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Social Accessibility Action to Improve Quality of OER User-generated Video-classes and Associated Resources

C. Rodrigo and A. García-Serrano

Dept. of Languages and Computer Systems - UNED
Juan del Rosal, 16 28040 – Madrid (Spain)
e-mail: covadonga@lsi.uned.es; agarcia@lsi.uned.es

Abstract

Social Accessibility is an approach to shorten the time for making web content more accessible by allowing ICT volunteers to improve its quality through collaborative work. In this context new forms of volunteerism have emerged through the creative and innovative use of ICTs. The first action in social ICT volunteering at UNED, the largest public distance university in Spain, took place in 2013 by enrolling 13 student volunteers. In 2014, the second action started with promising outcomes and more than 60 volunteers. The overall project aimed to improve the accessibility of original user-generated video learning resources contained in a multimedia repository of the university commonly used by the vast community of a quarter of a million students. The video classes were textually transcribed, subtitled and converted into mp3 audio. Its semantic labelling in the repository was also improved through collaborative volunteer metadata authoring. Main contribution of this paper is to show the ICT-based volunteering experience and the corresponding discussion on main findings. The experience has demonstrated the capacity of ICTs to promote social innovation at the universities and bring about citizen empowerment, in this case developing conscious awareness of the difficulties that must be faced daily by people with functional diversity and the benefits of implementing universal web accessibility.

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1. Introduction

The concept of Digital Inclusion comes from the idea that technology and the ubiquity of the Internet can bring about challenges and new opportunities for communities and individuals alike and can reach all layers of the population (Almuwil et al., 2011). However, it is necessary to bring the technology to the people and train them properly in such a way that they begin to consider the technology as a social good. The digital challenges and opportunities are not evenly distributed, the access to it is not equitable and participation in the online environment is not even for people with functional diversity, adding extra difficulties such as the need to develop specific digital or even social skills (Emiliani & Stephanidis, 2005). Thanks to ITC the integration of people to a new order with different relationships at the global scale is favoured. As Warschauer (2004) remarks, “Access to ICT is embedded in a complex array of factors encompassing physical, digital, human, and social resources and relationships. Content and language, literacy and education, and community and institutional structures must be taken into account if meaningful access to new technologies is to be provided.”

In this context, the flexibility of the learning service provided by Internet based scenarios allows students to learn at their own time, place and pace, enhancing continuous communication and interaction between all participants in knowledge and community building. E-learning systems and learning (content) management systems offer open access to life-long learning content and services independent of time and location barriers. These services are increasingly accessible through technologies and devices, offering new opportunities for learning experiences especially for people with social inclusion, thus improving their opportunities. But eLearning environments are rapidly evolving towards a more revolutionary computer and mobile-based scenario (Kukulska-Hulme & Shield) along with social technologies that will lead to the emergence of new kinds of learning applications that enhance communication and collaboration processes.

According to the “Access and use of ICT by people with disability” report (2013) drawn up and recently published by the *Fundación Vodafone-España*, it must be noted that 91.8% of people with a disability in Spain use a mobile telephone, 42.8% of them a computer and 32.5% the Internet. These figures are somewhat lower than those on average within the overall Spanish population (95.5%, 72.7% and 75.1%, respectively for each technology) even though the use of the mobile telephone among people with visual, auditory and mobility disability is practically universal. The collective of people with an auditory disability are those that make most use of ICT, making the computer (47.5%) and Internet (61.8%) the most used technologies, even though, because of the limitations of their disability, this population faces the greatest problems of accessibility to mobile telephones (56.3%). But in spite of that, they also participate most in social networks (56.1%) and use the services of Web pages of organisations dedicated to disability support to participate in forums (36.6%). In the case of the collective of people with a mobility disability, they have the greater perception of the use of the mobile telephone as a facilitator for communication and for enabling personal autonomy, but at the same time they use the computer less (32.6%), and 32.5% the Internet, mainly indicating that it seems very complex to them to manage (34.1%).

These figures demonstrate that there is still a lot of work to do to remove all barriers to accessing ICT by persons with functional diversity. The ubiquitous impact of ICT plays a major role across all sectors of activity, as the increased provision of ubiquitous digital services are more readily available, the location of tools, and individuals are becoming more flexible (Meloche & Hasan, 2008). Therefore no one should be excluded from using mobile phones, the Internet, computers, etc. and all the applications and services including education, health, cultural activities, e-commerce or e-government for instance. Being excluded from these ICT-enabled applications implies being shut out not only from the information society, but from the opportunity of living an independent and autonomous life. Therefore ensuring accessible ICT for persons with disabilities and expanding access to these technologies, as well as to assistive technologies, is a key element of strategies to remove the remaining barriers faced.

The paper is organized as follows. Firstly, considerations on accessible learning are presented, along with their benefits for the social inclusion of vulnerable learners such as people with disabilities. Secondly, the approach to social accessibility is presented and the context of ICT volunteering in this research work. Thirdly the online-volunteer ICT initiative launched at UNED is presented (in its first and second edition) explaining the work developed, how the coordination was carried out and the different issues that had to be tackled. Next, the main results of satisfaction surveys from students with disabilities are presented. Finally, main conclusions are expounded.

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