Social Software for Social Inclusion: Aspirations, Realities and Futures

Thomas FISCHER¹, Joe CULLEN², Guntram GESER³, Wolf HILZENSAUER³, Davide CALENDÀ⁴, Martijn HARTOG⁵

¹Innovation in Learning Institute (ILI), Friedrich-Alexander-Universität Erlangen-Nürnberg, Nägelsbachstraße 25b, Erlangen, 91052, Germany
Tel: +49 9131 852 1185, Fax: +49 9131 852 4738, Email: thomas.fischer@fim.uni-erlangen.de

²Arcola Research LLP, 6 Alvington Crescent, London, E82NW, United Kingdom
Tel: +44 207 2543080, Fax: +44 207 2543080, Email: jcullen@arcola-research.co.uk

³Salzburg Research Forschungsgesellschaft, Jakob-Haringer-Straße 5, Salzburg, 5020, Austria
Tel: +43 662 2288 303, Fax. +43 662 2288 222,
Email: guntram.geser@salzburgresearch.at; wolf.hilzensauer@salzburgresearch.at

⁴PIN S.c.r.l - Polo Universitario "Città di Prato", Piazza Giovanni Ciardi 25, Prato (PO), 59100, Italy
Tel: +39 0574 602500, Fax: +39 0574 602515,
Email: davide.calandra@gmail.com

⁵eSociety Institute, The Hague University of Applied Sciences, Johanna Westerdijkplein 75, The Hague, 2521 EN, The Netherlands
Tel: 0031 70 445 7734, Fax: 0031 70 4458372, Email: m.w.hartog@hhs.nl

Abstract: The spread of social software in recent years has been phenomenal. Similarly the use of second generation Internet technologies – what O'Reilly once introduced as Web 2.0 and what today is extended to related terms as Web 2.0, Learning 2.0, Enterprise 2.0 and Quality 2.0 – such as blogs, wikis, podcasts, tagging are seemingly opening up innovative, bottom-up and direct possibilities for innovative learning as well as for social and e-Inclusion. Advocates of Web 2.0 furthermore suggest that the Internet is substantially moving from passive publication to active participation; that the Internet is one of the major knowledge repositories for personal knowledge acquisition and learning, may it be acquired formally, non-formally or informally. It is furthermore increasingly argued that Web 2.0 applications can empower resistant learners and excluded groups by offering them new opportunities for self-realisation through collaborative learning, and by changing the nature of education itself. Yet the evidence base for these conclusions is still fragmented and contested. There is for example also counter evidence that Web 2.0 can reinforce exclusion and reduce learning outcomes. The European R&D project 'Learning 2.0 for an Inclusive Knowledge Society – Understanding the Picture (Links-up; www.links-up.eu) aims at exploring therefore three main areas: i) Is Learning 2.0 really supporting inclusive Lifelong Learning (LLL)? ii) Can isolated e-Inclusion experiments be mainstreamed? iii) Is Learning 2.0 fundamentally changing the educational landscape?

1. Theoretical & Methodological Overview

1.1 Learning, Inclusion & Web 2.0

‘Inclusion’ is a complex concept, not least, because it is intimately associated with its opposite – exclusion. As Glass (2000) observes, there is frequently confusion in the literature between trying to measure social exclusion and trying to measure the effects of
policies aimed at eliminating it. The elimination of exclusion – inclusion – needs to address complex multi-dimensional phenomena.

As the European Commission defined it, exclusion is a process whereby certain individuals are pushed to the edge of society and prevented from participating fully by virtue of their poverty, or lack of basic competencies and lifelong learning opportunities, or as a result of discrimination. This distances them from job, income and education opportunities as well as social and community networks and activities. They have little access to power and decision-making bodies and thus often feeling powerless and unable to take control over the decisions that affect their day-to-day lives.

The growing ubiquity of ICTs in recent years, as a result of the burgeoning Knowledge Society, has attracted the attention of initiatives and projects aimed at harnessing technologies to address exclusion and support inclusion. This has especially been the case with regard to Web 2.0 and social networking technologies, with their potential to support far greater social interaction than before. As a range of studies have demonstrated (for a summary see Redecker et al., 2009), the Internet offers a lot of possibilities for people to gain and share information as well as to participate, to communicate and to collaborate in many different ways.

Nevertheless, the digital divide between better-educated and higher-status groups and involuntary off-liners or people with low digital literacy still exists and limits the possibilities of participation. A recent report by the Oxford Internet Institute observed that: “technological forms of exclusion are a reality for significant segments of the population, and that, for some people, they reinforce and deepen existing disadvantages” (Helsper, 2008). There is strong evidence to suggest that significant numbers of people remain at the margins of the knowledge society – not least because the complexity and diversity of their lives, and their roles in a technologically rich society remain poorly understood (Facer & Selwyn, 2007). Digital inclusion itself is therefore a new field for inclusion initiatives, concerning e.g. the accessibility of web resources or digital literacy of people at risk of exclusion.

Against this background, a number of initiatives have been established to support the application of ICTs – particularly Web 2.0 – to inclusion. In tandem, a range of initiatives aimed at awareness raising and dissemination of good practices in the field have been implemented, including, several awards schemes. For example, the European e-Inclusion Award was established in 2008 in the following categories: i) ageing well; ii) marginalised young people; iii) geographic inclusion; iv) cultural diversity; v) digital literacy; vi) e-accessibility; and vii) inclusive public services.

Learning with ICTs or Technology Enhanced Learning (TEL) is to be seen as a key driver for inclusion. It is increasingly argued that Web 2.0 can empower resistant learners and groups at risk of exclusion by offering them new opportunities for self-realisation through collaborative learning, and by changing the nature of education itself. This owes much to a notion that has come to the fore in recent thinking on learning – the idea that education is now focusing on New Millennium Learners (NML), and that the future of learning is inextricably bound up with these learners.

NML – i.e. those born after 1982 – are the first generation to grow up surrounded by digital media, and most of their activities dealing with peer-to-peer communication and knowledge management are mediated by these technologies (Pedró, 2006). For example, it is easier to take part in open learning initiatives, profit from open educational resources and new tools that allow easy communication and collaboration for learners. There seem to be fewer boundaries to take part in these opportunities compared with formal education settings, where social milieu, family background, healthiness, socio-economic possibilities

---

1 European e-Inclusion Award – http://www.e-inclusionawards.eu/ [2010-05-18]
and the accessibility of educational institutions as well as the geographic junction e.g. urban areas, are still the most important factors for (non-)participation.

Yet, as noted above, the evidence base for these conclusions is fragmented and contested. There is also counter evidence that Web 2.0 can reinforce exclusion and reduce learning outcomes. For example, it seems that people with better education and socio-economic backgrounds profit more from the new learning and participation opportunities than others. This effect – those who have more will get more – is called Matthew’s effect based on a popular citation from the bible. Therefore, a sceptic’s view on projects within this field is needed.

1.2 Research Questions

The overall research questions of the European R&D project ‘Learning 2.0 for an Inclusive Knowledge Society – Understanding the Picture (Links-up; www.links-up.eu) supported through the Lifelong Learning Programme (LLP) are based on the assumption that the usage of Web 2.0 supports inclusive lifelong learning. Links-up explored therefore the three following main issues:

- Is Learning 2.0 really supporting inclusive life-long learning?
- Can isolated experiments be mainstreamed?
- Is Learning 2.0 fundamentally changing the educational landscape?

1.3 Research Methods & Case Study Design

The research design and methodological approach adopted follows accepted models and practices used in case studies (Yin, 2002), but incorporates additional elements chosen to suit the particular focus of this study – particularly the research questions outlined above – and the environment in which Learning 2.0 initiatives operate. Six of these additional methodological elements applied were: i) Behavioural additionality analysis (Georghiou & Clarysse, 2006), ii) Theory of change analysis (Chen, 1990), iii) Cultural logic analysis (Habermas, 1981), iv) Pedagogic audit, v) Digital skills audit and vi) Social capacity audit. The case study methodology design is based on five inter-connected stages: (a) logistics, (b) positioning and profiling, (c) data collection, (d) analysis, (e) synthesis.

1.4 Selection Criteria & Selected Cases

The selection of cases reflected the following priorities:

- Different Learning Settings – include different formal and non-formal learning settings; different target groups, in particular at-risk and hard-to-reach groups; training situations, training, interactions etc.;
- Different Social Computing Applications – include a variety of uses of social computing applications such as wikis, blogs, podcasts, social bookmarking, editing and networking tools, virtual realities/immersive technologies etc.;
- Maturity and Potential of the Initiative – include initiatives that provide examples of sustainable development;
- Geographical Distribution – include a range of different geographical locations and cultural environments.

Links-up finally selected 24 cases selected for a detailed analysis. These cases have been:

1. ALPEUNED: http://adenu.ia.uned.es/alpe
3. Avatar@School: http://www.avataratschool.eu

Copyright © 2011 The Authors www.eChallenges.org Page 3 of 9
5. Conecta Joven: [http://www.conectajoven.net](http://www.conectajoven.net)
6. Cyberhus: [http://www.cyberhus.dk](http://www.cyberhus.dk)
9. HiStory: [http://www.history-project.eu](http://www.history-project.eu)
10. ICONET: [http://www.iconet-eu.net](http://www.iconet-eu.net)
11. Mixopolis: [http://www.mixopolis.de](http://www.mixopolis.de)
12. MOSEP: [http://www.mosep.org](http://www.mosep.org)
15. Notschool: [http://www.notschool.net](http://www.notschool.net)
16. Pinokio: [http://www.pinokio-project.eu](http://www.pinokio-project.eu)
17. Replay: [http://www.replayproject.eu](http://www.replayproject.eu)
20. Schome Park: [http://www.schome.ac.uk/](http://www.schome.ac.uk/)
21. SeniorKom.at: [http://www.seniorkom.at](http://www.seniorkom.at)
22. TRIO: [http://www.progettotrio.it](http://www.progettotrio.it)
23. Web in the Hood: [http://www.webindewijk.nl](http://www.webindewijk.nl)
24. Xenoclipse: [http://www.xenoclipse.net](http://www.xenoclipse.net)

2. Overview of Selected Cases

The analysis of the 24 cases shows firstly the variety with respect to their scope of inclusion. The classification of inclusion scenarios is based on the categories of the above mentioned e-inclusion award criteria. The results show that in this analysed sample most of the projects focus on the inclusion of marginalised people. Other important dimensions are cultural diversity and digital literacy, whereas ageing well and geographic inclusion are (intentionally) less present.

Secondly all age groups are well represented, although most cases include the category teenagers. Additionally Web 2.0 strategies focus more on the Net-Generation as well as on adolescents. Most projects have more than one target group, which offers a variety of implementation scenarios as well as transferability of results.

Thirdly, with regards to the inclusion objectives, the cases are quite heterogeneous. Most of the projects provide strategies against social isolation, accompanied with other measures. Often the inclusion objective is combined with an educational focus, where up-skilling and competence development are key. Also some cases with a focus on inclusion of people with disabilities are included in the sample.
The case studies shed fourthly further light on how learning and social inclusion objectives are linked to the use of different combinations of Web 2.0 approaches and tools. Figure 1 summarises how these practices are related together.

Figure 1: Inter-Relationships of the Links-up Case Studies
[modified after Haché, IPTS]

3. Analysis of Intervention Concepts of Web 2.0 Learning & Social Inclusion

The projects covered in the sample of Links-up case studies imply theories and models of change. The expectation is that introducing some innovative components into a social environment – in our cases Web 2.0 tools and methods – will promote different behaviour in individuals, social groups or organisations, achieving beneficial impact and change. These changes include re-engagement in learning and greater achievement of learners, which may lead to improved employment prospects.

Projects using Web 2.0 supported learning for social inclusion can be viewed according to a macro-model and a micro-model of change. In the example above, the micro-model is focused on individual re-engagement and achievement. The macro model in turn focuses on the generation or transfer of social capital through, for example the acquisition of skills that provide the economy, businesses and other sectors with knowledgeable and motivated workers.

Similar models already exist for issues of social anomie (e.g. deprived communities) and social exclusion (e.g. of ethnic minorities and migrant communities). In these situations, the intended impact of using Web 2.0 tools and methods is to strengthen communities and promote social inclusion. However, processes of social learning also play a key role (e.g. activities that vitalise a social community, help develop mutual understanding among social groups, etc.).

The models inform interventions aimed at tackling problems in learning and social inclusion and realising favourable impacts and changes in attitudes, knowledge and behaviours. In the sections below, we analyse the intervention concepts of the projects studied. The intervention concept of each project comprises the problem addressed, the target group(s), the intervention using Web 2.0 tools and methods, and the intended impact of the intervention.
3.1 Problems Addressed

The main problems requiring intervention are understood to be lack of competences and participation in social life i.e. social inclusion, which requires active engagement by the individuals and social groups themselves. In particular, engagement in education, vocational training and Lifelong Learning (LLL) in many social groups is seen as a core issue. Equally, acquisition of e-Skills as a basis for employability and participation in the information and knowledge society is also regarded to be of high importance. Furthermore, better counselling in critical situations as well as for vocational orientation and careers guidance is seen as a vital need. There is also a trend for developing innovative approaches that challenge established ways of providing public services. Such approaches should allow for re-evaluating education and new scenarios of schooling, as well as new methods in crime prevention and offender rehabilitation services.

3.2 Target Groups

Groups that stand out as intervention targets are hard-to-reach learners in deprived communities, ethnic minorities and larger groups of migrants lacking social inclusion and participation as well as young people at-risk (including at-risk of offending) that should be re-engaged in learning. These groups may have the necessary skills for a career in creative industries, and may strengthen their community by becoming role models of achievement and a voice for their interests. Other intervention targets are children, students and adults with disabilities or medical conditions.

3.3 Intervention Approaches

A blended approach is the most common form of intervention. The main reason for this is that in many interventions, target groups face barriers to learning which need to be overcome, such as poor e-Skills, lack of motivation and trust. A blended approach also allows for developing social relationships and exchange of experiences among participants (or community building) that can be supported, facilitated and enhanced by using Web 2.0 tools. ‘Online only’ approaches are used in contexts where there is an established portal or community website and users can be expected to have sufficient e-skills already.

4. Web 2.0 Technologies Used

The majority of the projects use Web 2.0 tools in the context of European projects (e.g. the Lifelong Learning Programme) and have set up a dedicated project website. Yet there are also a number of initiatives that use Web 2.0 tools and features on existing institutional platforms.

Often several tools have been used – most often communication and collaboration tools such as weblogs, wikis, forums, chat and podcasts. Media sharing platforms such as YouTube, flickr, Slideshare are also an important element in many projects. Such tools and popular platforms are seldom combined with classical e-Learning portals and course programs. The learning platform Moodle has been used by several of the projects; others used Drupal or a home-grown system. Social networking platforms e.g. Facebook or Ning were used by projects aimed at bringing together creative people from marginalised communities. Projects also explored how to use virtual worlds e.g. Second Life or OpenSim.

The fact that a platform is already implemented can be an advantage or a hindrance to the full use of a Web 2.0 approach. Open platforms with Web 2.0 tool modules (e.g. Drupal, Moodle and others) ease the setup, customisation and interoperability of tools.
Other platforms may considerably limit what tools a project can use (and in which ways) and, even, impede a Web 2.0 approach.

### 5. Lessons Learned, Recommendations & Conclusions

#### 5.1 Overcoming Resistance of Organisational Cultures

Projects that suggest Web 2.0 based collaboration and learning practices often face resistance by organisational cultures. In order to promote the adoption of such practices, ingrained working paradigms and mindsets of professional communities such as teachers, social workers or youth offending teams must be taken account of.

For example, in the educational sector Learning 2.0 challenges traditional settings as a change in teacher-student roles is necessary. Teachers will often fear losing control and need pedagogical as well as technical training to develop collaborative e-learning practices.

Advantages of Learning 2.0 should be demonstrated to all stakeholders, in particular, that it can bring benefits also to the involved professional staff themselves. Clear commitment and support by the management and other key decision makers to follow innovative methods is required and may help trigger some change in organisational cultures.

#### 5.2 Motivating & Driving the Active Participation of Target Groups

Web 2.0 applications per se do not necessarily drive participation and communication among members of the target community. Existing diverse interests of different potential users must be identified and taken into account and the particular needs and requirements of the users addressed thoroughly.

Secondly social barriers to learning must be addressed and people convinced that engagement in learning and social activity, not only on the Web is useful and rewarding.

Projects with hard to reach communities such as migrants or ethnic minorities need to build trust and achieve buy-in by leading community members. Peer mentoring can help drive learning motivation and outcomes.

#### 5.3 Using Appropriate e-Learning & e-Inclusion Methods & Tools

Initial lack of e-skills often requires a blended approach involving face-to-face and online communication. Such an approach also promotes social relationships and sharing of experiences among participants that can be enhanced by using Web 2.0 tools.

The choice and usage of technologies must be reflected thoroughly. In most cases, simple but useful and engaging tools will be the best choice, while projects that want to use a range of tools in an integrated and scalable manner may have to implement a robust and modular platform.

Learning 2.0 is furthermore about empowering the participants to self-organise with Web 2.0 tools, work together on topics of interest, and involve new members in the learning community. Peer mentoring approaches can furthermore drive learning as well as community building.

#### 5.4 Demonstrating Achievement & Impact

Projects that work with hard to reach social groups under the pressure of funding regimes often find it difficult to demonstrate the envisaged impacts.

Firstly, it is important to systematically involve relevant third parties and multipliers such as cultural centres, businesses and local media. Secondly, regular collection of data on
interventions and results is necessary to allow for documenting project progress and achievements. Particularly important are role models of success as motivation for the target communities, participating organisations and sponsors.

References


