new vision and a wide-open window of opportunity can be found in the current development and usage of Social Software based low-barrier and easy-to-use tools and services (Wikis, Weblogs, social networking, bookmarks and content sharing, RSS-based content syndication, podcasting, etc.) that are highly supportive of open learning practices and processes. The attribute "social" stems from the fact that such tools and services in particular promote connections, exchanges and collaboration among people who share common goals and interests. It is also acknowledged that Social Software fosters bottom-up development of communities of interest and practice, whereas typical institutional IT systems represent a top-down approach with centralised information access, authoritative information, defined user roles and permits.

Social Software is increasingly being used outside the commercial domain and shows the first spillover effects within the realm of education. Wider adoption for educational and lifelong learning purposes could have an enormous innovative impact as these tools and services are ideally suited to learner-centred as well as collaborative approaches in developing competences required in our knowledge society.

Outside the educational sector the use of Social Software has reached more than a "critical mass"; it is exploding. In April 2006, the so-called "blogosphere", which is tracked by Technorati on a regular basis, amounted to 35.3 million individual Weblogs, 60 times more than in 2003. The number of Weblogs doubles about every six months, with an average of over 75,000 new Weblogs created every day. (Sifry 2006; for empirical data on how bloggers use their blog see Pew International [USA] 2006 and the German study by Schmidt and Wilbers 2006)

From an educational perspective, it is understood that Weblogging is a self-directed, constructive as well as inherently conversational practice. Students who author a Weblog, which is possible individually and as a group, must make their minds up about certain topics, gather, evaluate and interpret information, take a position, come up with convincing arguments and evidence, and find the right means and style of expression. Teachers who integrate Weblogs into online and hybrid courses

will find that this promotes student engagement and achievement. (cf. Downes 2004; Glogoff 2005, Warlick 2005)

The blogosphere and Wikipedia, the world's flagship in collaborative authoring with millions of articles in many languages, clearly demonstrate an important point: Social Software has made it possible for anyone to participate actively as an author in the knowledge society. David Weinberger, Fellow at Harvard University's Berkman Institute for Internet & Society, writes about the many things students (and teachers) can learn from Wikipedia: "We hope they're learning that they can't be passive recipients of knowledge. But they're also learning that authority doesn't come only through chains of credentials; that we can get on the same page about what we know; that knowing involves being willing to back away from your beliefs at times; that knowledge is a social product, or at least heavily socially contextualized; that the willingness to admit fallibility is a greater indicator of truth than speaking in a confident tone of voice; that knowledge lives in conversation, not in the heads of experts; that certain people who do not need to be named are just impossible." (Weinberger 2006)

## Some examples of educational uses of Social Software

Social Software is already being recognised by many educators as a "hot topic", but so far has not made it into the educational mainstream. (cf. Alexander 2006; Dalsgaard 2006; O'Hear 2006) Yet, there are many highly active bloggers from the education sphere, who blog on a wide range of themes from general questions of pedagogy and didactics to highly specific issues in certain fields of study and learning (some Edubloggers are are to found at http://educational.blogs.com) The Edublogs Awards (http://www.incsub.org/awards/) give an impression of what is considered by the community to be outstanding practice. An important role in promoting Social Software is also being played by national and regional educational networks that provide information, services and support for teachers (as a best practice example, see the practical SchoolNetGuide on Weblogs and Wikis of the Swisscom Initiative, 2006 [in German]).

Most importantly, there is already much experimentation going on with Social Software tools and services at universities, colleges and schools. Wikis probably take the lead because of the ease of collaborative Web-based authoring and publishing they provide. In January 2006 the San Francisco based initiative Wikispaces started to offer hosting thousands of Wikis to K-12 teachers for free. These Wikis are full-featured, can be public or private, and have no commercial ads. They write: "Over 10,000 educational wikis later, we've heard countless stories of excited students and empowered teachers. They've told us about their collaborative essays, group study guides, online lesson plans, and classroom notice boards coming alive on Wikispaces. Now we're taking the next step – we want to give away 100,000 free K-12 Plus wikis." (http://www.wikispaces.com)

Since about five years the Wiki virus also has been infecting school communities in Europe (for example, with respect to the German-speaking countries, see Doebeli-Honegger 2005). Even using Wikis in primary schools has been explored, for example as a tool for collaborative story telling. (Désilets and Paquet 2005) Another interesting example is WikiVille, a project started in February 2006 in Bolton, England. WikiVille invites young people to write and reflect on topics such as life in their home town. It has become a global project through the participation of students from many countries around the world.

Also Weblogging sees interesting uses and reports on the educational impact are favourable. For example, the project "Escoles en Xarxa" (Schools on the Net) has created a community based on the Catalan language in secondary schools. In the first half of 2006, 53 schools were already connected to the project in the Catalan-speaking Community (Andorra, Balearic Islands, French Eastern Pyrenees, Catalonia and Valencia). In particular, the ongoing project also helps spread social values. Students use the blogs to report on developments in the social environment of their school and to debate social problems, for example experiences of people arriving in Spain from third world countries. (cf. EUN, Insight 2006) Another example of stimulating community and media creativity through Weblogging and RSS channels is the Canadian Campus Commons project. (Hemphill 2005)

Wikis and Weblogs of course are not the only educationally relevant Social Software based tools and services. An "Innovation Brief" of the European SchoolNet's Insight service suggests that online community, content sharing and social networking services like 360°Yahoo!, ConnectViaBooks, Del.icio.us, Flickr and Furl could be used to enhance learning. It also outlines possible educational implementations of such services. The Brief highlights the fact that "through sharing one's digital knowledge artefacts with other learners one not only brings on-line learning in a social context that it is sometimes missing, but also allows new paths of learning with peers to emerge". (Vuorikari 2005)

# Outlook: A slow shift towards open educational practices

The UK-based educational think-tank and development centre Futurelab in their "Opening Education" series recently published a study on the potential of a variety of social software based tools and services for education. They find the potential to be clear and that in schools "we are already witnessing small-scale experiments". However, they urge, "the use of social software in education is still in its infancy and many actions will be required across policy, practice and developer communities before it becomes widespread and effective". (Owen *et al.* 2006, 4)

These actions will particularly need to take into account that today most teachers are expected to work with too many students, they are not equipped with the right didactics for moderating learner-centred, collaborative study work (hence, are afraid of losing control), and there exists little experience in assessing and crediting the results of such work. Therefore we expect that it will take several years for the educational use of Social Software based tools and service to become mainstream, which is more likely to occur in the area of project-based learning than in "regular" teaching.

Rather than a fast transformation of educational practices we would expect a slow process of diffusion, experimentation and adoption. Educators already use the Web to a large extent to find information for professional purposes such as preparing classes. But the Web is currently changing dramatically due to new information standards, tools and services, and educators will increasingly make use of such resources. They will find information in project Wikis; will read interesting Weblogs of professionals, and realise that ever more RSS-based and other services can be used to obtain thematically filtered information or audio and video casts. In a first step they will do so as information users. But, if learner-centred and collaborative educational approaches are emphasised and supported by directors, head teachers and IT managers of educational institutions, the first choice of teachers and students would certainly be to make use of such tools and services in developing meaningful teaching and learning practices.

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