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Project report

Towards full digital inclusion: the ENTELIS manifesto against the digital divide

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Abstract

Purpose – *The purpose of this paper is to present the work of the European Network for Technology Enhanced Learning in an Inclusive Society project, which addresses the challenges of the digital divide for people with disabilities of all ages.*

Design/methodology/approach – *The project employs a number of activities and approaches which involve people with disabilities and other stakeholders, in order collect scientific knowledge, views, suggestions and experiences that will help in bridging the digital divide. These include literature review and qualitative methodologies of data collection, such as interviews with stakeholders, focus groups and living labs.*

Findings – *The benefits of (assistive) technology in the lives of people with disabilities are highly appreciated. However, a number of barriers, including lack of digital skills are identified. Thus the development of (assistive) technology competencies programmes is suggested. In addition, there is evidence of the need to further involve all stakeholders and increase awareness.*

Social implications – *The most important implication of the project is the production of the manifesto against the digital divide. With this document the project consortium justifies for action on raising awareness regarding the rights of persons with disabilities of all ages to be digitally included.*

Originality/value – *The value of the project lies upon the publication of the manifesto against the digital divide, which has already been endorsed by a number of organisations in Europe and elsewhere, with the aspiration of influencing policy makers and practitioners to collaborate in order to bridge the digital divide.*

Keywords *Digital divide, Assistive technology, Digital inclusion, European project, ICT competences, ICT-AT*

Paper type *Research paper*

Introduction and background

This short paper aims to present the work undertaken by the European Network for Technology Enhanced Learning in an Inclusive Society (ENTELIS) project (www.entelis.net/), and more specifically the pathway towards the publication of the manifesto against the digital divide. The ongoing digital revolution has rapidly changed the way people live, work, learn, socialise, and participate in community life and it has brought important new opportunities for all, including people with disabilities and older adults. However, for a variety of reasons, not all people are equally able to grasp the advantages of the technological evolution, resulting in a gap known as “the digital divide”. Unfortunately, there is considerable evidence that the digital divide exists, in particular where it concerns the elderly and people with disabilities. Various

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personal, socio-economic, educational, cultural and environmental factors, including inaccessibility, contribute to its occurrence. One of the factors frequently reported in current literature relates to insufficient digital skills of many people that eventually leads to a high risk of digital exclusion. Various projects implemented in Europe in the recent past (Keeping pace with (Assistive) Technology, ImPact, ATLEC, ATVET, ViPi) provide evidence that many people with disabilities of all ages have personal experience with information and communication technology (ICT) and assistive technology based on ICT (ICT-AT), but lack sufficient skills and knowledge to effectively participate in the digital society, while many formal and informal carers (personal assistants, family members, educators, etc.) are in a similar situation and lack the competences to support the cared-for person effectively. The same evidence emerges exploring the scientific international literature (ENTELIS, 2015a). Unfortunately society has been very slow to tackle the barriers that cause digital exclusion although more recently it is starting to mobilise itself, acknowledging the ethical as well as economic significance of full digital inclusion. Nevertheless much more could and should be done, and this is the main scope of the ENTELIS project and manifesto (ENTELIS, 2015b).

A few words about the project

The ENTELIS project is funded by the European Commission within the Lifelong Learning Programme (duration 2014-2016) (KA3 ICT Multilateral Network) and brings together nine partners from across the European Union and one partner from the USA. The partners of the project are: AIAS Provincia di Bologna Onlus (Italy, coordinator), the Association for the Advancement of Assistive Technology in Europe (AAATE, Europe), the European Association of Service Providers for Persons with Disabilities (EASPD, Europe), the European Association of Institutes for Vocational Training (EVBB, Europe), the Satakunta University (SAMK, Finland), the European University Cyprus (EUC, Cyprus), HF Trust Limited (UK), Open the Windows (OtW, FYROM), the National Federation of Voluntary Bodies (NFVB, Ireland), and the Institution of Matching Person and Technology (IMPT, USA). The project also holds a number of associate partners (ENTELIS, 2015c) and welcomes any other interested organisation to join the network as associate partner, by applying according to the network rules (ENTELIS, 2015d).

As stated in the introduction, the aim of the project is to address the challenges of the digital divide and the difficulties experienced by people with disabilities and elderly people in engaging with ICT. It does so by the exchange of good practice, research and the development of strategies and policies. During the first two years of the project the main research activities were conducted, which have been completed with successful outcomes in the development of a State of the Art Report (ENTELIS, 2015e) and the publication of the ENTELIS manifesto on digital inclusion. In the final year the project is aiming for data collected from participants in Living Labs that will provide an insight for the development of the foresight study and the roadmap towards actions for reducing the digital divide.

The research behind the ENTELIS manifesto

To support the research activities a conceptual framework was developed to facilitate awareness of the elements involved and their relationships. In the framework the end-user of ICT and ICT-assistive technology has the most central position. It further embraces the most significant actors and other parameters (learning environment, needs and aspirations, policies, practices and experiences), their functioning and interacting in a person surrounding “ecosystem”. During the State of the Art study, data of different nature were collected from different sources and using different methodologies, including a literature review of scientific articles and conference papers, interviews with persons with disabilities and other stakeholders, the collection of innovative experiences.

For the literature review the overall amount of 150 scientific articles and 13 relevant and recent projects have been assessed and analysed under several analytical themes including education, daily life, employment, ageing, thus examining ICT and ICT-AT related to various aspects of life.

A repository of summary tables of the literature studied and discussed is available on the ENTELIS website under the menu item resources(ENTELIS, 2015f).

In addition, interview data were collected in six countries: Italy, Cyprus, Finland, Former Yugoslav Republic of Macedonia, UK and the USA. Different groups of end-users (covering a wide range of people with disabilities and older adults), service and product providers, and trainers/educators were interviewed investigating the same set of themes as applied in the literature review.

In general, outcomes of the literature review and interview data analysis indicated that the benefits of ICT and ICT-AT for the lives of persons with disability of all ages are highly acknowledged and appreciated. Nevertheless there seems to be heterogeneity in the way technology is considered and utilised among various groups, with groups of individuals less included than others in processes relevant to them, such as people with intellectual disabilities and the elderly. In addition, a number of challenges and barriers for ICT-AT competence development were identified.

The State of the Art Report concludes with suggestions for further research, for policy development and for enhancing practice. Themes suggested include the need for further investigation into the reasons for the adoption/abandonment of ICT-AT and into mechanisms to reduce the impact of barriers and to strengthen factors that facilitate the acquisition of digital competencies according each individual's personal needs and aspirations.

Regarding policy and practice a persisting need to increase awareness and to involve all relevant stakeholders is highlighted, as well as the need for specific professional development and the need for more inclusively designed and accessible technology.

Finally, it is suggested that through the project as well as after its completion, the network could explore further possibilities for the development ICT-AT learning programmes customised to needs and users in various groups and also develop position papers and dissemination material that will target the general public, but also specific groups of policy makers, the industry, the academia, the practitioners/professionals and the end-users.

The ENTELIS manifesto

Based on considerations raised in the State of the Art Report, a manifesto against the digital divide, was developed and published aiming at raising awareness regarding the rights of persons with disabilities of all ages to be digitally included. This important policy document is the results of a collective effort and a critical elaboration of research evidence, with inputs from many high-level experts. The document has been discussed and finalised in a consensus meeting of the ENTELIS consortium, open to the participation of associate partners, experts and organisations considering joining the network in Dublin, on 11 November 2015. The day after, in Dublin, it was presented and introduced for endorsement during the ENTELIS seminar on *Reducing the digital divide: the role of Education*.

In summary, the manifesto asserts specific recommendations on:

- policies and strategies to reduce the digital divide;
- research and development efforts for user-led design and adaptive technology solutions;
- education and training, at all levels and in different settings, including curricula for educators and digital inclusion in educational policies;
- service provision in health, social care and educational sectors, including professionals in ICT and ICT-AT; and
- cooperation among all stakeholders at local, regional, national and international level, including the industry, the academia, national governments, as well as the European Union, the United Nations and the World Health Organisation.

The document is online at www.entelis.net/en/manifesto and it is possible for organisations to endorse it and to get inspired!

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