Proceedings of the TEEM’13 Track on Knowledge Society Related Projects

Salamanca, Spain
November 16th, 2013

Editors:

Francisco José García-Peñalvo
University of Salamanca

Alicia García-Holgado
University of Salamanca

Juan Cruz-Benito
University of Salamanca
TEEM'13 is organized by the Research GRoup in InterAction and eLearning (GRIAL) and Research Institute for Educational Sciences (IUCE) at the University of Salamanca and supported by:
Volume Editors

Francisco José García-Peñalvo
Research GRoup in InterAction and eLearning (GRIAL)
Research Institute for Educational Sciences (IUCE)
Department of Computer Science and Automatics
University of Salamanca

Plaza de los Caídos s/n, 37008 Salamanca, Spain
(+34) 923 294400 ext. 1302
Email: fgarcia@usal.es

Alicia García-Holgado
Research GRoup in InterAction and eLearning (GRIAL)
Research Institute for Educational Sciences (IUCE)
Department of Computer Science and Automatics
University of Salamanca

Paseo de Canalejas 169, 37008 Salamanca, Spain
(+34) 923 294400 ext. 3433
Email: aliciagh@usal.es

Juan Cruz-Benito
Research GRoup in InterAction and eLearning (GRIAL)
Research Institute for Educational Sciences (IUCE)
Department of Computer Science and Automatics
University of Salamanca

Paseo de Canalejas 169, 37008 Salamanca, Spain
(+34) 923 294400 ext. 3433
Email: juancb@usal.es
**Organization**

Research GRoup in InterAction and eLearning (GRIAL)
Research Institute for Educational Sciences (IUCE)
University of Salamanca (USAL)

**Steering Committee**

Francisco José García-Peñalvo (University of Salamanca, Spain) – Chair
David Griffiths (University of Bolton, UK)
María José Rodríguez-Conde (University of Salamanca, Spain)
Peter Sloep (OUNL, The Netherlands)
Robert Tennyson (University of Minnesota, USA)

**Program Committee**

Francisco José García-Peñalvo (University of Salamanca) – Chair
Gustavo Alves (ISPE, Portugal)
Miguel Ángel Conde González (University of Leon, Spain)
David Griffiths (University of Bolton, UK)
Nick Kearney (Andamio, Spain)
Cristóbal Suárez (University of Valencia, Spain)

**Organizing Committee**

Alicia García Holgado (University of Salamanca, Spain) – Chair
Juan Cruz Benito (University of Salamanca, Spain)
Lucía García Holgado (University of Salamanca, Spain)
Felicidad García Sánchez (University of Salamanca, Spain)
María José Rodríguez-Conde (University of Salamanca, Spain)
Antonio Miguel Seoane-Pardo (University of Salamanca, Spain)
Valentina Zangrando (University of Salamanca, Spain)
Index

Preface...............................................................................................................................................IX

Mobile Learning: How could mobile learning contribute in the learning process? Could it reduce Digital Divide?
Mª Goretti Alonso de Castro ................................................................................................................1

Tagging, Recognition, Acknowledgment of Informal Learning experiences (TRAILER)
Francisco J. García-Peñalvo, Miguel Á. Conde, Valentina Zangrando, Alicia García-Holgado, Antonio M. Seoane Pardo, Marc Alier, Nikolas Galanis, Jordi López, David Griffiths, Mark Johnson, Maria A. Marques, Maria C. Viegas, Gustavo R. Alves, Elwira Waszkiewicz, Aleksandra Mykowska, Dom Szkolen i Doradztwa, Mykowska Aleksandra Tarnowskiego, Miroslav Minovic, Milos Milovanovic ............................................................................................................................7

DevalSimWeb: Development of professional skills via participative EVALuation and SIMulation using Web tools.
Gregorio Rodríguez Gómez, María Soledad Ibarra Sáiz, and Jaione Cubero Ibáñez ........................................15

VALS: Virtual Alliances for Learning Society
Francisco José García-Feñalvo, Iván Álvarez Navia, José Rafael García-Bermejo, Miguel Ángel Conde-González, Alicia García-Holgado, Valentina Zangrando, Antonio M. Seoane-Pardo, Juan Cruz-Benito, Steve Lee, Raymond Elferink, Edwin Veenendaal, Sara Zondergeld, David Griffiths, Paul Sharplees, David Sherlock, Alberto F. De Toni, Cinzia Battistella, Giulia Tonizza, Giovanni De Zan, George A. Papadopoulos, Georgia Kapitsaki, Achilles A. Chiliees, Christos Mettours, Saul Cheung, Zaira Guerrero, Elena He, Marc Alier, Enric Mayol, Maria Jose Casany, Scott Wilson, Rowan Wilson, Mark Johnson ..................................................19

ECQA SOCIAL MEDIA NETWORKER
Ricardo Colomo-Palacios.....................................................................................................................27

European history crossroads as pathways to intercultural and media education (EHISTO)
Susanne Popp, Jutta Schumann, Oliver Simmet, Joanna Szczechiorska, Sylvia Hadrysiaik, Terry Haydn, Kathleen Lane, Teresa Belton, Patrick Yarker, Francisco J. García-Peñalvo, Valentina Zangrando, Antonio M. Seoane Pardo, Mª José Rodríguez-Conde, Alicia García-Holgado, Monika Vinterek, Anders Persson, Jan Morawski, Thomas Nygren, Susanne Friz.................................................................................................................................31

Assessment, Training and Innovation on Basic competencies in Secondary Education: ICT, Information Literacy and Conflict Resolution (ATI-LINCO)
Maria-José Rodríguez-Conde, Juan-Francisco Martín-Izard, Fernando Martínez-Abad, Juan Pablo Hernández-Marcos, Susana Nieto-Isidro, María-Esperanza Herrera-García, Susana Olmos-Migueláñez, Eva-María Torrecilla-Sánchez, Ana B. González-Rogado, Patricia Torrijos...............................................................37

Intercultural Education through Religious Studies (IERS)
Massimo Raveri, Cinzia Crivellari, Giovanni Lapis, Maria Bombardieri, Giulia Nardini, Beatrice Nuti, Anna Consomni, Francisco J. García-Peñalvo, Valentina Zangrando, Antonio M. Seoane Pardo, Mª José Rodríguez-Conde, Alicia García-Holgado, Tim Jensen, Annika Hvithamar, Britt Istoft, sabelle Saint-Martin, Eric Mesnard, Benoît Falaize, Anna Van den Kerchove, Philippe Gaudin, Ludovic Vandooegehe, Natalie Heron, Susanne Popp, Jutta Schumann, Oliver Simmet, Anna Mauro, Lorenzo Luatti, Elisa Carboni, Stefano Alacqua, Micaela Cozzi................................................................................................................43

Disruptive innovation of virtual education at the Ecuadorian institute of Higher Studies
Lena I. Ruiz Rojas....................................................................................................................................49
Intercultural Mentoring tools to support migrant integration at school (INTO)
Elisa Carboni, Marco Paoletti, Francisco J. García-Peñalvo, Valentina Zanrando, Mª José Rodríguez-Conde, Alicia García-Holgado, Joanna Szczecińska, Marek Krawiec, Zuzanna Rajmer, Anna Mauro, Caterina Casamenti, Graziella Favaro, Lorenzo Luatti, Stefano Alacqua, Micaela Cozzi, Charalambos Vrasidas, Michalinos Zembylas, Katerina Theodoridou, Christiana Aravi, Sotiris Themistokleous, Kiki Messiou, Cristina Azaola, John Schulz ................................................................. 53

Multicultural Interdisciplinary Handbook: tools for learning history and geography in a multicultural perspective (MIH)
Francisco J. García-Peñalvo, Valentina Zanrando, Antonio M. Seoane Pardo, Mª José Rodríguez-Conde, Alicia García-Holgado, Mag.a Martina Bechter, Paul Schober, Martin Maier, Susanne Popp, Oliver Simmet, Uta Fenske, Bárbel Kuhn, Stefano Gasparri, Silvana Bianchi, Anna Consonni, Cinzia Crivellari, Frank Riegler, Andrea Krimbacker, Jean-Marie Baldner, Didier Mendibil, Eric Mesnard, Joanna Szczecińska, Sylwia Hadrysiak ............................................................................................................. 59
Preface

Welcome to The First Technological Ecosystem for Enhancing Multiculturality, TEEM 2013, international conference

TEEM (Technological Ecosystems for Enhancing Multiculturality) Conference is born within the new PhD Programme on Education in Knowledge Society at the University of Salamanca, Spain. This conference is addressing both the Social Sciences studies and the new technological advances but within a synergic and symbiotic approach. According to this perspective, a not closed set of different research lines, always with a collaborative orientation, is established, including Education Assessment and Orientation, Human-Computer Interaction, eLearning, Computers in Education, Communication Media and Education, Medicine and Education, Robotics in Education, Engineering and Education and Information Society and Education.

Moreover the academic and research tracks, TEEM Conference encourages living or recently ending national and international Projects coordinators and researches to make a presentation about the advances and main outcomes of their projects related to the Knowledge Society researching lines presented above.

I would like to thank the members of the International Program Committee for their accurate and timely reviewing. I would also like to thank the Track Chairs for their efforts in organizing the academic issues related to each track, and the Organizing Committee for their huge effort in all the associated tasks that an international conference involves. Last, but not least, I would like to thank the participating organizations: the University of Salamanca, Research Institute for Educational Sciences at the University of Salamanca, Research Transfer Unit of the University of Salamanca, GRIAL Research Group, ADE Castilla y León, Organismo Autónomo Programas Educativos Europeos (Spanish Ministry of Education, Culture and Sports), European Commission and ACM for their support.

Salamanca, Spain, 24th October, 2013

Francisco José García-Peñalvo (TEEM 2013 Conference Chair)
Mobile Learning: How could mobile learning contribute in the learning process? Could it reduce Digital Divide?

Mª Goretti Alonso de Castro
Control and Evaluation Area Coordinator
Organismo Autónomo Programas Educativos Europeos
Gustavo Fernández de Balbuena, 13, 2ª Planta, 28002 Madrid
(+34) 915506728
goretti.alonso@oapee.es

Abstract
In this document, we describe how the use of smartphones and other mobile devices is increasing and how to take advantage of this trend to improve formal and informal education through European projects.

Keywords: Mobile Learning, Learning Model, Motivation.

1. INTRODUCTION
The use of smartphones among teenagers is increasing and a new trend named mobile learning, learning through mobile devices, is beginning to open up new possibilities and challenges in education. Some experts in education and new technologies show that the proper use of these devices may improve performance because of the increase in student involvement compared to traditional teaching. Furthermore, statistics show that smartphones and tablet computers grow in number, so learning is becoming more mobile and easier for the average student. Hence, we are going to review the advantages and disadvantages of using mobile devices in the learning process as well as how this type of learning is evolving.

2. WHAT ARE MOBILE LEARNING ADVANTAGES AND DISADVANTAGES?
It is early to know all the possibilities that mobile devices offer because mobile learning is still experimental. Nowadays are being carried out various proofs of concept through mobile learning.

One example is the use of mobiles for visiting museums or historical places cities in order to carry out the learning process in situ.

Related to this emerging trend there are a number of studies and articles analysing the advantages and disadvantages of using mobile devices for learning.

2.1 Advantages
The potential magic of the smart phone when it comes to learning lies in its ability to provide instant access to facts and the ability to collaborate with others, as well as provide a fun, mobile platform for educational games [1].

The positive outcome of this phase of innovation is that we are seeing new entrants doing creative things and developing systems that are driven by needs of populations that have not been historically well served by information industries [1].
2.1.1 Educational Support
Using smartphones and tablet computers, students have easy access to knowledge. They use their devices as supportive educational tools. They now have access to diagrams, articles, essays and other academic information which can improve student performance in the classroom [8].

2.1.2 Interaction
We all know that when a teacher calls upon a student, the student gets the jitters, thinking that he or she might be in trouble. With mobile learning, communication between teacher and student is easy. It can even encourage shy students to communicate more openly when they are in class. Teachers can also use mobile devices to interact with students that require special attention [8].

2.1.3 Management
No two students are the same. Each has their own way of absorbing information. Several educators note that each student requires different pedagogies or strategies for learning. Through mobile learning, students are able to learn in their own way. They can now personalize and enjoy learning [8].

2.1.4 Wider Access
Other than having access to educational tools online using their smartphones and tablet computers, students now have access to industry experts. Students can read reviews and blogs by field experts. They can also follow conferences and “webinars” (online seminars). They also now have a chance to interact with professionals even from their homes or classrooms. Using gadgets, they can overcome distance and expenses too [8].

2.1.5 Special Education
More and more gadgets are being developed every day to help students with learning disabilities. Mobile technology can also benefit those with special needs. Now that there are several apps that cater to learning disabilities and physical impairments, we can say that learning-challenged students have a chance to be equal to those who are normal [8].

2.2 Disadvantages
The negative scenario is that these systems are not open enough to allow a lot of innovation and learning from street-level knowledge that young people could be bringing to these systems, and it could bring on even more of a digital divide. There are kids who have persistent broadband PC–based Internet access at home, doing much more creative kinds of media production, and sharing and mobilization. And the kids who are reliant exclusively on their hand-held devices let them do a lot of things, but much more on the curated, consumer level experience rather than the activate one. It could go both ways, we don’t really know [1].

2.2.1 Cost
Cost is one great disadvantage of mobile learning. How can students be part of mobile learning if they do not have a mobile device? Moreover, technology changes very fast. Students have to upgrade devices frequently. Other than the device, there are monthly data charges from mobile providers, so downloading large files not only takes time but also costs a lot [8].

2.2.2 Size of Device:
The size of the gadget is also a disadvantage. It is so small that they can be lost or stolen easily. Moreover, the screen is just too small and it can strain the eyes of those who use it for a long period of time. Also, on a screen so small, only a small amount of information can be displayed [8].

2.2.3 Battery Life:
Most gadgets only have about 2 to 4 hours of productivity. Once the battery runs out, the student will have to plug it in for recharging. Mobile learning is then no longer mobile [8].

2.2.4 Technology,
Although technology is still progressing, what we have now is still limited. Most gadgets have limited storage for storing large or many files. A student has to spend more in order to have bigger storage space, and that goes back to the first disadvantage of mobile learning. Moreover, there are several operating systems or platforms out there. Content isn’t all equal. So if students are Apple users, they use iOS; if Android users, they only like Android [8].
2.2.5 *Usability:*  
Mobile devices are difficult to use because of the small buttons. They can be tricky to use even for students. Although detachable keyboards are available, that costs money [8].

2.3 **Advantages versus disadvantages**  
Reviewing the positive and negative aspects shown above it can be said that there are more benefits than drawbacks. Nevertheless it is important to consider both of them in order to research in the right direction.

3. **HOW COULD MOBILE LEARNING CONTRIBUTE IN THE LEARNING PROCESS?**  
There are many on-going projects in order to research the impact of using mobile devices in and beyond the classroom.

One example of those projects is “MOBILE LEARNING PIONEERS” (MLDs) in which has been found that: it has resulted in greater quality of the lessons that teachers give to students, a marked gain on the state-mandated TAKS Benchmark tests and an increase in students interacting with each other. Students are readily teaching each other and their teachers about how to use the MLDs, and some students—not necessarily the ones with the highest grades—are stepping up to become the "go to" device specialists [2].

Another example is “Take Project K-Nect”. The program is a social-media-based curriculum that combines project and collaborative learning with new media learning for 3,000 high scholars in three states. An Algebra 1 curriculum has been distilled into mini apps that include instant messaging and blogging, assessment tools for teachers, supplemental activities, project-based learning components, problem sets, and cartoon animation. “Students [take] control of the learning process and create personalized learning communities [1].

Additionally, a study carried on by Grunwald Associates LLC, about parent's thoughts about mobile devices for early childhood and K-12 Learning shows that there are great benefits in using mobile devices in different competences [7].

Therefore, mobile devices appears to be really useful in order to improve the motivation and performance in learning, furthermore students could learn whenever and wherever they need the information which opens a great amount of opportunities.

4. **COULD MOBILE LEARNING REDUCE DIGITAL DIVIDE?**  
Studying the figures in the mobile technology penetration during the last years it is found that the mobile-cellular subscriptions are increasing year by year, so much so that there are almost as many subscriptions as people in earth. This is reflected in the study carried on by the Telecommunication Development Sector (ITU-D) [9]. Hence mobile learning could have a great potential in reducing Digital Divide. Nevertheless, it can be found reviews of all kinds in this sense (for and against in this regard).

4.1 **Positive effects**  
In countries that didn’t have existing telephone infrastructure much less universal telephone service much less Internet access, mobile phone service has been genuinely transformative in so many ways [1].

Mostly, it’s based on the bedrock that it enables social connection between people. Social connections are our primary platform for learning in everyday lives. It’s hugely transformative for that context of learning [1].

Because often in developing countries it’s the only portal that they have to the informational universe, people have been much more creative about using those kinds of platforms like texting and information access and retrieval and other kinds of
things in the learning phase than what you’d see in countries like Japan or the U.S. or Korea, where people have all these other pipelines and other avenues for information [1].

4.2 Negative effects
For very high-risk students — such as those who are homeless or are attending school primarily for a free lunch — the technology-integrated math class is as beneficial. In those cases, there’s much more to contend with than academics, and a mobile-phone curriculum alone won’t change that. [1]

[Mobile] systems are not open enough to allow a lot of innovation and learning from street-level knowledge that young people could be bringing to these systems, and it could bring on even more of a digital divide [1]

5. EXAMPLES OF EUROPEAN PROJECTS IN MOBILE LEARNING
There are many European projects related to mobile learning, some of them carried on in the framework of the Lifelong Learning Programme as it is shown in this section.

5.1 Lifelong Learning Programme Projects
There have been several projects in the framework of the Lifelong Learning Programme. As for example the projects described below:

• Transforming progression and learning outcomes for Youth at Risk through ICTs, Web 2.0 and Mobile Learning: The eFuture project aims to develop new methods for the use of ICTs, Web 2.0 and Mobile Learning which mainstream education and training providers can adopt to support large numbers of Youth at Risk in order to improve their capacity to enter the labour market and to progress to further education [3].

• COLLAGE - Collaborative Learning Platform Using Game-Like Enhancements: COLLAGE aims at using existing experiences in the field of mobile learning applications in Europe, so that existing best practices are integrated in an innovative, really state-of-the-art mobile learning support and information application [6].

• ENSEMBLE European citizeNShip lifElong MoBile Learning: The ENSEMBLE project concerns the use of ICTs - and particularly of mobile tools, like mobile phones, MP3 readers and netbooks - to encourage the integration of social groups which are at risk of being marginalized [4].

• Español a la Carta: mobile learning for immigrants in the restaurant sector: Español a la Carta is a training program for teaching Spanish to immigrants who are already working in medium or small companies of the tourist and restaurant industry. The project includes multimedia contents (audio, video and interactivity) for mobile devices, and it uses Flash Lite technology. It was initially developed for mobile telephones, but devices need to fulfil some requirements for visualizing animations and graphics. This was a handicap, and it was finally decided to create a web page for supporting the mobile learning course. The web allows downloading the contents to the computer so that students can transfer them to the mobile phone with a cable or via Bluetooth. Users have one lesson in the mobile and the other lessons are kept in the computer farther reviewing [5].

• TELEAC - let your mobile phone do the talking: mobile learning from Dutch TV: An application linked to TV via mobile languages based on phrase book languages. Available on mobiles, via text and audio links. Six languages are
Mobile Learning: How could mobile learning contribute in the learning process? Could it reduce Digital Divide?

currently available and Turkish and Arabic are planned. It is free to the user. It is aimed at new target groups, using new technologies and to give publicity other importance of language learning [5].

- INLET: using mobile devices and mass media to promote language learning among larger audiences: demonstrated interesting ways in which the general public and mass audiences of sport events can be motivated to acquire basic knowledge of a language. It also proved that cross-sector and cross-country collaborations between lifelong learning, ICT and broadcast media players can produce considerable added-value for informal language learning in Europe [5].

5.2 Results

It can be seen that there are a great sort of projects and papers in the mobile learning field, but there are still many steps to take in order to ensure that mobile devices are a reality in education, therefore, it is needed to keep bringing new innovative projects or educational policies that allow exploring all the possibilities offered by these devices.

Under the framework of the new Erasmus+ programme, which will be the continuation of the Lifelong Learning Programme, many institutions company institutions could apply for grants to carry out projects in different areas of education including among others mobile learning. ICT is one of the main objectives that the European Community wants to promote, and m-learning is one branch of it. The call for proposals is expected to be published at the end of December and it will explain all the information of the new program. More information could be found in http://ec.europa.eu/education/news/20130719-erasmus-plus-preparation_en.htm and http://ec.europa.eu/education/erasmus-for-all/

6. CONCLUSIONS

The great penetration of mobile devices worldwide turns them into a tool with many possibilities in the field of education.

The scale and diversity of mobile learning projects in the United Kingdom and Denmark indicate that sustained government investment is necessary to roll out large projects which effectively use mobile phones for learning [10].

Thereupon, it is needed to loss the fear of allowing the use of mobile devices in classroom and to establish the rules that help to find a balance between suitable and unsuitable uses of mobile technology in classroom.

Furthermore, action is required in order to achieve that this new educational trend can reach most of the population in both developed and developing countries, thus reducing the digital divide.

Finally, due to the growing importance of mobile learning, the new Erasmus+ programme could contribute to foster projects in the field of innovation in education related to this trend, as ICT in education is one of the main objectives of the programme.

7. REFERENCES


Tagging, Recognition, Acknowledgment of Informal Learning experiences (TRAILER)

KA3 Multilateral project

Francisco J. García-Peñalvo, Miguel Á. Conde, Valentina Zanagrandã, Alicia García-Holgado, Antonio M. Seoane Pardo
GRIAL Research Group, Research Institute for Educational Sciences (IUCE), University of Salamanca
Paseo de Canalejas 169, 37008 Salamanca, Spain
(+34) 923 294500 ext. 3433
{fgarcia, mconde, vzangra, aseoane, mjrconde, aliciagh}@usal.es

Marc Alier, Nikolas Galanis, Jordi López
Sushitos Research Group, Universitat Politècnica de Catalunya - Barcelona Tech (UPC).
Edifici omega, Despatx 116, C. Jordi girona, 1-3, 08034 Barcelona, Spain
(+34) 934137885
{marc.alier, ngalanis}@essi.upc.edu

David Griffiths, Mark Johnson
Institute for Educational Cybernetics, University of Bolton, Deane Road, Bolton, BL3 5AB, Bolton, UK
(+44) 01204900600 {d.e.griffiths, m.w.johnson}@bolton.ac.uk

Jose Janssen, Francis Brouns, Hubert Vogten, Anton Finders
Open University of the Netherlands (OUNL), Valkenburgerweg, 177, 6401 DL, Heerlen, Netherlands
(+31) 455762915 {jose.janssen, francis.brouns, hubert.vogten, anton.finders}@ou.nl

Maria A. Marques, Maria C. Viegas, Gustavo R. Alves
Instituto Politécnico do Porto, Rua Dr. Roberto Frias, 712, P-4200-465, Porto, Portugal
(+35) 1225571000 {mmr, mcm, gca}@isep.ipp.pt

Elwira Waszkiewicz, Aleksandra Mykowska
Dom Szkolen i Doradztwa Mykowska Aleksandra
Tarnowskiego, 6/1-1, 30-538, Cracow, Poland
(+48) 126565712 {ewaszkiewicz, amykowska}@domszkolen.com

Miroslav Minovic, Milos Milovanovic
University of Belgrade, Jove Ilića, 154, 11000, Belgrade, Serbia
(+38) 1113950800 {miroslav.minovic, milos.milovanovic}@mmklab.org

Abstract

Learners do not only learn in the institutions, they learn during their live in different contexts, with different resources and from the interaction with different persons. This kind of learning that is not always intentionally carried out is known as informal learning. The application of Information and Communication Technologies to learning and teaching processes facilitates making visible such kind of learning for the institutions. However the nature of formal and non-formal, course-based, approaches to learning has made it hard to accommodate these informal processes satisfactorily. The project aims to facilitate first the identification by the learner (as the last responsible of the learning process), and then the recognition by the
institution, in dialogue with the learner, of this learning. To do so a methodology and a technological framework to support it have been implemented and tested.

**Keywords:** Informal Learning, Service-based framework, Personal Learning Network, Decision Making

1 INTRODUCTION

Learning is something that is not always linked to an institutional environment. Learners learn along their life, from the experience, interacting with peers, looking for information in the Internet, etc. These are learning activities that take place outside the institution and can be planned or not. This kind of learning is known as informal learning.

Technological and organizational innovations, and the affordances of the Internet, are facilitating increased access to knowledge and training for individuals that range from formal courses to informal ad hoc learning. However, the greater part of the informal learning that takes place, both within and outside institutional and organizational contexts, remains unacknowledged. Though informal learning has always taken place, the advent of ICT and, particularly, social media approaches, have facilitated these processes and, at the same time, have made them more visible.

Informal is increasingly seen as an aspect of learning that deserves special attention, because of: 1) The recognition that the Bologna process is giving to informal learning [1] as a basic element in lifelong learning; 2) The pressing need to be able to demonstrate learning that in many cases is obtained by observation and experience [2]; and 3) because of the emergence of the Internet, mobile devices and 2.0 Web tools that facilitate such kind of learning [3-5].

In the workplace the recognition of informal learning is especially relevant because of different factors. Among others [6, 7]: it enhances employability and produces positive benefits for managers and companies; it can develop task skills and knowhow and communicates “social” norms and preferred patterns of behavior; It gives employees the opportunity to learn and keep their skills up-to-date, while being part of the overall workplace culture rather than just its training regime; etc. These issues lead to an interest in informal learning from corporate world, driven by the desire to capitalize on the intellectual assets of the workforce, to manage organizational knowledge and in recognition that informal learning may prove a cost effective way of developing competence [2].

There are several initiatives that try to facilitate recognition and assessment of informal learning. However they are mainly focused on the validation of informal learning and, particularly, on the development of issues relating to certification and qualification with a view to the recognition of competences. Less attention is paid to aspects relating to the support for, and facilitation of informal learning so that learners can integrate it in their portfolio. Though the recognition, conceived as certification of informal learning, is important, it is necessary to go beyond it in order to move towards its integration with other learning contexts and, in order to do so, TRAILER (Tagging, Recognition and Acknowledgment of Informal Learning Experiences) project is defined.

TRAILER project [8-10], an ICT multilateral project funded by the European Commission, started on January 2012. For two years, a group of researchers from seven European institutions are working together to develop an innovative ICT-based service, which should allow the learner to identify episodes and evidences of informal learning and which should allow the institution to recognize those informal learning activities in dialogue with the learner.
This work presents a description of TRAILER project, its main objectives and outcomes, and also outlines some conclusions of the project.

2 DESCRIPTION

2.1 Objectives

The main objective of the project is to incorporate the consciousness of informal learning as part of an individual’s development; this starts with the identification by the learner of informal learning activities and the subsequent process in which these are made visible to the institution. This task will be done by developing methodologies and tools that will facilitate this process, making it transparent both to learners and institutions and allowing all the stakeholders involved to make the most out of these processes.

2.2 OUTCOMES

The TRAILER project involves learners and institutions. ‘Learners’ may be workers in a workplace, or traditional learners in an educational institution. Through transparency of communication, the TRAILER environment enables discussion between the different stakeholders and institutions concerning informal learning activities, the associated competences and how this information can be exploited. In order to achieve this, a staged methodology supported by a technological framework has been deployed, so this are the two main outcomes of the project.

The TRAILER methodology comprises a framework with several components and interfaces to make possible the interaction required [8]. The framework is described in Fig. 1 where it is possible to see a Personal Learning Network (PLN) that groups the tools that the user employ to learn in an informal way such could be Wikipedia, Youtube, Games, Social Networks, LMS, Remote Labs, Expert Forums, Twitter, etc [11]. One of the tools included in such component is the portfolio in which informal, non-formal and formal learning experiences can be stored and published [12]. Such tool has an interface to facilitate gathering informal learning activities the informal learning collector (ILC). On the other hand there are several institutional tools. These are: a Competence Catalog that facilitates a way to categorize informal learning experiences taking into account learner or institutional perspectives; an Institutional Environment that facilitates the analysis of the published information in order support dialog with the learner and to facilitate decision-making concerning learning issues within the institution (for example, accreditation processes) [13].

Given this framework the starting point of the TRAILER methodology is the moment in which the user carries out an online activity, which may have a bearing on a competence. The learner can identify and match an activity with the set of possible competences presented by TRAILER, or store it and identify it later. The processes of collection, inspection and reflection result in a methodology with 3 stages (Fig 2.) [14]:

1. Identification and Storage. It implies that the user classifies the activity taking into account a competence catalogue that includes general competences, institutional competences and competences defined by the user. After that the identified activity is recorded in the portfolio.

2. Organization. Once the information of the ILA is stored, it can include information about the associated competences or can require organizing it by employing the catalog. In addition, once it is stored, it can be classified into the portfolio in different categories or views. When the information is properly organized it can be published to the institution, with the
learner determining what is published and to whom it is visible. With this information, institutions can conduct analyses on competencies, or the user could find peers with similar interests and/or worries.

3. Analysis. The public published information can be analyzed in order to make decisions about the learning requirements, tools and contents used by the institution and the skills a user has, taking into account a specific individual or a group. The publication of information and the views of the portfolio facilitate a common analysis of the gathered information, which can facilitate a dialogue among the stakeholders. The analysis system can produce recommendations regarding institutional skills or knowledge gaps or personal recommendations for the learner/employee [15]. With this dialogue and recommendations, a global portfolio of knowledge can be co-created between the user and the institution. The components involved in this stage are the Portfolio, the Catalogue and the Institutional Environment.

![Technological framework](image)

**Fig 1.** Technological framework to support the methodology that includes a Personal learning Network which integrates a portfolio system and some institutional tools such as an institutional environment and a competence catalog [8]

### 2.3 EVALUATION AND RESULTS

In order to ensure the validity of the methodology and the framework several evaluation activities were needed.
Firstly, it was necessary to evaluate usage information and expectations that students have on informal learning. This was done through some surveys and interviews with learners and people in charge of the institutions. From this activity the conclusion was that the institutions and even more so the companies see the informal learning as something useful that should be taken into account, they do not have the necessary protocols and tools to support its validation and recognition [8]. The methodology and the technological framework were necessary.

Secondly the framework was implemented as a proof of concept. This was done in order to validate the framework before to carry out different pilots. The implementation was checked by a panel of experts taking several usability factors into account. Through this testing it was possible to discover several breakdowns that were solved before the pilots were carried out [16] and to improve the usability of the implementation developed.

Finally several pilots were carried with different organizations, taken into account the companies and learners perspective and the allow us to show the validity of the methodology and the technological framework, however it would be desirable to improve the implementation carried out in order to make the dialog easier and more transparent [17-22].

Fig 2. Stages of the methodology that facilitate dialogue to recognize the informal learning activity among the learner and the institution and thus facilitates the co-creation process of a competence portfolio for the institution and the individual

3 CONCLUSIONS

Nowadays informal learning has gained special attention and has specially impact in the workplace and educational contexts. Employees need to show what they have learnt beyond the institution in order to promote in their jobs and/or find new ones. In addition the institutions needs to know the competences their employees have, in other to make decisions and to determine
the tasks they can or cannot carry out. In the case of learners they can show to the institution what they know and the people in charge of them can adapt learning pathways depending on this knowledge background. This implies the articulation of a dialogue related to informal learning activities between employees/learners and people in charge of institutions. TRAILER project facilitates a methodology and a technological framework to do this.

The framework has been implemented as proof of concept and tested through several pilots. The results show that a dialogue based on informal learning between the institutions and their learners is possible. However other challenges are still open such as if the informal learning is really being considered in the companies, if what is needed is a technological solution, if it is necessary to measure and recognize all person merits, etc. From a technological point of view the system can be improved introducing ways to deal with competences ambiguity, semantic layers enhance the decision support system and to propose competences to the learners, etc.

Finally it can be said that TRAILER project facilitates a dialogue to make visible informal learning but there is a need to see how informal learning can be really exploited.

4 ACKNOWLEDGMENTS

With the support of the Lifelong Learning Program of the European Union. Project Reference: 527752-LLP-1-2012-1-DE-COMENIUS-CMP. This project has been funded with support from the European Commission. This publication only reflects the views of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

5. REFERENCES

Tagging, recognition, acknowledgment of informal learning experiences (TRAILER)


DevalSimWeb

Development of professional skills via participative EVALuation and SIMulation using Web tools (ALFA III (2011)-10)

Gregorio Rodríguez Gómez, María Soledad Ibarra Sáiz, and Jaione Cubero Ibáñez.
University of Cádiz
Calle Doctor Marañón, 3,
11002 Cádiz, Spain
(+34) 956 016481
{gregorio.rodriguez, marisol.ibarra, jaione.cubero}@uca.es

Abstract

The DevalSimWeb project (Development of professional skills via participative EVALuation and SIMulation using Web tools) is financed by the ALFA III Program from European Union and developed in collaboration between 2 European universities and 4 Latin American universities.

The DevalSimWeb project addresses some of the main problems of Latin American universities: “dropping out” or the abandonment of studies during the first or second year, especially by students from the more disadvantaged social classes and post-graduate insertion into the labour market.

Through the DevalSimWeb project we aim to improve the quality of Latin American Higher Education, via the development of evaluation skills, in both the teaching staff and the students, and interpersonal skills (critical thought, creativity/innovation, teamwork, autonomy, etc.). This will be used to help students successfully finish their university studies and integrate them into a labour market characterised by the use of information and communications technology, through social networks, and knowledge.

This project offers an alternative approach to assessment for learning in higher education. It is based on the use of ICT and aims to develop university student’s skills to reduce the dropout rate and promote their employability.

Keywords: e-Assessment, Learning Oriented e-Assessment, Skills Development, Web services, Serious Games

1 INTRODUCTION

Thomas (2002) relates college dropout rate, among other variables, with the assessment methods used and the university institutional structure, which tends to reproduce a certain social culture. Often these models do not take into account the competences, abilities and skills requested in the labour market.

Boud & associates (2010), Carless, Joughin y Mok (2006), Falchikov (2005), Ibarra, Rodríguez y Gómez (2012), López Pastor (2009) and Rodriguez, Ibarra y Gómez (2011), among other authors defend the importance of student’s active participation in the assessment process through strategies such as self, peer or co-assessment. These strategies promote autonomous learning, empowerment and self-regulation through critical reflection of their own performance.

In the current learning society, there is a need for students to be effective life-long learners, in that respect the concept of "sustainable assessment" (Boud, 2000), emerges. Sustainable assessment implies that students receive specific training in assessment so that they can successfully face their academic and professional tasks (Boud & Associates, 2010).

The conceptual framework that guides this project builds on the e-learning oriented e-assessment (Rodriguez and Ibarra, 2011). The aim of the project is to reduce the digital divide that exist between teachers and students when addressing the assessment process. With the use of ICT the objective is that students reach strategic e-learning.

1.1 Description

Described below are each of the nine work packages into which the DevalSimWeb Project has been organised (Figure 1). Each of the packages is the shared responsibility of the six members of the project.
1.2 Objectives

Through the DevalSimWeb project, we aim to improve the quality of Latin American Higher Education, via the development of evaluation skills, in both the teaching staff and the students, and interpersonal skills (critical thought, creativity/innovation, teamwork, autonomy, etc.). This will be used to help students successfully finish their university studies and integrate them into a labour market characterised by the use of information and communications technology, through social networks, and knowledge.

Specific objectives:

1. **Reduce the student dropout or abandonment rate in university studies.** This is for students in the first two years of their degree and will be done via their participation in training activities, developed in collaboration with businesses, which allow them to successfully face academic evaluation.

2. **Increase the universities’ number of post-graduate entries into the labour market** via students’ active participation in the processes of evaluation of their learning.

3. **Increase the level of employability** of university students who finish their degrees, via the development of skills demanded by the labour market.

4. **Increase university students’ skill level** within a set of transversal skills (critical thought, creativity/innovation, teamwork and autonomy) which are required for academic success and entry into the labour market. This will be done via their training to deal with e-Evaluation processes (self-evaluation, evaluation among peers and co-evaluation) with a focus on self-regulation, strategic learning and the use of open source web tools and services.

5. **Encourage the improvement and generalised use, in universities, of open source computer tools and web services for evaluation,** with a focus on self-regulation and strategic learning, thus favouring an improvement in the quality of higher education.

6. **Encourage innovation in university institutions,** via changes in the evaluation models which favour the development of work-related skills (such as soft skills) and learning throughout the students’ lives.

7. **Favour the professional development of the university teaching staff,** by increasing their skill level so that they can approach the evaluation of the students’ learning from a democratic and participative perspective. The focus will be on evaluation based on the students’ self-regulation, strategic learning and the use of open source LMS.

8. **Strengthen collaborations between universities and businesses,** by creating a consultation system for the development and verification of the models for evaluating the students’ work-related skills.
1.3 Outcomes/Results

We can distinguish between three types of final product in the project:

1. Materials:
   - **A catalogue of work-related and professional skills.** To write this catalogue a study was developed in order analyse the importance given to different soft skills by stakeholders (companies, teachers and students). The results showed a need to promote five competences, which are included in the catalogue: teamwork, communication, ethics, analysis and critical thinking, and decision making. These competences were the base from which the training programs were developed.

2. On-line training programs for the development of skills. Three training programs have been designed:
   - **EVAPES Program** - An on-line training program for the development of evaluation skills in university teaching staff.
   - **APREVAL Program** - An on-line training program for the development of evaluation skills in first year university students.
   - **EDECOM Program** - An on-line training program which is aimed at final year university students.

   These training programs focus on the importance of assessment in the teaching and learning process. They aim to develop the assessment competence and skill in teachers and students both. To do so, a reflective and participative assessment is presented. These training programs are going to be implemented in each of the latin-american universities involved in the project.

3. Resources:

   Some of the resources that have been developed within the Project are:
   - **A Spanish and English web portal** ([www.devalsimweb.eu](http://www.devalsimweb.eu)). The web describes the Project and specifies the partners, reports, news and products of the Project.
   - **EvalCOMIX web service** ([http://evalcomix.uca.es](http://evalcomix.uca.es)). EvalCOMIX, which was first developed within the EvalCOMIX research Project, has been improved. This web service helps teachers to design assessment tools and its use by the students.
   - **DIPeval web service** ([http://dipeval.uca.es](http://dipeval.uca.es)). It is a software that enhances the design of assessment procedures and widens the technical pedagogical options.
   - **DINNO** – A tool for innovation in assessment ([http://dinno.evalfor.net](http://dinno.evalfor.net)).
   - **Two serious games** (A day with EVA and University Welfare) ([http://eva.devalsimweb.eu/](http://eva.devalsimweb.eu/)). These games allow students to practice their assessment skills through daily situations. They combine entertainment and learning.

   Another major product of DevalSimWeb project is the creation of the **Euro-Latin American Institute for the Development of Evaluation of Learning.** It will be a forum for the management of knowledge concerning the advances and challenges which arise and an observatory for the diffusion of good practice in evaluation in higher education.

2 CONCLUSION

The main objective of DevaSimWeb project is to reduce the dropout rate and increase employability. To reach this goal, the project offers an alternative approach to assessment for learning at universities. It is based on the use of technologies to promote university student’s competence’s development so that it has an impact with regards to their academic success and employability.

Different products have been developed within the project. The main outcomes are the training programs for both teachers and students. Training teachers and students might have an influence on the development of alternative assessment practices at university level. Also, by introducing technologies, such as serious games, the students learn while they are entertaining, and therefore, it is easier to transfer the academic learning to real world situations. According to Zamora (2011), serious games are a satisfactory tool to develop skills. It use promotes experiential learning, which enhances the change of mental schemes, necessary to understand the dynamic and complex reality.
3 ACKNOWLEDGMENTS

This paper has been possible thanks to DevalSimWeb project ‘Development of professional skills via participative EVALuation and SIMulation using Web tools’ (ALFA III (2011)-10). Financed by the European Comission.

4 REFERENCES


VALS

Virtual Alliances for Learning Society

Francisco José García-Peñalvo, Iván Álvarez Navia, José Rafael García-Bermejo, Miguel Ángel Conde-González, Alicia García-Holgado, Valentina Zangrando, Antonio M. Seoane-Pardo, Juan Cruz-Benito
GRIAL Research Group, University of Salamanca, Salamanca, Spain
+34 923 294500
{fgarcia, inavia, coti, mconde, aliciagh, vzangra, aseoane, juancb}@usal.es

Steve Lee
OpenDirective, Exeter, UK
(+44) (0) 1392 214300
steve@opendirective.com

Raymond Elferink, Edwin Veenendaal, Sara Zondergeld
RayCom B. V., Utrecht, The Netherlands
(+31) 30 276 1121
{raymond, edwin, sara}@raycom.com

David Griffiths, Paul Sharples, David Sherlock
Institute for Educational Cybernetics (IEC) The University of Bolton, Bolton, UK
(+44) (0) 1204 903565
{d.e.griffiths, P.Sharples, d.sherlock}@bolton.ac.uk

Alberto F. De Toni, Cinzia Battistella, Giulia Tonizza, Giovanni De Zan
University of Udine, Udine, Italy
(+39) 0432 558100
{detoni, cinzia.battistella, giulia.tonizza, giovanni.dezan}@uniud.it

George A. Papadopoulos, Georgia Kapitsaki, Achilleas P. Achilleos, Christos Mettouris
University of Cyprus, Nicosia, Cyprus
(+357) 22 894000
{george, gkapi, achilleas, mettour}@cs.ucy.ac.cy

Saul Cheung, Zaira Guerrero, Elena He, Marc Alier, Enric Mayol, Maria Jose Casany
Mindshock, Barcelona, Spain
(+34) 686 447 956
saul@mindshock.es
{marc.alier, mayol, mjcasany}@essi.upc.edu

Scott Wilson, Rowan Wilson, Mark Johnson
University of Oxford - OSS Watch
Oxford, UK
(+44) 1865 270000
{scott.wilson, rowan.wilson, mark.johnson}@it.ox.ac.uk
Abstract

VALS has the aims of establishing sustainable methods and processes to build knowledge partnerships between Higher Education and companies to collaborate on resolving authentic business problems through open innovation mediated by the use of Open Source Software. Open Source solutions provide the means whereby educational institutions, students, businesses and foundations can all collaborate to resolve authentic business problems. Not only Open Software provides the necessary shared infrastructure and collaborative practice, the foundations that manage the software are also hubs, which channel the operational challenges of their users through to the people who can solve them. This has great potential for enabling students and supervisors to collaborate in resolving the problems of businesses, but is constrained by the lack of support for managing and promoting collaboration across the two sectors. VALS should 1) provide the methods, practice, documentation and infrastructure to unlock this potential through virtual placements in businesses and other public and private bodies; and 2) pilot and promote these as the “Semester of Code”. To achieve its goals the project develops guidance for educational institutions, and for businesses and foundations, detailing the opportunities and the benefits to be gained from the Semester of Code, and the changes to organisation and practice required. A Virtual Placement System is going to be developed, adapting Apache Melange, and extending it where necessary. In piloting, the necessary adaptations to practice will be carried out, particularly in universities, and commitments will be established between problem owners and applicants for virtual placements.

Keywords: Virtual placements, Open Source Software, Collaboration, Semester of Code, Higher Education and Companies alliances, Learning

1 INTRODUCTION

The motivation behind the VALS (Virtual Alliances for Learning Society) project has its origin in a shared need, to forge greatly improved links between higher education students and their teachers, and on the other hand the businesses where those students will find employment in a near future. This way, VALS consortium is representative of a much wider challenge facing European industry in the education of tomorrow’s knowledge workers, and their integration in the workplace.

Large sector of the European economy are now mediated by online communications and collaboration, both within a single company, and in the collaboration between organisations. Nevertheless, mobility of students in placements and internships in companies relies on the local connections, which higher education institutions have developed, and the location of placements is restricted by the high costs of relocation and living expenses at any significant distance from the home institution. The solution is to create virtual placements [1]. These will make use of the technology that drives the professional environment to organise and carry out placements.

The reason this potential has not been fully exploited is that virtual placements have not to date offered experience of an authentic business environment and business problems. Thus, for the approach to be successful, these aspects need to be replicated in a virtual placement.

To achieve this, VALS will build knowledge partnerships between higher education (HE) institutions and companies who will work together on resolving authentic business problems through open innovation [2-4]. The innovative approach of VALS is to leverage virtual placements of students in companies in order to foster entrepreneurial skills and attitudes, and to make use of the results to establish new learning and teaching methods. This will result in the Semester of Code methodology, a sustainable set of methods and processes for creating and managing virtual placements, and for integrating these into innovative teaching and learning strategies.
The VALS focus is, on the one hand, real world business problems, and on the other, education that involves programming. These may be from a wide variety of areas of study, not only ICT. This is a promising area for establishing industrial/educational collaboration, because there is:

a) established practice of external participation in business, in which software artefacts are developed outside a business, and then applied within it,

b) a very wide range of real world business problems can be addressed.

Within this context, Open Source Software (OSS) [5] will be used as an enabling technology. This has a number of significant advantages, but nevertheless, the VALS method is extensible to any innovation that is mediated by software, so long as the legal and organisational barriers created by licensing terms can be overcome. OSS provides the means whereby HE institutions, students, businesses and foundations can all collaborate to resolve authentic business problems.

Firstly, OSS provides the necessary shared infrastructure: it is accessible to students, and businesses are not constrained by intellectual property or commercial interests, which prevent them engaging with educational placements. Secondly, OSS provides a context of well-established collaborative practice within which authentic business tasks are shared remotely, and beyond the confines of an individual organisation.

Moreover, the foundations that manage the software are also hubs, which channel the operational challenges of their users through to the people who can solve them. This has great potential for enabling students and supervisors to collaborate in resolving the problems of businesses, but is constrained by the lack of support for managing and promoting collaboration across the two sectors.

Thus, VALS will provide:

- The methods, practice, documentation and infrastructure to unlock this potential through virtual placements in businesses and other public and private bodies.

- Pilots, promoting these as the “Semester of Code”.

2 DESCRIPTION

Foundational work in virtual placements was done by the Cross Sector Virtual Mobility (CSVM) project, which published a book in 2008 [6] exploring the potential of this approach. However, the EU-VIP project (2009 – 2011 - http://www.euvip.eu/EU-VIP/EU-VIP/about.html) [7] estimated in its State of the Art in Support of Virtual Placements that “…fully virtual work placements are still rare. Only two of the partner organizations informed that they had students taking on fully virtual work placements. However, the share of virtual placements out of all placements was still rather low at least according to the statistics (approx. 1–2 %)” [8]. The soon to be launched PROVIP project is one of few current initiatives in this emerging area, and it will develop a collaboration platform to support virtual placements.

The VALS project takes a different approach. Rather than providing generic support for the virtual equivalent of physical placements it focuses on the coordination of collaboration around the creation of shared artefacts. It notes that OSS mediates a vast ecosystem of companies involved in a wide range of industries, and builds its collaborations around this existing practice. There have been prior efforts to promote the use of OSS (e.g. OpenSE), but these have not been integrated with industrial practice. The innovation of VALS stems from recognition of an alignment of interest between three groups of stakeholders, opening up unexploited opportunities:

- Businesses.
The project vision facilitates this alignment of interest to establish an innovative and sustainable collaborative practice. In its activities VALS establishes a new approach to virtual placements leveraging industrial practice in remote collaboration around the development of artefacts; a new medium for flows of information between stakeholders; and an innovative means for managing this process.

A particularly innovative aspect is the leveraging of the participation of OSS foundations. These have an urgent need to find contributors to the code that they develop and maintain. They have developed sophisticated methods and software with which to gather the requirements of business users, and to express these as self contained projects that can be addressed by contributors. These mechanisms are used in VALS to match authentic business needs of organisations with the contributions that can be made by students, building on methods from the Google Summer of Code. A methodology is established whereby the lessons learned can feed into the content of courses, creating a virtuous cycle. A relevant existing initiative is the Google Summer of Code, which provides stipends to students to work on OSS projects in their vacation. However, while the matchmaking aspects of this initiative are valuable, and will be applied in VALS, there is no recognition of students’ achievements in formal education, and the benefits of synergy between education and industry are lost.

2.1 Consortium

The consortium of eight is composed of equal numbers of HE institutions and companies (see Table 1) who have a focus on OSS, and is completed by a number of OSS foundations as associate partners who have committed to collaborating in the Semester of Code by providing access to problems and problem owners.

<table>
<thead>
<tr>
<th>Partner no.</th>
<th>Role</th>
<th>Organisation Name</th>
<th>City</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Applicant</td>
<td>University of Salamanca</td>
<td>Salamanca</td>
<td>Spain</td>
</tr>
<tr>
<td>P2</td>
<td>Partner</td>
<td>OpenDirective Ltd</td>
<td>Exeter</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>P3</td>
<td>Partner</td>
<td>RayCom B.V.</td>
<td>Utrecht</td>
<td>Netherlands</td>
</tr>
<tr>
<td>P4</td>
<td>Partner</td>
<td>University of Bolton</td>
<td>Bolton</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>P5</td>
<td>Partner</td>
<td>University of Udine</td>
<td>Udine</td>
<td>Italy</td>
</tr>
<tr>
<td>P6</td>
<td>Partner</td>
<td>University of Cyprus</td>
<td>Nicosia</td>
<td>Cyprus</td>
</tr>
<tr>
<td>P7</td>
<td>Partner</td>
<td>Mindshock S.L.</td>
<td>Montornès del Vallès, Barcelona</td>
<td>Spain</td>
</tr>
<tr>
<td>P8</td>
<td>Partner</td>
<td>University of Oxford – OSS Watch</td>
<td>Oxford</td>
<td>United Kingdom</td>
</tr>
</tbody>
</table>

2.2 Objectives

The aim of the project is establish sustainable methods and processes for virtual placements, which bring together higher education and companies to collaborate on resolving authentic business problems.

Its intervention is to align and address the needs of the stakeholders involved:

1. Software companies engaged in open source (such as WSO2 and RedHat) and OSS foundations (such as Apache and Outercurve) need to actively solicit contributions from new contributors, including students, in order to remain viable and compete with closed-source offerings.
The current level of engagement between universities and the software industry is recognised as being insufficient by:

a. Universities, who want to offer authentic teaching and assessment opportunities using current industry best practices.

b. Students, who want to obtain relevant experience and to make contacts in the industry that they can use to help start their career after graduation.

c. Employers, who are seeking graduates with real-world programming experience and related soft skills such as communicating in distributed project teams and working with contemporary development tools and practices.

VALS creates the Semester of Code, bringing together Academic Supervisors from HE, mentors who are problem owners at enterprises and foundations, and students. Preparation for the Semester of Code, and integration of outcomes into the academic process, mean that each iteration takes place over a full academic year.

Their relationships and the benefits accruing are shown in Figure 1.

![Figure 1. Relationships, workflows and benefits among VALS stakeholders](image)

The objectives of the project are to:

1. Create an OSS Education Process methodology and guidelines, articulating the collaboration, and providing guidance on the following aspects of student engagement with authentic business projects:

   a. The process of lobbying for and gathering potential projects.

   b. Matching of students with projects.

   c. The pedagogic implications of student engagement with authentic business problems.

   d. Assessment of student work on authentic business projects.

   e. Representation and recognition of learning resulting.
2. Generate awareness in industry and education of the opportunities presented by collaboration with student software developers.

3. Establish an online system to manage virtual placements for student developers to work on real-world business problems, with appropriate mentoring. Following the successful example of the Google Summer of Code it brings together:
   - Students who would like to contribute their skills to fix a software problem.
   - Open source projects whose users have requested a feature or enhancement.
   - Mentors who own the problem addressed by the student.

4. Run a pilot programme to demonstrate the effectiveness of this approach, open to non-partners.

5. Evaluate the results of the pilot programme.

6. Establish long-term alliances between universities and companies in Open Source development.

7. Initiate mainstreaming of the project approach, with the provision of persuasive evidence, materials and resources with which to carry the work forward.

2.3 Methodology

Resources are applied to stimulate and coordinate the move to new patterns of collaboration around the Semester of Code. All project work revolves around the pilot programme and is directed towards the goal of mainstreaming. VALS components, relationships and WPs involved are shown in Figure 2.
VALS. Virtual Alliances for Learning Society

VALS is organised in the following phases:

**Phase 1 (M1 – M5):** articulation of the pedagogic model for the Semester of Code, with buy-in from both academic and commercial partners. A project intranet and website, Quality Assurance Plan, Mainstreaming Plan and Project Handbook will be prepared. Requirements for Virtual Placement System gathered:

- A pedagogic model for teaching, mentoring and assessment for students engaging in open source project development that:
  - Covers formal teaching, assessment and curriculum design requirements.
  - Includes methods to represent and recognise the learning achieved by students when carrying out their projects.
  - Proves of value to participants in pilots and is accessed by external users.

**Phase 2 (M6 – M9):** preparation for academic partners to deliver courses incorporating the model. Dissemination and evangelism beyond the consortium:

- Virtual Placement System launched:
  - Google Melange platform extended to support HE aspects of virtual placement projects, including supervision, development of proposals, supervision, and assessment.
  - Adapted system published as free and open source code, available to all interested parties. Delivered in English, with easy translation mechanism.
  - Materials available to prepare students for participation in VALS placements.
  - Attracts interest from beyond the consortium.

**Phase 3 (M10 – M20):** Pilot and evaluate the Semester of Code programme with commercial associate partners providing coding project opportunities, and academic partners supporting students participating in the programme. Continued evangelism, and monitoring of the participation of non-partners. A plan for the continuation of the Semester of Code and its associated resources and systems will be produced, in collaboration with the associate partners:

- Semester of Code pilot programme:
  - Major open-source companies and foundations involved.
  - Semester of Code resources positively evaluated by stakeholders.
  - 75 – 100 virtual placement projects established and evaluated.

- The VALS Open Pilot:
  - Participation from beyond the project.

**Phase 4 (M20 – M24):** Consolidation and mainstreaming. Evaluation report published. Practice in HE partners adapted to incorporate the model without project support:

- Post-project iteration of Semester of Code initiated.
  - Guides and didactic materials published under Creative Commons licenses, available at no charge.
  - Adoption of the model by institutions, companies and sectors within and beyond the consortium.
3 CONCLUSIONS

We believe that collaboration on open source development between universities, companies and foundations is a way to achieve all VALS goals in a “win-win” fashion, and long-term alliances. However, while individual lecturers in Computer Science and related subject have engaged with Open Source in an ad-hoc way, there has been little in the way of systematic integrated teaching using live projects. The methodology and guidelines provided by VALS must enhance the effectiveness of all partners operations, and provide a means of transforming significant sectors of educational and industrial activity.

4 ACKNOWLEDGMENT

With the support of the Lifelong Learning Program of the European Union. Project Reference: 540054-LLP-1-2013-1-ES-ERASMUS-EKA. This project has been funded with support from the European Commission. This publication only reflects the views of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

5 REFERENCES

ECQA SOCIAL MEDIA NETWORKER

Ricardo Colomo-Palacios
Universidad Carlos III de Madrid,
Av. Universidad 30
28911 Leganés, Madrid, Spain
rcolomo@inf.uc3m.es

Keywords: Social Media, Professional Qualification, Certification.

In order to address this lack of skills and to support organizations in building competences in the field of social media a lifelong learning course is currently under development within the frame of the European Certification and Qualification Association (ECQA). The ECQA Social Media Networker (SIMS) is a two year long project which started in October 2011 with funding from the EU Lifelong Learning Programme (LLP). The project aims to develop a new skill set and a job role qualification study program, where competencies in social media are customized for the European industry into an online study program complemented with an online training, examination and certification schema for the Social Media Networker job role. A pilot training scheme will take place in the participating organizations/member states (Austria, Greece, Hungary, Ireland and Spain) and the study programme will be refined and improved based on systematic feedback. This paper describes the joint effort of five organizations in five countries to define and develop the professional role of a Social Media Networker. After developing and testing the modular training material, the profession will be launched to the market.

The project history is as follows: in 2011 five organizations decided to submit the project proposal titled “ECQA Certified Social Media Networker Skills”. The project partners are the following institutions: Universidad Carlos III de Madrid (Spain) I.S.C.N. GesmbH (Austria), Dennis Gabor College, DGC (Hungary), Alexander Technological Educational Institute of Thessaloniki, ATEI (Greece), and the Cork Institute of Technology, DEIS Department of Education Development (Ireland). All partners had considerable previous experience within their field and their cooperation added value and represented a synergy of expertise in different areas.

The European Certification and Qualification Association (ECQA) is a non-profit association connecting different organizations (companies, university, institutions etc.) and thousands of professionals world-wide via training and certification for a wide range of job roles - currently the ECQA offers training and certification for 30 job roles. New job roles are also constantly being developed. The ECQA provides its services in more than 24 countries through more than 60 members (consisting of training organizations, trainers, exam organizations etc.).

The ECQA is the result of a series of different projects co-funded by the European Commission under the Life Long Learning programme.

The EQN (European Quality Network, 2005 - 2007) established a network of different members (previous Life Long Learning Leonardo projects, European networks, chambers of commerce, trainings organizations and institutes), who have developed qualification programmes and training courses. These different groups jointly analysed key quality indicators and success factors to achieve high quality services and a continuous innovation process. The result was a set of quality rules for job role based qualifications related to skills architecture, course syllabus, test questions and certification rules. These quality criteria set the framework for the foundation of the European Certification and Qualification Association.
The skill set (syllabus) for the Social Media Networker provides the basis for the development of training and examination. The skill set is based on the skills definition proposed by the DTI (Department of Trade and Industry) in the UK for the NVQ (National Vocational Qualification).

The defined skill set follows the ECQA compliant skills definition standards and describes the target profile's competences in terms of skill units, which are defined by skill elements. Each skill element consists of a number of performance criteria (learning outcomes) describing the minimum level of performance, which a training participant has to demonstrate in order to be certified as an “ECQA certified Social Media Networker”.

Each skill set consists of the following items:

- **Domain**: An occupational category (e.g. Domain “Social Media Management”)
- **Job Role**: A job description that covers part of the domain knowledge (e.g. someone in the job role of a “Social Media Networker”)
- **Unit**: A list of certain activities that have to be carried out in the workplace. It is the top-level skill in the qualification standard hierarchy. Each unit consists of a number of elements.
- **Learning Element**: A description of one distinct aspect of the work performed by a worker, either a specific task that the worker has to do or a specific way of working.

Each element consists of a number of performance criteria.

- **Performance criteria**: Description of the minimum level of performance, which a training participant has to demonstrate in order to be assessed as someone qualified for the respective job role – e.g.: “ECQ certified Social Media Networker”.
- **Optional Level of cognition**: For each performance criteria there is an intended level of cognition. At the same time this describes the complexity level of the exam questions for each performance criteria (according to Bloom’s Taxonomy).

The innovation transfer project ECQA Certified Social Media Networker Skills (SIMS) deals with the professional qualification and certification of the job role of Social Media Networker. The aim of this project is the transfer of the Social Media Networker Skill to industry. This will provide a technological and methodological strategy for online learning assessment, recognition, facilitation and qualification for this new job role. The project includes:

- Development of an online accredited programme of study for the job role of a social media networker.
- Piloting of the programme in all participating member states of the project and refinement of the programme based on systematic feedback.
- Dissemination of the project results via a range of channels including conferences and special issues in journals.
- Ensuring the sustainability of the project and its outputs through the European Certificates Association and other bodies.

To this aim, this project will establish a skill set and certification criteria based on the European-wide accepted scheme of the ECQA. It will involve industrialists on an international level, and will implement the results in the respective partner institutions.

The project partners arranged the project kick off meeting in Madrid in December 2011. Here they decided on the initial skill set titles of the Social Media Networker course and distributed the task of writing 2-3 skill card elements each and the corresponding training material based on the skill card based on literature review and selfinitiated research. For quality management purposes two other partners reviewed the skill cards independently.

For the job role of a social media networker, the topics of the skill cards are the following:
Unit 1:

- E1: Introduction to Social Media
- E2: Social Media Technologies

Unit 2:

- E1: Social and Business Networks (Facebook, Google+, LinkedIn, XING, asmallWorld, MySpace…) E2: Blogging, Microblogging (Twitter, Blogger, Wordpress, Jaiku, Foursquare)
- E3: Content Sharing, Recommendation and Collaboration (Youtube, Flickr, Picassa, Podcast, Google Docs, Wiki, Dropbox, Slideshare, LastFM, Genius, Pandora, Digg, Amazon, Snooth …) + Education

Unit 3:

- E1: Planning, Implementing and Monitoring Communication (Trends, Analytics, Integration to the whole communication plan …)
- E2: Enterprise 2.0 (Knowledge Management, HRM, Co-creation and user generated content, Training)
- E3: Marketing and CRM (Social Media Marketing, CRM and Supply/Chain and Social Media)

Unit 4:

- E1: Culture of sharing and Online Reputation Handling (Management), Use of Language, Branding, Netiquette
- E2: Legal and Financial aspects of social media (copyright content and Culture of sharing)
- E3: Information overload (Semantic Web, Data Mining, Natural Language Processing)
Abstract

EHISTO (European history crossroads as pathways to intercultural and media education) is concerned with the mediation of history in popular (science) media and the question of social and political responsibility of journalists and other mediators of history, especially teachers, in the field of commercial presentation of history. The project responds to the increasing significance of a commercialised mediation of history within the public historical culture and reflects the fact that these representations, which do not always meet the EU standards for history education, can have a lasting impact on the young generation’s understanding of history.

Using the example of popular history magazines, the project shall, besides the necessary basic research, develop didactically reflected materials for both history education in school as well as initial and in-service teacher training. On one hand enable a media-critical examination of history magazines and on the other hand, by working with the history magazines, the project addresses itself to popular interpretations of history from the participating countries and reflects
their similarities and differences in European cultures of remembrance. Therefore, this approach not only trains media-critical competences but furthermore enables a multi-perspective and comparative access to history.

The project EHISTO will last two years and is funded by the EU Lifelong Learning Programme with about 300,000 euros. Partners from six European nations take part in the project.

**Keywords:** History, Methodology, Intercultural, Crossroads, Media, Critical Analysis

1 **INTRODUCTION**

An active European citizenship has to be built on a public awareness of the common European heritage and shared values as well as on respect for diversity by integrating the different national experiences. Here, history teaching as well as the initial teacher training and in-service teacher training have to play a crucial role because all over Europe the field of history is still characterised by national conceptions of history. Different multi-perspective EU-projects have responded to the challenge of encouraging history education to increasingly take up more European topics, compare different national perspectives, to highlight transnational topics like migration and cultural exchange and to aim for intercultural competences. But the influence of extracurricular, commercial ways of presenting history in mass media on the pupils’ view of history has not yet found adequate recognition in those meritorious projects, although it is widely known that commercial public history has a very high impact on layman-recipients and that particularly young people often have not yet the competences required to critically evaluate and decode the message of history presentations in mass media. Therefore a congruous connection of the build-up of intercultural and media-critical competences in dealing with the European heritage has yet to take place. It is the initial consideration of the EHISTO project that this challenge must no longer be neglected – not least to contribute to the success and sustainability of on-going and future projects in the area of promoting intercultural history education in Europe.

EHISTO links together civic with intercultural and media-critical competences. As examples for the purpose of dealing with the mass-medially conveyed cultures of history the project uses popular history magazines for the following reasons:

1. The magazines are subject to commercial conditions.
2. They represent a medium that both pupils and teachers consume and that covers very many topics, which are both a high curricular connectibility as well as up-to-dateness (due to its periodicity). In addition the magazines demonstrate curriculum-compatible mediality (text, pictorial documents, graphic) and are well obtainable for the use in lessons.
3. The popular history magazines in Europe are – in contrast to other commercially characterised media products (e.g. films, video games, comics) – on the one hand strongly focused on national markets. On the other hand, as it has been shown by previous studies (see below), the magazines from different countries have many topics in common (e.g. famous personalities; events with pan-European impact like wars, peace settlements, revolutions; transnational phenomena like migrations, culture exchange, religions, social and political movements). Dealing with topics like these – so called “European History Crossroads” – in classroom, may strengthen the pupils’ cultural awareness by the ability to relate their own local, regional and national perception of history to the points of view of other countries. Therefore popular history magazines offer the best conditions for a transnational, intercultural and multilingual comparison of national conceptions of history.
By encouraging pupils to expose themselves to the differences and commonalities of national cultures of history in Europe the project is based on the findings of several previous projects: Council of Europe projects (e.g. “The Image of the Other in History Teaching”, “Shared Histories for a Europe without dividing Lines”, “Crossroads of European Histories - Multiple Outlooks”) as well as LLP-Projects (e.g. “Exploring European History & Heritage”). But EHISTO intends to take an important further step towards increasing the critical understanding of the history discourse in commercial mass media. The underlying motive is to fight xenophobia at its base and to encourage an inclusive European citizenship by providing the necessary tools for the history classroom.

The innovative potential of EHISTO consists of a close linkage between the awareness of the diversity of European heritage and of intercultural competences on the one hand and of the historical media competences on the other hand using the example of “European History Crossroads” in popular history magazines. This entails the encouragement of both “cultural awareness” and “social and civic competence” as well as “intercultural competence” as key competences of the LLP, for the social and historical foundations of civil societies being reflected and the latter being seen from multiple perspectives.

The project is based on the results of a conference in Amsterdam in 2011 at which the mass-medial presentation of “European History Crossroads” in popular history magazines was explored from a comparative European perspective and evaluated for its potential for the advancement of LL-key competences for history teaching. All project partners have a strong focus in the areas of “Teaching about European history and heritage in multiple perspectives”, “media and intercultural competences” and are closely linked to schools and teacher training. This is an important precondition because EHISTO is based on a continuous and close cooperation with school teachers and pupils of the pilot-schools in all phases. Some of the partners have collaborated at the International Society for History Didactics and EuroClio and participated in European projects or even coordinated them (e.g. “Regards Croisés”, “MIH-Multicultural Interdisciplinary Handbook”). They take now the next step to include extracurricular factors of mass-medial and commercial presentation of history and media education in conveying history in schools. After all the integration of the FWU in EHISTO involves decisive advantages for the Europe-wide supply of work materials in the form of complimentary Learning Objects (LO) because of its long-standing competence in the area of European cooperation in eLearning and dissemination.

2 PARTNERSHIP

The EHISTO project includes, besides the University of Augsburg as coordinator, five European research centers, which are all experienced in multi-perspectival and media-critical approaches to history education. The project also involves a number of European secondary schools, several associated partners, and four internationally renowned consultants. All these different institutions and partners will be working together in order to achieve the project aims.

Project Partners:

- University of Augsburg, Germany
- University of Salamanca, Spain
- Academy of Management Lodz, Poland
- Dalarna University, Sweden
- University of East Anglia, United Kingdom
- FWU – Institute for Film and Pictures in Science and Education, Germany
3 OBJECTIVES

The project aims at establishing intercultural and media-critical competence within the civic and history education in Europe by using multi-perspective and transnational historical topics (“European History Crossroads”). The subject matter to be analysed is commercial mass media, especially popular history magazines, which often emphasize one-sided national narratives.

EHISTO joins other multi-perspective and transcultural civic education projects in the area of history education (e. g. “image of the other” and “shared history”). The project even goes beyond their aims by trying to close the gap between the historical images formed in school and those formed outside. This should give pupils further competences in analysing and assessing this phenomenon. EHISTO therefore develops and tests the innovative concept of a transnational and multi-perspective “historical media education”, which strives to close the observed gap between the scholastically conveyed conception of history and the history culture outside the school walls. The aim is to integrate this training content (comparing history presentation in national commercial mass media, the combination of media-critical and intercultural competence) into schools as well as initial and in-service teacher training.

4 WORKPLAN

Altogether, EHISTO has five main work phases that are structured in a coherent process:

Phase 1: Baseline study of the needs and best practice examples in schools concerning the intercultural and media analytical competences and recording the actual state of the required national market of popular history magazines to find some topics which are part of the magazines, the school syllabi and in the curricula of teacher trainings.

Phase 2: Development of teaching materials, focusing on media education and on multi-perspective oriented history teaching. At the same time, a module and a module guide for initial teacher training will be developed.

Phase 3: In terms of the results of phase 1 and 2, a course and a handbook for in-service teacher training will be developed.

Phase 4: The developed materials (teacher material and teacher manual, teacher module and guide for initial teacher training and the module for in-service teacher training) will be tested, evaluated and revised.

Phase 5: Documentation and publication of the EHISTO results.

5 OUTCOMES

Based on the research results obtained in the first phase of the project, EHISTO will develop theoretical and empirical tools in order to implement the project outcomes into the educational landscape. EHISTO, together with schools, institutions for initial and in-service teacher training and educational media experts, conceptualises

1. Learning objects that are available online, including teacher manuals for the secondary level focused on historical topics that are covered by national magazines and syllabi of all partnering countries (“European History Crossroads”). The materials consist of history and media-didactically edited content.
2. Project seminars for initial teacher training along with a module guide
3. Teacher course with a handbook for the use in in-service teacher training that integrates the new approach along with activating methods.
4. Finally, the project results will be made available for policy makers and stakeholders in order to contribute to the development of a European teacher education reference frame called “transnational history media education”.

6 CONCLUSION
At the end of the first year of the EHISTO project, the baseline study and the development of teaching materials are available in order to start the initial and in-service teacher training. These pilot experiences will take place during the first half of the second year and the results will be presented in the third meeting of the project that will hold in Salamanca at middle of May, 2014. The outcomes improvement will be applied during the second half of the next year in order to present the final results during the closure conference.

All EHISTO results are available through the official website of the project, http://european-crossroads.eu. In addition to the website, the project has presence in Facebook https://www.facebook.com/pages/EHISTO/296656033780361 and Flickr http://www.flickr.com/ehisto.

7 ACKNOWLEDGMENT
With the support of the Lifelong Learning Program of the European Union. Project Reference: 527752-LLP-1-2012-1-DE-COMENIUS-CMP. This project has been funded with support from the European Commission. This publication only reflects the views of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.
Abstract

The ATI-LINCO is an interdisciplinary national research project leaded by the Research Group “Evaluación Educativa y Orientación” (“Educational Assessment and Guidance”) at the University Institute of Educational Sciences (IUCE, University of Salamanca, Spain). Its focus calls the attention on key skills assessment, training of Secondary school teachers in Basic competences and the implementation of innovation processes.

In the first project (SEJ2006-10700) the research interest aimed at the assessment of Basic Competencies in high school students, obtaining enough evidence as to move on a second project (EDU2009-08753). In this second attempt, the research questions about the assessment and training of secondary school teachers were divided into two basic skills:
information literacy and conflict resolution competences. Finally with the ATI-LINCO project, the interest is to reverse the results of the evaluation and training on innovation processes in the secondary school setting.

The Project themes are: skills assessment, teacher training, Innovation in secondary education, information literacy, conflict resolution and Information and Communication Technologies (ICT) as integrate tools supporting the entire project. The research methodology is different and adapted to each of the objectives proposed.

On the one hand, our goal is to continue with the diagnosis of student key skills, that support learning. On the other hand, we propose an experimental design to test the ICT effectiveness in a training program for skill development in teacher training schools. On the other hand, we intend to frame an educational innovation project based on Basic Competencies through an interactive process of action-research. The ultimate goal, therefore, is contributing to improve the quality of the Spanish Educational System in Secondary Education

Keywords: key competencies, information skills, skills for conflict resolution, Program Evaluation, teachers training, educational innovation, secondary education, ICT.

1 Introduction

The present project was approved at the Spanish Ministry Congress, with responsibility for Research and Development with reference to EDU2012-34000, with financial help from basic open research, in the context of then VI National Scientific Investigation, Technological development and innovation 2008-2011, Education sub program. The period of execution is from 2013 to 2015 and it is follows the two consecutive previous projects: SEJ2006-10700 and EDU2009-08753, being carried out by The Education and Orientation evaluation (http://ge2o.usal.es), within research group (GRIAL), part of the Investigation team inside of the University <<University Institute of Educational Science>> (IUCE), at the University of Salamanca (Spain).

The first project(SEJ2006-10700) was mainly about the key role of evolution competences, particularly, informal competency, in Secondary education students (Rodríguez Conde, Olmos Migueláñez, Pinto Molina, Martínez Abad & García Riaza, 2011; Rodríguez Conde, Olmos-Migueláñez y Martínez Abad, 2012), with results which helped us carry on with a second project (EDU2009-08753), basing the problem of investigation around the evolution and formation of the teaching team of secondary education in two basic responsibilities: informal responsibilities and social responsibilities ((Rodríguez-Conde, Martínez-Abad y Olmos-Migueláñez, 2013; Torrecilla Sánchez, Martín Izard, y Hernández Ramos, 2012). This third project concludes the cycle, looking at the results of the evolution and the training, about the proceedings of innovation, within the centres of secondary education (students aged 12-16)
The interest of the European Union (European Union, 2000) in this type of research is obvious, because the cycle of educational evaluation and innovation forms part of the strategic agenda in the area of education, as is the development of the key area of productive team networks. Citizens' competence development focused on the demand for the working environment of the XXI century, and should form of a fundamental concern for the government.

2 Description

The purpose of this educational research is to achieve important competencies among Secondary Education Students and in teachers of that level, based on the use of information and communication technologies (ITC), to apply and evaluate the innovation educative innovation project, to contribute to the last project, with answers from applied empirical investigation the better quality of learning in our country.

1st Topic. Competency Evaluation: informational competency (Informational Literacy or ALFIN) and resolution conflicts competency

2nd Topic. Teachers and innovation training in secondary education: informational and social competency (Conflict resolution)

3rd Topic. Information and communication Technologies (TICs) as questioner tools for the working project.

2.1 Objectives

Concern about quality of education is the reason why so much importance is given to key competencies, both in consideration of the base of the curriculum of compulsory learning and as an important variable in the level of training of Secondary Education teachers. Evaluation and training drive towards an implementation innovation in education centres. We believe that research that which sets out a strategy of evaluation and innovating training in Secondary Education centres, can contribute to increasing the state of scientific knowledge about the process, indicators and results of obligatory education and provide strategies to improve.

Specifically, the objectives will be:
Study 1. Perform a diagnostic evaluation of the level of informational and technological competence of students and teachers in secondary education, in order to provide empirical information that can facilitate decision making.

Study 2. 2.1. Design, implement and evaluate a training course in the areas of skills studied in secondary schools of at least two autonomous communities (Castilla y León and Andalusia), from the pilot program implemented in previous research (ef-TALCO ). 2.2 Design, implement and evaluate, at least one innovation project in a educational center in each region, which intervenes in the development of these skills in high school students.

The final goal is to make visible the process network and the results obtained in this Innovation Project in Secondary Education Core Competencies, which will enable their transfer to other centres and educational contexts in those areas successfully tested for quality improvement of education in the information society and media.

2.2 Outcomes/Results

Study Result 1:

Once analysed, the results will be released and a final report will be finalised, specific for the first fase of the study, in which the conclusions will be obtained about the level of analised key competence and teaching with appropriate recommendations for the same improvement.

Study 2.1 Results:

The results and a final report of this last phase will be published online for free, under Creative Commons, which helps explain the program to R & D + i, which is funded from the Ministry of Economy and competitiveness. The final goal is to make visible the process network and the results obtained in this Innovation Project in Secondary Education Core Competencies, which enables their transfer to other centers and educational contexts in those areas successfully tested.

Study 2.2 Results:

The results and prepare a final report of this last phase, would be published in online format free, under Creative Commons, which helps explain the program to R & D + i, since funding from the Ministry of Economy and competitiveness. The ultimate goal is to make visible the process network and the results obtained in this Innovation Project in Secondary Education Core Competencies, which enables their transfer to other centers and educational contexts in those areas successfully tested for quality improvement of education in the information society and media.

3 Conclusion

Competency-based education prepares students to continue learning once their schooling has finished and to meet the challenges of adult life. The school is not the only source of information, this institution is faced with the problem of having to determine content and skills that are of interest and benefit to students in school life and in their extracurricular future. Since it is impossible to accumulate all this knowledge during the period of compulsory education, the school needs to train students for learning that can provide them with the ability to continue learning independently throughout their lives. We understand information literacy to be a key competence for development and the necessary development of people after their school life (Rodríguez-Conde, Martinez-Abad and Migueláñez Olmos, 2013).
Research into virtual spaces on the Internet, such as potential training spaces (Rogado Gonzalez, Rodriguez-Conde, Olmos-Miguelanez, Borham Puyal, Garcia-Penalo, 2012), has been carried out since the days of Web 1.0, that is to say of the WWW, the network of networks in communication that maintains thousands of servers around the world and unlimited search results content. This characterizes, at different scales, the Internet from the mid 90's to the early XXI century. With 2000 a new concept of Internet appears, related to the integration of new content and collaborative spaces, i.e. not only trying to create or find content and information, but with the user also generating their own information which, in turn, may be exchanged or enriched by other users (Garcia-Penalo, Conde, and Casany Alier, 2011). Thus, considering an urgent need to conduct rigorous projects from the field of scientific research in education that provides reliable and valid data on the use and specific intervention proposals that demonstrate the advantages of these materials on certain aspects to be defined in learning of students in secondary education.

4 Acknowledgment

We acknowledge the funding received from the subprogramme basic open research programme, within the VI National Plan for Scientific Research, Development and Innovation 2008-2011. Sub education, for EDU2012-34000 project. Also the Institute of Educational Sciences of the University of Salamanca, which made possible the development of this project between 2013 and 2015.

5 References


Intercultural Education through Religious Studies (IERS)

COMENIUS Multilateral project

Massimo Raveri, Cinzia Crivellari, Giovanni Lapis, Maria Bombardieri, Giulia Nardini, Beatrice Nuti, Anna Consonni
Department of Asian and North African Studies, Ca’ Foscari University of Venice
Palazzo Vendramin dei Carmini, Dorsoduro 3462, 30123 Venice, Italy
(+39) 041 2349522
raveri@unive.it, giovanni.lapis83@gmail.com, consonnianna@tiscali.it

Giovanni Lapis, Maria Bombardieri, Anna Consonni
Department of Asian and North African Studies, Ca’ Foscari University of Venice
Palazzo Vendramin dei Carmini, Dorsoduro 3462, 30123 Venice, Italy
(+39) 041 2349522
raveri@unive.it, giovanni.lapis83@gmail.com, consonnianna@tiscali.it

Isabelle Saint-Martin, Eric Mesnard, Benoît Falaize, Anna Van den Kerchove, Philippe Gaudin, Ludovic Vandoolaeghe, Natalie Heron
Institut Européen en Sciences des Religions (IESR)
Rue Ernest Cresson 14, 75014 Paris, France
(+33) 1 40521000
ism@ephe.sorbonne.fr, ericmesnard@sorbonne.fr

Francisco J. García-Peñalvo, Valentina Zangrando, Antonio M. Seoane Pardo, Mª José Rodríguez-Conde, Alicia García-Holgado
GRIAL Research Group, Research Institute for Educational Sciences (IUCE), University of Salamanca
Paseo de Canalejas 169, 37008 Salamanca, Spain
(+34) 923 294500 ext. 3433
{fgarcia, vzangra, aseoane, mjconde, aliciagh}@usal.es

Susanne Popp, Jutta Schumann, Oliver Simmet
Philologisch-Historische Fakultät from Lehrstuhl für Didaktik der Geschichte
Universit.tsstr. 10. 86159 Augsburg, Germany
(+49) 821 5985556
{Susanne.Popp, jutta.schumann, oliver.simmet}@phil.uni-augsburg.de

Anna Mauro, Lorenzo Luatti, Elisa Carboni, Stefano Alacqua, Micaela Cozzi
Oxfam Italia Intercultura
Via Concino Concini 19, 52100 Arezzo, Italy
(+39) 0575 182481
{anna.mauro, lorenzo.luatti, Elisa.carboni}@oxfamitalia.org

Abstract

Religious and cultural diversity are today more than ever a critical and political challenge as the recent emergencies related to geo-political and economical global transformations clearly show. European countries are concerned by a big immigration flow that demands an educational effort in order to foster the mutual understanding and integration.

According to Toledo guiding principles, IERS project meets the needs of an innovative approach in teaching about religions and beliefs at school by providing teachers of humanistic disciplines with new tools that help teachers and pupils to plunge deeper into religions and cultures of non-european countries, as well as raising the knowledge of the
religious traditions that contributed to the common European cultural Identity, promoting it in the best way suited for encourage intra -and extra- European cultural dialogue attitudes.

The Project aims to support the development of social, civic and intercultural transversal key competences by educating towards a positive understanding of cultural and religious differences, a readiness to engage in dialogue and to avoid or manage conflicts. By encouraging teachers and pupils to expose themselves to the differences and commonalities of religious topics, it promotes also the values of democracy, equality and human rights as it deals with social and civic dimensions of both intercultural and interreligious dialogue.

The project will involve high school in-service teachers by developing a complete set of didactical tools and training experiences. The results will be:

1. A baseline study which analyzes the actual situation of teaching about religions throughout Europe;
2. New innovative didactic tools such as Multimedia Digital Modules to be used in classroom activities, accompanied by a Handbook with didactical guidelines for teachers.
3. Teacher support activities (virtual community, training activities, developing of didactical projects to apply in classroom).

**Keywords:** Religions, Education, Digital Modules, ICT Tools, Methodology

1 **INTRODUCTION**

Religious and cultural diversity are today more than ever a critical and political challenge as the recent emergencies related to geo-political and economical global transformations clearly show. European countries are concerned by a big immigration flow that demands an educational effort in order to foster the mutual understanding and integration.

Religion is, indeed, an essential element in the cultural identity of a number of the groups that make up our societies, but it has also been associated with stereotypes or negative pre-conceptions, including the assumption of a so-called ‘clash of civilizations’ (Fact Sheet n° 34 (2007) of the European Network Against Racism; Eurobarometer Report on Discrimination, a survey issued in January 2007).

Responses to these challenges can be represented especially by considering the fundamental role of education about religious and cultural difference and diversity in building societies and social cohesion. The scholastic environment is the privileged space in which young representatives of several cultures currently in the European territory meet. The school today is as much as a frontier, in which some students are still risking a bad integration if not the ghettoization. Through education, the transmission of knowledge and understanding of religions and customs have – in fact – a role in forming, creating, and influencing social relations between students from different culture and behaviours.

Nowadays, European countries have different models of religious education in public schools, often organized by the dominant religion in the country. Overall, a comprehensive teaching of religions through a scientific, critical, historical and intercultural lens is still in embryonic and experimental level throughout Europe both regarding teacher training and intercultural approaches of didactical materials.

We consider that intercultural knowledge build a bridge towards the comprehension of the others, thus nurturing life-skills. By enhancing the respect of the different cultural, social and religious identities, the school communities are able to prevent and manage social and cultural conflict, to promote good practices of active citizenship, to strengthen social cohesion, the human dignity and the value of democracy.
Intercultural Education through Religious Studies (IERS)

IERS project aims to support the development of social, civic and intercultural competences by educating towards a positive understanding of cultural and religious differences, a readiness to engage in dialogue and to avoid or manage conflicts. By encouraging teachers and pupils to expose themselves to the differences and commonalities of religious topics, it promotes also the values of democracy, equality and human rights as it deal with social and civic dimensions of the intercultural and interreligious dialogue. It also raises the cultural awareness and appreciations of different religious and artistic expressions.

In order to do so then, teachers of Humanities, Social Sciences, History and Geography, Religions at Secondary School will be involved, with academic experts in the field of religious studies and teaching about religions, in a training process and a working by project that enable them:

1. to be conscious of the state-of-the-art of the teaching about religions in the European schools, to learn from a comparative overview the best practices already implemented in Europe and to be aware of the European guidelines and recommendations;
2. to get an up-to-date scientific knowledge about the religious phenomena;
3. to put in practice, in their teaching activities, a comparative and intercultural perspective on the various (European as well as non-European) religions, worldviews and cultures, in order to nurture in their class mutual comprehension, dialogue and respect.

That's why the project plans to realize:

1. A baseline study which analyzes the actual situation of teaching about religions throughout Europe, focusing in particular in the countries of partner institutions;
2. New innovative didactic tools such as Multimedia Digital Modules to be used in class, accompanied by a dedicated Handbook with didactical guidelines for teachers. Their contents will deal with the last findings of religious sciences and teaching methodologies, as well as the highlights of the aforementioned baseline study.
3. Teacher support activities (European virtual community, training activities, developing of didactical projects to apply in classroom) along the project lifecycle with teachers of associated schools involved in the project, in order to have steady review and active involvement of the teachers 1) in the Digital Modules implementations and 2) in the piloting in their institutions of contents and methodology and 3) in the dissemination and exploitation of project outcomes.

IERS project proposal was born capitalising previous experience and results of Comenius MP project – MIH Multicultural Interdisciplinary Handbook: Tools for Learning History and Geography in a Multicultural Perspective. Teams proceeding from University of Salamanca and University of Augsburg worked with part of the team from the University of Venice from 2009 to 2011 by developing the methodological and technical framework of a multicultural didactical approach to the learning of History and Geography. The involvement of academic institutions from Italy, Denmark and France with a specific research itinerary on the project contents will valorise project results with their scientific contribution in the field of religious and intercultural studies. In particular Denmark will share its knowledge in the field of religious education and teaching about religions. The university of Augsburg will implement its experience in teacher training. Finally the University of Salamanca will provide the technology for the innovative Multimedia teaching tools and the Internet platform for the internal and external communications of the consortium.
2 PARTNERSHIP

The consortium is composed by the following institutions:

- Università Ca'Foscari Venezia (Italy)
- Institut Européen en Sciences des Religions (France)
- University of Salamanca (Spain)
- University of Southern Denmark (Denmark)
- Oxfam Italia Intercultura (Italy)
- University of Augsburg (Germany)

The Ca' Foscari University of Venice is well experienced in international projects management. Through the Department of Asian and North African Studies it makes available to the project a team of scholars with a wide expertise in Religions and Inter-cultural Studies as well as in Teacher Training.

The European Institute of Religious Science of the École Pratique des Haute Etude will coordinate the various expertises of the different partners in the creation of the Digital Modules. In order to do so its team features not only scholar of Religions and Religious Studies Teaching, but also experts of teacher training and cultural integration/immigration issues.

The University of Salamanca has well-documented experiences in international projects. It is involved via its Research group in Interaction and eLearning and it will be focusing on the production of educational digital tools. Thank to it's experience as manager of the former COMENIUS MIH will be also in charge of the quality evaluation throughout the entire project.

The scholars from the German university of Augsburg are professors in didactics of history in the fields of multicultural dialogue, methods and contents for teaching. It is worth noting that Bavaria is one of the largest regions in Germany, an important aid to dissemination considering the high level of autonomy enjoyed by regions in this country. In fact, the University of Augsburg will coordinate with its expertise the Teacher Pilot work package.

The Institute of Philosophy, Education, and the Study of Religions of the University of Southern Denmark will provide distinguished scholars in Religious Studies research as well as Religious Studies teaching. It will be responsible for the baseline Study and will be actively cooperating in the creation of the Digital Modules.

Finally OXFAM will capitalize its experience in project concerning migrants and intercultural integration. In addition thanks to its international network, it will exploit it in the valorization and sustainability actions of the project, in order to disseminate and mainstream the project outcomes also outside the consortium's countries.

Each partner will bring into the consortium as associated partner at least one high school, in order to ensure constant involvement of and impact to the target group (teachers). In particular the experience of schools in Denmark where a well developed curriculum on religions is applied will be shared and capitalised during the project.

3 OBJETIVES

The Project aims to be for teachers of Humanities, Social Sciences, History and Geography and Religions at Secondary School a complete set of didactical tools and training experiences in order to achieve these primary goals:

- to contribute to the development of quality lifelong learning and to promote high performance, innovation and a European dimension in systems and practices in the field.
- to reinforce the contribution of the European school system to social cohesion, active citizenship, personal development, intercultural dialogue and equality, promoting the need to combat to all forms of discrimination based on sex, racial or ethnic origin, religion or belief.
- to promote an awareness of the importance of religious and cultural diversity within Europe.
- to provide an opportunity to share knowledge and understanding among young people and educational staff of the diversity of European cultures and languages and its value, enhancing the quality and European dimension of teacher training.

To reach these primary goals the following elements will be developed within the framework of the project:

1) Creation of a transnational team from different European University Departments dealing with Religious Studies, Intercultural Studies and Teachers Training, each one linked with at least one school as Associated Partners and a team of teachers in service at Secondary School.

2) Production of a baseline study of the teaching about religions in the European schools.

3) Production of didactical tools (Multimedia Digital Modules and methodological Handbook) whose target are high school teachers of history and social sciences, humanities, arts, philosophy, and obliviously, religions, so the they can use these products to enrich their courses with topics dealing with religions and intercultural education.

4) Development of teacher support actions (European virtual community, training activities, developing of didactical projects to apply in classroom).

4 METHODOLOGY
The IERS project methodological framework implies different methodological approaches according to the related set of activities to be developed through the project lifecycle, as follows:

- Management Methodology, to be developed in order to ensure the efficiency of management tasks and quality and evaluation processes.

- Technical Methodology, is oriented to implant the ICT environment for the developing all the project tasks (website, internal communication platform, Multimedia Digital Modules production, learning and social environment).

- Content Development Methodology, based on a set of (scientific, technical, didactical, ICT and methodological innovation) templates, guidelines and recommendations for supporting the contents development. These contents will be consumed in training actions for the teachers, and these teachers will use them with their own students in pilot phase.

- Teaching Training and Support Methodology will be based on a quality social community approach, where the strong presence of human roles (online tutors) and learning by doing, learning and practice communities and interaction will be key to ensure the effective acquisition of skills and competences by teachers who will attend the training and support actions in programme. This action will be implemented alongside the development of the Multimedia Digital Modules and the Pilot phase in order to ease the active collaboration and involvement of the teachers of the partner schools.
• Pilot Methodology will define the planning and the kinds of activities implemented by teacher in their own schools.

Dissemination, Exploitation and Valorisation Methodology will consist of two different approaches: on the one hand, it will involve “conventional” methods for disseminating and exploiting the benefits of the project: social media presence, attendance to workshops and conferences, organizing of workshops and events at school, elaboration of guidelines and recommendations, etc.; on the other hand they will be strengthen with a final conference in the context of teaching about religions in the European schools. With them it will be possible to engage the target groups with the project and its outcomes, specially the policy makers, academic managers and teachers.

5 ACKNOWLEDGMENT

With the support of the Lifelong Learning Program of the European Union. Project Reference: 539803-LLP-1-2013-1-IT-COMENIUS-CMP. This project has been funded with support from the European Commission. This publication only reflects the views of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.
Abstract

To respond to the current needs of society, higher education institutions in Ecuador are being investigated, assessed and accredited in order to know their problems and propose alternative academic improvements. In this context, the training and education of professionals has been identified as one of the most important tasks of the Ecuadorian Institute of Higher Studies (IAEN). To accomplish this, the unification and development of Information and Communications Technologies (ICTs) has been proposed. As a parallel process, it is necessary to implement a new concept of the student/users, and introduce changes to the roles of teachers and administrators in relation to communication systems and the design and distribution of teaching. With the aim of incorporating ICT processes into professional training, the Institute's authorities have determined that a Massive Open Online Course methodology should be implemented, using the EdX platform, to better shape the education of professionals, teachers, students and public functionaries. The Institute recognizes the impact that connectivity, open pedagogy, and networked learning can have on the institutions and universities that are generating knowledge, by using new technologies of learning, frameworks such as Moodle, EdX and the IAEN's web, to contribute in new ways to Ecuador's National Plan of Good Living. The project's goal is that in one year the Institution has a virtual platform capable of handling between 30,000 and 500,000 users per month, including students, teachers and Ecuador's civil functionaries, who will participate in the different courses. The project is expected to have a positive impact on the field of professional training.

Project URL: http://iaen.edu.ec

1 INTRODUCTION

The search for new horizons based on the power of knowledge demands that higher education institution streamline and innovate their performance within the framework of technological development, trending towards quality improvement to offer to society professionals highly trained in cognitive, procedural and attitudinal realms.

Virtual education is an educational strategy, based on the intensive use of new technologies, flexible operating structures and highly efficient teaching methods in the teaching-learning process, which facilitates that conditions of time, place, occupation or age of students not become limiting factors or conditional for learning.

Classroom education with the support of ICTs is undergoing a process of renewal. This means that is possible to enhance the classroom education in its development incorporating new technologies, so that the teaching and learning processes become more efficiently and effectively.

Conventional didactics and pedagogy urgently requires a renewal process because in virtual environments. The merger of these two great intentions, the conventional and virtual, gives rise to the appearance of what is called b-learning.
2 DESCRIPTION

The current project is based a disruptive innovation of virtual education. It seeks to put hand in hand the processes of virtual education with the technology. It becomes necessary that the Ecuadorian Institute of Higher Education model a methodology that guides the linked processes, the strengthen the professional training of teachers, students and Ecuador’s civil functionaries.

The project implementation involves investigating the state of the art about the virtual environment at the IAEN, orienting it to the Moodle and EdX, two platforms that look to fit under certain pragmatic and heuristic criteria for measuring and evaluating quality interactive usability of graphic interface.

The project's success is based on a multidisciplinarity of methodology, pedagogy and technical sophistication, and involves engaging the semantic web for the architecture of the virtual environment, considering the ontology of domain.

Finally, implementing the methodology created by the virtual environment of the IAEN will give a new perspective on education in Ecuador.

2.1 General Objectives

Modeling a methodology for the Virtual Education environment of the Ecuadorian Institute of Higher Education, for the purpose of strengthening the formation of professional faculty, students and civil functionaries in Ecuador.

Objectives:

- Investigating the state-of-art of the virtual environment of the IAEN, build on the Moodle and EdX platforms.
- Establishing quality criteria to evaluate the virtual environment of the IAEN.
- Creating a heuristic method to measure and evaluate the usability and quality of the graphic interface of the IAEN’s virtual environment.
- Create a semantic web to model elements of the architecture of the IAEN’s virtual environment, based on the ontology of domain.
- Analyze the methodology of the IAEN’s virtual environment.

2.2 Outcomes/Results

To generate growth and innovation in virtual education processes it is necessary to involve a technological as well as an educational methodology that optimizes the institutional educational platforms and allows a mix oriented at the IAEN’s academic quality. These revolutionary transformations in education technology are turning points compared to existing practices, and are the gateway to a new technological and methodological paradigm where technological practices based on free software allow continuous adjustments to the educational platform, and methodological adjustments to educational processes, to form learning environments where the teacher takes on a personal contact with the student and enhances the collaborative effort and the interaction between students, teachers and the knowledge that comes when participants share information.

Clearly we are all different and learn differently. It follows that education cannot be "the same" for all, nor the access to technological resources is on the same scale. So, the proposed use of open source platforms such as EdX and Moodle allows us to develop new strategies and methodologies to point towards the personalization of education according to the approaches and needs of the environment.
Under the perspective raised, one cannot think of a technological solution based on a single platform to deliver online courses when education in Ecuador contains several edges and institutional aspects. Progressively incorporating the use of Information and Communication Technologies into the teaching and learning processes, using the official platform, via different modes: the classroom, e-learning and b-learning is thus the chosen method.

3 CONCLUSION
Modeling a methodology for the virtual education environment of the IAEN will strengthen the professional formation of teachers, students and civil functionaries in Ecuador.

4 ACKNOWLEDGMENTS
Y would like to thank to the Ecuadorian Institute of Higher Studies and my colleagues, master candidates Patricio and Augusto. A very special mention to Dr. Francisco José García Peñalvo who has offered constant support and knowledge since I’ve known him. Doctor, many thanks for the confidence you have put in me.

5 REFERENCES
Intercultural Mentoring tools to support migrant integration at school (INTO)

COMENIUS Multilateral projects

Elisa Carboni, Marco Paoletti
Oxfam Italia
Concino Concini 19, 52100 Arezzo, Italy
(+39) 0575 182481
elisa.carboni@oxfamitalia.org, marco.paoletti@oxfam.it

Francisco J. García-Peñalvo, Valentina Zangrando, Mª José Rodriguez-Conde, Alicia García-Holgado
GRAL Research Group, Research Institute for Educational Sciences (IUCE), University of Salamanca
Paseo de Canalejas 169, 37008 Salamanca, Spain
(+34) 923 294500 ext. 3433
{fgarcia, vzangra, mjconde, aliciagh}@usal.es

Joanna Szczecińska, Marek Krawiec, Zuzanna Rajmer
Academy of Management Lodz
Sienkiewicza 9
90-113 Lodz, Poland
(+48) 42 6642278
jszczecinska@swspiz.pl

Anna Mauro, Caterina Casamenti, Graziella Favaro, Lorenzo Luatti, Stefano Alacqua, Micaela Cozzi
Oxfam Italia Intercultura
Via Concino Concini 19, 52100 Arezzo, Italy
(+39) 0575 182481
{anna.mauro, caterina.casamenti, lorenzo.luatti}@oxfamitalia.org

Charalambos Vrasidas, Michalinos Zembylas, Katerina Theodoridou, Christiana Aravi, Sotiris Themistokleous
Centre for the Advancement of Research and Development in Educational Technology
Metochiou Egkomi 66, 2407 Nicosia, Cyprus
(+357) 22795128
{pambos, sotiris}@cardet.org, m.zembylas@ouc.ac.cy

Kiki Messiou, Cristina Azaola, John Schulz
University of Southampton
Highfield Campus, SO17 1BJ Southampton, UK
(+44) (0) 23 8059 2642
{k.messiou, M.C.Azaola}@soton.ac.uk

Abstract

Within the scope of European policies and to combat educational disadvantages for migrant children, numerous actions have been taken to improve the position of migrant children in education. In secondary education the emphasis lies on diversification of the offered teaching methods and extra guidance of the pupils. Some schools in Europe have set up measures to increase the continuity of the educational support in terms of migrant pupil inclusion and orientation. Despite these measures, dropout rates are still high among migrant youth and compared to their native peers a disproportionately large number attend the lowest levels of secondary school after completing primary school. The disappointing results of regular guidance are partly the reason for the development of more innovative forms of guidance.

The project aims to promote strategies and methods that help students with a migrant background at risk of ESL to maintain their motivation through the development, testing and validation of an Intercultural Mentoring Programme based on the empowered peer education methodology.
The Intercultural mentor profile will be adapted to different European contexts, developed in collaboration with at least 100 school staff members (headmaster and secondary school teachers from 5 different European countries) and tested with at least 50 students with a migrant background trained as Intercultural Mentors.

The impact of the project will be sustained thanks to its outcomes:

(i) Didactic Kit: conceived as self-teaching materials will contain the training framework to directly implement the model of intervention in secondary schools system;
(ii) Guideline Handbook: support the future implementation of training courses – by other education organizations and secondary school,
(iii) Project website: it will include not only the results and materials of the project (handbooks, e-learning platform, reports, etc.) but will also include updated information on young migrants.

**Keywords:** Mentoring, Intercultural, Methodology, Education, Secondary Schools

1 INTRODUCTION

According to the European statistics (Eurostat) and those of Member States because of a stream of “migrant students” the great gap of school performance between “migrant students” and “native students” holds steady (for example native students scored 40 points more than their migrant classmates according to Pisa table). National and European research highlight a disadvantaged position of students from migrant background: negative marks, high rate of students being held back, concentration only on few subjects, school drop-out and absenteeism (For further information please read the research: Education at a Glance 2012, OECD Indicators). The main reasons which lie on this condition are closely related to a socio-economic and cultural context of the family. Indeed, families are often unable to support the student in his/her studies or homework assignment, help sons and daughters to choose the best option for their scholastic careers, and endorse motivation and project. The target group are definitely preteens and adolescent immigrants (over 14), and the most critical moment is the delicate transition from middle school to high school. Undoubtedly it is a “crucial” phase for scholastic careers of each student, when several critical factors come out. For instance, in Italy the first year of high school 38% of foreign students failed and another 10% dropped out ((Miur-ISMU, Alunni con cittadinanza non italiana. Verso l’adolescenza, Rapporto nazionale, Roma-Milano, 2012).

Meanwhile, the educational institution must carry out its function as an formative figure guaranteeing equal opportunities to everyone, especially during this period of economic crisis. Therefore, the progressive reduction of economic resources should push the school system to find new and sustainable solutions. There is so much to learn from an intercultural “resilience” which is able to turn troubles into strong points. The educational institution is not aware of having within valuable resources which can help the school performance of students, especially those who having more difficulties.

We figured out, thanks to experimental methods from other schools of European countries, the Mentor figure is that has reached more success – based on mentoring methodology. Mentors guide and support learning paths of their disadvantaged classmates at school and out of school. It means an “inclusive” approach to teaching and learning which satisfies all students’ expectations, especially for those who come from more hostile environment. Unfortunately, the “hostile classmate” role is a resource still little known and regulated by school (as it is said by the European research of Eurydice, Integrating Immigrant Children into Schools in Europe, Bruxelles, 2009), that must find its own “institutionalized position” at school: a proposal that is still waiting for an appropriate definition both in methodology subjects and approaches. In particular we need to specify precise tasks and conditions of this planning proposal: both to people who will be involved in this Intercultural Mentoring activities (young immigrants, youth who need to improve
their school performance paying attention especially during the “phase” from middle school to high school), and to people who will carry out the role of Mentor (older classmates, experts or foreign students). The idea is to place side-by-side foreign young people –considering that this is the more vulnerable target - with older “Welcome Buddy” figure, who helps, supports, stimulates and gives advice. It is a right method since it is an available (both inside and outside of schools through the national engagement) and convenient resource. In addition, there are other advantages for all people involved: families, schools and especially for people who “are guided” and those who “guide”. The “older buddy” is like a “star” that orients and helps foreign student towards the academic integration, improving their school performance, learning and reducing the school drop-out. This Mentor role can be carried out by older and more qualified youth. They can be native, but it would be better still if a mentor was foreign in order to pay more attention to migrant youth or migrants’ children who are the main characters in this project, making them become active citizens (according to the European research “International Education in Schools”, by Cristina Allemann-Ghionda required by the Committee on Culture and Education of the European Parliament, in June 2008).

Thanks to the Intercultural Mentoring the “older welcome buddy” and students have the possibility to improve their skills and capacities getting stronger in their relationships at the same time. Frequent mentor meetings, managed by coordinator/teacher, are formative moments since the experience of the Mentoring and opinions can be exchanged. Carrying out Mentoring tasks helps these young people to gain skills and capacities necessary for a personal growth and becoming active citizen. Moreover, Mentoring creates a better social climate within the class or group, thanks to the introduction of new and better pedagogical methodologies which facilitate a more efficient management of the class.

Teachers’ Training plays a crucial role in this project permitting them to use this resource in a properly way. Indeed, promoting this project each school will be aware of the Intercultural Mentoring importance, using it as a routine and stable tool, that is the main goal of the project. Therefore we need to define the intervention models, submit them to testing and spread them at European level.

Up to date, all partner subjects of this project have realized significant experiences in this topic. In particular the relevant triennial Italian experience (realized in Turin, Milan, Bologna, Arezzo schools) through the Intercultural Mentor figure (an older immigrant mate) in 3 eighth grade of the middle school and 1 ninth grade (first year of high school). This experience permitted to elaborate and test: process, actions and tools. (Centro COME, ScuolaFacendo. Sostenere le scelte scolastiche, accompagnare i passaggi delle ragazze e dei ragazzi stranieri, Milano, 2012; G. Favaro, Figure di prossimità. I tutor stranieri accompagnano il cammino d’integrazione).

2 PARTNERSHIP

The INTERMENTOR Consortium rational is to combine partners with research capacities in the field of education and school integration (P3, P5, P6) with partners which owns capacities to reach schools and teachers in order to test and adopt tools and methodologies offered by the project (P2) with partner assuring the vastest diffusion of project outputs thanks to the relevant network he is part of (P1, P4, P6).

To carry out this work a partnership needs to satisfy the following requirements:

1) To have experience that is relevant for content development and teacher and pupils training;
2) To have appropriate technical skills to develop the contents and to apply the community experiences;
3) To have contact and/or experience working with schools, families, groups at risk of exclusion, social agents;
4) Skills appropriate to carry out the dissemination and exploitation to the project target groups.
5) Skills and experience in European project management.
Each partner will assume the coordination of at least one WP, in accordance to each partner skills, as shown below. All partners will be involved in all WP and cooperate actively with WP coordinators in defining concrete methodologies and in implementing activities at national levels.

The complementary skills of the consortium give as result a well-balanced partnership, distributed as follows:

**P1 OXFAM Italia (OIT) – (WP1 Coordination):** This institution will be the leader of the project. OIT has advanced skills in managing strategic partnerships and alliances, vast experience in coordination and participation in immigrant-related European projects. This partner is a non-governmental organization with experience with collectives at risk of exclusion.

**P2 Oxfam Italia Intercultura (OII) – (WP3, WP4).** Oxfam Italy Interculture is Oxfam Italy’s social cooperative, founded in 2010. Its history is linked to Oxfam Italy’s vast experience on the issues of immigration and integration. OII inherits a strong link working both locally and nationally through partnerships with public authorities and agencies, voluntary and no-profit organizations, educational authorities and universities. OII main goals is the integration of people from such groups into schools. Its direct link with schools, capacity to implement various activities with teachers and pupils. Successful intervention within disadvantages groups (including immigrants) and coordination and participation in immigrant-related projects. Development of training contents for teaching staff and direct and privileged contact with immigrant communities and participation in immigrant-related national programs.

**P3 Universidad de Salamanca (USAL) – (WP2 - WP9 Coordination).** It has research experience in areas such as content development, training of trainers, formal and informal learning programs application, social learning application, etc. In addition they were coordinators in EU immigrants related projects so they have the experience and results of that specific project. research skills and experience in carrying out need analysis and country context profile, in related European projects.

**P4 - CARDET – (WP7, WP8) Coordination:** direct and privileged contact with teachers, educators and policy making in the field of education. They have experience and knowledge about real necessities of learning institutions and the interaction problems between them and the learning stakeholders. Coordination of Project Website due to its expertise in developing web portal and in dealing with ICT tools (www.migrationnetwork.org).

**P5 - University of Social Sciences in Lodz (WP5 Coordination).** This partner is an higher education Polish institution with training experience at different levels (specially teacher training and higher education), activities and a huge experience in EU project management.

**P6 - University of Southampton (WP6 Coordination):** Thanks to the vast network of teachers, educators and policy making in the field of education, this partner has the potential of reaching multiple stakeholders and spread project contents on vast scale.

### 3 OBGETIVES AND RESULTS

The main objective of the project is to promote strategies and methods that help students with a migrant background at risk of ESL to maintain their motivation through the development and promotion of an innovative model of “Intercultural Mentoring”.

INTERMENTOR intends to achieve the following specific objectives:
Intercultural Mentoring tools to support migrant integration at school (INTO)

(I) Apply in Italy, Spain, UK, Cyprus and Poland the *Intercultural Mentor Profile*, an empowered peer education model of stimulating young people sense of initiative and motivating students with migrant backgrounds to fulfill their educational potential;

(II) Develop, test and implement training and didactic materials aimed at innovating schools education system through an intercultural mentoring programme based on the centrality of young people, especially immigrants;

(III) Implement five pilot training courses for secondary school teachers in order to promote their professional development and inclusive approaches to teaching and learning in multicultural contexts, enhancing the inclusion of pupils with a migrant background.

This project brings together key experts from the fields of education, civil society and research institutions to review best practices and achievements of peer education in this field, as well as to enable dissemination of learning from this process through the development of an in-service training course for teachers, and of a resource pack with a curriculum modules for use with young people in schools.

The project aims to become an educational test to build an interdependence between the field of intercultural education and active citizenship ensuring real opportunities for educational achievement and socio-cultural integration of foreign pupils in secondary schools.

The project partners will produce:

a) An in-service training course for teachers from the perspective of teaching / learning life-skills, key competencies: during this course, conducted with an action research methodology, teachers of different subjects will set up a new model of intervention within their schools;

b) An informal training course for students with a migrant background to become an Intercultural Mentor;

c) A series of original educational material (*Guideline Handbook, Didactic Kit*) for wider implementation of the mentoring programme across the European school education system;

d) A project website developed through the project activities that will act as ongoing networks and forums to maintain the active engagement of the various stakeholders during and beyond the life of the project i.e. education providers, pupils, civil society organization, and local authorities.

The above mentioned material will be produced on the basis of an accurate need analysis on integration of migrant students highlighting assets and liabilities in each participating country and using these results for the content adaptation. This process will be carry out under the scientific supervision of the Scientific Committee. The teachers participating at the training courses in 5 countries will be active actors of the testing phase: they will produce the original educational materials, under the coordination of an expert with the scientific supervision of researchers.

The project provides the exchange of best practices among partners in the schools integration field. Especially we will strengthen teachers observation skills in order to be able to support students during the choice of their future studies (orientation phase), but also to be able to monitor the school social environment and to intervene promptly in case of negative indicators in terms of school transition between lower and upper secondary school.

Partners will address their action to change described situation by undertaking the following steps:
actively working on the need analysis of each participating country relating to integration of migrant students (WP2), assessing methodologies and tools to create the Training Courses for teachers and mentors and the Intercultural Mentor Profile;

(ii) using the results of WP2 in the product development task of WP3. Training contents and materials will be adapted in accordance with the structural factors (national partner context) and the cultural conditions to which teaching staff in Europe are subjected; It will also been taken into special consideration the best practices identified and national partner context;

(iii) implementing the pilot training courses in 5 different national context. This will allow the testing and validation of the training contents developed under WP3;

(iv) participating in the product validation phase, by collaborating in the definition of improvement areas for the pilot training course and contributing in the preparation of the final version of each tools. The accomplishment of the above mentioned tasks will provide training contents and materials fully applicable and plainly capable of supporting training courses.

4 ACKNOWLEDGMENT

With the support of the Lifelong Learning Program of the European Union. Project Reference: 540440-LLP-1-2013-1-IT-COMENIUS-CMP. This project has been funded with support from the European Commission. This publication only reflects the views of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.
Multicultural Interdisciplinary Handbook: tools for learning history and geography in a multicultural perspective (MIH)

COMENIUS Multilateral project

Francisco J. Garcia-Peña, Valentina Zangrando, Antonio M. Soane Pardo, Ma José Rodríguez-Conde, Alicia García-Holgado
GRIAL Research Group, Research Institute for Educational Sciences (IUCE), University of Salamanca
Paseo de Canalejas 169, 37008 Salamanca, Spain {fgarcia, vzangra, aeseane, mijrconde, aliciagh}@usal.es

Mag.a Martina Bechter, Paul Schober, Martin Maier
Hafelekar Unternehmensberatung Schober GmbH
Bozner Platz 5, 6020 Innsbruck, Austria
{martina.bechter, paul.schober, martin.maier}@hafelekar.at

Stefano Gasparri, Silvana Bianchi, Anna Consonni, Cinzia Crivellari
Ca’ Foscari University of Venice
Palazzo Vendramin dei Carmini, Dorsoduro 3462, 30123 Venice, Italy
gasparri@unive.it, cinziacrivellari@fastwebnet.it, consonnianna@tiscali.it

Frank Riegler, Andrea Krimbacker
Pädagogische Hochschule Tirol
Pastorstraße 7, A - 6010 Innsbruck, Austria
franz.riegler@ph-tirol.ac.at, sussex@aon.at

Jean-Marie Baldner, Didier Mendibil, Eric Mesnard
Institut Universitaire de Formation des Maîtres – Créteil (IUFM)
Rue Jean Macé, 94380 Bonneuil sur Marne, France
jean-marie.baldner@creteil.iufm.fr, {didier.mendibil, ericmesnard}@orange.fr

Joanna Szczecińska, Sylwia Hadrysiak
Academy of Management Lodz
Sienkiewicza 9
90-113 Lodz, Poland
(+48) 42 6642278
jszczecinska@swspiz.pl

Abstract

MIH project (Multicultural Interdisciplinary Handbook: tools for learning History and Geography in a multicultural perspective) is a Comenius Multilateral Project funded with support from the European Commission that has been developed from 2009 to 2011.
Conceived from the idea of educating lower and upper Secondary School pupils in a process of construction of a European identity by involving them in the culture of other countries, MIH project meets this need by providing new methodological and ICT tools that could help teachers and pupils to plunge deeper into both cultures and languages of another nations via their History and Geography, and opens the way to introduce a European perspective in History and Geography school curricula and classroom activities.

**Keywords:** Multiculturality, Geography, History, Learning Objects, methodology, ICT tools

### 1 INTRODUCTION

MIH project, conceived in 2008, stems from two main forces: on the one hand, the ongoing debate, at the time, on European identity linked to the ratification of the Constitutional Treaty by member states; on the other hand, the process of school reform that is taking place in all countries of the union, focused on the notion of competence, was undermining the traditional system of disciplinary teaching and pushed to a new alliance between history and geography.

The MIH (Multicultural Interdisciplinary Handbook) project provides new tools that help teachers and pupils to plunge deeper into the culture and the language of another nation via its memorials, its history and its landscape/geography. Moreover, it intends to promote the common European identity, as it introduces a European perspective in the schools’ History and Geography programmes, which are usually confined to national borders.

The multiculturalism of MIH (the M of the acronym) must be understood as sharing perspectives and study topics specifically related to common European or national identity constructions. One of the aims of the project, the most relevant, was to provide the schools with the national narratives that contribute to form the national identities, in the belief that this would be useful at the mutual understanding within the European area.

The "I" of the project is for "interdisciplinary" and clearly indicates that the Digital Modules involve multiple disciplines and key skills. The contents and the methodologies that the project was intended to develop were the historical and geographical for two reasons: first of all because most of the identity construction of nation states has been focused on the study of history and geography, and secondly, because recently, in some countries at schools, the two disciplines was increasingly juxtaposed to almost merge into a single “geo-history”, or, in others, were incorporated in the teaching of "social sciences".

The Handbook should be considered a guide for teachers. It should accompany the teacher through:

- the epistemological and methodological approach to the teaching of History and Geography in a multicultural and interdisciplinary perspective, according to the results of the research carried out during the MIH project;
- the design and deployment of learning objects (Digital Modules), that allow, by using historical and geographical documents and contents, the construction of materials for individual learning and classroom activities;
- the comparative description, in terms of contents and didactical proposals, of a digital modules selection produced during the project.

The Handbook can be used both by teachers interested in multicultural learning as well as by those involved in CLIL projects. In the latter case, teachers have at their disposal the consistent path, the original documents and a general methodology that recent reports have shown to be missing.
The Digital Modules are the final tool of the project. The modules are available as free materials that can be used in class or for independent study by pupils and represent an important contribution to the development of digital educational content.

2 PARTNERSHIP

The consortium is composed by the following institutions:

- University of Salamanca (Spain).
- Pädagogische Höchschule Tirol (Austria).
- Hafelekhar Unternehmensberatung Schober GmbH – Innsbruck (Austria).
- Institut Universitaire de Formation des Maîtres – Créteil (France).
- University of Augsburg (Germany).
- University of Siegen (Germany).
- Università Ca’ Foscari di Venezia (Italy).
- Społeczna Wyższa Szkoła Przedsiębiorczości i Zarządzania (Poland).

The University of Salamanca leads the initiative and has well-documented experiences in international projects. It is involved via its InterAction and eLearning Research Group (GRIAL – http://grial.usal.es), currently focusing on the production of educational podcasts and Learning Objects for both eLearning and bLearning contexts.

The German Universities of Augsburg and Siegen contribute with long expertise in Didactics of History in the fields of multicultural dialogue, methods and contents for teaching History in bilingual classes. They will share the responsibility for piloting the complete toolset.

The Department of History of the University of Venice contributes with scholars involved in teacher training, in History and Geography Methodologies and Didactics. They are responsible for the state-of-the-art Studies and the Methodology for content developing.

The Polish Academy of Management has a language unit and also provides training for teachers. The Academy has vast experience in managing European projects. All the staff is competent in inter-cultural education.

The trainers at the IUFM of Créteil, a public teacher-training institute currently attached to the University of Paris XII, have already developed school handbooks and participated in European cooperation (MOBIDIC project - http://www.mobidic.org/start.htm). They are responsible for the layout of the Handbook.

Hafelekar Agency staff is responsible for the evaluation program, dissemination and valorisation. They collaborate closely with the University of Salamanca in order to ensure the highest quality in the whole processes.

The Paedagogische Akademie of Innsbruck staff is expert in both teacher training, especially as related to the design of curricula, and language teacher training. They will design the training course.

3 OBJECTIVES AND OUTCOMES

The aim of this Project is to build and share a set of tools including a Handbook, Digital Modules and a Teacher Training Course. They offered a structured path through European Contemporary History and Geography where the countries concerned were those of the Project partners.

MIH aims to:
• Further the development of a common European identity by having schools participate in the culture of other countries using their languages and their collective symbolic imagery.

• Contribute to the creation of a new generation of school textbooks supported by methodological guidelines for teachers and ICT-based contents that can support teachers involved in CLIL experiences, or who are simply interested in the area.

• Implement digital educational contents in schools.

3.1 Digital Modules design and production processes

Researchers involved during the project within the team produced 40 Digital Modules in original language; 37 of them have been also translated into English. The Digital Modules are available in the project website http://mihproject.eu/dissemination/digital-modules.

Contents’ selection was carried out following the four topics agreed, taking care to indicate for each module the curricular level (according to the national educational system of the country where the module was produced), the kind of sources proposed for the didactical activities and a sum of methodological suggestions for its use in classroom.

The planning of the Digital Modules production involved researchers and teachers from each partner institution and from schools that participated in the project as associated partners. It was an important opportunity for exchanging scientific knowledge and for sharing teaching practices, by overcoming language barriers and advancing the mutual knowledge of content and teaching practices.

A comparative analysis of topics treatment in the Digital Modules revealed unexpected similarities, like for instance in the choice of the most significant events describing each topic or in the use of common sources. Common objectives to all modules are also the promotion of active citizenship, at national and European level, and the discovery of an historical and geographical past in its relation with the present time. From the didactical point of view, particular attention is devoted to improve in the pupils the acquisition of conceptual tools in order to use properly sources and documents, and the strengthening of spatial-temporal skills.

There was a pilot phase for testing the Digital Modules, where 73 teachers implemented the Digital Modules in their classes with approximately 800 pupils; students agreed to fill in a questionnaire proving their feedback with these learning experiences. Most of teachers used both materials and activities for enhancing their lessons but they did not need to significantly modify their plans for adding these resources as a complement for the lessons. Even when the Digital Modules were used to extend learning experience with extra-curricular contents (e.g. European cities), the experience has been welcomed.

Teachers appreciated very much the multicultural perspectives and considered that the whole Digital Modules provided a highly interesting multicultural approach, since it was possible to show the differences between the historical narratives in different countries and contexts, especially by analysing Digital Modules about the same topic coming from different learning scenarios. Sometimes the teacher decided to let students choose the Digital Modules they preferred and pupils were fascinated by the change of paradigm that relied on replacing the paper maps and textbooks with video clips and digital activities; they did also appreciate the use of digital contents and resources, as so as the different approaches that the use of such resources should allow.
3.2 Teacher Training courses development

One of the project tasks was the design and implementation of a training plan addressed to teachers. This was intended to prepare teachers in partner countries for using MIH methodology and products in classrooms. During the second year of the project, 73 teachers participated in a training course for then carrying out the pilot phase in classroom with pupils.

Each partner institution organized its own course in face-to-face or blended learning methodology, in order to introduce the goals and possibilities of MIH project results. Teachers knew the materials and contributed to define their use in the classroom according to the different school levels and curricular programmes.

3.3 Handbook for teachers

MIH Handbook has been produced taking into consideration the lessons learned by analysing users’ experiences with MIH products and didactical solutions. The digital version of the handbook is available in the project website http://mihproject.eu/dissemination/handbook along with a set of video tutorials and some useful materials to support the production of new contents by teachers.

4 CONCLUSION

According to the EU Lifelong Learning Programme Objectives, MIH project was devoted to involve pupils in contributing to the creation of a sense of European citizenship, by promoting a multicultural approach of education in European schools with the support of Information and Communication Technologies and CLIL methodologies. Along the project lifecycle, the researchers’ team has carried out each task trying to involve pupils –by means of their teachers– and has made them aware of the diversity and richness of the multicultural environment in which they live. From this point of view, the project provided the essential ingredients to enable this EU goal. As a challenge for the near future, MIH team will continue to point on multiculturality as a key factor for developing new researching projects, academic proposals and training actions.

5 ACKNOWLEDGMENT

With the support of the Lifelong Learning Program of the European Union. Project Reference: 502461-LLP-1-2009-1-ES-COMENIUS-CMP. This project has been funded with support from the European Commission. This publication only reflects the views of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.