Digital Literacy 2.0: the Future of Adult Education

Barbara Blum, Jutta Croll, Katrin Schuberth
Stiftung Digitale Chancen/Digital Opportunities Foundation (Germany)
bblum@digitale-chancen.de, jcroll@digitale-chancen.de, kschuberth@digitale-chancen.de

Abstract

For citizens in Europe and elsewhere Digital Literacy has become one of the key competences to ensure social cohesion, active citizenship and personal fulfillment. Since educational disadvantage is closely linked to social exclusion and poverty, there is a need to empower the really 'hard to reach' groups and to enable them to make use of ICT.
Incidentally, web 2.0 applications are also a powerful tool to address those socially and educationally disadvantaged adults. In the European project Digital Literacy 2.0, funded in the Lifelong Learning Programme and coordinated by Stiftung Digitale Chancen, the chosen method of approaching that target group is offering to teach them web applications which will simplify and have immediate benefits for their everyday lives, such as gratis web telephony, online banking, tax payment and other public services, information search and Social Networking.
In the project libraries from Belgium, Bulgaria, France, Germany and Poland in cooperation and exchange with welfare organisations from Germany, the UK and Portugal are piloting a two-step training campaign. The first step, which is currently under way, involves a train-the-trainer approach, the trainers being staff in the aforementioned non-formal learning settings (libraries and welfare organisations). In the second step, based on a qualify-the-user approach, the multipliers trained in the first step will approach and train those educationally disadvantaged adults who are among their familiar clientele at their workplaces.
Experience from previous projects has shown that special target groups can be attracted to learning offers by a) topics relevant to their daily lives, and b) offers that require only a small first commitment to learning [1]. Both aspects have been considered in the training methodology and curriculum which have already been completed and are in practice now. An expectable positive side effect of teaching the target group web 2.0 skills is that these skills will lower the threshold to information and learning in general as they make it easier to selectively obtain individually relevant knowledge. The two-fold training campaign, the chosen method of addressing socially disadvantaged adults, and the fabric of the curriculum and training materials will all be presented in this contribution.

1. Introduction

Someone's vacuum cleaner breaks. Instead of buying a new one he searches online forums with the help of the exact product specification – maybe he will be able to repair it.
The queue at the registration office is long. But a lot of transactions with public services can be settled on their websites nowadays – and if you still have to go there in person, you can at least find out quickly how to get there.
An immigrant misses her family at home, but to call them would be too expensive. Why not use an online messenger? – it's free, it's easy to do, and it even has a video option so that she can see and not just hear her loved ones while talking to them.
The internet and especially web 2.0 applications have the potential to make everyone's life easier, cheaper and more comfortable. However, people who are socially and educationally disadvantaged, who could use some ease, spare money and comfort in their lives, often lack the skills to make use of those opportunities. Numbers, how many people in Europe use the internet on a regular basis, vary from country to country [2]. But all over Europe, old age, low education and unemployment are among the factors which make access to and competent use of web applications less likely [3]. Those are the groups that are being addressed by the European project "Digital Literacy 2.0".

2. The Digital Divide

In the 1990s the digital divide was defined in terms of access. It was assumed that people who do not have access to computers and the internet would lag behind those who do, not only with regard to the technological skills required for using ICT, but also the information accessible through the new media. For the United States this phenomenon became evident with the Falling through the Net studies

carried out by the National Telecommunications and Information Administration between 1995 and 2000 [4], and was substantiated by further research in other countries like the (N)ONLINER Atlas in Germany [5].

It has since become clear that there is more to the digital divide than just access. As ever larger portions of the populations in industrialised countries did go online, another facet of the gap emerged – between those who use ICT and the opportunities they provide competently and creatively, and those who lack the skills to do so. As Europe's Digital Competitiveness Report shows [6], this divide can rather be described along the lines of education. It represents one symptom of an overall, growing economic gap exacerbating the social integration of those who are disadvantaged in terms of level of education, employment, age and other factors.

Accordingly, there has been a shift of focus among initiatives and organisations in the field, including Stiftung Digitale Chancen, from measures facilitating access to ICT to measures providing the skills needed for an effective and competent use of ICT [7].

The emergence of the so-called web 2.0 – the evolution of web applications that make internet users producers rather than recipients of content – has the potential to make the problem posed by the divide between the digitally literate and illiterate more acute. As more and more of public and professional communication takes place online, disadvantaged people's lack of web skills can reinforce their general non-integration as they are falling behind in a growing number of aspects of life, such as career prospects, information, mobility, the possibility of participating actively as citizens, or making use of economic advantages such as cheaper products and services only available online [8].

However, with regard to the integration of disadvantaged groups, web 2.0 also provides powerful opportunities.

3. The 2.0 Approach

For people who have not yet had much experience with computers and information technologies, web 2.0 has the potential to lower the threshold to the internet as such.

Web 2.0 is turning the internet from a source of information into a platform for exchange and self-expression. Accordingly, there has been a shift in the role of web users from passive recipients to active producers of content. Whereas previously the creation of content had mostly been restricted to professionals using content management systems, new applications such as blogs, wikis and social networks are transferring this process to the website itself, into the realm of the user. There is no longer a need to understand the whole structure and navigational menu of a website. Instead, users only have to handle small and simple applications in order to actively participate in the composition of the internet, and these applications are getting more user-friendly every day. [9]

This more active role of the user is closely associated with more social participation. Web 2.0 applications afford a platform for public debate, political petitions, and more and more transactions with public services take place online. Particularly for people who are not very familiar with these types of participation, the internet provides uncomplicated and immediate access. Contributing to a rating system or commenting a blog entry often requires no more skills than are needed to write an e-mail.

Moreover, a growing number of web applications, particularly in the field of mobile apps, are designed to directly simplify the daily lives of their users, for example in terms of saving money, organising one's daily routine or communicating with others. The prospect of applications not requiring professional skills but having immediate positive effects on their everyday lives provides an extraordinary opportunity of approaching those disadvantaged target groups that are traditionally hard to reach.

4. The Project Strategy

"Digital Literacy 2.0" is funded in the European Lifelong Learning Programme and conducted by eight organisations in seven countries. It addresses socially and educationally disadvantaged adults who either have had no or limited access to ICT so far, or do have access but lack the skills and the confidence to make full use of the opportunities provided by web 2.0. The project's main objective is to empower those disadvantaged adults to a stronger social participation by making them qualified users of web 2.0 applications.

Since socially and educationally disadvantaged adults are a group particularly hard to reach through conventional learning offers, the project partners collaborate with community centres, welfare organisations, libraries and other institutions who serve as non-formal learning settings. The staff in those settings are being qualified as multipliers who are then able to teach ICT skills to those disadvantaged adults who ideally already are among their target groups.

Thus, the tasks of the project partners are: organising and conducting a two-step training campaign – "train the trainer & qualify the user" – ; developing all training material needed for both steps of the training campaign; providing an infrastructure, both online and offline, to reach as many people as possible and implement the web 2.0 based learning approach into measures for social inclusion throughout Europe.

4.1 The Project Partners

The project is run by a consortium of eight partners from seven European countries coordinated by Stiftung Digitale Chancen. The partners are libraries from Belgium, Germany, Bulgaria, Poland and France, who are experienced in providing not only access to media and information, but also counselling and courses for adult learners. The others partners belong to the welfare and adult education sectors [10].

4.2 The Training Campaign

The linchpin of the "Digital Literacy 2.0" training campaign is the learner-centred curriculum. It consists of a great number of small learning modules or tasks, such as setting up a Skype account or contacting a public service, which are arranged to form five larger learning blocks: E-Citizenship, Collaboration, Social Networking, Communication, and Basic Computer and Internet Skills. One block typically starts with a very easy-to-complete task, the modules getting more and more specific down the list. Furthermore, each module contains instructions and/or web links that help the learners complete the tasks.

Several factors have been considered in designing the curriculum. First of all, its contents had to capture the prospective learners' attention and interest. Experience from previous projects has shown that special target groups can be attracted to learning offers by a) topics relevant to their daily lives, and b) offers that require only a small first commitment to learning [11]. Hence, the curriculum contains a large number of modules teaching the learners web 2.0 activities that will have immediate advantages for their daily lives, such as gratis telephony, finding bargains or organising group activities using tools such as Doodle. Moreover, the easy-to-complete modules at the beginning of each block are intended to facilitate a sense of achievement and by triggering their interest and giving them confidence motivate the learners to try their hands at the slightly trickier, more specific tasks down the list.

Secondly, the curriculum had to contain possible paths leading to a stronger social participation of the clientele. Once the learners have completed easy tasks having direct positive effects on their lives, they might also get interested in web 2.0 activities that constitute a higher level of social participation like taking part in online petitions, contributing to online forums or even publish some of their own thoughts via one of the many web tools facilitating this, such as blogs and wikis. In creating the modules involving these sorts of activities, the authors of the curriculum have used the information society indicators, as defined by Eurostat [12], including the number of individuals using the internet for taking part in online consultations or voting, looking for a job or sending a job application, finding information about goods and services, or uploading self-created content.

Thirdly, it was important that the curriculum would provide a high level of flexibility and control, both for learners and for trainers. Its modular structure makes it freely (re-)arrangeable, according to the respective learner's or group of learners' needs as well as the learning situation (size of group, duration of session etc.). Each learning block has a small built-in self-assessment instrument, allowing for trial-and-error style self-tutoring with the application and instructed group learning, thus allowing the learners to keep control of their own learning process and facilitating personal projects in which they can follow and achieve their individual learning goals.

Making prospective trainers (i.e. staff in non-formal learning settings) familiar with the learner-based curriculum and its possibilities is a major aspect in the first step of the "Digital Literacy 2.0" training campaign which is currently being carried out [spring/summer 2013]. All project partners in all seven countries are conducting staff trainings, either within their own organisations, or by offering these trainings to institutions working with the target group. The curriculum and all accompanying training materials for both steps of the training campaign are available in all seven languages to partners and trainers on the project website www.digital-literacy2020.eu. The website also features a calendar tool where the partners can register when and where staff trainings are scheduled in their country for institutions interested in having their staff trained to see. Furthermore, the collection and evaluation of feedback forms from the trainings takes place there, a "reflective diary" tool helps trainers to reflect on

their learning sessions, and a small online quiz collects feedback from learners while at the same time providing an opportunity to test their newly acquired web skills.

5. Outlook

A major requirement for the project partners has been to make sure that the "Digital Literacy 2.0" training campaign will be sustainable. With the help of the campaign a total number of 505 staff will be trained in the seven participating countries. Each trained staff is supposed to then hand over their knowledge to disadvantaged adults among their clientele. Once the staff members are qualified, there is no limit to the potential number of people who will profit from their skills as multipliers.

Due to its flexible, modular structure, the learner-centred curriculum can easily be extended and adjusted to include new developments and innovations in the field of web 2.0, which are certain to occur.

When it comes to digital literacy and the number of active internet users, there are still markedly big differences between the nations of Europe. A major goal of "Digital Literacy 2.0" is also to develop and realise an approach that is applicable in all European countries. After the finalisation of the project the then tested training material will be introduced to the European expert public at an international closing event in January 2014 and published. Thereby the partners hope to valorise and spread the project's approach and strategy throughout Europe, beyond the nations already involved.

As a wider social implication, the project partners expect that the learning process will improve the target group's general attitude towards social participation and the acquisition of knowledge and skills. The digital divide is a symptom of a general gap growing between the more advantaged and the more disadvantaged citizens of Europe. However, in the project partners' view, web 2.0 and ICT skills are a field very suitable for approaching the less disadvantaged, empowering them to get involved, and thus counteracting the social gap.

References

[1] a) and b) were among the findings of two projects previously coordinated by Stiftung Digitale Chancen: "Internet erfahren" (http://www.inklusive-internet.de/) and "Surfen zum Job" (http://www.surfen-zum-job.de/jobsurf/content/sections/index.cfm).

[2] see *EU ePractice Factsheets*: "An overview of the eGovernment and eInclusion situation in Europe" (http://www.epractice.eu/en/factsheets/) [last accessed 11 April 2013]; Eurostat (http://epp.eurostat.ec.europa.eu/portal/page/portal/information_society/data/main_tables) [last accessed 11 April 2013].

[3] see European Union (ed.), *Europe's Digital Competitiveness Report 2010*, Luxembourg: Publications Office of the European Union, 2010, pp. 73-84. (source: *Eurostat Community Survey on ICT Usage by Households and by Individuals*: http://epp.eurostat.ec.europa.eu/portal/page/portal/information_society/data/comprehensive_databases) [last accessed 11 April 2013].

[4] see National Telecommunications and Information Administration (NTIA) (1995; 1998; 1999; 2000), "Falling Through the Net" (http://www.ntia.doc.gov/) [last accessed 11 April 2013].

[5] Initiative D21 e.V. (ed.), *(N)ONLINER Atlas 2012: Basiszahlen für Deutschland – Eine Topographie des digitalen Grabens durch Deutschland: Nutzung und Nichtnutzung des Internets, Strukturen und regionale Verteilung* (http://www.nonliner-atlas.de/) [last accessed 12 April 2013].

[6] see [3]

[7] cf. Croll, Jutta, „Anschluss oder Ausschluss?: Über die integrative Kraft des Social Web und die Überwindung der Digitalen Lücke". In: Breiter, Andreas & Wind, Martin (eds.), *Informationstechnik und ihre Organisationslücken: Soziale, politische und rechtliche Dimensionen aus der Sicht von Wissenschaft und Praxis*, Berlin: Lit Verlag, 2011, p. 105.

[8] ibid., p. 106.

[9] 0ibid., p. 107.

[10] For a list of all partners and further information see: http://www.digital-literacy2020.eu/content/sections/index.cfm/secid.3

[11] see [1]

[12] see: http://epp.eurostat.ec.europa.eu/portal/page/portal/information_society/data/main_tables [last accessed 12 April 2013].