



ICTrain Project and accessibility for Deaf and Blind People

Enrico Dolza, Barbara Plasonik

direzione@istitutosorditorino.org

Istituto dei Sordi di Torino (Italy) Ozara d.o.o (Slovenia)

Abstract

There are several reasons on the European level why the consortium of 27 experts from Slovenia, Greece, Italy and Austria with excellent knowledge and experience in education and training of the Deaf and Hard of Hearing, Blind and Partially Sighted (4 target groups) have decided to propose a project named ICTrain, Information and Communication Training:

- *the target groups do not have an equal access to (ICT-based) education and training,*
- *applications in ICT are not user-friendly;*
- *the existing teaching methods, teaching materials, and approaches do not keep pace with the technological changes sweeping through our society and the ICT are not sufficiently present in Europe's education and training systems that have to be adapted to these changes (progress report adopted by the European Commission in 2008);*
- *ICT-based education and training are not accessible for every European citizen depending on their socio-economic background.*

In order to provide Innovation in learning through ICT on the European level the consortium is developing an innovative ICT-based training in design ceramics for at least 70 Deaf and Hard of Hearing, Blind and Partially Sighted learners. Moreover, the innovation will be accessible for every European citizen. Experts are exploiting the Innovation in 6 pilot trainings and initiate a Project Promotion Campaign including dissemination of the results on local, regional, national and European level through a network to the European Platform for Rehabilitation, to all relevant European institutions concerning education and training of people with special needs, policy makers and other stakeholders with the purpose of transferring the results into mainstream practice and promoting antidiscrimination and awareness-raising activities, social inclusion, ICT-based learning for all, EU policies, and LLP.

The long-term objective is setting the foundation for (in)formal status of the innovative ICT as one of the key ICT tools for education and training of people with special needs.

1. The project ACTrain

ACTrain is a project funded with the support of the Leonardo da Vinci programme of the European Union within the Eacea agency Life Long Learning Programme.

1.1. The output

The main output will be a complete and free on-line training for making pottery products, full accessible for people with sensory impairments: deaf and hard of hearing, blind and partially sighted. These target groups, in fact, have great difficulties to use normal on-line training because of their special procedures for access to communication. They have big barriers to communication and language, both in the written or verbal forms, according to their individual condition of disability.

This training looks also to be as a first format to make accessible the life long learning to disabled people, from which they are often excluded.

The training, ready-made in German, Greek, Italian and Slovene and in the four National Sign Languages of the partners, will be made of 50 lessons downloadable from the web site www.see-hear-touch.com.



1.2 Partners in the project

There are 6 partners in the project:

OZARA d.o.o. - Slovenia

The mission of OZARA d.o.o. is the training, employment, and social inclusion of persons with disabilities.

www.ozara.org

Aeris3 d.o.o. - Slovenia

A digital creative and software-development company from Slovenia.

<http://www.aeris3.si/>

HRDC (Hellenic Regional Development Centre) - Greece

A non-governmental organization that promotes professional training, dissemination, and technology transfer within enterprises, educational institutions, and social partners.

<http://www.hrdc.org.gr/>

The Turin School for the Deaf - Italy

http://www.istitutosorditorino.org/_home/indexB.asp

The University Rehabilitation Institute, Republic of Slovenia

The main national health institution offering comprehensive rehabilitation services for persons with disabilities, in regard to their motor-functions and work abilities.

<http://www.ir-rs.si/>

University of Klagenfurt, Centre for Sign Language and Deaf Communication, Austria

<http://www.uni-klu.ac.at/zgh/inhalt/1.htm>

1.3 The goal

The goal of the partnership ACTrain within the framework of 5 workpackages over 3 years (January 2010 – December 2012) is to achieve the following results:

- Project management,
- Development of innovative ICT-based training in ceramic design,
- 6 Piloted training schemes
- Project Promotion Campaign, and its Dissemination plan,
- Evaluation plan.

2. The Workpackages

2.1 Workpackage 1 - Project management

Within the framework of workpackage 1, the partnership held its Kick-Off-Meeting in April 2010, in Maribor, Slovenia. The purpose of the meeting was to enable those partners, subcontractors, and other participants working on the project to meet each other, ensure a clear overview, and to plan all the project's activities, as well as defining the most optimal strategies for implementing all the workpackages, establish a Project Management Group in order to ensure the monitoring and implementation of single workpackages, discuss the financial issues and management of the project, and find the most optimal promotion and dissemination plan.

2.2 Workpackage 2 – Development of innovation

This concerns the development of ICT-based training in pottery design, accessible for everyone and especially adapted for the deaf, hard of hearing, blind, and partially-sighted, in 5 different languages. It is our priority to raise the competence levels of people with special needs.

Within this workpackage, the partnership has completed the 2nd Workshop in Patras, Greece with the purpose of finding the most optimal strategies for developing the ICT-based training, the most suitable adaptations for the target groups, and to evaluate the progress of the project, in addition to those management and financial issues connected with the implementation of the project.



Within the framework of this workpackage the partnership is developing a Curriculum with 50 ICT-based lessons in ceramic design. All 50 lessons will be available in all 5 languages. The teaching materials will provide the foundation for any necessary adaptation required during the training programme, due to any special needs of the target group.

Accessibility adaptations for the target groups are the crucial point of the project, in order to make the whole training accessible.

By bearing in mind the specific needs of the target groups and the experience of the experts, the partnership ACTrain has so far agreed on the following adaptations:

For the blind and partially-sighted:

- the blind will be able to download their lessons if they want to read them using their already existing screen readers such as Jaws, Proteus, Amebis, Virgo, Apollo, Zoomtext, Braille Display or Braille Line;
- all lessons will be available as an audio description, which is the best way to provide access to education and training for the blind and partially-sighted;
- the blind will hear what is on the photos or in the videos via the audio descriptions;
- since the innovative, though as yet unavailable Application Proteus, will orally guide the blind and partially-sighted throughout their whole training, they will no longer need any of their already existing screen readers, and will not have to buy any additional and expensive software or hardware. The partnership is developing an all-inclusive and innovative ICT tool for the education and training of people with special needs;
- moreover, the blind and partially-sighted will no longer need any of their existing devices, since the Application will include all the things they need to have access to education and training

Adaptations for the deaf and hard of hearing:

- videos will have subtitles for a better understanding;
- sign-language videos will be made;
- photos, videos, and explanations will be used in order to enable the target group to understand the lessons – different teaching materials that will enable them to understand the lessons better;
- words hard to understand will be explained and described if necessary;
- new signs will be developed in sign-language;
- lessons will be structured according to the clarity principle with very clear beginnings and endings;
- synonyms will not be used, always the actual words;
- where necessary, concrete descriptions will be used for words regarding colours, forms, time, location etc.

2.3 Workpackage 3 - Pilot training

Within the Pilot training - Workshop 3 in Torino, Italy, in June 2011 - in order to scrutinize the first results of the training, monitor the progress of the training, define any strategies for solving those problems that may have surfaced during the training, and review the methodologies and qualities of the work programme, dissemination activities etc.

Six training groups will be formed in order to test the on line training for ceramics:

- 1 OZARA d.o.o., Maribor, Slovenia: 5 participants, blind
- 2 School for the Deaf in Ljubljana, Slovenia: 80 participants
- 3 Intermunicipal Association for Blind and Partially-Sighted, Maribor, Slovenia: 3 participants
- 4 HRDC: 10 participants, deaf
- 5 Istituto dei Sordi di Torino (School for the deaf): 19 participants
- 6 University Rehabilitation Institute Republic of Slovenia – Soča: 5 participants and other children with special needs



In Maribor, a 7th group has been formed at the Centre for Hearing and Speech, an organization participating in the project as an Associate partner.

Since clay is a suitable material (therapy, learning etc.) for both children and adults, the partners will disseminate the innovative ICT-based training and the webpage www.see-hear-touch.com to the different National and European organizations responsible for the education, training and re-integration of people with special needs.

The long-term objective of this programme is to establish a firm foundation for the acceptance, formally or informally, of innovative ICT as one of the key ICT tools for the education and training of people with special needs.

2. 4 Workpackage 4 - Project Promotion Campaign and Dissemination plan

The partnership aims to achieve the following results:

- Final International (Video-On-Line) Conference for promoting the project, the EU policies, Social Inclusion, Lifelong Learning Programme, antidiscrimination and awareness raising activities, the EACEA agency, learning through ICT for people with special needs etc. This conference is planned for the 24th October 2012 at the University Rehabilitation Institute – Soča, in Ljubljana, Slovenia
- A Video-on-line presentation: 5-minute video for promotional purposes
- Articles and news in the media for promotional purposes at local, regional, national or european levels.
- E-newsletters
- Network: All partners are responsible for the development of a network of institutions responsible for the education and training of people with special needs, as well as policy making authorities and other stakeholders, with the purpose of transferring the outcomes into mainstream practice, carrying out promotion, dissemination, anti-discrimination, and awareness raising activities at local, regional, national and european levels.

3. What is so special about it?

- it has not yet been developed on purpose for these target groups
- it is multilingual
- adaptable to the needs of the user
- a big challenge: 4 different target groups with quite opposite needs – deaf, hard of hearing, blind and partially-sighted
- accessible for all regardless of their socio-economic backgrounds
- all-inclusive-ICT: participants will not have to buy any additional and expensive programmes or any other hardware (navigation is voice-guided – the blind, for example, do not need a screen reader since the Application includes the voice- guidance), the training can be performed on any modern computer with internet connection
- it can be used during distance-learning by everyone, and for those people with special needs
- the whole project, as well as the ICT, has been developed in very close cooperation with the target groups of the project
- this Application can be used for any other modules in any other field, not only in ceramic design
- scalable architecture - participants can add or hide different functions, depending on their needs - the Application is designed for everyone, not just the target groups of the project, which is a very important added-value of the ACTrain project; expandable (depending on the needs of participants, functions can be added or ignored)
- the application is optimised for best performance, even on smaller screens

This project is meant to improve the learning possibilities, hand skills, learning through ICT, employment possibilities, and the exchange of knowledge between partners. In this way people with



special needs will be able to participate equally in the world of ICT, but if only they want any new learning challenges.

This project is based on the report »The use of ICT to support innovation and lifelong learning for all« adopted by the EC in 2008, clearly stating that ICT is insufficiently present within Europe's education and training systems. It is the long-term objective of this project to establish a foundation for the Application Proteus to become one of the key ICT tools for the education and training of people with special needs.

