EDEN 2014 ANNUAL Conference

E-learning at Work and the Workplace

From Education to Employment and Meaningful Work with ICTs

BOOK OF ABSTRACTS

Including the Collection of "Synergy" Synopses

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E-learning at Work and the Workplace – From Education to Employment and Meaningful Work with ICTs

Developing human potential has been a persistent EU policy aim even in the recent years of economic crisis. Among the goals of the European Strategy for smart, sustainable and inclusive growth, Europe 2020, we find employment and innovation, featuring education as a major lever.

European education and training systems are often criticised for not properly responding to social needs, and even that employers, education providers, and youth live in parallel universes. Universities' reputation often comes from the visible, high level relations with prestigious corporations **and also the employability of their graduates**.

E-learning, as a system integrator, may help education providers and employers to actively step into one another's worlds. Workplace-based training supported by ICT tools is part of the solution to reduce skill shortages and mismatches. E-learning has become a dominant delivery method in learning settings at work across various sectors and a wide range of company sizes. Its advantages may be many, including flexibility, **economic efficiency**, and new work habits and improved **organizational learning culture**. ICT-enhanced learning may improve organisational performance and lead to increased staff commitment and the generation of new ideas. E-learning is often used by companies to inform and educate not only their employees but also customers, as part of their branding and marketing strategy and activities.

The latest ICT solutions for simulations, virtual worlds, immersive learning and enhanced learning experiences are continuously producing renewed toolkits, supporting the development of authentic **and more personalized** learning settings. E-competences and e-skills are increasingly treated as autonomous elements of personal development to be supported by specific learning activities and patterns.

The year 2014 is important as the start of the new European programme period until 2020. This coincides with intensive developments in ICT-supported learning, educational innovations and, in particular, open educational resources. With present economic trends, the key question being growth and employability, it is highly important how employers accept job candidates with the certifications and competences from the new world of learning, characterised by many innovative approaches and open educational settings.

With the Synergy Strand at the conference, EDEN has followed up its new collaboration initiative. It is a stream of lively, interactive sessions which facilitates the sharing of project outputs, practices and research findings, thus offering platform to develop ideas, create new partnerships by engaging the conference audience. Synergy focuses on the identification of points of synergy amongst presenting initiatives and participants and the elaboration of future collaboration roadmaps.

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WORK IN THE FUTURE IS CONTINUOUS LEARNING

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Introduction

In the modern, constantly changing work environments, continuous learning is more important than before. The ways of learning are changing, because a great deal of on-the-job learning takes place outside the traditional forms of education. Learning in working life is also changing: instead of competences of individuals developing through training courses, learning is increasingly becoming a continuous, community-based activity. The Finnish TYYNE project (Työelämä oppimisympäristönä – Working life as a learning environment) focused on working life as a future learning environment. The study dealt with the multidimensional relationship between working life and learning.

The key premise for the study was that multi-faceted, extensive and continuous learning will be the most essential aspect of all work in the future. Information processing and new learning are almost without exception involved in all current and future professions – including those that are usually not considered knowledge-intensive. Work in the future will clearly be community-based in nature, and expert tasks conducted alone are already vanishing. High standard competences of individuals will be important in the future as well, but individual expertise will need to be related to the collective competences of the work community.

Main conclusions

Developments at work will require more extensive and faster learning. In this way, the boundary between working and learning will become artificial: in the future, working will be continuous learning. A key observation made in this study was that the great change in learning can be summarised as learning transforming itself from individual activity to community-based activity. The key word for the community-based learning is network. Learning networks are diverse, multi-faceted and multidimensional – and community-based learning will be increasingly founded on open implementations that do not recognise organisational boundaries. Community-based forms of activity are supported by e.g. trends that increase the significance of communities of practice for learning, promote openness and transparency, and solidify community-based models in the arrangement of work.

One of the important features in community-based learning is the increase in open sharing. Learning in future work environments will take place at all times and everywhere. Various learning features are increasingly embedded in our tools, and support for learning will become a standard feature of their diagnostics.

The significance of informal learning will grow and gain strength in working life. In our quickly changing environment, the traditional course-oriented modes of competence development have their restrictions, because most of our current learning takes place when we work and communicate with the other members of our work communities. The traditional educational methods still have an important but a more specifically defined role.

In working life, the habits and methods involved in learning both develop and become more versatile. These new modes and forms of learning will supplant traditional classroom-oriented forms of education. Game-like learning contents are rapidly becoming more common in working-life learning, as the concept of games and game-like features is gaining depth and dimensions.

Resources for learning that have become important include, for example, various communities-of-practice in which employees of different organisations share professional practices. Peer groups are also an essential resource in modern work communities, producing and refining wikis and other community-originated products. Users are simultaneously information producers and information users, which has an effect on their roles regarding their learning.

On the basis of the TYYNE study, 15 recommendations were given to promote learning in future working environments in a versatile manner.

ICT SUPPORTED WORK-BASED CONFLICT RESOLUTION LEARNING

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The development of work-based learning has traditionally been associated with the need to develop the competences, skills, attitudes and behaviours that produce effectiveness in implementing defined job performance in relation to standards, productivity and outputs. The modern idea of developing a rounded set of work-based competencies that facilitate complex systemic analysis, foster critical and reflective skills and address more complex issues of environmental well-being and soft-skills regarding human relationships is still however regarded with suspicion by management systems where the critical bottom-line is profitability and efficiency. There is a growing realization that as well as highly specific job-related technical skills, the demands of the globalized workplace make it imperative that social and interpersonal knowledge, skills and competencies be incorporated in any on-job learning program.

There is a growing realization that as well as highly specific job-related technical skills, the demands of the globalized workplace make it imperative that social and interpersonal knowledge, skills and competencies be incorporated in any on-job learning program. In the area of conflict and dispute at work however, we see an intersection of issues that address work behaviours, lost productivity, system failure and dysfunction – all of which can gravely impair performance and outputs. Developing learning around conflict and conflict resolution techniques at the level of the workplace thus becomes a critical area for the investigation of innovation and creativity in applying ICT supported learning skills to learners in the middle of disputed spaces. This paper compares and contrasts two ICT supported work based initiatives that have been developed to address social conflict issues, to support staff competence in dealing with sometimes intractable disputes and to create a rights based approach to the enhancement of professional skills in dealing with conflict, dispute, racism and anti-social behaviours. The examples are drawn from field operatives in international conflict zones attending the on-line course in conflict resolution of UOC, the Open University of Catalonia in Barcelona and the transport employees of Veolia in Dublin who have been participating in anti-racism and diversity training in the conflict resolution programs developed by Universal Learning Systems.

The challenges of population change, ethnic/cultural difference, migration and social exclusion have created concerns for Irish employers. Significant challenges exist in addressing issues and developing capacity around responses to ethnic conflict in Ireland. This program provides relevant, coherent and well-researched outcomes that address staff needs for methods and strategies in intercultural operations and conflict resolution. For both Veolia and UNITAR, partnership with external academic agencies provided a strong synergy of content and process in this critical learning field at a time of social transformation. The paper draws a comparison between the conflict management courses and the ICT support for earning involved.

IS THE *OPENNESS* A PROBLEM IN OPEN WORKPLACE-BASED TRAINING?

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Now when the number of open courses and MOOCs is increasing there exists an opportunity for business to benefit from these flexible online courses as work-based training. A clear trend is deepening cooperation between industry and universities. The possibilities for new collaboration and partnerships should be enticing for both HEIs and business.

The issue of openness in prospective open courses as part of workplace-based training is investigated in this explorative study. Staff responsible for training at five companies was interviewed. Both the interviewees themselves and the correspondent companies are collaborating with scientists at higher education institutions (HEIs). However, the individual teachers, researchers, companies and university management have in most cases only a vague idea about appropriate operating and business models of open and online courses.

The companies displayed a positive attitude towards expanding the technology-enhanced online learning, and foresee few problems with openness when they participate in teaching and other course activities. The knowledge of generic level is not an issue when already applied in practice. When an industrial process or operation has been established the knowledge behind it no longer needs to be protected.

Although transparency is not an issue, the companies do identify some subjects that will be withheld from the courses. There are commercial secrets, innovations and specific inventions, which cannot be disclosed. Customer lists and similar information also have to be kept secret. One company, within the defence industry, must also take national security into account.

In conclusion: the interest is obvious in order to succeed with technology-enhanced and open workplace-based training and the issue of openness does not seem to be a major hindrance. There is a large potential in collaboration between companies and in collaboration between scientists and industry.

VIRTUAL PRACTICAL TRAINING IN ENGINEERING FIELDS

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Engineering education is a field of higher education that requires a broad range of practical skills to be offered to the students. The university curricula always involve some periods of work placements in companies, in order to allow students to get the real work experience in fields where they might practice after graduation. Politehnica University of Timisoara has a recognized history of cooperation with the economic area, which embraces research and technological development, where students are many times actively involved together with the academics. The weak point is that this sort of cooperation mainly involves the top students, which will probably embrace a research or academic career after graduation. Still remains the problem of the average student, which will typically embrace an industry career – usually without a strong practical experience and without the practical skills expected by the employer. The university developed through the Center for e-Learning the Virtual Campus, which can be used in order to facilitate online cooperation in training with industrial and academic partners from Romania and from abroad.

Simulated enterprise for technical work in technology companies is a European Social Fund project implemented by the Ministry of Education, in partnership with Politehnica University of Bucharest, Politehnica University of Timisoara, Constantin Brancusi University of Targu-Jiu, conducted between 2011 and 2013. The project aimed mainly at increasing the employability of university graduates in terms of training and development of the engineering practical skills required by employers, by developing and implementing an integrated information platform that simulates the real working technology companies and hiring specialists from these companies for students' practical training and for developing supporting materials. These goals were accomplished by using an innovative tool for Romanian higher education: simulated enterprise.

The project was not designed just to meet a need felt by universities (a better insertion on the labour market for engineering graduates) or a need of senior students (to work immediately after graduating), but wanted to come half way to meet with current problems of recruiting young workforce, problems that technical companies are facing with. As a result 600 students were involved in the virtual practice for 3 months and from them 240 students with outstanding results benefited of full real life internships in companies that provided the initial tutors. Training a large number of students (200 students in Computer Science, Systems Engineering, Telecommunication Systems' Technology, Applied Electronics – second year of study) and the involvement as tutors of 8 technical experts from leading employers in the western area of Romania (OCE Canon, Continental Automotive Romania, HELLA, Flextronics Romania, ETA2U, Lasting Systems, Expert Consulting, MMD Design). The project has developed a methodology for conducting internship and student assessment that included instructional working methods, curricula for 90 hours, the assessment module and innovative use of ICT in the concept of virtual practice.

The evaluation of the project *Simulated enterprise for work techniques in technology companies* has been done both from the point of view of students and of the companies.

According to the project evaluation, done from the perspective of all involved actors (companies, university, students) the results proved to be positive. The companies were particularly happy that they were able to provide specific training for the students from the first year of study, and to accommodate students with the real working mentality about deadlines, internal communication, discipline, etc. The following year, many of the students participating in the project were accepted by the companies for internships and for taking part to joint project research. It is expected by the companies to cut-down the cost of training for their future young employees, that should be better prepared for their working career. The university was happy to be able to provide a better practical training and to take advantage of the mentality change for some of the students, that proved to become better motivated for studying and building their future careers.

COMPARING LEARNERS' PERCEPTIONS AND EXPECTATIONS IN PROFESSIONAL TRAINING AND HIGHER EDUCATION: THE GERMAN PERSPECTIVE

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Culture, at least to some extent, is related to particular (individual and collective) experiences. In terms of education, this means that a learner, who experienced particular services in his/her past, might perceive such services as usual for educational culture and thus, expect them to be delivered in any kind of learning scenario. In German universities, education is meant to be a full-time job and usually is designed to provide a broad basis of theoretical and methodological knowledge. Achieving methodological competences is a core goal of German academic education: once a student leaves the university, he/she is expected to decide about appropriate methods for any kind of problem (in the field of study and beyond) and how to modify the known methods in case of need. In contrast, in professional training, the learners have to study in extra-occupational situations (time is a serious issue) and might expect training that pointedly prepares them for very specific tasks.

Regarding culture research in design-oriented disciplines, the cultural dimensions of Geert Hofstede and the related national key-values per dimension are widely accepted as "common understanding". Basing on the 18th centuries' understanding of culture, Hofstede claims that cultural values play such a basic role within a national society that related cultural perceptions are transferable to the whole national populations and particular behaviours and attitudes can be deduced. In this context he also provides implications for educational systems.

We assumed that scenarios of professional training have their own educational cultures. When designing learning contents and learning scenarios for professional training, it might be essential for the learning success to meet the learners' expectations and contextual peculiarities. In order to determine design issues for professional training, we wanted to know, if expectations of learners and their perceptions regarding professional training actually differ between organizations and between organizations and institutions of higher education.

For the investigation, we adopted our standardized and already established questionnaire from our on-going survey "Learning Culture" that originally focuses on higher education. We slightly modified the questionnaire according to the targeted professional context (e. g., "professor" became "instructor") and conducted it in its paper form in the contexts of seven German DAX-noted enterprises. The respondents were asked to express their perceptions of professional education according to 100 culture-related statements in the following categories:

- relationship between learners and instructors; perceptions towards laud and admonition; group building processes; communication style; behaviour in groups;
- time management;
- value of errors; the type of user activity; expectations towards personal coaching;
- demand to influence learning contents;
- how and when feedback is to be provided;
- gender-related issues.

We found remarkable differences between the results of the investigated enterprises, but even more significant diversity between the results of the German enterprises and the priory investigated German universities. As a general conclusion we can assume that generalizing research results that were solely achieved from national university students might lead to an inappropriate design of learning scenarios for particular professional contexts. Professional training for a particular enterprise should be developed according to its specific educational culture.

IN SEARCH OF EMPIRICAL EVIDENCE FOR A GROWTH PATH TO CRITICAL REFLECTION

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During their studies, pre-service teachers are continually asked to reflect. Hereby is mainly expected that they reach a level of critical reflection. Critical reflection is often described as a growth path in different phases, with critical reflection as endpoint. It is unclear whether empirical research confirms this growth path. To check whether a growth path with critical reflection as endpoint can be empirical confirmed, 596 reflections from four different empirical studies with pre-service teachers were taken in a secondary analysis. The results from this secondary analysis reveal that 1) participants score very low on critical reflection and 2) the idea of a growth path with critical reflection as endpoint cannot be confirmed. Focus shift is possibly a description that is closer to the empirical findings. Based on the results of this study, possible implications for the supervision of students are described.

INVESTIGATING RELATIONSHIP BETWEEN SELF- AND CO-REGULATORY LEARNING PROCESSES IN A WORKPLACE E-LEARNING SYSTEM

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Introduction

While learner-centric theories such as self-regulated learning (SRL) seem appropriate to inform the design of e-learning systems aiming at enhancing learner's control, there have been deficiencies within SRL research when applies within workplace settings. Historically, SRL has been conceptualised and researched from an individual perspective within formal settings with disconnected individuals, resulting in reducing regulating process to the individuals and providing a vague picture of the interaction between self- and co-regulatory learning processes. Recently, there has been increasing attention given to the context in which the regulatory process takes place and the social and emotional processes which are components of it. However, it is still unclear how the individual and social aspects of regulation processes interact and contribute to explain individual and group engagement in real-life learning situations. The purpose of this paper is to propose a theory-informed framework to design e-learning systems aiming at supporting learning regulatory process in work environments and then to analyze the relationship between self- and co-regulatory processes. Accordingly, by following a design-based research methodology, we developed a theory-based framework to inform the design of an e-learning system for a workplace setting. Then we explained the implementation of a prototype built upon this framework. Next, we evaluated and tested the prototype in a pilot group consists of 177 users. Finally, we used the created data logs in this prototype to scrutinize the possible relationship between self- and co-regulatory learning processes performed by these users.

Research Methodology

To conduct this research, we adopted design-based research (DBR) methodology. Design-based research focuses, simultaneously, on practice and theory through finding and solving practical problems and providing design principles. Design-based research is an iterative process comprised of four phases: (i) identifying and analyzing a complex real world educational problem in the research context by researchers and practitioners in collaboration, (ii) generating a solution based on reviewing existing theories and consulting with practitioners, (iii) evaluating the solution by gathering empirical data, and (iv) reflecting on the design experience to refine the solution and construct theoretical knowledge.

Design Principles

The results of this research suggest that there is a significant relationship between self- and co-regulatory learning processes. The findings of this research suggest the following improvements in the future design of the prototype

- Defining more social learning scenarios to improve both individual- and co-regulatory learning process.

- Feeding both individual- and social-based learning activities with similar types of content in order to make a close link between these processes.

- Providing appropriate level of choices for learners and allowing them to pursue their preferred ways of learning.

- Allowing the learners to observe the learning activities performed by other learners.

- Supporting motivational aspects of regulation process by introducing more extrinsic (gaming elements) and intrinsic elements (i.e. curiosity-based learning).

- Designing and implementing learning analytic module to assist learners to get a clear picture of their learning process and pattern.

- Allowing more knowledgeable learners to participate in developing and evaluating content items.

CASE STUDY OF IMPLEMENTING WORK BASED LEARNING IN THE IT SERVICE MANAGEMENT COURSE

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Introduction

Emerging trends in ICT sector in the last decades have a great influence on the education of ICT professionals. For a success on the challenging labour market, higher education graduates are expected to show, not only the acquisition of formal competences, but also the adaptability to the working environment. Therefore, the collaboration with employers in both curriculum design and delivery is recognized as crucial factor for the successful education of future ICT professionals. The identified need for the connection with employers in the curriculum design and delivery has lead to the innovative teaching methods that are increasingly finding their place in formal education, such as work-based learning (WBL), problem-based learning, experience-based learning etc. In this paper, the authors present the implementation of WBL in the undergraduate course IT service management. During the course, students were encouraged to "work" in virtual business companies to simulate process of developing, promoting and delivering an innovative and creative IT service. In order to validate introduced methods, students' perception of competences and skills that were gained or improved during the course was analyzed, as well as their estimation of course delivery

The overall objective of study presented in this paper was to obtain students' reflection on the implementation of WBL methods in the undergraduate IT service management course, and on the course content in general. The specific objective was to determine whether there is a difference in the students' reflection of different WBL methods regarding their initial interest for the course, which was characterize as small, medium and high.

Methodology

In this research, the intention was on the students' satisfaction with the implementation of WBL methods in the course delivery and therefore, a questionnaire divided in three parts was prepared by the authors. The first part of questionnaire is related to some general respondents' characteristics, such as gender, initial course motivation and expected grade. The second part contains a list of generic competences, adopted from the one defined in Tuning project. The purpose of this part was to obtain students' perception about the generic competences they have acquired or improved during this course. Third part of the questionnaire contains a semantic differential table with 8 pairs of opposing attributes. Students were asked to estimate five aspect of this course delivery using semantic differential table.

Respondents were students at Faculty of Organization and Informatics, University of Zagreb, who attended undergraduate course IT service management in the academic year 2013/2014. After the course completion, students were asked to fill the questionnaire prepared in the on-line form. Totally, 104 responses were obtained, out of 140 students attending the laboratory exercises, with the response rate of 76.4 %.

Results

The general outcome for all respondents shows that their overall perception about the work-based learning implementation in this course is positive. From the five assessed aspects, the collaboration with employers is perceived as most interesting and most useful (M=4.308, sd=0.258) aspect, although it is not perceived as much challenging. The following aspect is a simulation of working environment during the course delivery (M=4.081, sd=0.349). Preparation for the labour market through the career development activities (M=3.890, sd=0.311), teaching methods (M=3.770, sd=0.427) and the content of laboratory exercises (M=3.693, sd=0.459) were rated a bit lower, but still showing students' positive experience with those aspects. The paper presents detailed analysis for each of the five aspects, according to the students' initial interest for this course.

Results of presented study indicate that this synergy of traditional learning and simulation of real business surroundings within formal education is very welcomed by students.

EVALUATING MOOCS – WHAT IS REALLY HAPPENING?

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This paper describes the evaluation of two Massive Open Online Courses (MOOCs) run by the University of Leicester as part of the FutureLearn initiative (https://www.futurelearn.com). It will use a novel approach to the evaluation, using a new MOOC classification schema. The new MOOC classification schema has been developed because it is believed that the current discourse around the concept of xMOOCs (primarily based around interaction with content and essentially adopting a behaviourist learning approach), and cMOOCs (which focus on harnessing the power of social media and interaction with peers, adopting a connectivist learning approach), is an inadequate way of describing the variety of MOOCs and the ways in which learners engage with them. The paper will provide a brief history of the emergence of MOOCs and the key stakeholders. It will introduce an alternative means of categorising MOOCs, based on their key characteristics. The paper fits under the 'Quality aspects: assessment and evaluation, retention techniques, performance support' conference theme. It will argue that using the MOOC classification schema can be used as a strategy to better design MOOCs, as well as an evaluation framework for analysing participants' learning behaviours.

LET'S LOOK INTO THE FUTURE! E-LEARNING TRENDS AND HYPES IN ACADEMIC TEACHING

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The present paper introduces methodology and findings of a trend study in the field of academic teaching. The overall interest of the study is the analysis of life stages and future potentials of e-learning innovations. A content analysis – based on 427 scientific articles of leading German speaking e-learning conferences – has been conducted. Thus, e-learning trends and hypes in academic teaching have been identified and characterised. The following paper focuses two things, on one hand existing academic concepts of trend research in the field of e-learning will be discussed and on the other hand the above-mentioned study will be introduced.

HOW CAN E-LEARNING AND MOOCS REVEAL AND EXPLOIT THE HIDDEN TREASURES OF OPEN RESEARCH AND OPEN EDUCATION?

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What is the Current Situation Concerning E-Learning and MOOCs?

E-Learning has existed and been promoted by many experts, professional providers and associations at national, European and international levels (such as BITKOM AK Learning Solutions, EDEN and ICDE) for more than 20 years, but has not achieved the awareness and attention of a broad audience and society as a whole. The huge promises from the internet hype at the beginning of this millennium were not fulfilled as predicted: despite the continuous and slowly increasing success and implementations of E-Learning in enterprises, it was not recognized as a driver and enabler for innovation across all educational sectors. On the other hand, the new term MOOC (Massive Open Online Course) has immediately attracted the masses, even though it is just another label for a diversity of online learning scenarios and methodologies that were already developed and implemented many years before. MOOCs can be considered and defined as a special type of E-Learning, raising new interest and offering opportunities to (again) reach learners attracted by E-Learning solutions due to many reasons. Thus, MOOCs can be the enablers for a renaissance of E-Learning.

The Hidden Treasures of Open Research and Open Education

Open Research and Open Education are two worlds which share the same vision, objectives and ideas, i.e. openness as the standard for the publication and (re-) usage of concepts and materials. But both worlds are not interconnected, undertaking research, development and implementation in separate, closed communities. Open Research focuses on the requirements for researchers to (peer-) review, publish and distribute their interim and final research results. This mainly leads to the upload and publication of the final results as scientific articles in one's own repository or in journals and their repositories. Open Education addresses the need for the modernization of learning, education and training in general through the introduction of innovative methodologies and scenarios for opening up education and learning in all sectors. Both open worlds and their developments and results can be treated and described as hidden treasures, because both worlds are not aware of each other and the (missed) opportunities which could result from their interconnection.

Why and How to Connect Open Research and Open Education?

Open Research and Open Education could and should be connected to mutually benefit from the potential of the respective other world. Educators could benefit from all the research materials and resources that are normally published with open licenses as they can be adapted to their educational purposes and environments. Likewise, researchers could benefit from the broader (re-) usage of their research results, possible feedback and an improved reputation. For better awareness raising of these (not yet exploited) potentials and opportunities an international community was established in Rome on May 15 2013, the day before the international LINQ Conference (www.learning-innovations.eu). Experts and organizations from four continents assembled together to create ICORE, the International Community for Open Research and Open Education (www.ICORE-online.org). Consensus was achieved through open discussions, brainstorming, selecting and voting on ICORE objectives, principles and statutes. Within one year ICORE was able to attract and welcome more than 200 members, joining forces with all interested existing organizations to promote and support the connection of Open Research and Open Education. Common events at international conferences and recognition by the European Commission and other public authorities and associations number among the first successes of ICORE.

In particular, E-Learning and MOOCs can support the connection of Open Research and Open Education through their (natural) inclusion of digital resources and materials. Technology-enhanced learning and online courses are the ideal instruments and vehicles for the adaptation of research results and for their broadest societal impact through the uptake by interested and progressive pupils, students, employees at workplaces and adults in lifelong learning.

OPEN LEARNING ARENAS WITH AN OPEN CULTURE OF SHARING – SUCCESS FACTORS

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It is said that higher education is undergoing an era of disruptive development, and likewise as the music and film industry has done. The development of open, free, and flexible education, with the use of OERs (Open Educational Resources), and MOOCs (Massive Open Online Courses) challenge higher education dramatically. However, unfortunately the way teaching and learning happens is undergoing infinitesimal shifts. Likewise, the way how quality and success factors are presented, and measured are still under the same umbrella, as in the so called traditional paradigm, e.g. linear offered, delivered, assessed, certified.

Open learning cultures are significant quality issues in terms of globalization. Open education creates not only opportunities to participate in online courses from prestigious universities, but also allows for participation in global social online collaboration and interaction. Moreover, it is a democratic right. What is paid by taxpayers should go back to taxpayers. Free education for all is a social innovation, as well as the initiative with housing for all is. Both initiatives are inclusive and lead to better living conditions, a healthier population and possibilities for more active social citizenship. The development and introduction of MOOCs force quality enhancement of education, research, and collaboration with the surrounding society. Additionally, MOOCs contribute to sustainable development. MOOCs are a revolutionary way of thinking about learning, social interactions, and quality. MOOCs are already embracing the world and millions of people are enrolled, completely free, unrestricted, and at comfort in their own home. MOOCs require rethinking and involve disruption of educational foundations. MOOCs require a shift in culture, power, and ownership; from stakeholder offers to learners' demands and promotes *choice based* learning. Choice based learning is understood as that it is really the individual, the learner who makes the choices of his or hers own education, as the most of the prestige global educational offers are available almost for free here, now and from everywhere on Internet.

The question is not any longer how we shall work with digital media and technology in education, but rather how we can work with learning in a digital community, not at least for work and in working places. It is also obvious that academics, and this is also true for managers and directors that the changing paradigm for collaborate work and to see learners as prosumers, academics has to go from sage on the stage…to guide on the side…to meddler in the middle. Likewise, learning situations, both formal and informal have to go from content to context, as content is available from everywhere, it is the context which matter, like the flipped classroom model. To adopt to open learning arenas with an open culture of sharing there are urgent demands for opening up education and to rethink linear learning and education and instead to offer rhizomatic (non linear, or like root threads) pathways for learning, this is true both for educational settings as for work and working life.

This paper focuses on how open education contributes to education for all on equal terms, free and inclusive, and with social interaction. The question is no longer how to work with digital media in education, but rather how to stimulate online learning as well as social interaction and participation in a digital world, and on a daily base, in schools and in working life. Higher education is one of the most powerful incentives to change the world. Democracy, richer and better living conditions may thus be encouraged. This does not happen by itself. It all starts with access, inclusiveness, interactiveness, and openness in education. If ancient models of education still are used, how can individuals, then be expected to successfully be active global citizens to be responsible and influence their own and others' situation in a modern and changing society. This paper also focuses on quality dimensions and ways on how to measure and how to work with quality enhancement in open learning arenas with an open culture of sharing.

BADGING AND EMPLOYABILITY AT THE OPEN UNIVERSITY

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Awarding badges to recognise achievement is nothing new. Of late, badging has gone digital, offering new ways to recognise learning and motivate learners, providing evidence of skills and achievements both within and beyond formal learning contexts. Badging (or 'soft accreditation') has been piloted in various forms by the Open University (OU) in 2013, both in discrete projects and elsewhere on open courses and employer-led initiatives. This paper outlines what the OU has learned from its pilot projects and details how the University is subsequently developing a suite of badges for informal and formal students that align with employability and the OU's existing skills-related open educational resources (OER).

The OU's badging pilots are informed by recent research into the motivations and demographic profile of learners using the free educational resources which the OU makes available through its OpenLearn and iTunes U platforms. The research findings had indicated that a substantial number of informal learners using the OU's free content do so for work and/or professional development and that learners are eager to have their informal learning achievements recognised in some way. The research also provided evidence that OpenLearn is providing a bridge to formal learning in several different respects, suggesting that the addition of badging could strengthen this bridge.

The evaluation of the 2013 pilots indicated that learners who achieved badges were highly motivated by the experience and that the badged courses attracted learners who were particularly inclined to become students. The evaluation has subsequently informed the development of a further project to deliver a suite of free, open courses of 24-hours learning, each of which are assessed through the deployment of a set of Moodle quizzes. To mitigate perceived risks to the sector and the University of providing a badged OU curriculum on a bite-sized scale, badges are limited to employability and skills development. The badged courses will be provided free of charge to the learner and those achieving badges will be encouraged to display them through their public-facing profile on the OpenLearn website. The badged content will be evaluated for its efficacy to motivate and develop informal learners and to provide employability skills for OU students. It is hoped that this paper will stimulate academic interest in the topic and will be of interest to Higher Education Institutions (HEIs) globally and open up the discussion around developing a known currency of non-accredited learning.

SUCCESS FACTORS FOR VIRTUAL MOBILITY EXCHANGE ON "OPEN EDUCATIONAL RESOURCES"

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With the importance and need for HE institution modernisation and focus on student-centred-learning approach, as well as rapid technological developments, virtual mobility (VM) has become a way for international and intercultural collaboration of institutions, teachers and students, when the development of key competences and transversal skills are at focus. However, are the institutions aware of the successful ways of VM implementation?

The aim of this research is to identify success factors for VM implementation.

10 international teachers and experts from 6 European countries designed curriculum for international student VM exchange. Curriculum was designed for a 3 ECTS course "Open Educational Resources". The course was targeted at mixed target groups due to the topic of the course, and invitation was distributed for a closed group of people representing e-learning staff members, teachers and trainers at participating institutions, as well as students at different levels of study programs.

The pilot of the course "Open Educational Resources" was implemented in the framework of Lifelong learning Erasmus program project "VMCOLAB – European Co-Laboratory for the Integration of Virtual Mobility in Higher Education Innovation and Modernisation Strategies" (project No. 527770-LLP-1-2012-1-BE-ERASMUS-ESMO). 18 students from 7 home universities participated in the pilot. Vytautas Magnus University coordinated virtual mobility course design and virtual mobility implementation. Other universities participated in curriculum design and were responsible for the topic learning organization (lecturing, student assignments and feedback), namely, University of Granada (Spain), European Foundation for Quality in eLearning, University of Pavia, and University of Jyvaskyla.

During VM pilot, all participants met online for the first time and were introduced to each other as group members (as curriculum was opened as OER itself after the pilot, the records of the online meetings are available and can be reviewed at http://www.teacamp.eu/moodle2). Moreover, each week international student groups were assigned with the tasks that they had 1 week to implement, communicating using suggested online communication and collaboration tools, but also in their unique individual ways, using any resources they saw relevant for their successful group outcomes.

Main outputs and success factors

The pilot was successfully completed by the same number of participants (18). No drop-outs were identified.

Success factors of VM implementation are summarized from the participants' comments; others are added by pilot organizers:

- there was a strong leadership and coordination that enabled the organization and successful finalization of the pilot (participants' point of view).
- motivation of the participants: there were real challenges for student groups which had some passive students (*lurkers*), however groups managed to focus on the task, were highly motivated and dedicated (organizers' point of view).
- thorough preparation, coordination and planning of the pilot, coherent information for the participants was prepared and distributed – all planned well in advance (from the teachers' point of view).
- attractive topic was selected as most learners were interested in learning about OER (learners' point of view).
- prior experience and dedicated collaborators who communicated, participated and supported the pilot from the very beginning till the end, our consortium partners and associated partners (organizers' point of view).

MOOC USING EXISTING OPEN EDUCATIONAL RESOURCES, SETTING UP IMPLEMENTATION AND REVIEW

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In France, DTU (Digital Thematic Universities) allow free access to thousands of OER (Open Educational resources). These resources are validated by the academic community. Some of these resources are used in distance learning by universities to deliver international co-diplomas mainly in French speaking countries. At the "Université de Lorrraine" we have already some experience with big groups through Paces (first common year of health studies) where traditional teaching has been replaced by blended learning relying on web lectures and pedagogical materials available via a learning platform. The MOOCs are a further step because there are free, fully online and for huge numbers of participants. This paper describes the setting up, the implementation and the first evaluation report of a transversal French MOOC in applied statistics called COURLIS. The contents of the MOOC are mainly OER coming from the DTU. Several universities are in the consortium designing COURLIS. The content's level is equivalent to a bachelor degree. A fee-paying certification is proposed and the final examination is not on line. The main objective is to give a common basis for each discipline (health, management, psychology,) in applied statistic. The pedagogical methodologies rely on a connectivism part (cMOOC) and a transmissive part (xMOOC). Interactive self-assessments, collaborative wikis, personal blogs help followers in their learning. The personal work of the student is estimated to 100 hours during 4 months. There are 2 sessions per year. About six months after the beginning of Courlis 1,000 students are registered and no technical problem has occurred. The first examination has been planned in February 2014 and at this day 1% of students passed an examination.

The two first parts of the paper describe the French context and the DTU .The third part is mainly on the Courlis MOOC design and in particular the partnership, the transversality, the pedagogical principles and the technical implementation. Another part explains the governance of the project. In the next part is described how the MOOC is observed by a research laboratory and in particular the interactions with and within the MOOC COURLIS in their various aspects. A paragraph is dedicated to the timing of the implementation and finally one paragraph on the first results after six months.

WIDENING CREATION OF ACCESSIBLE DIGITAL EDUCATIONAL CONTENT: A COMBINED BLENDED LEARNING AND MASSIVE OPEN ONLINE APPROACH

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Ensuring inclusive education systems at all levels and lifelong learning is a commitment shared by all the United Nations countries who in 2006 signed the Convention on the Rights of Persons with Disabilities, by which each country should ensure that all citizens with disabilities or some special educational need have access to primary and secondary education, higher education, job training, adult education and lifelong learning, without discrimination and on an equal basis with others. This same principle should apply as well to their integration in the work environment.

To move towards an inclusive education, progressively and substantially increasing alternative education practices based on Information Technologies and Communications (ITC) are needed, through the implementation of accessible eLearning. In the virtual educational context, in which teachers use digital educational content, it should be ensured that the content is accessible, i.e., understandable, usable and perceivable by any student or lifelong learner who has the prior knowledge required to enrol in the training, and having any kind of disability is not a barrier to complete the training.

The course "Creating accessible digital educational content" is aimed at teachers conducting online training, and its objective is training for teachers to create digital educational content that any student can use, whether or not they have some kind of physical or sensory disabilities. The course is organized by participants in the cooperation project ESVI-AL, which aims to move towards a virtual inclusive Higher Education in Latin America. This course has two versions. One has the format of a workshop, with a online component and a face-to-face one. The second version uses the same resources but is organized as a MOOC (Massive Open Online Course).

This paper presents how the strategy for disseminating teacher training on creating accessible educational content has been designed in such a way to include both a blended learning approach and a massive open online one. In particular we describe how a course can be designed for a closed blended learning environment and can also be used in an open massive format. The paper presents the goals to be attained by the completion of the training and the competences to be achieved. It also presents the contents of the workshop, the methodology of teaching and the assessment set to pass the course. Finally, the work shows the MOOC methodology to be used.

The objective of the training courses (workshop and MOOC) is to train teachers so they can create digital educational content in a way that is accessible to any student, whether they have or not any physical or sensory disability. Thus, a teacher will be able to create accessible educational content in different formats after finishing the training. The workshop is taught by a blended learning model, with online educational activities throughout its duration and classroom activities for a week. The open massive course uses the same online resources as the workshop and is organized in a fully open online format using the iMOOC methodological model. According to the European Credit Transfer System (ECTS), the workshop has 2 credits in the mandatory part, since this system considers that 25 hours of student work equate to one ECTS credit.

The two-version course created allows trainees who perform it to create accessible educational digital content. So far the workshop has been launched in different test groups in Latin America and the results have been positive. The results obtained in these pilot groups will be analyzed and studied shortly, and the results and the learned experience in these first workshops will be published. The MOOC is being produced for launch later in 2014.

We think in this way awareness about the importance of creating accessible educational digital content may be broader and may be widespread throughout the world.

A MOOC FOR ENTREPRENEURSHIP EDUCATION, ADOPTING A CRITICAL TECHNOLOGY – AN EXPERIENCE CARRIED OUT AT THE DHITECH TECHNOLOGICAL DISTRICT IN APULIA (ITALY)

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Introduction

Training a group of graduate students based in Apulia (Italy) is part of a wider project, the Activating VINCENTE: "Innovating engineers/ Entrepreneurs specialized in Technological Entrepreneurship Ecosystems", funded within the EU National Operational Plan, (PON02_00563_3470993). The main aim of the project is to create the specific profile of a high tech innovator and entrepreneur, specialized in defined areas of knowledge, endowed with skills and attitudes able to transform technology and/or research results in a new business model to create economic and social value (technological entrepreneurship)[1]. Within the above training course, LPS-Laboratory for Experimental Research (University Roma TRE) was in charge of teaching two modules, where the main task to be carried out by the in-training students was to devise an effective MOOC in Entrepreneurship education. The present contribution highlights the background at the basis of the specific training idea and describes the results of the inquiry carried out with the in-training graduate students, with the aim of reflecting the strengths and weaknesses of such innovative ways of carrying out open education.

Methods

Within the above Activating VINCENTE training project, researchers from LPS (Laboratory for Experimental Pedagogy – Università Roma TRE) were in charge of teaching two modules to the graduate students participating in the initiative: *Development of Online Cooperative Environments* and *Models, Processes and Systems For Online Learning Communities.* Main learning objective of the modules was to acquire skills in the field of Internet entrepreneurship and, in particular, students were asked to devise an effective MOOC on the subject of Entrepreneurship education. The first sections of the modules were devoted to theoretical aspects regarding entrepreneurship education itself and how to build a successful MOOC, then, students were divided in groups and each group had to carry out, writing cooperatively online (Google Doc), one project work, taking into consideration a series of points.

Results

Among the various activities, in-training students were asked to answer to some questions about online education, with particular reference to cooperative learning. The questionnaire has been administered with Google Docs[2] and it included open ended and multiple choice questions. The results obtained enabled the research group to reflect on certain issues related to the design of online learning environments, such as MOOCS, in order to make them more and more effective and successful. The inquiry aim was essentially to understand what the interviewees thought about the differences between a face-to-face course and an online one. The results highlighted that they do not consider the two learning situations so different in themselves, showing that attending an online course has become culturally accepted. The difference, if any, is noted when it comes to learning assessment and the data presented demonstrate that online assessment is felt as more objective and less biased by physical presence, that would harm, according to the in-training students, the results in terms of validity and reliability. Taking into consideration that online assessment is a key issue in teaching and learning online, such results give suggestions about the potential impact that online assessment could have on teaching and learning. Other analysis have been carried out during the modules, both as regards online cooperative writing performed by the in-training students devising their MOOCs, and the level of critical thinking skills reached after their learning experience. The results of such analyses represent material for a wider study to be issued in the next future by LPS research group involved in the present research.

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[1] http://dhitech.it/downloads/PON02_00673/Prot.n.73del_8.2.2013_Bando61borse.pdf
[2] Questionnaire is available at https://docs.google.com/forms/d/1S21apRIhPD5vcA3QGGLsEoo-IMAmsTkKay3qFiym5k0/

OPEN BADGES FOR COMPETENCE RECOGNITION AND EMPLOYMENT APPLICATION: INSIGHT FROM THE GERMAN QUALIFICATION PROGRAM "CREDIT POINTS" FOR MIGRANT ACADEMICS

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The Project "Credit Points" as Part of IQ Network

This paper describes current developments, practices and insights related the application, potentials and challenges of open badges for competence recognition and employment application in context of a blended learning qualification program for migrant academics in Germany. The program is called "Credit Points for migrant higher education graduates with engineering degrees" (short: "Credit Points") and is the first supplementary qualification program for migrant academics in Germany applying open badges for competence recognition and employment application. The program "Credit Points" is anchored at Beuth University of Applied Sciences Berlin, at Gender and Technology Center and is part of the German federal IQ Network. IQ Network including the project "Credit Points" are founded by the German Federal Ministry of Research and Education, the German Federal Ministry of Labour and Social Affairs and the German Federal Employment Agency.

The project "Credit Points" is an educational innovation program designed to complement academic and occupational qualifications of migrant academics with degrees in technical fields. The aim of the project is to help migrant academics supplement their existing qualifications based on individual academic backgrounds and career plans in order to facilitate the entry into the labour market in Germany. To reach this aim, "Credit Points" applies innovative pedagogical models, career counselling services and cutting-edge learning technologies to support migrant academics in developing, recognising, documenting and communicating skills for employment and employability. "Credit Points" combines eLearning modules delivered via Moodle, ePortfolio techniques supported by Mahara with face-to-face meetings, trainings, coachings and workshops to enhance flexible, modular learning individually combined to match personal goals, qualification needs and life circumstances.

One of the key concepts in "Credit Points" is the use of open badges to supplement the formal "credit points" included in higher education certificates, i.e. course titles and the number of ECTS. As such the concept of open badges extends the traditional understanding of "credit points" and opens new pathways of conceptualising "credit points" in education.

Open Badges as Credit Points

ECTS has effectively contributed to credit accumulation and academic recognition in Europe, playing a crucial role in consolidating the European Higher Education Area (EHEA) as part of the Bologna Process. However, ECTS proves only limited value as a currency which can be traded between study and work. ECTS are also limited to certain populations of students. For example, graduates from outside of the EHEA cannot rely on ECTS and need other types of credit points providing evidence of their competencies and achievements to sustain their employability in Europe. This is where further ways of describing and capturing student competencies have to be explored in order to be able to communicate these from the academic to the work-based context.

Open Badges is a promising approach to capturing, recognising and communicating individual competencies across contexts. Digital badges are symbolic representations of an accomplishment, skill, quality or interest that can be easily shared. Open badges offer a flexible mechanism not only for motivating learners or goal setting but also for recognising personal competencies and achievements and communicating these between education and work. In this sense badges can be viewed as boundary objects, which can be used to cross boundaries between existing divisions such as formal and informal learning or academic and professional context.

Open badges in "Credit Points" are applied to trigg alternative methods of assessment. The aim of assessment for open badges is to elicit information about individual competencies, achievements and successes. The basis for the allocation of badges as credits points is capturing moments of student creativity, innovative thinking, peer support or self-initiative as evidence of competencies, emphasizing individual strengths. This evidence in program "Credit Points" is captured in the process of learning and interacting with other students in courses, workshops, meetings and consultations with the advisor as well as during in-company placements.

cMOOC IN E-LEARNING DESIGN FOR VET TEACHERS: MAPPING PROFESSIONAL COMPETENCES ONLINE

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Introduction

The transformation of VET across Europe is taking it momentum. In that context provision of open, massive educational offer for the professional trainers and teachers seemed a good direction. The partnership took the challenge to redesign the e-course towards VET-specific need, pilot it as cMOOC and transform it into an open course available for individuals and institutions. The article deals with the massive online course designed for VET teachers in e-learning pedagogies. The authors discuss the recommendations towards designing the cMOOC for VET practitioners and refer to the pilot cMOOC conducted in Croatia, Slovenia, Poland, Lithuania, Italy, Czech Republic, Spain and Norway from November 2013 till March 2014 with overall 300 participants.

Designing for VET e-learning: pedagogical framework

There are 3 main pedagogical pillars of the course, that is authentic learning and reflection together with a portfolio-based competence development. Due to the wide scope of the course that is on the verge of pedagogy and technology the designers decided to embed reflective practice into the course to deepen learning and drive off from the technological component. As a reflection is always related to the real experiences, in combination with the authentic activities it enables the learner to experience real-life situations and draw conclusions for the future actions. There are 9 competences identified that need to be mapped with digital evidence during the course. The selection of evidence is autonomous and each participant can focus on different modules or activities according to their understanding and interpretation of the competences proposed

Designing cMOOC for VET teachers: background

The MOOC hype ubiquity seems rather ostensible, at least in Europe. The dominance of English as a main learning language makes the offer rather exclusive and courses in other languages are scarce. The statistics show that the number of people taking up MOOCs is largely limited to the countries where English is either mother tongue or is perceived as second-language. Ability to learn in a foreign language is crucial and different then ability to read or communicate on the basic level which makes language a huge barrier in accessing MOOCs. However, the provision of a cross-European MOOC for educators is a challenge. Differences in access to ICT, digital skills and online practices on vocational schools' level are significant and vary from country to country.

There were 3 main areas of intervention identified as important for VET in relation to e-learning and require further development which were covered in the course objectives: content-design challenges reflecting the lack of state-of-the-art textbooks and handbooks for VET- specific subjects, technology-related challenges and learning design challenges involving effective online collaboration strategies and communication.

Designing cMOOC for VET teachers: design and moderation

The MOOC consists of 10 modules, each containing activities and localised resources. The driving concept was design of e-tivities for VET and its constant development with content (OERs and licensing, evaluation of OERs, developing short educational videos and infographics, users generated content), pedagogy (activity-driven design, e-tivities, facilitation and scaffolding, moderation strategies, motivation and support for learners, online collaboration, using web-conferencing for competence development) and technology (open source and free solutions, Moodle, collaboration tools, mobile devices for video making, web-conferencing).

The initial evaluation results show the 1/3 dropout rate which in fact reflects the general trend in that respect. However for many VET teachers it is a great opportunity to become a part of a learning community online, as the course provided time and space for active engagement and practice. It is also the opportunity to become a lifelong learner in a authentic environment as a result apply the skills to the educational context of the school.

DESIGNING AUTHENTIC LEARNING ACTIVITIES AND ENVIRONMENTS: THEORY AND PRACTICE

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Adult learners returning to school are looking for educational experiences that not only cover the theory and background of a field, but also connect the program to the real world of work. Whether they are looking for career change, advancement in their current organization, or personal growth opportunities, they are demanding that their educational experiences move them beyond the traditional decontextualized classroom model. These types of learning activities are embodied in the concept of "practice fields" wherein "the goal shifts from the teaching of concepts to engaging the learner in authentic tasks that are likely to require the use of those concepts or skills". For those of us involved in distance education, this can provide unique opportunities to leverage educational technologies as our students are geographically dispersed.

Practice Fields and Authentic Learning

The hallmark of a constructivist learning environment is that students are actively engaged in their learning rather than passive recipients of content. In authentic learning contexts, students are encouraged to engage in realistic, ill-structured problems that more closely resemble the real world scenarios they will encounter outside the structured class. Whenever possible, engagement with communities outside of the formal academic environment is even more effective. The authenticity of instructional experiences can vary from simulations, to immersive virtual experiences, to presentations to companies through program internships.

Penn State World Campus Case Examples

Over the years, Penn State's World Campus[1] Learning Design unit has worked to incorporate constructivist design strategies targeting adult learners. Our case examples span the continuum from relatively low-cost, low-tech activities to immersive, complex virtual environments. All emphasize learning environments and activities in which students "practice the kinds of activities that they will encounter outside of school".

- *Strategic Communication*: The practice fields in these courses require students to participate in domain-related practices, confront ill-structured problems, and work in collaborative and social environments.

- *Instructional Design in Distance Education*: Students bring all the elements of the course together to develop the final product similar to experiences working for a training company or bidding on a contract.

- *Forensic Nursing Autopsy*: This course provides the students with the unique experience of watching videos and processing information of an actual autopsy being conducted on a cadaver.

- *Italian Language Learning:* The Italian language-learning environment has been designed intentionally to immerse students in real-world scenarios they are likely to encounter when travelling to Italy.

Regardless of complexity and production cost, fundamental to the effective design and implementation of practice fields is a commitment to learning environments and activities that are authentic and treat the learner as an active participant in the learning process rather than a passive recipient of static knowledge.

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[1] World Campus is the Pennsylvania State University's online campus, serving over 13,000 individual adult students at a distance. World Campus offers 90 distinct certificates, minors, bachelor's degrees, and master's degree programs online.

TOOL USE IN COMPUTER-BASED LEARNING ENVIRONMENTS: ADVICE AND COGNITIVE LOAD

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Tools can be described as features or resources in an interactive learning environment (ILE) which can help a learner to enhance their knowledge construction. Tools can, for example, provide the learners with information (e.g. theory document); assist learners in processing stimuli (e.g. table of content), help learners to reflect on the learning process (e.g. summary); give learners access to additional exercises and practice (e.g. simulations), and so on. Several researchers have pointed out that tool use in ILEs often is suboptimal or even non-existing. To overcome the issue that learners do not adequately use the control they are given in ILEs, theorists have suggested bringing advisement into the picture.

This study focuses on the effect that additional advice on tool use has on learning outcomes, post-experimental motivation and experienced cognitive load. As additional advice might synchronize the perceptions' of learners about when to use a tool, the right information becomes accessible at the right time. Amongst others, Elaboration Theory of Instructions and the 4C/ID model predict better learning and motivation in these circumstances. Consequently, it is hypothesized that additional advice enhances learning outcomes. In addition, as advice can calibrates learner's perceptions, cognitive load might be reduced.

Eighty-nine students took part in this study, the age range was between 18 and 23 years. Of the participants, 97% (n = 86) were female. The ILE for this study comprised a course about mindmapping. During the course, the main task was to create a paper-and-pencil mindmap on the topic of gamification. To fulfil this goal, participants had full control over seven different tools and a time limit of two hours. The available tools were a figure which depicted a mindmap with instructions on how to make a mindmap, a 25-minute video which contained a presentation on gamification, a PDF file which provided hints on gamification, a second PDF file which contained applications of gamification, a third PDF file with some principles on gamification in education, a fourth PDF file containing an overview of the advantages of serious games and finally the online search engine Google. The two conditions in this design are: control over tools (C; n=48) and control over tools with additional advice (CA; n=41). In both conditions, participants received a sheet with explanation on the seven tools they could use. In the CA condition, participants received additional instructions on how and when to use specific tools. Results show that, after controlling for pre-experimental knowledge and experience with mindmaps, there is no significant difference between the conditions with respect to learning outcomes; quality of mindmaps; post-experimental motivation; experienced cognitive load and tool use behaviour.

A possible clue for an explanation of why advice might not have lowered the perceived cognitive load of the task or the mental effort participants experienced in using a tool might be found in the qualitative analysis of the question why participants did not use certain tools. Some participants indicate that they first browsed through all tools to get an idea of all the information available and only after this they began drawing the mindmap. Also, inspection of the handed-in instruction bundles revealed that some participants took notes and created small schemes before they started completing the mindmap. These cues might indicate that the participants used their own tools and strategies to lower the cognitive load, as by using these tools and techniques it might become possible for the learner to act upon the limits of his or her own working memory. With respect to the experienced cognitive load of the task, it is possible that learners already equaled out a part of the experienced cognitive load, as it was reduced by their own scaffolds or self-regulation strategies. The results of this study suggest that advice for optimizing self-regulated learning strategies might be more beneficial than advice over tool-use.

ACCEPTANCE OF DIGITAL LEARNING TOOLS IN THE CONTEXT OF NON-TRADITIONAL STUDENTS

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Adult students in higher education

The characteristics and needs of adult students are the vital starting point in the instructional design process. In selecting appropriate media, the acceptance of e-learning tools and services by the student target population should be taken into account. For the instructional design process for programs for adult learners, it is worth looking on the experiences made in the field of university programs, because the distinction between traditional, distance and so-called non-traditional students (NTS) is becoming blurred. In order to address the needs of this student group – and NTS and adults are one rapidly growing group within university students – their distinctive characteristics need to be taken into account. A specific digital learning offering will only be viewed as important if adults perceive a clear benefit in using these online learning tools.

Acceptance of eLearning formats for adult students

Küpper developed a model of acceptance based on an analysis of existing models regarding the use of e-learning offerings and programmes. She confirms her empirical findings as follows: "In nearly all models, three groups of impact variables can be distinguished: individual-related, business-related and technical/innovation-related input variables". An important aspect with regard to Küpper's innovation-related characteristics is the relative advantage that the user sees in his or her use of digital learning formats. Two hypotheses were developed:

1. Students with family obligations (childcare, care of a relative) assess the use of digital learning formats as being more important than their fellow students do. (H1a)
2. Students with a need for flexible learning opportunities value the use of digital learning formats as being more important than their fellow students do. (H1b)

Results

The influence of innovation-based characteristics on the importance assessment of digital learning formats in higher education was tested. Hypothesis 1a states that students who are under time constraints due to their employment, value digital learning formats as being beneficial and therefore more important. However, there is no evidence to confirm this hypothesis. There is a marginal effect for students with family obligations; thus Hypothesis 1a can be partly confirmed. There is a tendency for students with family duties to value the flexibility regarding time and space as being beneficial and important; and such flexibility is supported by means of digital learning formats. Hypothesis 1b can be confirmed: students expressing a need for innovative and flexible learning formats at university and rated digital learning formats higher. The effect is confirmed for all innovative and flexible learning formats covered in the questionnaire. Students with additional family commitments show a slight tendency towards a higher importance assessment; however the effect is only marginally significant ($p < .10$). Students with a stronger demand for various flexible and innovative ways to learn (summer schools, longer periods of self-study, etc.) assess the importance of digital learning formats consistently higher than students who have no need for flexible ways of learning.

Conclusion

With regard to innovation-based predictors, the results show that the impact of external criteria (number of working hours, family obligations) is smaller than expected and often discussed the theoretical articles regarding the needs of adult students for flexible learning opportunities. Students who are open-minded and have a high interest in innovative and flexible forms of teaching and learning, also value digital learning formats as being more important. A subsequent analysis would be required to examine which factors particularly increase the demand for flexible (and therefore also digital) learning formats. In further studies, it would be useful to examine to what extent certain study structures (e.g. mass lectures) in particular fields raise the importance assessment, or if personal preferences of certain student groups (e.g. positive attitude towards technology) play an important role.

STUDENT AND STAFF PERCEPTIONS OF THE USE OF MULTIPLE CHOICE TESTING IN HIGHER EDUCATION ASSESSMENTS

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Introduction

Multiple choice questions (MCQs) are commonly used in higher education assessments and their use has increased alongside the availability of information and computer technology. Online MCQ testing is often considered an option to help deal with increasing numbers of students on distance learning and work-based learning.

By their nature, MCQs are not usually considered to encourage deep learning, however, students who do participate in online self-assessment often demonstrate improved academic performance compared to those who do not participate, and even students with low motivation levels often make use of online MCQ tools.

The aim of this paper is to present the perceptions of both the lecturing staff and students on the use of MCQs in higher education and to summarise the viewpoints and opinions of their usefulness to give both formative and summative feedback.

Study Design

All students and teaching staff at Edinburgh Napier University Business School were invited to take part in an online survey in May 2012. Participants were sent an email invitation to take part in the survey which mainly consisted of questions relating to experience and use of MCQs in higher education.

Findings

A total of 334 students and 28 staff members responded to the questionnaire survey. A total of 63.1% of undergraduates and 48.1% of postgraduates indicated that they had taken an MCQ test during their current degree programme. On the whole, most students did not have a favourable attitude towards the use of MCQ testing and postgraduate students had more negative opinions than undergraduate students and in particular, postgraduates believed that MCQ tests cannot be used to assess comprehension or understanding.

A thematic analysis was also carried out on two open-ended questions included in the survey and the responses were summarised into three main themes: pedagogical tool to support student learning; questionable suitability at higher education level; and question construction.

Conclusions

The survey findings indicate that, on the whole, both academic staff and students tend to have a rather negative attitude towards the use of MCQs in higher education. Although MCQs may have a place in assessing knowledge, they are less useful in assessing higher level skills such as interpretation, critical evaluation and writing skills. However, staff felt that MCQs can be very useful as a formative assessment tool and a means of providing positive feedback to students. Students agreed that MCQs are useful for self-evaluation and were satisfied with the use of MCQs as a means of revision. However, students felt that MCQs, when used on their own, did not provide them with the opportunity to demonstrate their higher cognitive skills in an assessment setting.

When designing higher education courses, teaching staff should consider the use of well-designed MCQs as a tool for providing formative feedback to students, and the use of ICT in distance or work-based learning provides a means of access to a wide range of learners.

DESIGNING AND VALIDATING AN E-PORTFOLIO TOOL FOR TRACKING TEACHER COMPETENCIES AND DEVELOPMENT THROUGHOUT A CAREER ACCORDING TO EU PRINCIPLES

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Introduction

Teaching is a complex profession, coping with increasing student diversity and struggling to raise educational standards for global competitiveness. The environment of an educator (teacher/trainer) at any level is immensely challenging and member states are reviewing how they prepare and support them for the vital tasks they perform on behalf of the European society. Educators must help students become autonomous learners by targeting transferable abilities rather than just memorising facts. This calls for common European competencies and qualification principles for both teachers and trainers. Europe comprises a rising number of diverse cultures and ethnic groups with values and attitudes exhibited in different conventions of thinking, communication and action. A more comprehensive, flexible mode of educating, training and assessing teachers meets these demands. To this end, policy guidelines and an ePortfolio tool were developed in the context of Policy for Educator Evidence in Portfolios – PEEP project. This paper presents the methodology for designing the ePortfolio tool, as well as validation results from pilots. Recommendations are made from stakeholders' feedback regarding the development of the ePortfolio career record. It is suggested that this tool becomes a mandatory recording system of continual professional development for EU educators in order to assist and confirm professional status and provide a useful passport for mobility.

Designing the PEEP ePortfolio Tool for Tracking Teacher Competencies and Development

PEEP policy guidelines describe and advocate an ePortfolio career-tracking system for European Union educators in order to strengthen professionalism and raise standards of teaching and learning. It argues for a need to include non-formal and informal evidence, as well as formal qualifications, in order to provide a more complete picture of an educator's competence. Professional principles rather than arbitrary standards are suggested as being more enduring and meaningful in transnational contexts as the criteria for selecting appropriate evidence. To this end, the four European Principles for Teacher Competencies and Qualifications were deployed. A common EU ePortfolio of professional development encourages educators to plan and participate in life-long learning to validate this process. It addresses on-going monitoring of knowledge, attitudes and pedagogic competencies and their effectiveness in practice within a career dossier. This provides a coordinated, coherent, continuous, cooperative approach to personal-professional development, promoting a culture of reflective practice and research; supporting professionalism and assisting the status, recognition and mobility of educators. The ePortfolio tool (available at peep.ea.gr) employs a grid to plot the user's career stage against the four EU principles. The grid defines principles at early, mid and specialist career levels, enabling individuals to map their career stage to the four principles for evaluation of the formal, non-formal and informal evidence. The career phases do not signify levels of experience; rather they frame general and recognisable aspects of professional competence and achievement. Evidence are chosen with the portfolio creator having ownership of all material and deciding who, at what point and for what purpose can have access.

Validation of PEEP outcomes

Validation methodology, tools, as well as analysis of results of the PEEP ePortfolio tool pilots across the partnership (Greece, UK, Bulgaria, Latvia, Wales, and Poland) with an emphasis on the validation results from Greece are presented. The evaluation of ePortfolio use for tracking careers took place with 258 respondents across Europe. Methods of analysis included face-to-face group and individual discussions. Results of data analysis show that responses, from partner countries, are positive to the idea of ePortfolios. They offer insights into issues that may need resolution, such as a mandatory policy for career tracking and professional, technical support for the process. Based on the four principles, a respective ePortfolio tool could be developed for other sectors and professions, such as the health or the engineering sector.

SEQUENT: SUPPORTING QUALITY IN E-LEARNING EUROPEAN NETWORKS

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EADTU and EFQUEL, the two key stakeholders in Europe when it comes to quality assurance in online education, have developed various innovative quality assurance and excellence models. Through respectively the E-xcellence quality label developed by EADTU and the UNIQUe quality label developed by EFQUEL, the two organisations share a common expertise in the rewarding of excellence examples in on-line higher education.

In a common effort to convince governments, universities and QA agencies of the necessity to have a QA approach for e-Learning provision, EADTU and EFQUEL have decided to join forces together with ENQA and set up the European wide SEQUENT initiative.

The "SEQUENT" initiative aims to promote excellence in the use of ICT in higher education, with a clear goal to prepare European Universities in line with the European Modernization Agenda and to make higher education in Europe fit better to cross-border collaboration initiatives in the implementation of innovative and ICT enhanced partnerships.

Quality instruments related to online and open education are the E-xcellence label, UNIQUe label, ECB-Check and the OpenupEd quality label for MOOCs.

Please find all info on the SEQUENT website: www.sequent-network.eu

DEVELOPING A DIGITAL COMPETENCE SELF-ASSESSMENT TOOLKIT FOR NURSING STUDENTS

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As digital skills are the most transferable generic skills applicable to 90% of professions (European Commission, 2011) with a 95% of all businesses having access to the internet, the requirement for digital competence is likely to increase; therefore, the need for quantification and the establishment of appropriate indicators (metrics) in a generic format is a priority. This research presents the results of the development and testing of a self-assessment toolkit for the measurement of digital competence characteristics and attitudes, which was piloted with a group of first year nursing students.

The survey self-assessment toolkit was derived from the early findings of Janssen's and Stoyanov's study (2012) that was part of the wider EU Digital Competence (DIGCOMP) project. Twelve digital competencies were identified, five statements per classification area were defined, and a six-point agreement scale was used; the usefulness of the toolkit was validated through examples of the types of the extracted results (digital competence maps) which were analysed and tested for the mapping of the digital competence characteristics of individuals and groups.

The findings suggest that the DIGICOMP framework is applicable as a generic digital competence framework for professional practice. Parallel work of in-depth interviews has identified significant themes that can be investigated in relation to developing the work further in healthcare education; however, these results should be considered in the context of an indicative demonstration of the potentials and the limitations of the toolkit.

THE CHALLENGE OF THE TOTAL QUALITY MANAGEMENT APPROACH FOR THE DEVELOPMENT OF ONLINE AND DISTANCE EDUCATION

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The organisations themselves have to "produce" quality systemically and not just the individual units, which are responsible for the study programs or contents. Therefore, a holistic approach of management in general and quality management in particular is required to cope with the challenges of online and distance education in the future. The integration of TQM and online and distance education management is based on the complex management approach for educational institutions. But, there are still a couple of dilemmas and issues. Therefore the universities have to develop general professional concepts and to transfer the standard procedures into special TQM processes for online and distance education. This development will be provided by discussing individual solutions and issues based on approved cases and best practices in the educational institutions.

BUSINESS GAMES THE LEARNING BY DOING TOOL FOR BUSINESS MANAGEMENT

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Our responsibility in business schools is to teach students what we do in business. That is, provide them the necessary knowledge for business management. This necessarily involves developing skills in the problem solving and decision-making involved in each stage of the business activity: analysis, planning, implementation and control. To do this, we have different teaching methods in business schools such as the lecture, concept applications, case method and simulations or business games. This article seeks to argue that business games are the most powerful method to achieve this learning objective. We analyzed the characteristics of each of the teaching methods and relate them to their potential for the development of skills in decision-making and problem solving.

It is concluded that the lecture and case method allow teaching and to develop skills in the phases of analysis, planning and control, but not on the critical implementation phase. The only method that allows learning and developing skills in the implementation phase is the simulation or business game.

On the other hand, it is concluded that business games provided that properly structured and also incorporating some role-play to contemplate negotiating skills may be the best method (without excluding others) for practical learning and developing skills in decision making and problem solving in all phases of the business activity.

TRANSITION FROM EDUCATION TO EMPLOYMENT: CREATING MEANINGFUL MULTILINGUALISM IN THE EUROPEAN LABOUR MARKET WITH ADVANCED ICT

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A key issue in the development of employment in Europe has been the creation of free movement of labour. Migration is now part of a wider global concern that has seen a dramatic redistribution of resources in terms of equality of access and the very structure of work itself. One of the main solutions for this change is adaptive technology which consequently enhances learner involvement in the learning process and develops autonomous access to learning material. This solution has created a great demand for digital content and digital writers.

Parallel to this macro-economic context is the growing impact of the emerging digital world and the contours of employment it is shaping. This new and emerging digital world has created a range of new professions and skillsets which are literally and figuratively unprecedented.

Among other issues, these two problems have also put a renewed light on the importance of multilingualism and development of skills and competences in learning materials' design and promotion of policies and technologies that enhance the acquisition, practice and development of additional languages for mobile workforces.

The key purpose of this investigation is to raise the question of how to train experienced writers from the world of print, so that they can adapt and learn how to become digital content writers.

The issue is how we solve these problems and begin to train an entirely new generation of digital writers in the shortest and most effective way possible. This requires thought on how we create vast amounts of quality content in a rapid way as well as how we deal with different language conversions and localization of digital content.

LANGO: project example and learning point

Language on the Go (LANGO) is an EU funded project developed to explore the opportunities offered by the new information and communication technologies to encourage learners to maintain and build upon their existing language skills. The project developed a multilingual language tool to apply interactive learning approaches and innovative e-learning platforms, which provide computer assisted and mobile assisted language learning within a framework of attractive and easy learning content. The LANGO innovative e-learning tool supports learners of Bulgarian, Maltese, Greek and Russian languages. Evidently, the methodology and technology can be adapted at later points to other languages. The LANGO project is an example of a solution of two major issued in this paper: training "print" language writers to become digital writers and creating a multilingual course which can easily be adapted to many more languages and needs.

THE CIRCUMSTANCES OF USING TECHNOLOGICAL APPLICATIONS INSIDE AND OUTSIDE OF THE FACULTY BY PHYSICIAN AND NURSE CANDIDATES

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Fast growing technological developments have significant effects in the educational context. In cases of providing students with opportunities that enable them to use information technologies efficiently and effectively, it is seen that their perceptions of information literacy and self-sufficiency regarding the fields that they study have improved. Recently thanks to these technological applications used commonly for educational purposes, students can communicate with whomever they want to, share/receive files and correspond within a short span of time. These technologies include social networks and other electronic communication tools. All these technologies can be categorized under Web 2.0. With the help of Web 2.0 technologies utilized frequently in educational environments in the recent period, students have been integrating into such environments and taking individual responsibility for learning.

There are several studies indicating the positive impact on students when technological applications and tools are used to assist face-to-face education. The important thing is to create awareness of these technologies' positive effects on students in the educational context.

In this study the aim is to determine which technological applications are used by physician and nurse candidates; where, why and how they are used, based upon the technologic and educational context. This research is considered as a case study. The study group was determined by "easily accessible case sampling" and consisted of 78 freshman, sophomore and junior physician candidates from the Faculty of Medicine of Hacettepe University; 50 freshman, sophomore, junior and senior nurse candidates from the Nursing Program of the Faculty of Medical Sciences in Başkent University. A questionnaire and a semi-structured interview form created by the researchers were used in this study. The content analysis method was used in the data solution. Research participants stated that technological applications they used in daily life and for classes were different. This situation can be considered as an indication that we could not yet integrate technology into education. When the results obtained in accordance with first sub-question of the research (Which technologies do the physician and nurse candidates use in daily life?) were examined, it was determined that the physician and nurse candidates used the social networks the most (79.6%) in daily life. When other applications were examined in order, it is seen that they used office programs (69.8%), e-mail applications (57.1%), search engines (55.1%) and educational software (16.0%). When the results obtained in accordance with second sub-question of the research (Which technologies do students use for classes? Why?) were examined, it was determined that the physician and nurse candidates used search engines the most (83.9%). When other applications were examined in order, it is indicated that they use office programs (79.6%), e-mail applications (67.1%) and social networks (23.8%). When the results obtained in accordance with third sub-question of the research (Which Technological Applications Do Students Use for Classes?) were examined, it is established that students use distance learning programs (88.5%) and social networks (76.6%) for classes.

It was determined in the research that students used search engines and office programs the most. As a result of the research, results of the students who take distance learning courses was higher than those who formal learning. Moreover students presented positive attitudes towards distance learning. In conclusion, the finding regarding students' willingness to take distance learning courses and use of social networks should be carefully dealt with. Especially considering the high numbers of students attending faculties that school health professionals, alternative teaching methods and procedures should be conceived. Student participation should be encouraged along with mixed learning platforms, and students who are crammed into the lecture halls should be supported in terms of education.

ORBIS DICTUS – FROM LEXICAL STATISTICAL COMPUTATION TO NATURAL LANGUAGE PROCESSING AND SELF CUSTOMISATION

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One of the main objectives of the Italian national funded project Adaptive Message Learning (am-Learning) is to produce a system capable of understanding the learner's lexical needs and providing him/her with the adapted study material that he/she will understand with the least help from a third party knowledge source (e.g. dictionaries, web, etc.). During the four years project, this result was obtained using lexical statistical computation techniques to measure relevant educational competences such as reading comprehension. This approach led us to manipulate the idea of "word frequency" as related to the difficulty of comprehension of a word in a certain document. In other words, the concept of frequency can be defined as how many times a word occurs in a huge collection of texts that fall under the same category (e.g. cardiology, physiotherapy, sociology, etc.) – called *corpus.* The higher the frequency the word holds, the higher the chance (probability) that the reader (student) already knows it (understanding its meaning in the document), and vice-versa.

One of the products of the am-Learning project is an advanced e-learning platform (or LMS – learning management system) called Orbis Dictus. It is already working and it implements the above approach to deliver an automatically adapted e-learning materials and tests based on lexical statistical algorithms. This innovative platform is formed by three distinct technological tools, each of them devote to provide different LMS functionalities: the *LexMeter* module outlines an initial user profile assessing the learner's characteristics in terms of his/her lexical competency; the *ProgressMeter* module creates short *cloze* tests to report and monitor the learner's gradual improvement through the learning path; using the results obtained by the other two, the third module, called *Adapter,* automatically adjusts the text document (e.g. manuals) in accordance to the follow hypothesis: introducing more detailed explanation of low-frequency (hard) words helps students better understand the given text material. In other words, starting from a fixed text inserted by the course tutor, the study material is automatically integrated with definitions and explanations in order to provide the student with an already tuned text, matching his/her reading skill.

Some enhancements were proposed to improve this approach taking advantage of the vast collection of words added daily to the web by its users, collecting new data with every second passing, in addition to building a system that will not need to be explicitly programmed every time new data is added, or every time the system makes a wrong judgement or a right one, but simply learns new knowledge from the newly collected data (Machine Learning).

One more addition deserves mentioning is the natural language processing, in this field some studies and algorithms were adopted in order to help the system consider the articles and books not as a collection of single words, but as a collection of phrases, paragraphs that cover subject (Aboutness concept).

DIGITAL COMPETENCIES – COLLABORATING, WORKING AND LEARNING ACROSS CAMPUSES

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A Design-Based Project

The project *Digital Competencies for Collaboration– across Campuses* is a project, which illustrates how faculty through design-based research can improve and transform communication and learning. In the project the Social Education Program (SEP) at University College Zealand (UCZ) works with faculty's competencies – developing new ways of using technology to empower faculty collaboration across campuses, to create new designs for teaching and to enable new methods of knowledge sharing. Faculty, in the case presented, is located on four different campuses and the use of technology connects faculty members as well as links work and learning in new ways. The project also shows how a design-based approach can improve educational practice.

The objectives of the project were formulated as the need to:

- Increase faculty's digital competence

- Enable new ways to collaborate across campuses

- Link faculty work and faculty learning

The overall agenda was to enhance the development of a stronger academic environment. This has been achieved by following five important principles:

- Faculty empowerment and user participation – in design and decision processes in all phases of the project

- Leadership – providing visions, direction, concrete support and resources

- External consultants – providing professional guidance, structure, and expertise

- Collaborative reflection, documentation, sharing and development of concrete teaching and learning designs

- Access to digital platforms, tools and training-sessions

The project is being evaluated through the process. The evaluation methods have been questionnaires, interviews and an evaluation workshop where the participants has done peer to peer evaluation mediated by a visualisation method.

The initial results show that digital competencies for the entire group have been improved by using Podio as a shared learning platform, and by being trained in using Adobe Connect for efficient meetings. Furthermore, the training of a number of teams in the use of digital video and other digital tool as parts of teaching and learning designs has been beneficial. However, the most important initial result is that faculty as part of the projects and seminars has experienced that all faculty-members have specific digital competency. Especially, mapping of faculty competencies has been a core activity during the project. It has enabled peer-to-peer-support, teach-the-teacher–training and knowledge-sharing, which has linked faculty work and faculty learning. Finally, the support of external consultants has had an impact on the results of the project. In professional and innovative ways, the overall process has been structured, faculty and leaders have been supported in the concrete processes and activities and the consultants have maintained a strong focus on project goals, output and outcome.

ONLINE OR BLENDED – COMPARING ONLINE AND BLENDED COURSES

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As broadband internet access and LMS technology are rapidly expanding, and ICT is becoming a part of the teacher education curriculum, online learning is growing in all parts of the world in order to open education to everyone. Online collaborative work can bring specialists to every class, connect between students in different countries and from different cultures and adapt learning to the flat world. This research compares blended and online models of teaching in two versions of the same course at a teacher college in Israel. Each learning activity in class in the blended model has become an online activity in the online course. What is the contribution of an online course to students as compared with the contribution of a blended version of the same course? An achievement test, questionnaires, course products, interviews and statistic tools assisted to measure, investigate and estimate the contribution of each model to the development of students' skills, and the advantages and disadvantages of each model. Results indicated that an online course, which uses state-of-the-art ICT and major pedagogical considerations in organizing its online learning activities, has the potential to create meaningful learning.

ONLINE MODELS FOR PROFESSIONAL DEVELOPMENT OF A DISTRIBUTED TEAM USING VIRTUAL TOOLS – THE DYSLEXIA IN MODERN LANGUAGES PROJECT

Sarah Heiser, Matilde Gallardo, Ximena Arias-McLaughlin, The Open University, United Kingdom

This paper presents an online model of professional development for a distributed team of teachers of languages in a distance learning context. It presents a model that uses both synchronous and asynchronous tools, as used in previous projects by the project team and their colleagues as staff developers to bring together teachers, variously to develop online skills and practical knowledge to underpin the support of distance learners. This paper shows the model and its evolution in this particular project. With a focus on developing teachers' pedagogical expertise in the field of modern language teaching and specific learning differences, SpLD, and dyslexia in particular, it shows the use of a range of virtual tools to facilitate the shared gathering of information and the writing and reversioning of learning materials to support adult language learners with dyslexia in HE. This paper proposes to show the teachers' engagement with the shared gathering of knowledge and collaborative production of open educational resources, OER for supporting these students.

The study covers a staff development project which took place at the Department of Languages, Open University, UK, between December 2012 and July 2013. The project rationale was the identification by teachers and their academic managers that many language teachers in distance learning felt they could be better prepared to support adult language learners with dyslexia. The project sought to answer the part time teachers' questions, "How can we make adjustments in our teaching to accommodate the individual learning needs of dyslexic learners?" and "How can we best support our dyslexic students?" As a first joint action, the participants worked with a shared purpose, to gather a literature of pedagogy and accounts of practice from a variety of contexts.

The project, which used a Moodle workspace, consisted of four top level links to different online tools, each with a distinct purpose:

1. The text-based forum was the spine of the project and the area for information and asynchronous discussions. Participants set up threads for their working groups of 3 to 4, split by areas of interest in a particular language or type of activity. As the various strands were not closed, all 12 participants could read them and post comments.

2. In the synchronous meeting room (Elluminate) each phase of the project was explained and discussed. A timetable was issued at the outset of the Dyslexia and Modern Languages project and participants asked for their commitment to attend. Synchronous meetings by small groups also took place, for example to prepare presentations. Later in the project some peer observation of online teaching with the newly created materials took place.

3. The Moodle repository was used for the collecting and sharing of references and scholarly publications of existing research on dyslexia and for the initial work on 'how to' guides and shared teaching materials.

4. In the later stages of the project, participants collaborated in a wiki to draw together their reflections and discoveries into a *Guide to Good Practice* for supporting Open University language students with dyslexia, for the use of other teachers.

One outcome of the project are 18 resources, including the *Guide,* available on open access in the LORO repository (http://loro.open.ac.uk) to be shared with colleagues and the wider language teaching community. These can be retrieved with a single search under the free tag 'dyslexia friendly'.

Collectively, participants concluded that good practice for dyslexic students was generally good practice for all. By working together collaboratively online with a shared aim of learning how best to support dyslexic language learners, the part time teachers enlarged their professional skills. They did this within a project framework that was itself developed by the experience. This paper shares the project framework, discusses the detail of virtual tool design and use, and touches on the content, now available on an OER basis.

HYBRID LEARNING ENVIRONMENT IN HIGHER EDUCATION: CONCEPTUAL MODEL DIMENSIONS OF TEACHERS' COMPETENCE FOR E-LEARNING IMPLEMENTATION

Snježana Babić, Polytechnic of Rijeka, Croatia

In the past few years, under the influence of different trends, many higher education institutions have made great efforts to improve the process of adopting e-learning, as well as to enhance its quality.

Hybrid learning environment is particularly significant e-learning model which is in this paper defined as systematically modelled educational environment. Based on the requirements and characteristics of the immediate learning environment (students and educational content) and wider learning environment (institutions), the hybrid environment is the origin of choosing and connecting the learning activities in traditional classroom (with or without the use of technology) with online learning activities in virtual learning environment (e-learning system), in addition to the mandatory interaction with the aim of successful realization of the educational goal. It is important to point out that virtual learning environments (VLE) are built in different e-learning systems (institutional or cloud) that represent one of the significant information subsystems of numerous higher education institutions aspiring to become virtual universities.

The implementation of e-learning technology in academic practice is not a trivial matter since it includes wide range of knowledge, skills and competencies in different scientific areas (pedagogy, technology, sociology, psychology, etc.), especially while creating hybrid learning environments.

In practice, different models of hybrid learning environment are found, where certain portion of differently structured VLEs are present. Even with slight rotation and shift of the components from the learning and teaching centre, VLE changes form and with it the role of key components: higher education teacher, educational content and student. It can be concluded that the level of required competence for e-learning implementation in hybrid learning environment can be considered in the continuum from rather low to high level of required e-learning competency.

Defining the factors related to teacher competencies for e-learning implementation poses a great challenge for many experts, and it is crucial since the existing vocation of higher education teacher needs to be upgraded with certain qualifications from the field of e-learning. Furthermore, it is significant for human resources management in higher education institutions, i.e. for the development of new ways of knowledge management.

This paper presents a theoretical framework of literature research of factors concerning teachers' acceptance of technology and innovation in the field of e-learning and competencies for its application in higher education institutions. Based on the research findings, the dimensions have been singled out and described, as well as factors of conceptual model of teachers' competence for e-learning implementation in hybrid learning environment, as a foundation for future empirical studies and guidelines for teachers' professional growth.

Teachers' competence for e-learning implementation in hybrid learning environment will be considered in the framework of the following dimensions:

- Knowledge, skills and competencies;
- Values and attitude towards adopting e-education;
- Higher education teachers' personal characteristics;
- Situational factors (course characteristics; student characteristics);
- Institutional factors;
- Professional development.

THE IMPORTANCE OF E-LEARNING IN TRANSFORMING ORGANISATIONAL STRATEGIES: A CASE STUDY

Sandra Brás, RIPE NCC, The Netherlands, António Teixeira, Universidade Aberta, Portugal

Background

A number of organisations are introducing eLearning in training and teaching practices aimed at employees and/or customers. This research project aims to determine whether, and how, the introduction of eLearning practices in a training organisation, or an organisation with a strong training component, represents a disruptive process and whether it leads, or empowers, the transformation of the organisation's strategies. The research takes, as a case study, the RIPE NCC, and is composed by two complementary parts. The first part focuses on the analysis of the introduction of eLearning in the organisation, with all the contextual aspects inherent to such a process. The second has its focus on studying the impact of eLearning in changing organisational strategies.

Methodology and the case study development

In this work we combined two research methods: case study, as we focus on a specific organisation, and Design-Based Research (DBR). The choice of DBR is due to the fact that it is an emergent research method for learning environments, in which the researcher can also be designer. This allows for more flexibility during the research period, given the fact that the researcher can change and adjust the teaching and learning process design during the research.

The introduction of eLearning practices at the RIPE NCC was gradual and we split it into four stages.

- Stage 1: Improving the quality of the OER. We started developing videos according to the following criteria: centred on real life tasks/problems; consider different learning styles; use of plain English; short and specific videos (one topic at a time); use of a persona or cartoon that could add some humour to the learning process.

- Stage 2: Implementing the Webinars. Due to the unstable political situation in some countries of the RIPE NCC's service region and the fact that developing videos for all the content one needs to learn about the RIPE NCC is very time consuming, we developed Webinars to help those members who cannot attend the local training courses. In order to verify if there was any interest in Webinars, we used a survey for needs' analysis, which helped us making decisions about the integration of Webinars with the regular training activities.

- Stage 3: RIPE NCC Academy implementation proposal. Given the success of the Webinars, we started considering adding a new eLearning service that would fit the members' learning needs. One of the main features of this model is the certification of the LIRs' knowledge. The RIPE NCC Academy is an eLearning service, using a Virtual Learning Environment (VLE).

- Stage 4: The impact of eLearning in the RIPE NCC's strategies. In this work we chose to define organisational strategies as the bridge between the objectives, the goals and the actions to reach those goals. As for the RIPE NCC's organisation strategies, we considered the strategic pillars of the organisation: Strong Registry; Trusted source of data; and Strong and stable Community. We used two surveys to verify the impact of eLearning in changing the RIPE NCC's strategies. One of the surveys was sent to Senior Management, Middle management and the Executive Board of the RIPE NCC, as they are more aware of the strategies of the organisation than any other employee. The other survey was sent to the participants of the Webinars since 2012, to verify the impact that using eLearning has in the way they perceive the RIPE NCC.

Conclusions

Based on the indicators shown in this research, we can conclude that the introduction of eLearning practices represents a disruptive process, which can lead to the transformation of the organisational strategies. Taking into account the temporality of this process, the results indicate that a change may happen. However, in this research we did not have enough time for a short or long-term verification. Regarding the advantages of this study, we highlight not only the advantages listed by the members, which result from the usage of the eLearning practices, but we also highlight the advantages that this research can bring to other organisations.

IS THERE A CORRELATION BETWEEN ICT INTEGRATION LEVELS AND LEARNING ORGANISATION MATURITY?

Pearse Murphy, Athlone Institute of Technology, Ireland

Introduction

Many major studies have examined the effectiveness of the integration of ICT into higher education organizational processes in detail. Overall these analyses provide a mixed picture of the effects on educational outcomes of the integration of ICT into teaching, learning and assessing (TLA). Many of these reports point to the requirement for continued research into this area. Researchers have found a disjoint between perceptions of policy and strategy makers and those employing ICT in delivery of higher education at the chalk face. The perception from students particularly was that there was little or no ICT skills development in their programs of study.

Most reports agree that in the main a blended approach to the use of ICT in TLA will prevail. In the exploration of the integration of ICT into TLA, evidence of best practice will be sought both from the policy / strategy and the levels of integration perspectives. First, the paper will give a brief outline as to the development of the institute of technology (IOT) sector and where it sits within the higher education landscape of Ireland currently, in order to set the context for this study.

This study is set in an era when higher education institutions, similar to private business organisations are required to adapt and change at an increasingly frenetic rate to ever more intrusive environmental stimuli which require rapid cultural shifts. These adaptations are being driven by factors such as globalization, increasing competition, ubiquitous technology and communications and the emergence of the post-industrial society where the expected graduate is a knowledge worker required for the knowledge economy. This is particularly true of Ireland a small open economy on the periphery of Europe which is currently haemorrhaging its traditional manufacturing base to less costly eastern European and Asian states. The current mantra of the Irish Government and all its agencies is to transform Ireland to a leading knowledge economy as soon as possible.

Higher education institutions are required to respond in ever shorter life cycles in adapting to new pedagogical cultures, driven by environmental change. In this climate there is a need to at least investigate business frameworks such as those espoused in learning organisation theory. Examples such as the COVARM project in the UK represent efforts to streamline and normalize the course validation process using business models and software engineering tools. It is salutary in exploratory research in this area to look at a model like the learning organisation in that a limited amount of research exits in a higher education setting using such a model and thus further investigation is opportune at this juncture.

While a lot has been written about learning organisations and organisational learning in the literature, there appears to be a dearth of work which links the theory to the application or practice.

Methodology & Literature Review

Learning organisation maturity for an entity may be viewed, analogously, as continuous professional development or life long learning for an individual. The learning organisation approach seemed to fit well with what the writer sought as a framework for strategic thinking, given its currency. Having found and adapted the learning organisation profile (LOP) tool to address the strategic focus of the study, the writer next sought a tool that might assist in establishing the level of integration of ICT into teaching, learning and assessing (TLA) in the subject higher education institutions. The TLA tool was tested statistically for validity and reliability, similarly to the LOP tool, and proved well within the norms required for social research.

Findings

The findings are presented as series of tables in the main paper.

Conclusions

In the context of a transformative environment in which the IOT sector in higher education in Ireland finds itself the engagement with strategic frameworks such as the learning organization model may benefit the embedding of the idea of continuous change and adaptation into the mindsets and theories in use of the protagonist stakeholders for the benefit of both themselves and their institutes into the future.

COLLABORATIVE LEARNING AND KNOWLEDGE MANAGEMENT

Thomas Harald Schmuck, Peter Haber, Manfred Mayr, Thomas J. Lampoltshammer, Salzburg University of Applied Sciences, Austria

For an organisation, knowledge is the key to success. Therefore, the preservation of knowledge is a task that must not be underestimated. One of the most common ways of passing on knowledge within an organisation is by formal training, where a senior employee provides an instruction on topics so that employees in need of specific skills or knowledge can profit from that. When it comes to preserving the knowledge, usually, a central data storage that can be accessed via a Wiki or a similar website is employed. Employees can thereby contribute and request work-related information to and from this repository. While this established procedure may work at the first glance, a lot of potential is wasted, as the technology employed is not used at its full potential, nor is the learning approach the most suitable method of passing on knowledge. The introduction of a next generation knowledge management system can help to considerably improve the conservation and transfer within an organisation.

Collaborative Learning and Knowledge Management (CLaKM) is a framework that allows the creation of a social e-learning platform. This platform enables effective learning with as much ICT support as needed and/or desired. The basic idea of CLaKM is to foster informal learning without boundaries, connecting people from different teams, departments, and even branches within the organisation. To achieve this, CLaKM combines ideas and trends including:

- Self-learning organisational management (SLoM) combines classic knowledge management with business intelligence and is based on knowledge/skills/experience portfolios

- Social e-learning: knowledge is gained through interaction with others (informal learning), therefore communication with peers within an e-learning system is very important; social media interaction allows people to connect with each other in a comfortable way they are already accustomed to

- Management of Collaboration (MoC): a central instance that acts as a bridge across any gaps that might arise between two parties; coordinator of people, technologies and resources of an organisation

CLaKM enables the on demand information and knowledge exchange between someone who has certain knowledge and someone who needs it. This is achieved by SLoM's always up-to-date portfolios, which are relayed by the MoC. Therefore people holding special skills are collaboratively interconnected with others by building up mentoring teaching groups to impart their knowledge and abilities in an informal way. To be not limited by physical distances CLaKM is fully embedded in an interactive virtual working environment.

RETHINKING PRODUCT DEVELOPMENT EDUCATION STREAM WITHIN AN E-LEARNING ENVIRONMENT

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Introduction

In this paper we will present e-learning implementation of one of the course from the new product development stream that has been awarded as the best e-learning course at University of Zagreb in 2013. The general conclusion to be drawn is that this type of learning was perceived as very different for the students compared to earlier courses enhancing engineering students' interest for product development, increasing understanding for noncore-engineering aspects of product development (innovation, eco design, ergonomic, etc.) motivate self-learning and increase students' communication and presentation capabilities.

Product development stream of courses

The new product development education stream was built based on the consideration about requirements for the modern engineers that are well documented in literature and are results of the discussions with industry. Especial important insights for new product development education stream were results of the several workshops on design education held during the series of the international design conferences DESIGN (www.designconference.org). Engagement in all phases of product lifecycle, complexity and multidisciplinary approach, teamwork, creativity and innovation are recognised as the main descriptors of the working environment for the modern engineers. Therefore instead of the existing education o the engineering methods and tools, the focus of the new education approach has been moved toward the whole product development process including engineering, management and ethical issues.

Pedagogical-didactic approach applied

Pedagogical-didactic approach that has been used for the development of the whole stream is based on the learning by practicing as is defined within CDIO (conceive, design, implement, operate) framework for future engineering design students. The approach is realised as combination of the classical lectures in the classrooms including real world examples analysis, self-learning by using different types of resources and activities, simulation tasks based on the gained knowledge during the exercises and self-preparation for the final examination. The key interactive elements of the courses stream are synchronous and asynchronous discussions as the main medium for knowledge and information exchange between teachers students. Accordingly, didactical model that is applied for stream of courses is combining classical group learning and self-learning in order to enable for each student maximal flexibility and autonomy in learning process participation. The key idea of the courses development is to additional emphasise active role of students in knowledge exchange process undergoing during the courses execution. For each course the expected learning outcomes have been defined as a starting point for course structure development. In order to support that, the learning process in the course stream is designed to enable gradual learning by experience, based on individual problem based tasks in the beginning of the first course up to project based team learning at the end.

Conclusion

The implementation of new course stream on product development significantly differs from traditional engineering education that was practice before at our institution. Although students and teachers have been satisfied with the outcomes the main features of the product development students' education are still hard to address with e-learning technology. From our experience, one of the most important one is related to the practical work on analysis of the real products from different perspectives that is usually conducted in workshops. The similar issues are related to the laboratory focused work and experimentation. Learning by doing like for example during disassembling phase at end of product life cycle develops specific skills and experience that are hard to replace in virtual environment. Besides that, different aspects of the product development process are supported by different engineering software tools that are hard to integrate with LMS. Somehow those problems may be considered as the core of engineering education and leave the space for the future research in the area.

PROMOTING INNOVATIVE TRAINING & PERFORMANCE SUPPORT AT THE MANUFACTURING WORKPLACE – THE MAN.TR.A™ MODEL FOR LACE PROJECT

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Smarter Training for Smarter Manufacturing

Manufacturing is going through what many call the 4th industrial revolution with new technologies coming into place to disrupt the way we produce, distribute and sell goods in contemporary markets. After changing the service and content industry in the last decade, the web is now passing from the 'Internet of Bits' to the 'Internet of Things'. New disruptive technologies such as 3D Printing, Advanced Robotics and Cyber Physical Manufacturing are appearing that will revolutionize the way we produce, distribute and purchase goods in contemporary markets. In a nutshell, it is now clear that another '*webification*' wave is about to hit the industry. This time it will address the roots of goods fabrication and distribution, an economical space potentially with a much higher likely impact than that reported for the digitization of the content and service industry, with manufacturing still retaining a 17% share of the world's overall GDP, (Europe reported at 15.1% in 2012), despite the massive off shoring and de-industrialization forces influencing western economies in the recent past (Figure 1).
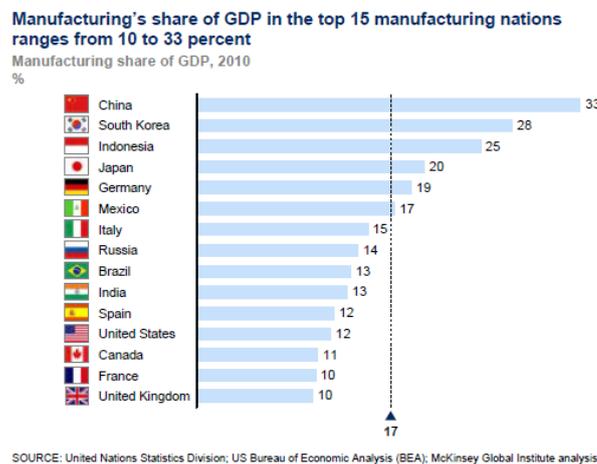
Figure 1. Manufacturing Share of GDP – Top 15 manufacturing nations by GDP %

But technology is not only due to change the manufacturing plants, supply chains and infrastructures in short term. Up skilling its workforce to make it capable of coping with such market conditions easing the adoption of new models, processes and advanced IT infrastructures is no longer an option and must become a pillar of the manufacturing business transformation future towards new maturity and standardization levels.

The LACE Initiative & Man.Tr.A™ Model

In January 2014 the European Commission has launched the LACE (Learning Analytics Community Exchange, www.laceproject.eu) project to promote the use of educational data analytics and mining techniques to improve the effectiveness and efficiency of learning and training technologies in contemporary academic and industrial curricula. The LACE initiative includes a specific work package dedicated to workplace training led by Infinity Technology Solutions of the sedApta Group (www.sedApta.com), an innovative EU startup Company recently launched to conceive advanced IT processes and tools training solutions for the industrial sector.

This paper presents the innovative Man.Tr.A.™ model developed for the occasion to help the analysis and modelling of workplace training, the identification of KPIs to measure its effectiveness and efficiency and the definition of appraisal paths to increase the adoption of proper workplace based training solutions within the manufacturing vertical. towards new levels of performance support and training excellence needed by contemporary manufacturers to better cope with the global challenges and opportunities they are about to face.

SMES: GENERATING SOCIAL CAPITAL THROUGH NETWORKS AND SOCIAL MEDIA

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A study by Gray, Saunders and Goregaokar (2012), found a strong engagement amongst SMEs with online information and communication technologies (ICT), some of it linked to social capital. The importance of these findings prompted additional research in this area. The new, 2014, study took as its focus SME use of social capital and set out to address the following questions:

- What are the key business advantages to SMEs in using online and offline activities to generate social capital?

- What are the relative merits of using online and offline activities to generate social capital?

- Which forms of social media have SMEs tried but considered not worth pursuing?

- Which online and offline communities do SMEs connect with and for what reasons?

- What criteria do SMEs use when judging which communities to connect to?

Social capital can be defined as the goodwill available to individuals and groups, and operates where friends, colleagues or general contacts receive opportunities to use their financial and human capital. Whereas human capital is a quality of individuals, social capital is a quality created between people through offline activities such as networking events and online activities which use social media. Two benefits that are relevant to SMEs flow from social capital: information and influence. Where two groups have dissimilar information, an entrepreneurial SME can span the structural hole by monitoring information, identifying problems and offering tailored solutions. Individuals can gain influence in networks by accumulating obligations that they can cash in at a future time.

One way in which SMEs can seek to expand their social capital is through the use of social media. However, while access to the Internet by SMEs is almost universal, and their use of social media is growing, SME use of social media is lower than for larger organisations. Nevertheless, the 2012 study shows that 66% of SMEs considered networks and social media were of at least some importance to their continuing success. Having a website was considered important by 86% of SMEs, with 67% reporting that search engine optimisation is important to their continuing success. The new 2014 study confirmed these findings, revealing that SMEs have difficulty in purchasing high quality advice on SEO. The new study also suggests that social media sites such as LinkedIn are widely used to showcase the SME business and to build relationships with customers. However, direct links between the use of LinkedIn and higher sales revenues are hard to determine. Facebook is used, but not as extensively as LinkedIn being used more in a personal than a business capacity. Twitter can be effective when used in conjunction with other social media such as the business' website and social media posts such as blogs, but there is the danger that tweeting replaces genuine business activity. YouTube is a potentially powerful medium, given that it is relatively cheap to produce and upload videos, since users seem prepared to accept less than professional video standards. In addition to social media, SMEs also use face-to-face networks to both supplement a social media presence and also in their own right. 'You have to be in front of people to talk to them'.

Overall, few if any SMEs claimed to have expertise in the uses of social media. However, they are keen to 'get a presence' in one or many media but realise they are on a learning curve. But whatever social media are used, they have to be 'fit for purpose' and appropriate to the business model being used. Social media are not a substitute for face-to-face networking and events. Indeed, the strategy is how to integrate them.

DEVELOPMENT OF A STRATEGY FOR SOCIAL MEDIA USAGE IN HIGHER EDUCATION

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Social media (SoMe) is everywhere in our daily life. People have started to use social media in almost every aspect and field of life, however, limited attention has been paid so far to studying the potential of social media for educational purposes. So an important question is "How to use social media efficiently for teaching-learning processes?" To answer this question, standards or strategies should be defined for a more effective and efficient social media usage in an educational context. Hence, being a part of an international research project[1], this article aims to develop a strategy for social media usage in higher education. Therefore, qualitative measures, namely data from literature, web searches and together with interviews of instructors from two countries formed the scientific data on which our framework will be based.

Results of the Case Studies

For the Turkish case (N=12), two universities, namely Ankara University (AU) and Middle East Technical University (METU), were selected as sample cases. It might be useful to emphasize one point here, that AU has complete online official programmes, so all the instructors and students have experience in both e-learning and blended learning, whereas METU uses social media and Web 2.0 tools to support traditional instruction and uses only blended learning. For the German case (N=10) similarly two universities were selected. It was found out that the University of Konstanz has no regular online courses, but usually supplements presence teaching with the Ilias Learning Management System (LMS). At the Technical University of Berlin (TUB), 6 instructors were interviewed. TUB uses Moodle as their LMS while having various online learning opportunities. Based on the findings, it can be concluded that there are no strategies regarding social media use in the sample universities.

Results of Literature and Web Search

Although there are some universities which have already developed their own strategy and started implementation like Vanderbilt University, University of Cincinnati and Tufts University, it is found that none of the goals set by the universities address the use of social media in teaching-learning processes. Hence, it is obvious that universities' social media strategies have been developed for guaranteeing "web presence" of the university and having different goals than serving for supporting educational processes, and other strategies are studies that are promising from a business point of view which will be addressed in the following section.

Framework for Social Media Strategy

From this point of view, our social media strategy will be the first attempt for defining a strategy to enhance educational use of social media with a focus on higher education institutions. On the base of the emerging themes of research articles, our research findings and suggestions made by instructors, and some templates provided from different universities, a framework for a possible SoMe Strategy has been developed by relating business scopes with educational aims. The framework consists of 8 dimensions: (1) Identity of Target Audience, (2) Name & Design, (3) Measuring Success-Presence, (4) Teaching Styles, (5) Learning Opportunities, (6) Learning Goals, (7) Assessment & evaluation-Tracking Tools, (8) Content Types – Sharing.

Conclusion

This framework is provided to reveal possible determiners of an effective implementation of SoMe in educational contexts. Researchers hope that these findings will shed light on this area for leaders of universities for implementing in SoMe Strategies and will also be used to drive a Social Media Toolkit, currently being developed within the international research project, which is aimed to be a guide for instructors in their innovative teaching implementations.

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[1] EU FP7 Era.NET RUS "SoMeCat" (Social Media as a Catalyser for Cross-National Learning), Coordinator: Zurich University of Applied Science, Center for Innovative Teaching and Learning (Switzerland), www.somecat.org.

SOCIAL MEDIA AS A TOOL FOR TEACHERS AND STUDENT COUNSELLORS

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Introduction

Internet forced its way in to the most diverse areas of life nowadays. Students follow school activities through the electronic learning environment provided by the school, 'Dr Google' is our first source of information when we are sick and afterwards we schedule an appointment with our family doctor via his online agenda. But also in terms of human contact the internet plays its role as an important medium.
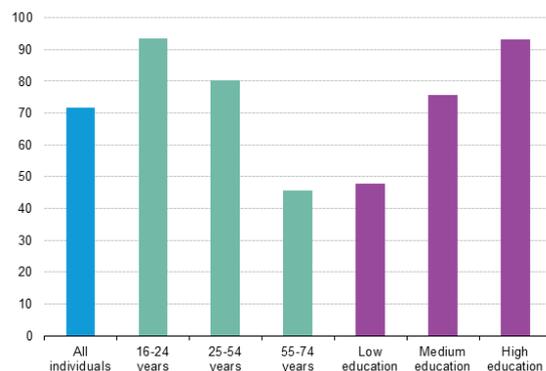
Figure 1. Internet use and frequency of use by individuals, 2013
(% of individuals) (Seyebert & Reinecke, 2013)

Internet access is available in 76% of the 'average' European households with a broad difference between specific countries. In Bulgaria 51% of the households has an Internet connection compared to 94% in the Netherlands. Figure 1 shows that 93% of the European 16-24 year olds uses it at least once a week. In this paper session we will investigate the possibilities of the use of social media in educational environments, where it can add value as a prevention tool and as a medium for teachers/student counsellors to fulfil their responsibilities in taking care of children with extra socio-emotional needs. The focus is not on the use of social media as a learning tool, which has longer practice based value. We focus on the possible role online tools can play in the care policy of an educational environment.

Social media as a tool…

Van Hecke points out the importance of social media in social care work and social care workers should be where children and young people are, and that's currently online. As young people spend a significant part of their time online, educational organizations should question the value of their presence in this place to hang out. For as it can be a tool for teachers and student counsellors to anticipate on obstacles threatening welfare and the learning potentials of youngsters.

We describe these online tools as Internet based instruments that can be used before, during or after a student face-to-face contact. For example, a Google doc questionnaire where the student can choose from a range of counselling goals specified for every life domain. At the end of this instrument he and/or the teacher/student counsellor gets an overview of the chosen items. This can be a starting point for a counselling process between student and teacher/student counsellor.

In the full paper we describe the importance and benefits of social media as a tool for teachers and student counsellors. Furthermore we will give some examples how social media can be used in a student – counsellor/teacher relation.

PERSONALIZED LEARNING & COLLABORATIVE WORKING ENVIRONMENTS FOSTERING SOCIAL CREATIVITY AND INNOVATIONS INSIDE THE ORGANISATIONS

Thomas Kretschmer, Christian M. Stracke, University of Duisburg-Essen, Germany, Janez Hrastnik, AMIS, Slovenia

The ARISTOTELE Evaluation Framework

The general aim of the ARISTOTELE project was to foster workplace learning of employees through the use of innovative information technology tools and environments. The main objective of the evaluation framework was to design and to provide evaluation methods for the "pilot trials" of the ARISTOTELE project in which the tools were tested. The objective here was to define and provide the ARISTOTELE Evaluation Framework with all selected methodologies and required instruments (e.g. models, processes, criteria) which could be used to assess innovative learning models and processes. These methods were the basis for developing a set of indicators: They were used and applied to assess the outcomes of the ARISTOTELE project and to measure the impact. In addition, it built an assessment methodology to evaluate the effect of the integrated ARISTOTELE Platform, Tools and Methodologies on learning processes, collaboration and knowledge sharing in enterprises.

Hereby, the ARISTOTELE impact measurement concentrated on five main impact categories: costs, time, quality, outputs and fit with the organisation. These categories and the respective indicators served to quantify differences using the ARISTOTELE platform and tools in comparison to the technical solutions used before in similar circumstances. Thus, the aims were to identify objectively measurable performance indicators and to measure them applying business processes which are relevant both for the two application partners and potential users.

The internal design process of the business processes was to go back to the already identified work and learning practices (which fall into the ARISTOTELE key areas and are in a knowledge work context) and the requirements on one side and available ARISTOTELE platform functionalities on the other. The industry partners in the project consortium together with business analysts and HR experts elaborated the final version of the business cases, proposals for their measurement and expected improvements. The associated business processes which were expected to be improved were identified. This procedure guaranteed the relevance of the business processes used in pilot trial II both for the application partners (APs) and for the ARISTOTELE project.

Overall Evaluation Results

Triangulation of the data coming from the different validation methods allowed condensing the results as follows:

1. The Human Resource Management (HRM) tool is a good candidate for a product that needs some improvements on the reported usability concerns and the integration of different languages and could prove direct and positive impact on the business processes.
2. The Personal Work and Learning Experience (PWLE) tool needs a better focus on and integration into business processes to provide substantial impact and measurable improvements on required time and resources.
3. The Knowledge Building (KB) tool (Recommender System) needs some improvements, but in general it can be considered as a good candidate for a product supporting the business processes within e.g. call centres.

The results of the evaluation could prove that the tested ARISTOTELE tools are providing support for the application partners with specific impact on their business processes. The findings could be used for the further development and improvement of the ARISTOTELE tools and platform towards valuable products with potentials for the market and acceptance by the application partners and other business customers for achieving values, advantages and impact within their own business processes and relationships with external stakeholders.

DIGITAL STORYTELLING AS A REFLECTIVE PRACTICE TOOL IN A COMMUNITY OF PROFESSIONALS

Corrado Petrucco, University of Padua, Italy

Storytelling and professional practices

People seem to have an innate ability to represent their experiences in a natural way in the form of stories because they facilitate communication, describe content in a rich context and require less effort than more formal methods. A typical Digital Storytelling artifact is a video or a slide-show just a few minutes long and its essential elements include a strong point of view, dramatic questions and emotional content that keeps the viewer's attention and speaks directly to the audience: indeed, a digital story is often viewed as a strong emotional experience. Digital stories also convey a more detailed context than textual and verbal stories, facilitating tacit knowledge elicitation.

This exploratory study based on an ethnographic research about a group of food safety professionals (physicians, veterinarians, biologists, chemists, nutritionists and prevention technicians) of the Veneto regional health system (North Eastern Italy). The training project was aimed at improving the cooperation between people belonging to different service industries that deal with animal health and food safety. For these professionals, during their everyday work, there are few opportunities to exchange information and talk about and solve critical issues. To fill this gap, we experimented with the creation of an on-line Community of Practice. Seeing the relevance that the emergence of narrative modalities in the processes of problem-sharing and problem-solving had taken on in the online community, we decided to support their "reflective practices" encouraging participants to create Digital Storytelling artifacts about the problems they perceived to be the most important. The following research questions were explored:

Storytelling as reflective practice

How can a digital storytelling activity support a reflective process to improve and diffuse good professional practices? Our working hypothesis therefore provided for the use of Digital Storytelling in two successive stages:

1. the first stage understood mainly as an internal process within the community, to encourage reflection on one's own professional practices told by the stories, and

2. the second as a product to be utilized as a support for communicating best practices both inside and outside the community.

A total of 14 Digital Storytelling items were created on various topics of interest to the community of food safety professionals. The many members said in personal interviews, that the difficulties encountered in the process of formalizing workplace experiences into digital narratives was mainly of two kinds: one, because they often had to elicit a lot of tacit knowledge "embedded" in their practices, and two, because they realized that, telling a story about a problem-solving incident, would have revealed necessarily to others a great deal about their professional competences on the subject.

Some findings: digital storytelling as negotiated knowledge between the community

The digital storytelling process helped the community to reach a higher level of awareness about their specific professional competencies and critical work issues, fostering high levels of commitment and motivation. This dialogic process can be a way to transform simple narrative knowledge into an inter-subjective, negotiated knowledge.

The apparent successful outcome of the narrative activity, creation and reflective processing of digital stories, encourages us to further test the method in this and other professional contexts, not only when it is necessary to stimulate "reflective practices", but also when it is necessary to stimulate the emergence of a community of practice. In fact, during the collaborative creation of the digital story, the community can become a true community of practice.

THE IMPORTANCE OF COLLABORATIVE LEARNING IN MULTI-PROFESSIONAL CONTINUING EDUCATION

Lynette Nagel, Alecia Samuels, Gaby Pretorius, University of Pretoria, South Africa

Introduction

In response to changing demands in the workplace and the need to improve knowledge, skills and competence with a work-related focus, qualified professionals often later resume studying at higher education institutions. While the soft skills required in addition to subject matter expertise in some professions are seldom addressed in the curricula of the initial qualifications, these courses provide such an opportunity. Though e-learn- and massive online course delivery brings the learning to the workplace, persistence remains a challenge. The role of the online facilitator is instrumental in the development of a learning community wherein students are motivated to persist. Participants need a friendly social environment, scaffolding to remain on topic, guidance to learn collaboratively through interaction, so as to tap into each person's unique knowledge and insights. The Community of Inquiry (CoI) survey has been validated to measure the quality and design of online courses, focusing on facilitation (Teaching Presence), student interaction (Social Presence) and higher order learning (Cognitive Presence).

The University of Pretoria has been offering a two-year, part time, multi-professional coursework Masters programme in Early Childhood Intervention (MECI) for the past seven years. The online MECI program focused on assisting professionals such as speech therapists, occupational therapists, physiotherapists, medical doctors, nurses, educators, educational psychologists, nutrition specialists and social workers in providing early intervention services all over South Africa, the African continent and at times abroad. In order to gain from multiple perspectives, students participated in online class discussions and in smaller, multi-professional study groups. Interactions took place in asynchronous online discussions, synchronous chat rooms and onsite contact weeks on campus. The average completion rate was around 90%.

Findings and Discussion

The 34 item CoI survey was completed by 28 respondents using a 5 point Likert scale. Teaching presence was the most highly rated presence (average 4.50), followed by Cognitive Presence (average 4.35) and Social Presence (average 4.0). The difference in averages of the Social Presence's Open Communication construct between the group who graduated in 2013 (11 students) and 17 previously graduated students was highly significant ($p<0,01$). The lower social presence values in the 2013 class were due to technical and usability challenges experienced in the online discussion and chat tools in a new Learning Management System phased in for use only by the 2013 graduates.

Qualitative analysis of open-ended responses on factors relating to course success showed that *collaborative activities* was the most salient theme, of which "class online discussions" was the most prominent code, followed by team work, team building, collaboration, brainstorming, and more. Triangulation between the course artefacts, CoI survey results and student responses showed that collaborative activities contributed to Social Presence and particularly to Cognitive Presence. The *role of the instructor / facilitator* was the second most salient theme, characterised by facilitation, feedback, instructional design, guidelines and schedule plan, all illustrating the details contributing to the high Teaching Presence scores. A team approach and collaboration in the learning community was thus highly rated and contributed to engagement, motivation and successful course completion. Reflecting back on the aspects of the course that proved most useful in their present workplace and careers, participant responses revealed a strong *team-related skills* theme, represented by team meetings and –reflection, trans-disciplinary team work and collaboration. Less salient themes included their *own personal development*, while *new theoretical concepts* further enhanced their functioning in multi-professional tasks.

Conclusions

While subject-related knowledge was appreciated, the collaborative activities, particularly participating in online discussions, contributed most towards successful course completion, in spite of some technical challenges. The perceived value of having sufficient collaborative and teamwork skills in the multi-professional workplace illustrated the worth of including the appropriate soft skills in continuing professional education.

VIRTUAL COLLABORATION IN THE BUILT ENVIRONMENT

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Introduction

This paper reports on a project hosted at the Universities of Loughborough and Coventry in the UK and at Ryerson University in Canada. Students formed groups of six individuals, two from each university, including architects, construction engineers and project managers. The project was designed to create an authentic simulation of industrial collaboration and practices with the aim of improving the learner experience of education and in increasing students' employability. The study was funded by the Higher Education Academy in the UK with the intention of identifying which success factors led to effective online collaboration and is a follow-up to a previous project sponsored by the Hewlett Packard Catalyst Program. The long term goal of the project will be to develop these findings as guidance to the conducting of online collaboration to the education sector as a whole, and to draw together the students' experiences as a user needs analysis from which to develop a technical specification for a platform to support virtual collaboration in the education of building engineering students, and perhaps the industrial sector as a whole.

Data on the project is being gathered from a range of sources, the students' reflective journals, focus groups and questionnaires to obtain feedback from the students and also direct observation of recordings of the students' online interactions in GoToMeeting. Evaluation of the students' experience focused particularly on the students' ability to conduct project management and time management strategies, in their experience of working in distributed teams, in their use of the technologies involved and (in the online meetings) the students demonstration of presence within the shared virtual environment.

Findings of the project to date

Overall the exercise was seen as an extremely valuable one in terms of providing an authentic experience of multidisciplinary international working and the following observations can be made:

- Students showed high degrees of digital literacy, selecting specific platforms to achieve specific tasks, and moving fluidly between them to achieve the desired results. For quick communication all of the students used Facebook. Some had used Dropbox for previous collaborations at university. None had used GoToMeeting before.
- GoToMeeting was successful as a platform for holding meetings from a functionality point of view, however the hardware on which it was run was not robust enough to be reliable, with audio, video and connectivity problems being common.
- Students have the literacy to make their own choices concerning which software to use for communication. Facebook works effectively, as would GoToMeeting if hardware was available of a competent specification. One student suggested having dedicated machines for videoconferencing that could be optimised for audio and video and made available specifically for the module.

The other common issue across most of the groups was the lack of compatibility between different software packages. Ideally the highest standard and most recent version of the design packages would ideally be used, and students at all institutions trained in its use. This however will shortly be less of a problem if all design packages move towards a single industry standard.

LACE – CREATING A COMMUNITY ON LEARNER ANALYTICS AND EDUCATIONAL DATA MINING – STRUCTURING THE DISCOURSE

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Learning Analytics and Educational Data Mining – New Fields of Interest

When translating learning into numbers all kinds of discourse emerge, especially when the promise is that learners, teachers, local authorities, companies and others soon will have tools that make the churning and interpretation of these numbers available for all with a device. Enthusiasts and sceptics form positions, and the battle to come is less exciting for the many stakeholders that are oriented towards step-by-step improvements of learning based on sound evidence, within ethical boundaries. Moving the field of Learning Analytics (LA) and Educational Data Mining (EDM) beyond technology hype, prejudiced resistance and pedagogical straightjacket choice, there is a need for a sound framework identifying the critical dimensions of LA and EDM, so that focussed discourse within the particular stakeholder communities can identify the most promising designs for improved learning and developing education and training systems.

In January 2014, LACE, a 30-month Support and Coordination action project under the 7th European Framework Program kicked off with the aims to promote knowledge creation and exchange on LA and EDM; increase the evidence base; contribute to the definition of future directions; and build consensus on interoperability and data sharing. LACE is eager to build on existing community activities, e.g., research being done in SOLAR (Society for Learning Analytics Research), and new EU specific targeted research projects; and to make sure that practices in Schools, Higher Education and Workplace learning are part of the conversation. These sectors are the focus areas of the project, in addition to Interoperability and Data Sharing. From the very beginning the activities of the project is directed towards involving the broader communities in creating a hub of evidence on LA/EDM supporting the discourse. The www.laceproject.eu website plays a key role in organising the community.

LA & EDM and Workplace Learning

Among the 18 themes for the EDEN 2014 Conference at least 7 directly address LA and EDM.

Competence management and assessment: Technologies for formalising and exchanging information of competency frameworks allow for systems that help individuals to position their own competences in relation to a norm defined by a company, an industry group, a professional quality body, etc. Gap analysis could give both the employer and the employee means to define actions related to employability, task management, workplace learning and training etc. The locus of intervention could be content and resources (e.g., learning outcomes linked to educational resources); support for learning (e.g., personal learning profile vs. idealised task competence profiles); or assessment and performance (e.g., competency profiles for teams to help selection).

Scaling up work based learning: Traditional approaches to manufacturing and to workforce training are no longer adequate if Europe is to compete globally. The digital marketplaces are developing rapidly, with crowd sourcing and crowd funding schemes, and Produce on Demand and Make to Individual models, – spurred by the introduction of Internet of things, 3D printing and other technological innovations. Talent driven innovation is one of the main drivers of global manufacturing competitiveness, which leaves up-skilling of the workforce imperative. Still missing are tools to support the training process and the assessment of its efficiency. Learning analytics is an emerging method of learning assessment and appraisal in the workplace. By analytics of learning behaviour of employees, it is possible to understand who needs more training, and in what process. It also allows seeing how training can be the most efficient and cost effective. LACE project will the coming two years explore the evidences of Learning Analytics in the workplace, particularly in smart manufacturing.

Quality management: The EDEN conference themes focussing on student guidance services, assessment and evaluation, retention techniques, and performance support all address the main areas of LA research, where we start seeing some results. In these areas the main challenge is to make the already existing data available for analysis.

EDUCATIONAL TRIAGE IN HIGHER ONLINE EDUCATION: WALKING A MORAL TIGHTROPE

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Are students walking around with invisible triage tags attached, that only lecturers can see? Is this fair? Or is it just pragmatic? Like battlefield medical attention, lecturers' attention is finite. And as class sizes and workloads increase, it is becoming scarcer" (Manning, 2012)

It is difficult to understate the scope and impact of the changes facing international and national higher education. Terms such as "disruption" and "innovation", "disaggregation", the "unbundling and unmooring", "revolution", and "crisis" have become endemic to discourses on the current and future states of higher education.

Against this backdrop, higher education institutions increasingly need to make strategic decisions regarding opportunities and alleviating risk. Risk within higher education both mirrors the broader societal dimensions of risk, and also presents additional aspects including the danger of obsolescence, changing funding regimes, the impact of technology on content, assessment and the role of faculty, the increasing diversification of forms of higher education and student populations, and concerns about student success and retention.

Within this context, higher education and in particular open distance and elearning (ODeL) increasingly relies on the harvesting, analysis and use of available data to inform strategic decisions regarding enrolment, marketing, curriculum development, the appointment of staff, student assessment and increasingly, strategies that inform initiatives to increase student retention and success.

The harvesting and analysis of student data therefore offers opportunities for higher education institutions to respond, timeously and appropriately, to identifying students who are at risk of failing or dropping out. The opportunities offered by learning analytics have, however, also brought to the fore concerns regarding a number of issues such as governmentality, data privacy, consent and other ethical issues and challenges.

The central question this paper poses is "how do we make moral decisions when resources are (increasingly) limited?"

This paper

- briefly introduces learning analytics as tool in the practice of educational triage;
- provides a short overview of the notion and practice of triage;
- discusses educational triage;
- assesses the potential of educational triage to responsibly and ethically respond to legitimate concerns about the "revolving door" in distance and online learning and the sustainability of higher education

Though educational triage is germane to higher education within the discourses and practices of accountability, governmentality and the optimisation of resources; there is a dire need to explore the epistemological and ontological assumptions underlying and informing these discourses and practices.

SPATIAL ABILITIES: A GROUP OF BASIC WORKPLACE SKILLS DEVELOPED THROUGH GEOGEBRA 3D

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Results of the 2012 survey of the Program for International Student Assessment (PISA, 2013) revealed a sharp decline in performance both in Mathematics and in Science for Hungary. Task types "Shape and Space" in the PISA assessment focused on one or more basic skill components (reconstruction, mental rotation, change of viewpoints, estimation of surface size, etc.) and required the utilisation of spatial abilities in everyday situations. In a recent national assessment project, we developed a visual skills framework for curriculum innovation that is now being integrated in the European Framework of Visual Skills through the EU funded project EnVIL. This paper presents tasks for a developmental, authentic assessment of spatial abilities through the new, 3D version of the GeoGebra software.

Dynamic visualisation through 3D GeoGebra

GeoGebra, this innovative, dynamic visualization software was created by Markus Hohenwarter and originally intended for use in secondary level science and mathematics education. It is available as an open source application and can be installed on any platform that is suitable to run Java. Today, however, it is available in 62 languages in 122 institutions of 190 countries. With more than 45,000 online study materials available, about 5.5 million copies of the open source software were being used in schools in 2012.

Its latest version, GeoGebra 5.0 includes 3D functionalities and is ideally suitable for digital creation in space. Perhaps the most important feature of this version is that it connects different representations of objects with their geometric display and algebraic description. GeoGebra is a dynamic system because users get a virtual designing kit with the program that enables them to visualize any spatial problem. Unlike designing on paper, the initial objects (points, straight lines etc.) can be freely moved while the objects dependent upon them move along with them based on their geometrical connections. Thus, students practicing mental rotation can actually rotate a linear representation of a cube and see its shape changing according to the change of perspective. Discovery learning at its best, the system can also be used for testing the level of spatial perception. Through an integration of the GeoGebra 5.0 Beta and 4.x, we may develop virtual learning and evaluation task sheets that activate spatial skills in an authentic setting resembling manipulation and orientation in real space.

Assessment of spatial skills

In order to contextualise visual skills as important and assessable components of education, we joined the Development of The Assessment of Cognitive and Affective Skills and Abilities Project of Szeged University. In the first phase of the Visual Literacy sub-project, we developed and piloted a set of paper-based and digital tasks. Later, the best tasks were included in eDIA, the *online, adaptive testing environment* of the project that provides an easy-to-use, freely available for all Hungarian schools testing environment. The spectacular visual appearance of the tasks of eDIA makes it an enjoyable visualisation tool that makes it easier to comprehend spatial problems than black-and-white, abstract axonometric projections in traditional paper-based tests. During electronic assessments, students work in an environment that resembles social web sites as well as gaming applications. Usage studies show that they can orientate in the menu without effort. In the "Visual Culture" task package, we always provide practice items that show manipulation options and also a voiceover for slow readers. Digital images provide a life-like representation of space and reproduce complex spatial situations accurately.

Task response types include marking, colouring and moving images, entering text, joining text and picture or forming groups of items. Cognitive skills involved in perception, design and creation are targeted simultaneously, just like in real life. Visual skills are in the focus, but other competences are also targeted, revealing the *interdisciplinary significance of art education.* In its final form, the eDIA-system will monitor personal development, offer tasks for individual skill enhancement based on previous results. Art teachers may thus design individualised teaching-learning processes that support talent development, catering for special needs (mental or psychomotor deficits) at the same time. In our presentation, we will show dynamic 3D tasks and outline spatial abilities development in ages 6-12 years.

DEVELOPING A LEARNING CULTURE IN NON PROFIT ORGANIZATIONS, 57357 A STORY OF CHANGE

Sherif Abouelnaga, Children's Cancer Hospital Egypt 57357, Egypt

57357 is a story of Change, it's the largest free-standing children's cancer hospital in the world. From its conception in 1995, CCHE 57357 has been an innovator and leader of change in healthcare in the developing world. The 200 bed state of the art hospital has been built completely by donation and is being sustained by donation; establishing a new era of fundraising in Egypt, the Middle East and Africa and is available free of charge for all children with cancer regardless of race, creed or ability to pay.

The CCHE 57357 has pledged through its mission and vision to be a leader and innovator utilizing scientific evidence based process for the good of all children with cancer.

We put knowledge into action by building our processes on evidence based practice through continuous improvement in our learning, training and exchanging knowledge with others. As a learning Organization 57357 is providing benchmark practical academic knowledge for the health care community, in order to develop top notch patient servicing and health care quality within the MENA Region and Africa. 57357 is helping the organization to improve Employee Performance through providing training & facilitations that serve the purpose of "Putting Knowledge Into Action".

VOCATIONAL EDUCATION AND THE EVOLUTION OF THE COMPUTING DISCIPLINES

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Throughout the relatively brief history of IT, undergraduate teaching programs in the IT disciplines have had to cope with the traditional antipathy of universities towards vocationally-based education. This resistance towards vocationally-oriented education has been a common feature of universities since their origins as educational institutions.

The earliest universities followed the example of the ancient Greek academies, in favouring disciplines which focused on pure knowledge, independent of its application in practice. Consequently, throughout most of the history of the university, studies in the fields of engineering and technology were excluded on the grounds that they were too 'utilitarian', lacking in the theoretical foundations deemed appropriate to a university academic discipline.

It was not until the late 19th and early 20th century that the disciplines associated with technology and the applied sciences began to earn widespread acceptance as suitable fields of study for universities.

The overview of the history of IT education in the Victorian higher education sector, presented here, has highlighted a number of important features about the way in which has developed:

- Disciplinary legitimacy and recognition: Of the ACM's five core disciplines, only CS and CE can claim to have been universally accepted from the beginning as legitimate academic disciplines in the institutions covered in the study; the other disciplines did not achieve that status until the reforms to the higher education system broke down the barriers between 'academic' and vocationally-based IT.

  Interestingly, the vocationally-based generalist applied computing program which has been the most commonly offered type of program over the study period was the last type of program to earn disciplinary recognition from the ACM.

- Disciplinary diversity: The rapid rate of technological change and the changing demands of the student market have led to higher education institutions offering an extremely diverse range of IT-based academic programs. The programs in the disciplinary areas recognised by the ACM have been far out-numbered by programs addressing specific specialist aspects of IT and its applications.

- Volatility: There has been an extraordinarily high rate of turnover in IT program offerings, particularly in the changing student market place of the last 15-20 years. The speed with which institutions have been willing to dispense with IT programs suggests that the 'hold' which IT has on its place in the academic hierarchy is at best uncertain, and at worst tenuous.

- Vocational emphasis: After providing the dominant rationale for IT programs up until the abolition of the CAEs in 1990, the influence of vocational requirements has been significantly reduced and replaced by student demand as a key driver of IT program offerings.

- Influence of external factors: 'Non-academic' factors such as the structure of the higher education system, government funding policies and market forces have played major roles in influencing the shape of IT education.

SUPPORTING TEACHER TRAINING: ICT, THE SPÉIS PROJECT AND IRELAND

Alan Bruce, Universal Learning Systems, Ireland

The education system of the Republic of Ireland has undergone fundamental and significant changes over the past 25 years. There have been major alterations to the curriculum at both primary and post-primary levels. At a strategic and policy level several other issues have begun to make a deep impact. These issues include social inclusion, early identification of children with learning difficulties, multiculturalism, partnership with parents, rights, language learning and identity and, significantly, ICT all becoming central to the planning of quality educational provision. New technologies have emerged which play a central role in the way young people communicate and learn and teachers have been required to adapt their teaching to reflect the new reality. An increasingly diverse society, changing family structures and the emergence of new social problems have added to the complexity of teachers' role. Specialized teacher-training colleges have been operated along traditional lines and are operated exclusively by the religious denominations.

This paper examines a recent innovative initiative by the Church of Ireland College of Education (CICE) in Rathmines in Dublin on ICT and its role in the formation of teachers in their training and development. CICE has implemented an e-supported portfolio system of learning scaffolding for its teacher-training program. This project – Spéis (*School Placement e-Integrated Scaffolding*) – was designed by a consortium of Finnish and Irish educationalists and e-learning experts to provide the first teacher placement e-support and portfolio system in Ireland. The project deployed advanced technologies to enable creation of a platform where academic staff, student teachers and administrative personnel could design, implement and review an ICT supported learning architecture.

The Spéis project supplements and complements recent developments in Irish curriculum reform and is seen as a template for future e-learning supported initiatives in the wider field of teacher training and support. This paper also investigates the kinds of teacher-training support implemented and cross-references these to the changed primary curriculum, the Irish government's *E-learning Road Map* and the move towards competence based learning and the utilization of e-portfolios in the wider Irish educational and learning contexts. Spéis is an innovative e-supported project and program, among the first in Ireland. In 2012, the teaching placement was extended to 10 weeks and was expected to require substantially more supervision, follow-up and monitoring. It is in this context that the College decided to move to a virtual learning, mentoring, supervision and communication system.

This e-support system was designed to achieve a number of outcomes: supervision and contact for trainee teachers and supervisory tutors in CICE; on-line engagement with trainee teachers; an e-forum and seminar framework for group learning and exchange; integration of pedagogical processes and technology solutions to meet CICE requirements; a creative and dynamic mechanism to supervise and support the placement process over 10 weeks in various and remote locations.

INVESTIGATING THE STRUCTURE OF THE OPEN UNIVERSITY OF BRAZIL

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This study aims to provide a broad overview of a research program focused on two important aspects of the Open University of Brazil system (UAB; *Universidade Aberta do Brazil*): the universities centres (usually termed NEADs) and the municipal support centres (*pólos*). Our initial research, from 2011-2012, focused on describing and typifying the municipal centres, which form the capillarity of the UAB system. To date, over 600 such centres exist (2012 data; a map can be seen here http://educacaoaberta.org/uab). During a second, ongoing phase, we aim to describe and typify the NEADs. UAB currently involves 103 institutions of higher education from around Brazil. Each of these institutions has a coordination centre dedicated to be the interface between the federal government, higher education institutions and the municipal centres. They are responsible for creating, conducting, evaluating and promoting the courses, which are offered, at a distance, to the municipal centres, sometimes in multiple locations around the country simultaneously.

In our municipal centre study, 68 centre coordinators from the northern, north-eastern and southern regional centres were interviewed, participated in cross-centre visits, and engaged in online forums. Based on our analysis, we identified three types of municipal centres. First, centres with a large number of openings. These centres are situated near capitals, in cities with 70-150 thousand inhabitants and have an emphasis on continued education. Second, in cities of 20-30 thousand inhabitants, offering a mix of initial and continued education courses. Third, the centres are located in towns that are more distant, approximately 310 kilometres from the capital of their states, with about 10 thousand inhabitants, offering between 5 to 10 courses, focused on initial training. Curiously, the third type of centre meets the highest proportion of student to inhabitants in the cities/regions where they are located. With these data, we were able to begin to provide insight into an under-studied and often criticized aspect of the UAB system.

The investigation into the NEADs begin late 2011 and is still ongoing, using visits and semi-structured protocol for an interview/focus group, aimed at creating a typology of and identifying relevant questions related to the production, access and dissemination of educational resources within UAB from the perspective of the higher education institutions, their NEADs, and their relationship to the municipal centres. In the paper, we highlighted the experience of three institutions in Brazil. The first functions in a decentralized fashion, whereby each academic unit preserves its autonomy in the development of activities within distance education. Each academic unit promotes graduate, undergraduate and extension courses through special projects, with the support of the SEAD, which functions as a secretariat or office, articulating projects approved by the collegiate faculty in each unit. It has no collegiate body of its own, constituting a small working group, under the auspices of the university administration (*reitoria*). The second university has a long-term experience with distance education, and in 2009 opened the AEDI, an *assessoria* (Office for Distance Education Support, in free translation) connected directly to the rector's office. In a Brazilian university, an *assessoria* is generally a place with bureaucratic flexibility, as its members can be nominated directly by the rector of the university and the activities can be demanded of the academic units as a demand from the rectory, without the demand for a collegiate decision in each unit, and only by the highest university body to which it is connected. A third university created its NEAD in the 1990's (pre-UAB) in order to target the demand for teachers at the initial levels of schooling. Contrary to the other two examples, in this university, NEADs were created, over time and through local demand, in each academic unit. It is currently located within the School of Education. Since 2013, a central Office for Education Mediated by Information and Communication Technologies was established to help direct, foment and coordinate a university-level effort to integrate educational technologies. These include, but are not exclusive to UAB-related initiatives. This model demonstrates the possibilities of more bottom-up and decentralized (but coordinated) approach to the integration of NEADs within the university system.

The initial data presented here aimed at demonstrating a multifaceted research project that is being conducted to investigate the Open University of Brazil. As a large, national and cooperative project, the UAB has been able, in relatively little time, to expand the outreach of distance education, particularly to in-service teachers, throughout Brazil through a publicly funded project. This research points to a non-homogeneous scenario, as municipalities and universities create unique solutions to the implementation of the UAB system. Further investigations will provide insights in the relationship between the centres and the NEADs, as well as the production, circulation and use of educational resources in the UAB system.

PROFESSIONAL DEVELOPMENT ON AN INTERNATIONAL SCALE: COUNCIL OF EUROPE – PESTALOZZI PROGRAMME VIRTUAL COMMUNITY OF PRACTICE

Pascale Mompoint Gaillard, Council of Europe Pestalozzi programme, France, Višnja Rajić, University of Zagreb, Croatia

Communities of practice as organisations of learning have developed different forms as: task-based, practice-based or knowledge based communities. The paper presents a case study of a successful community of practice developed under the umbrella of Council of Europe Pestalozzi programme for teacher development. The programme itself is transformative, enabling the combination of a number of processes and conditions of learning. One of the most important ways of supporting teacher learning and professional development for education professionals is through ongoing activities within the virtual community of practice (vCoP). The core content of the vCoP is organised in specialised sub-groups/rooms linked to projects of the Pestalozzi programme. Participants in activities of the Pestalozzi Programme are invited to become members of the vCoP. Open rooms (public spaces) exist for the benefit of the community at large. Open rooms are accessible to every member without invitation and there you find discussions and exchanges of interest to the whole community. The vCoP of the Pestalozzi Programme seeks to promote and provide opportunities for collaboration through community building. It develops a community model for supporting learning and promotes learner engagement with members and in educational settings in Europe and elsewhere. It engages members in learner-centred, pro-motive interaction to foster connection and a sense of belonging. Participants voice their feeling of belonging and identity. This paper presents the opportunities and challenges inherent to such an endeavour.

FROM CARER TO CARERPLUS: THE TRANSLATION OF A DIGITAL COMPETENCE FRAMEWORK INTO A BLENDED MOBILE LEARNING PROGRAMME FOR THE DOMICILIARY CARE SECTOR

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This paper outlines the processes and challenges involved in the translation of a digital competence framework designed for the care sector into a coherent blended learning programme for carers and care workers across Europe. The work here describes the digital competence mapping processes deployed to develop the curriculum and learning architecture for the CarerPlus programme. It employs Bruner's notion of the spiral curriculum and is built around an activity-based pedagogy to promote significant learning gains. The programme comprises several interrelated courses that target the development of digital competences in the domain of social care interventions with ICTs, professionalization and the enhancement of the quality of life of care recipients. This work has been carried out under the European funded CarerPlus project that is situated against a background of the aging demographic across Europe. The two central aims are: (a) to provide a pathway for the development and professionalization of care workers through the acquisition of a set of digital competences; (b) to combat social exclusion in older persons through their care context, utilising newly acquired digital skills and knowledge.

SUPPORTING STUDENTS THROUGHOUT UNIVERSITY CAREER: THE STAY IN PROJECT

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The STAY IN project seeks to contribute to an improved guidance and counselling provision for higher education students, focusing on online support services. The action is aimed at enhancing the quality of educational services and at improving retention rates. The action focuses particularly on the ongoing study career, both in presence (student offices) and especially at a distance, by means of a multi-level channel of communication and a continuous dialogue with the student.

Between January and May 2013 a research analysis was carried out, in order to identify the students' needs, and act to fill in the gap between support needs and support provision. The overall methodology adopted combined three methods of data collection and analysis: a set of Key Informant Interviews; a Literature Review of theory, research and practice on student guidance and counselling; a Student Survey. The survey (546 completed questionnaires) in particular offered some interesting data, by making explicit:

- a general gap between support needs and support provision;
- a gap between the supply of support and perceptions of the utility and usefulness of the support provided;
- an inadequate basic information.

The full report is freely downloadable from the project website: **http://stay-in.org**/.

To answer the identified needs, STAY IN has designed a model contributing to the development of e-services in the field of guidance and counselling, although a more general concept of e-support underlines the project approach, and has developed multi-channel open source platform.

The platform allows to carry out online guidance and support processes in full, from the first contact, to virtual meetings and asynchronous communication. However, even if the first contact is established online, when applicable and/or preferable, meetings can be organised at the services premises or at the telephone, in order to meet as much as needs and preferences possible. The support persons, namely teachers, for didactic support, guidance practitioner, for guidance and orientation, counsellors or even administrative staff (taking care of the study plans modifications, in example), are committed to track the ongoing process within the platform in any case: this will allow a monitoring on how the system is able to answer requests, and will also allow the organisation to identify frequency of problems and potential weaknesses, then to act in order to enhance quality of services.

Beyond the technical development, a great effort has been made to involve concerned people since the design phase, by organising focus groups, workshops, and consultations. The STAY IN partners believe that, even if the tool plays a relevant role in the future adoption, the key element for the success of any initiative is the commitment of people and shared vision and goals: awareness about the not-neutral role of each of the players in providing improved guidance and support services to higher education students, has been therefore amongst the main objectives of the action.

THE AGILE LEARNER – USING NEW TECHNOLOGIES AND SOCIAL NETWORKS TO MAKE LEARNING A LIFESTYLE, NOT AN EVENT

Kathleen Deery, University of Wisconsin-Stout, Dennis Deery, Irish Rose Consulting, United States of America

Rapid social change and the burgeoning pace of information creation now allows, and perhaps even requires, people to adopt a lifelong learning mind-set. It is estimated that the amount of information present in our world doubles every 18 months today, an amount that required 25 years to amass in the recent past. Traditional educational models have not kept pace with these changes, and are struggling to maintain their identity within a continually evolving milieu.

A new model for learning, borrowed from the fields of information and communication technology (ICT) and software development is being proposed that may help learners more readily adapt to the rapid pace of change. Agile Development was originally designed to promote greater efficiency in a transformative technical environment. Agile Development was unique in its approach to change because it placed a higher value on people and interactions over processes and tools. In addition it promoted a fluidity of learning by advocating for a rapid iteration of ideas in a changing environment and a focus on concrete outcomes. Throughout the past decade, educational practices have begun to mimic ICT growth patterns, and as such may benefit from an adaptation of the Agile Development Model applied to education practices. The Agile Learning Model is being proposed to increase efficiency and help learners to more quickly determine their own learning needs, build their own learning cohorts and determine their own learning outcomes.

Agile for Learning

The Agile Learning methodology is not proposed as a replacement for formal education. It is a paradigm shift, moving to incorporate the key elements of iterative problem solving and collaborative learning, while simultaneously de-emphasizing hierarchical structured learning. As such, it could be tailored to suit formal educational systems, as well as for self-paced informal learning and scholarship within communities-of-practice. Individuals who are instructed in Agile Learning methods from an early age (e.g., primary or secondary school) would further benefit from the model's principles, as they encourage lifelong learning and continuous professional development. This more accurately reflects the needs of society and supports the concept of an evolving, global knowledge base.

The Agile Learning Model proposes the following basic values:

- Individuals and interactions over processes and tools
- Acquisition of knowledge over exam preparation
- Collaborative learning over teacher-led learning
- Responding to change over following a plan
- Self-reflection and adaptation over conformity

An Agile Learning approach to education can provide learners with a valuable toolset to help them adopt a lifelong approach to learning. The paradigm of self-guided inquiry marries well with both formal and informal learning systems and is proposed as an alternative to traditional models of instructor-led and scripted dialogues. The approach assumes that learners do not know what they need to know, but are able to discover that by iterating ideas through a defined process. In this manner, learners are given flexibility to acquire knowledge using divergent methods and are empowered to create their own learning community for support as needed. A regular period of self-reflection helps this learning community to refine and adapt their learning methods to changing realities. The process is simple enough to allow a focus on knowledge rather than on the process, while simultaneously providing a framework to guide learners through a continuous feedback loop. The promotion of personal responsibility for achieving learning outcomes offers long-term benefits in self-efficacy and adoption of a lifelong learning approach to personal and professional growth.

THE ROLE OF KEY-STAKEHOLDERS AND COLLABORATORS IN THE LONG-TERM SUSTAINABILITY OF AN E-LEARNING PORTAL: THE CASE OF OPEN DISCOVERY SPACE PORTAL

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E-Learning resources, learning technologies and applications are becoming more and more popular in Europe, attracting the interest of the European Union and individual governments. E-Learning portals can be proved to be a "deus ex machina" solution in the global budget reduction for education. Stakeholders have a direct influence on factors that stimulate sustainable development and growth of technology and infrastructures and can greatly affect the sustainability of a project and its outcomes. The ODS project aims to create a pan-European E-Learning portal (multilingual open innovation platform) which acknowledges that engagement of stakeholders and their collaborative interaction with content, technology, software, webinar management service providers and e-publishers is very important for the success and long- term sustainability of the project. Thus, drawing on first-hand experiences from own research, as well as on previous knowledge, a new "stakeholder and collaborator analysis framework" and "engagement strategy" is proposed and developed for this purpose.

DISTINCTIONS BETWEEN COMPUTER SELF-EFFICACY OF PUPILS AND TEACHERS IN ELEMENTARY SCHOOL

Tomislav Topolovčan, Milan Matijević, University of Zagreb, Croatia

The aim of this study was to establish whether there are differences between the computer self-efficacy of pupils and teachers (N = 507) in the context of the classroom, as a developing workplace of the teacher in elementary education. The survey covered 184 teachers and 323 pupils in elementary school in Croatia. The results show that there is no statistically significant difference in the Basic Computer Skills dimension. In other words, both pupils and teachers assess their own self-efficacy in Basic Computer Skills equally. Further, the results show a statistically significant difference of the medium effect size in Media Related Skills. In other words, pupils assess their self-efficacy in this dimension higher than teachers. The results also reveal a statistically significant difference in the medium effect size concerning the self-efficacy dimension of Web Based Skills, i.e. the pupils' assessment of self-efficacy in the skill of internet use is higher than the teachers' assessment of self-efficacy in the same area. The results also show that pupils generally assess their computer self-efficacy more highly than the teachers do, which may be explained by the fact that these pupils are digital natives, belonging to what is known as the Net Generation, while their teachers are known as digital immigrants. This paper explains the implications of these results for modern multimedia student-centred classes, and the role of the pupil and teacher in such classes.

THE USE OF A VIRTUAL LABORATORY AMONG SLOVENIAN PRIMARY SCHOOL CHEMISTRY TEACHERS

Nataša Rizman Herga, Primary school Ormož, Dejan Dinevski, University of Maribor, Slovenia

Teaching and learning chemistry is a demanding process because it includes abstract concepts and notions which cannot be seen or touched. The use of modern technologies offers assistance in overcoming this kind of difficulties since it enables visualisation of science phenomena which are too small (atoms), fast (electrons), abstract (forces) or immense (solar systems) for direct observation. Many studies show that the use of visualisation materials (physical models, analogies, animations, simulations, sub-micro presentations) enhances the understanding of chemical concepts. Chemical contents can be visualized by using a virtual laboratory which also enables the visualisation of the sub-microscopic world.

Slovenian primary and high school teachers are well aware of the importance of ICT use in their classes also due to the project Computer Literacy which brought computers much closer to students and teachers. However, the actual execution of ICT supported classes and their efficiency have not been studied jet.

A conceptual approach to teaching chemistry combines experimental work, problem oriented teaching methods and the use of the information communication technology with the goal to facilitate efficient learning and students' motivation on all levels of the learning and teaching processes. Visualisation of abstract concepts and a safe experimental environment are only two reasons which points in favour of the use of a virtual laboratory in chemistry classes.

Information technology, multimedia and interactive elements of virtual simulation offer new forms of education. A virtual laboratory is a tool that enables independent learning, improved individualisation, differentiation and acquisition of generic and specific competences of subjects. The use of a virtual laboratory as an additional teaching and learning method allows for better acquisition of some education goals like (1) understanding of science concepts and phenomena, (2) derivation of logical conclusions based on the results of experimentation and (3) explanation of conclusions by connecting the experimental results with theory and integrating the three levels of science concepts.

The primary aim of the research was to determine the extent of the use of a virtual laboratory as an additional modern teaching strategy among Slovenian primary school chemistry teachers and which factors limited their use of a virtual laboratory. Online survey revealed that only one-third of teachers who participated in our survey used a virtual laboratory for instruction. However, when it was not possible to carry out real experiments, only a few teachers decided to use virtual experiments instead of real experiments. In this case, teachers preferred online videos of experiments.

We discovered that there are mostly two reasons for the lack of use of a virtual laboratory as an additional modern teaching strategy in chemistry instruction; firstly, the unavailability of free experimental software in Slovenian language (only a few teachers did not have hardware at their disposal) and secondly, according to teachers that were included in our survey, the lack of knowledge of virtual laboratories. Teachers feel they are not familiarised enough with virtual laboratories to be able to use them. Therefore we conclude that chemistry teachers still lack subject-related didactical knowledge for the use of virtual reality technology.

Teachers that participated in our survey are well aware of the fact that the use of a virtual laboratory brings new capabilities and capacities for chemistry instruction. They expressed interest and desire to use virtual laboratories. A successful instruction depends on teachers' personal willingness to use virtual laboratories; however, it will take time to achieve the level of the use of a virtual laboratory as an additional tool for everyday chemistry instruction comparable to the use of smart phones, tablets and similar technology by students. Students are more capable to use the IT then teachers; therefore, it is important to enable teachers to use the IT and allow them to acquire, upgrade and develop the required subject-related didactical knowledge.

JOIN THE VM-PASS LIVING LAB

Anthony F. Camilleri, EFQUEL, Belgium, Gráinne Conole, University of Leicester, United Kingdom, Anne-Christin Tannhäuser, EFQUEL, Belgium, Airina Volungevičienė, Vytautas Magnus University, Lithuania, Dénes Zarka, EDEN, United Kingdom

Mission statement

Today's learners are increasingly taking advantage of more flexible and non-formal learning opportunities through a variety of Open Educational Practices[1] (OEP), such as self-motivated study, Open Educational Resources (OER) and Massive Open Online Courses (MOOCs). Although these non-formal learning opportunities are often created by teachers in higher education, there is no formal link with the institution. Furthermore, for many people formal higher education remaining unaffordable and inaccessible. The VM-Pass project[2] believes that this non-formal learning has value, and deserves formal recognition.

The project's mission is to give non-formal learning achievements meaning within the formal education system. The project will enable recognition of virtual mobility and OER, by creating an innovative "learning passport" – a standard template where non-formal learning, assessment and accreditation can be documented such that it may count as prior qualification for higher education.

The innovative VM-Pass learning passport will open up learning, especially for disadvantaged groups and lifelong learners, by offering learners easier access to accredited higher education. The passport will help learners control their learning pathways, with flexible and tailored learning in an accessible form.

Within higher education, the project will promote OEP, along with collaboration and mutual trust, rather than competition, between institutions. It will promote the creation of networks and European partnerships, both locally and across countries, especially in the creation of flexible learning pathways and non-formal learning. The project should accelerate innovation in learning, through openness, leading to an improvement in the overall efficiency and quality of education. Ultimately, it should lead to improved sustainability of universal higher education through a digital educational marketplace.

Recruitment seminar

The workshop will start with a short introduction on the concept of "unbundled learning" and present some real cases of recognition of open learning. Subsequently, the Learning Passport, a transparency and recognition tool for open educational resources, is introduced, and an interactive sessions in small groups organised will give participants the chance to explore the instrument better and to give a teaser and chance of joining the Living Lab that VM-Pass organise.

VM-Pass Living Lab main activities:

- Work out the model, tools, services and systems of the recognition process
- Create the typology of quality systems
- Run a Recognition Clearinghouse System
- Validate the Clearinghouse System
- Provide Helpdesk
- Issue Learning Passports
- Engage partners in quality dialog process

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[1] Open educational practices constitute the adoption of open educational resources (OER) with the intention of driving improvement and innovation in teaching and learning. See www.oer-quality.org.

[2] www.vmpass.eu

SUPPORT TO EARLY EDUCATORS TO FACE CONTEMPORARY ISSUES: MEDIA EDUCATION AND VALUES

Eva Szalma, European Distance and E-Learning Network, United Kingdom, Begoña Arenas Romero, Scienter España, Spain, Laura Fedeli, University of Macerata, Italy, Elvira Sánchez-Igual, World Association of Early Childhood Educators (AMEI-WAECE), Spain, Svenja Pokorny, Pier Giacomo Sola, Amitie, Italy, Vojko Strahovnik, University of Ljubljana, Slovenia, Bruno Čurko, Association Petit Philosophy, Croatia

The state of the art in staff development in Early Childhood Education and Care (ECEC) is related to the fragmented situation of systems and provisions across EU: a common vision for childcare services is currently lacking in Europe; just as levels of investment differ greatly between Member States, picture also varies significantly in relation to childcare workforce. Childcare workers are qualified in all aspects of ECEC in some country (must hold a degree and be involved in continuous training) where in other countries they don't have formal education path and recognized professional profile. Given this varied background in the EU, there are no common recommendations/curricula, and there are very few possibilities of sharing and peer support.

Research has proven that childhood education is the most important phase to initiate a healthy development. The current crisis has shown that the challenges of Europe are not merely economic or political, but also cultural and ethical. Ethical education and critical thinking have a key role in forming an ethical mature human being. Despite this, practices, experiences and opportunities for teachers to obtain knowledge in this field vary significantly, as it is the case with the presence of innovative educational approaches. In several EU and candidate countries education professionals belong to groups with the lowest opportunities for professional development and continuous education and training. The need is clearly recognized by EU (ET2020).

The joint workshop of the NEST (Network of Staff and Teachers in Childcare Services) and the ETHOS (Ethical education primary and pre-primary schools for a sustainable and dialogic future) projects promotes the better understanding of the learning needs, resources and support for the Early Childhood Education and Care (ECEC) field. The workshop builds on the synergies of the above two projects, pinpointing two contemporary issues that professionals working with 0-6 aged children face are **digital media education** and **values education**. These are fields that their formal training might have been lacking with providing them with clear guidelines and there is a growing need for learning opportunities (informal and non-formal) and resources as well as for a dialogue. The workshop gives a recital of the national experiences and main issues in the different national working groups (from Finland to Greece), as well as the trials and tribulations of the partnership in forming an online community with professionals that are in very different level of ICT maturity. The interactive part will be divided between digital media education and values education and participants will be invited to search and identify solutions to the questions and issues presented from a problem solving approach.

Digital media education

Video game education is a research field whose range of action addresses a variety of dimensions under the area of studies about the so called new media. Children are currently fully involved in the digital world and the investigations run at international levels aim at underlining the impact of the digital game-based education and the ways it can affect the development of competences, attitudes and behaviours at an early age. A specific issue in this area of interest is the "rating" systems currently available at European level (e.g. PEGI) to support parents and educators.

Values education

Ethical education encompasses a wide variety of topics and approaches and has to be sensitive to its multi-dimensional and deep anthropological nature. The ETHOS partnership has opted for 5 key topics that are combined with a "multiples intelligences" approach and methodologies from the field of philosophy for children. The developed and available learning materials are also results of the training needs analysis (in which 150 teachers and 214 parents completed dedicated questionnaires). The 5 key areas are: Friendship, Moral values, Respect, Responsibility, and Tolerance. During the workshop we will present the approach followed by testing the existing resources and will ask the participants to help us supporting teachers when selecting resources.

INITIATIVES AND POLICIES FOR OER UPTAKE – THE FINAL STOCKTAKE

Paul Bacsich, Giles Pepler, Sero, United Kingdom

Overview

POERUP had by the last EDEN conference (2013) created a large tabulation of over 100 "notable" OER initiatives and a set of over 30 country reports. This presentation reports on activity since then and in particular on what will be the final state of POERUP deliverables and outputs when the project completes in summer 2014.

Initiatives and country reports

A team of POERUP staff and consultants are currently updating the tabulation of OER and OER-related initiatives (including MOOCs) as part of the updating process for country reports. By the end of this process there are likely to be well over 500 initiatives tabulated. Great care is being taken to check the data and to ensure that each initiative description contains a URL or other means of finding out more information about the initiative. The tabulation is being collected via a Word template but the "production" database is held in Excel and is also to be available in online database form.

A key development is the production of a world map of OER initiatives based on the extensive POERUP data. It is planned to demonstrate this at EDEN and invite comments. The issues raised in collecting such material will be presented, including the dynamics of inter-project collaboration.

In addition to collecting OER initiatives a companion operation is collecting OER-relevant policies across a range of countries. These will also be available in a tabulation and a map.

Policies

The set of three linked policy documents at EU level have undergone significant refinement since their release last September and current highlights will be presented. Versions of these are now being finalised for several European countries including France, UK, Netherlands and Poland. The challenges of this process will be reported on including how to work with countries inactive in development of OER policy and the different challenges of those active in policy development in OER or education reform relevant to OER.

Case studies

Highlights of the case studies will be presented, including our views on the relevance of these, in particular OERu, FutureLearn and ALISON, to other European countries and to the current discussion on new business models for OER and MOOCs.

Project Management and Sustainability

The challenges of project management will be briefly touched on in the light of changes in the project.

POERUP is consulting widely on the final destinations of the various wiki, documentary and tabular/database material in order to maximise the sustainability and reusability of the materials. Views from the audience will be very welcome.

TRANSFORMING EDUCATIONAL IDEAS INTO OER: A HANDS-ON WORKSHOP

Henri Pirkkalainen, University of Jyväskylä, Finland, Jan Pawlowski, Ruhr West University of Applied Sciences, Germany, Anthony Camilleri, EFQUEL, Belgium, Dimitra Pappa, National Center for Scientific Research (NCSR), Greece, Airina Volungeviciene, Vytautas Magnus University, Lithuania

The proposed workshop titled "**Transforming educational ideas into OER: a hands-on workshop"** targets learning practitioners. The aim is to introduce the concept of Open Educational ideas (OEI) as a means to sharing and collaborating around educational ideas before they materialize to educational resources. The approach will be discussed as a means to enrich collaborative work and openness around course design and classroom curricula. In the session related issues and barriers are discussed, followed by a hands-on experience on collaborative OER development.

Open Educational Resources (OER) have received increasing attention from educators, policy makers and researchers. However, the uptake of OER has not yet reached the expected level. Several barriers still keep people away from (re-)using OER. The key barriers are on the individual level, in particular motivational aspects. Users tend not to re-use OER as they have not created it themselves. What is clearly lacking is a feeling that learning opportunities have to be created by educators themselves. Thus, the **not-invented-here syndrome** seems to be even more relevant in the educational domain. Thus, finding ways to engage with like-minded educators in the early phase of OER development need to be explored.

The workshop will be facilitated by the **OEI2 project,** evolving around the promotion of innovative educational practices using open means, i.e. open learning resources and tools. In the first part, emerging approaches and methodologies will be shortly introduced and intensively discussed with the audience. The importance of engaging users at an early stage of the OER development process will be discussed. The presentation will focus on feasible methods for the collaborative development of OER, starting from their conception phase, i.e. the Open Educational Ideas (OEI). In this context, the complete Open Education life-cycle will be illustrated, discussing it from the perspective of collaborative idea generation. The second part of the workshop will illustrate the concepts and methods already discussed in the first part through the organisation of an OER development exercise, during which participants will work in groups (hands-on) on jointly creating a unit of study. Throughout the process, each group will record all related issues. Group findings will be then discussed in plenum.

In addition to creating OER in a collaborative manner, the participants get to discuss and find out for themselves how open practices around idea generation and early planning of learning resources can assist their working.

The workshop will be opened for virtual participation. The session will be available online for distributed attendance and a chance to participate in the idea generation is offered. An idea sharing space will be offered by OEI2-project by the end of April. The participants will have to chance to share their ideas and collaboration through this portal when attending the workshop virtually. Before the workshop, potential participants can already start preparations by sharing their topics of discussion and requests for collaboration activities. This online (collaborative writing) document is currently in GoogleDocs: http://tinyurl.com/OEI2EDEN.

The participants have also a chance to discuss and pose questions via Twitter (hashtag: #OEI2EDEN) during the workshop. The session moderators will constantly monitor online activities to ensure virtual participation is successful and engaging.

RESEARCH REPORT ON THE STATUS OF JUVENILE CRIME IN EUROPE

Consortium of MAJMIN[1] – LLP – Leonardo da Vinci – Development of Innovation Project – Project Number: 517580-LLP-1-2011-1-RO-LEONARDO-LMP

Purpose and goals

The purpose of this deliverable is to engage all partners in *theoretical* and *field* research aimed at gathering and producing information about minor offenders at the national and EU level. The specific goals of the research report are the following:

- Define minor offender categories in the EU (identification, description, glossary of terms)
- Identify institutions and organizations directly or indirectly involved in dealing with minor offenders
- Identify specific categories of professionals who work with minor offenders
- Provide descriptions mechanisms, criteria and good practice examples of dealing with minor offenders.

Conclusions

What we have done in this report was to: a) provide definitions of minor offender categories in the EU; b) Identify institutions and organizations directly or indirectly involved in dealing with minor offenders; c) Identify specific categories of professionals who work with minor offenders; and, d) Provide descriptions mechanisms, criteria and good practice examples of dealing with minor offenders.

Another direction to explore, as we move forward with the problem of minor offenders in Europe is to study the possible solutions as proposed by Council of Europe Commissioner for Human Rights (2008, p.2-3). We offer this list as a concluding statement of this report:

- Providing family support services based on disadvantaged areas with high crime, low educational attainment and high unemployment rates;
- Encouraging young people at risk to continue beyond minimum leaving age in education/training, possibly with enhanced benefits;
- Designing specific programmes that provide help for young people and teachers in schools by the provision of social work, psychological and mental health support, with specialist teachers trained not just in academic development, but also in citizenship and relationship skills, and in dealing with difficult behaviour;
- Promoting mentoring, involving volunteers, appropriate peers and part-time workers who have credibility with young people in a specific area/ethnic/faith group;
- Providing alcohol and drug abuse counselling services;
- Educate young offenders to avoid reoffending by:
  - fully implementing the European Rules for juvenile offenders subject to sanctions or measures, which put the emphasis on community sanctions and measures while safeguarding children's and young people's rights in all settings (from court proceedings to the deprivation of liberty);
  - ensuring that the age of criminal responsibility is not set too low, and that sanctions and measures involving the deprivation of liberty are only applied to children and young offenders as a last resort;
  - developing restorative justice and mediation programmes which make victims feel included.

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[1] http://majmin.eu

EQF BASED CURRICULUM FOR VET TRAINING OF PROFESSIONALS

Consortium of MAJMIN[1] – LLP – Leonardo da Vinci – Development of Innovation Project – Project Number: 517580-LLP-1-2011-1-RO-LEONARDO-LMP

Abstract

Educational tool structured in:

- EQF defined competencies (based on scientific research report) clearly emphasizing the necessary knowledge, vocational, technical and soft skills needed as transversal bridge between the professionals working with minor offenders;
- Identified content, structured on themes, training modules;
- VET workload necessary for this Curriculum to be delivered (dimensioned in training hours by categories of training).

Description of EQF based curriculum

This curriculum is the result of an analysis and a survey carried out as towards the main professional categories that are directly or indirectly involved in dealing with minor offenders and the juvenile crime, providing support and assistance to them. Such a Training Curriculum is one of the output of the European project MAJMIN – *Major Competences to Manage Minor Offenders.*

It is based on feedbacks and results of a **Documental Analysis** aimed at gathering information on the state of juvenile crime, which allowed achieving the **Research Report** focused on minor offenders, on institutions and organizations deputed to intervene, on professions and professionals involved in those interventions at different levels, as well as on practices and procedures of such interventions. Specifically for such a curriculum, the research was carried out with reference to the Marche region.

Further source of inspiration was a series of **interviews** conducted with professional categories previously identified, in order to deepen some aspects related to work practices and relationships of the profession, with specific reference to training needs, to opportunities for improvement of skills, to the needs in terms of functionality and interoperability; namely, the second session of interviews (some of them, video-recorded), was devoted to explore the details of knowledge, abilities and competences of the categories of professions identified.

From the analysis of the interviews and research report, it is therefore possible to identify for each macro-categories of professionals the "learning outcomes" in terms of knowledge, skills and competences, based on descriptors defining the levels of the EQF, with specific attention to levels 5, 6 and 7. Subsequently, the learning outcomes of each category are grouped into a single scheme; on the basis of that, those contents are associated with areas that, in such a Training Curriculum, are described as Training Modules. Therefore, the following document represents the outcome of a survey and analysis to define training needs and learning outcomes of professional groups involved in dealing and managing the cases of minor offenders, developing a sort of "ideal training path".

Curriculum specific objectives

Specific objectives of the training are those related to the improvement of knowledge, skills and competences in the transversal and thematic areas that, on the basis of EQF model, can be associated to the learning outcomes: Legislation; Pedagogy; Psychology; Health; Networking; Social work; Ethics/professional code of conducts

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[1] http://majmin.eu

FOCUS GROUP WITH FAMILIES

Consortium of MAJMIN[1] – LLP – Leonardo da Vinci – Development of Innovation Project – Project Number:
517580-LLP-1-2011-1-RO-LEONARDO-LMP

Motivations

- There is the need of involving family members in order to let them get awareness and responsibility;
- There is the need of allowing family members to catch the proper information, to give and to receive appropriate feedbacks;
- There is the need of promoting the dialogue, the comprehension, the interaction among all key actors (professionals and not) dealing with minor offenders;
- There is the need of equipping family members with information, knowledge, skills and competences to prevent minors offending.

Specific objectives of focus group

- There is the need of involving family members in order to let them get awareness and responsibility;
- There is the need of allowing family members to catch the proper information, to give and to receive appropriate feedbacks;
- There is the need of promoting the dialogue, the comprehension, the interaction among all key actors (professionals and not) dealing with minor offenders;
- There is the need of equipping family members with information, knowledge, skills and competences to prevent minors offending;
- To understand the expectations and the real requests of families to the institutions; to facilitate communication and creation of a relationship based on respect and reciprocal trust between people who are a part of intimate word of the minor and the social community in which family and minor live;
- To stimulate on professionals of the services linked to juvenile world a less judgmental approach and more respectful and sensitive one about the delicate period of life which minor lives and about family difficulties.

Conclusions of the organised focus groups

The family is no longer able to educate their children, because of the lack of sample from the adult world, by the parents themselves and by institutions. The messages that reach the young are wrong and morally harmful; messages of violence have become normality. The "culture of sacrifice" and the personal commitment are lost; to get what they want any means is permitted; the ephemeral values: money and profit. The goal is to HAVE MONEY, it doesn't matter what the medium is. The institutions do not support young people and do not give them a chance. The parents spend few times with their children and didn't speak enough with them. The large use of web influences the personality of the youth, producing a lack of face to face relation, the real one. The rules are transgressed, and consequently youngsters are not educated in "respect". Youngsters lack respect for laws, values, traditions and individuals. The parents often charge the youngsters of their expectations and this causes them stress, responsibility they should not take. The youngsters stay in front of the PC and they do not have the possibility to express and their energy and aggressiveness. They need to blow off steam to escape the tension, they need to compete (importance of sports). The sense of community is nowadays missing and this does not facilitate the management of young people; lacking communication and relations amongst neighbors and citizens do not support any more parents with a system of sharing and comparison made by mutual agreement of the same rules.

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[1] http://majmin.eu

HOW TO DESCRIBE STUDY PROGRAMMES BY LEARNING OUTCOMES – IT'S NOT AS HARD AS IT WAS BEFORE

Gottfried S. Csanyi, Vienna University of Technology, Austria, Alfredo Soeiro, University of Porto, Ana Dias, University of Minho, Rita Falcao de Berredo, Universidade de Lisboa, Portugal, Carmen Royo, European Universities Continuing Education Network – EUCEN, Spain

According to Bologna principles, intended learning outcomes should play a significant role in the European HE system and help to build the European Higher Education Area (EHEA). Some institutions already apply these principles and describe their courses, modules and programmes in terms of learning outcomes. Others don't. For sure there is a bundle of reasons for both, individual teachers and institutions, to postpone the use of learning outcomes (instead of content) from year to year. And the ECTS / European Credit Transfer and Accumulation System (traditionally based on aspects of input) is not really helpful to push through learning outcomes (which define the output). Nevertheless, in this workshop we do not want to deal with lacking motivation to apply learning outcomes. On the contrary, the goal is to support those who are interested and willing to overcome technical hurdles and compensate lacking know-how for this rather new challenge (in terms of the developmental speed of educational systems).

Some classification tools (like EQF, NQF, atlas of competences, ISCED classification of fields of education, Erasmus Subject Code, or learning outcomes database from VIRQUAL project), standardized terminologies (like the European Dictionary of Skills and Competences from DISCO project) and guidelines to link learning outcomes to valid assessment methods (see: ALOA model and TALOE project) might help to be more successful and efficient in translating traditional descriptions into Bologna oriented wording. Students and (partner) institutions will be glad to enjoy increasing transparency resulting from competent and consequent thinking, writing and acting in terms of intended learning outcomes.

Description of workshop

- Objectives:
    – Identify and discuss the main reasons for not applying learning outcomes for course descriptions;
    – Show and discuss tools and procedures how to overcome the identified problems.

- **Justification of the importance/currency/need:**
    – According to Bologna principles learning outcomes should be an indispensable element of curricula, course descriptions, credit points (ECTS), etc. But in too many cases they are not.

ARENAS FOR LEARNING – ENHANCING STUDENT INTERACTION IN ONLINE EDUCATION

Linda Reneland-Forsman, Alastair Creelman, Linnaeus University, Sweden

With this workshop we aim to use contemporary and own research to engage workshop participants in a collaboration around the consequences of the role of social for knowledge-building (i.e. meaning-making, commitment, motivation and engagement) and for how we design learning contexts with digital media. Dealing with "social" in a digital learning environment has proven more of a challenge than actually handling technology. Pitfalls are design issues of the social element such as taking communication for granted when interactive media is used and also acknowledging the role of social but separating social communication from knowledge building processes. Social communication holds a key-role for implementing expectations on interactivity and dialogical conditions for learning. Workshop content confronts the importance of changing interfaces, variation in representations, low transactional distance and creating a community worth participating in but as an inventory and sharing of participants' knowledge and experience of digital media solutions. Both presenters have also conducted research on successful completion strategies to which suggested strategies are linked.

Objectives of this workshop

A recurring feature in discussions about online education is the issue of completion rates, especially with regard to MOOCs. In many countries state funding of higher education takes completion rates into consideration as a key quality indicator and as a result online courses with lower completion rates are often vulnerable to cuts. In our article we argue that greater attention should be directed at identifying the causes of student drop-outs and focus on improving the level of student interaction, sense of presence and group dynamics. In particular we wish to focus on the critical factor of transactional distance in a course as a prime motivating factor for course completion. We hope to change the focus away from simple completion rate statistics to examining the quality of the learning environments we offer our students and how learning can be fostered in online education.

The aim of this workshop is to discuss and compile methods and strategies for raising the level of student commitment and group dynamics in online courses. Using the format of a learning cafe, both face-to-face and online, we aim to pool participants' experience in this field and compile a list of experience, best practice and areas for development. We aim to record the workshop using Adobe Connect. The results of the session will be openly available on a common online workspace and further discussion and dissemination will be encouraged by starting a Facebook group.

THE MEDIUM IS THE MASSAGE

Ari-Matti Auvinen, HCI Productions Oy, Finland

"The medium is the massage" provides a unique combination of an intensive one-to-one consultancy in the use of social media with a relaxing foot reflexology massage. The objective is to create a trustful and relaxed atmosphere to solve the fundamental issues in the use of social media in education and training. This concept has been tested twice in the Finnish ITK conference in 2013 and 2014 and also in 2013 in the EDEN conference in Oslo.

The experiences of these sessions have been encouraging. For the receivers of the foot reflexology massage these sessions have provided a peaceful oasis in an intellectually challenging conference, but also a rare possibility of reflect own experiences and ideas with a seasoned eLearning and social media expert in a dedicated environment.

The presenter, Ari-Matti Auvinen (HCI Productions Oy, Helsinki, Finland) has been working, among others, as Chair of the EDEN NAP (Network of Academics and Professionals) 2008-2014 and is a well-known expert of eLearning as well as of the use of social media in education. Since 2009 Auvinen has studied reflexology and also practices reflexology and lomi lomi massages in his wellness studio in Helsinki.

The issues tackled with some key notions and proposals will be posted to social media and also in the workshop room (anonymously).

U.S. APPROACH TO GAINFUL EMPLOYMENT, FUNDING MECHANISM, AND INTERNATIONAL PARTNERSHIPS

Marci Powell, USDLA and Polycom, Darcy Hardy, USDLA and Blackboard Inc., Rob Robinson, USDLA and Civitas Learning, United States of America

A critical problem impacting US employers today is a lack of trained, skilled workers that are qualified for the positions that employers have available. While these positions remain vacant, there are many individuals across the US who are unemployed or underemployed because they don't currently have the skills or education required to obtain affordable wage employment.

Utilizing distance learning technologies afforded through the US Department of Labor's $2 billion Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant program, higher education, community and technical colleges, in partnership with their local Workforce Investment Boards and other agencies, work together with private industry to design and deliver course programs and curricula. These courses and curricula serve to educate both traditional and non-traditional students, and provide the specific skills and knowledge necessary to fill jobs within their region's employers – often the area's largest industries.

The program targets trade-impacted workers who have either lost their jobs or who need to return to school in order to remain employed, as well as other adults who are returning to school for the same reasons. Schools must develop programs that can be completed in two years or less and must use online and technology-enabled learning strategies. The program has distributed $1.5 million to date and will distribute the final $500 million in September (the last Solicitation for Grant Applications was released on April 16). All content developed with TAACCCT funds must carry a Creative Commons license as an Open Educational Resource (OER). More information about TAACCCT can be found at http://doleta.gov/taaccct.

One outstanding example of an institution taking advantage of the TAACCCT grant program is East Central Community College in Mississippi. The east central region of the state of Mississippi found itself in a critical situation due to manufacturing plant closures, resulting in lost jobs and unemployment rates soaring to 22%. With the help of TAACCCT funding, East Central Community College (EECC) is turning things around and bringing hope back to their community.

The college used e-learning to put workers back in the workforce by helping them transition from low-level to high-level skilled jobs and providing opportunities to pursue different career paths. The Dean of Workforce and Development and the Community Based Job Training Grant Coordinator leveraged a $1.8M grant in an innovative way. Video conferencing centres across the region have been equipped with technology to offer live classes while capturing instruction and content for on-demand replay. Using the centres, ECCC was able to virtually leverage teaching staff to provide high touch instruction to dislocated workers and students near their homes. Each centre customized classes to fit local employers' needs.

TAACCCT is one approach the United States is taking to address the challenge, and some of the best approaches taken by TAACCCT grantees will be highlighted in the workshop. In addition, the workshop will highlight an effective U.S./European partnership, which was a recipient of a USDLA International Award.

Three guest speakers have been invited to participate virtually to share their expertise and experience in workforce education Grantees will share the way they utilized TAACCCT funds or partnered with the United States. They will also be asked to share their most challenging situation or issue, and describe the approach they took to address it along with the results to date.

STRATEGIES FOR EDUCATIONAL CHANGES: WHAT CAN WE LEARN FROM THE DEVELOPMENT OF E-PORTFOLIOS & OPEN BADGES?

Igor Balaban, University of Zagreb, Croatia, Serge Ravet, ADPIOS, France

Introduction

The objective of the workshop is to increase the awareness of educational practitioners on the conditions required to implement effective change in their practice and organisations. Too often, when not treated with suspicion, new technologies tend to be assimilated into the old educational framework and paradigm. Our aim is to explore how we can go beyond assimilation to actually contribute to the effective transformation of learning practice and organisations. Based on the extended experience of the members of the *Europortfolio Network*, we will elicit the different factors that hinder/accelerate educational change. For that purpose, we will explore the history of the development of two different, while closely related, technologies: *ePortfolios* and *Open Badges.*

Description

The history of ePortfolios goes back to the early 90s, while Open Badges is a more recent initiative supported by the Mozilla Foundation: September 2011. After a short presentation of a comparative analysis of ePortfolios and Open Badges' history, developments, stakeholders, technologies, successes and failures, etc., participants will be invited to review the findings and contribute with their own experience and ideas. Open Badges, with cMOOCs, are probably among the most interesting and challenging recent developments in the world of education. The potential for change is literally massive. Yet, hijacking cannot be excluded (xMOOCs?)! Having a better understanding under which circumstances an invention can become a true innovation is of critical importance to educators who are looking towards improving and transforming education. In order to elicit the key factors leading to/hindering innovation, the workshop will focus its attention on two closely related technologies: ePortfolios and Open Badges. Some of the questions that will be addressed are: (1) How did the different communities emerge and grow? (2) Who are the main stakeholders and leaders? (3) Who are the innovators and the laggards? (4) How do the micro/meso/macro levels interact? (5) What collaboration/cooperation/competition exists between technologies?

Taking a closer look at the similarities and disparities in the development of two closely related technologies (ePortfolios & Open Badges) could provide some interesting insights. For example, both ePortfolios and Open Badges: (1) share similar characteristics: both use evidence as main elements to demonstrate achievements (and the initiators of Open Badges had the vision to create a "distributed ePortfolio"), (2) are used in similar contexts: monitoring learning, recognising learning achievements, accreditation of learning, applying for a job, etc. (3) share intimate links: one creates an ePortfolio to get an Open Badge, then displays the newly awarded Open Badges in his/her ePortfolio. The exploration of the similarities and differences between the origins, developments, adoption and impact on practices and institutions, should provide some interesting insights to those willing to contribute towards educational change and improvement.

Outcomes

The outcomes elicited by the participants during the workshop, will contribute to their own reflection as well as to the general reflection on innovation and educational change through the planned publication of a *Green Paper* on ePortfolio, Open Badges and educational change. The lessons learned from the comparative analysis should encourage participants to take responsibility for innovation in their own practice and institutions. The work produced during this very interactive workshop will contribute to (and be acknowledged in) a *Green Paper* that will be published in 2014 within **Europortfolio Network** initiative (**LLP/KA3-ICT**). It should also contribute towards recommendations for further developments and increased collaboration between these two streams.

TIME TO ASSESS LEARNING OUTCOMES IN E-LEARNING (TALOE) – E-ASSESSMENT PRACTICES

Alfredo Soeiro, University of Porto, Portugal, Jüri Lõssenko, EISTA, Estonia, Sandra Kucina, SRCE, Croatia, Inés Gil-Jaurena, UNED, Spain

The Learning Objects (LOs) have been widely adopted in education with different roles. Their early adoption in Europe is associated with the vocational training. LOs are often used to describe the competences of the individual after the training, with the goal of improving the dialogue with potential employers. The adoption of LOs in higher education, in Europe, is associated with the European policies with impact on national and higher education policies, and is usually interpreted as what a student is expected to be able to do as a result of a learning activity (learning outcomes).

The e-assessment is considered to be as critical for e-learning as assessment is critical to traditional learning. The general concept of e-assessment used as a starting point for this project is using technology for assessing students learning.

The main goal of the TALOE project is to develop a web-based platform to help teachers and trainers decide which e-assessment strategies to use in their online courses. This tool is aimed to raise teachers' awareness about the variety of e-assessment strategies in order to achieve better quality of the learning process. The main idea is that teachers will describe the LOs of their course or module and the TALOE platform will analyse them and provide an e-assessment strategy that is consistent with the intended learning.

The focus of this workshop will be on the innovative e-assessment strategies. The project is researching and will select the e-assessment practices, based on the criteria also developed by the project partners, which focus on the model type, the pedagogy and the techniques as well. The list of criteria for identifying innovative assessment practices was drawn up as follows:

- be designed to measure the achievement of the intended learning outcomes and other course/programme objectives;
- be appropriate for their purpose, whether diagnostic, formative of summative;
- have clear and published criteria for marking;
- where possible, not rely on the judgements of single examiners;
- assess more holistic, complex activities using knowledge and skills in problem-solving or authentic tasks;
- use a diverse range of assessment methods, resulting in qualitative descriptions or judgements;
- integrate assessment with teaching and learning and involve students as active participants;
- identify and describe achievements according to relevant criteria and standards.

The workshop will be an opportunity to discuss the selection criteria for the assessments practices and the e-assessment practices with other educators and e-learning experts by splitting into groups and analyze them via moderated questions and demonstration possibilities. The workshop results will be published as main output taken the format of a report and incorporated in the web tool that will be developed in the second stage of the project.

As a next step, the web-based platform will be developed and tested with a minimum of six pilot case studies.

VIDEO USE IN HIGHER EDUCATION: PROMOTING HIGH QUALITY HIGHER EDUCATION WITH UP-TO-DATE MEDIA APPROACHES

Sonia Hetzner, Stefanie Zepf, Claudia Schmidt, University of Erlangen-Nürnberg, Germany

All over Europe universities face the challenge of improving education, accommodate a raising number of students and meet difficult budget requirements. Students are demanding better, faster and adapted to their needs education helping them to compete in a globalised world. Furthermore students expect more and more universities to provide access to good quality electronic learning tools.

At the same time universities are competing more and more for students in a global pool of higher education providers. And due to the European financial crisis, public funds for education are not keeping pace with rising costs.

Universities and other higher education organisations have used videos for many years to introduce special issues to their students, or for promoting collaboration on web-based video technologies in order to save time and travel costs. However a big majority is still very reluctant to use videos to improve education, promote flexibility and offer better support despite budget constraints.

The workshop will give an introduction to the topic, analyse good practice examples of video use in higher education, review interesting, sometimes unexpected evaluation result and promote high quality use of video in higher education at lower costs.

Examples and evaluation results are outcomes of an extend initiative at the University of Erlangen-Nuremberg for increasing teaching quality and innovation. Within the initiative a special focus is given to innovative, pedagogical meaningful and effective use of video in education.

Description of workshop

There are excellent reasons for the use of video in higher education (for Classroom as well as for online teaching).

In the workshop three key questions would be discussed in the group.

CREATING MEANINGFUL LEARNING FOR CHILDREN WITH A MEDICAL CONDITION – KEY EDUCATIONAL FACTORS AND RELATED ICT SOLUTIONS

Michele Capurso, John L. Dennis, University of Perugia, Italy

Education represents the most important factor in prevention and mediation of psycho-social consequences for children with medical conditions. Despite this these children are less engaged in learning, and face social difficulties resulting in lower academic achievement. Students with medical conditions who are hospitalized or must stay home (Home and Hospital Education - HHE) do not have access to mainstream education.

In such a situation ICT may have a significant role. Distance learning and communication is crucial in maintaining continuity in education and in social-emotional processes for children who must stay at home or in the hospital for extended periods. However, mere use of technology in education does not ensure quality in process or outcome. Guided by educational theory, educational factors must always be taken into account and should direct technology choices.

This workshop is designed to take the form of a discussion group where a list of key educational factors elaborated from previous research in educational psychology will be discussed. These factors including relationships, making and constructing knowledge, assuming public roles, metacognition and individual differences will be discussed as well as the ICT technologies that help enable these children with medical conditions learn "as if" they were in a mainstream educational system. In the process how technology can impact methodology and pedagogy in HHE, and how those technologies can be effectively applied in 'normal' didactical situations will be discussed.

Practical use and potential problems associated with ICT for the education of children with a medical condition will be assessed. A list of recommendations for the best use of ICT for children with a medical condition will emerge.

One outcome of this workshop is that Major themes will be determined during the workshop will be made readily available to all participants by the end of the workshop. Another outcome of this workshop will be: an aggregate list of the key educational factor/ICT solutions as determined by expert panel. That list can later be paired with published peer review research seeking those factor/solutions that meet both validity and reliability criteria as well as frequency of use and may be used for future works and research in the field.

This workshop's results will be later integrated with other focus groups' results coming from all over Europe and Egypt, as part of the work of the EU funded project LeHo (Learning at Home and in the Hospital – Multilateral Lifelong Learning Programme).

1. How do higher educational institutions attract and retain quality students by offering them good quality education with high flexibility in learning?
2. How can higher education institutions promote the use of video in day-to-day activities in a cost effective way?
3. How can universities maximize video production techniques and pedagogies for next-generation learning?

Examples and evaluation results are outcomes of an extend initiative at the University of Erlangen-Nuremberg for increasing teaching quality and innovation. Within the initiative a special focus is given to innovative, pedagogical meaningful and effective use of video in education.

LINKING STUDENT SERVICES AND DIGITAL CAREER LITERACY

Ivana Rajić-Stojanović, Danijel Dadović, University of Zagreb, Croatia

Rationale

Higher education studies ensure students' formal qualifications that support their transition into the labour market. However, a university degree no longer guarantees automatic access to well-paid jobs or a satisfying career. University career development services should also provide students with the support and space to reflect on their work potentials and career aspirations. In addition, one of the main functions of these services is to encourage students to practice the skills that they will utilise when they look for and/or find working experience. In addition, it is very important to secure advice and guidance regarding career development and career management skills. In particular we would like to emphasise the use of the internet and IT in this area as well as the role of university career development services concerning students' digital career literacy.

The internet is transforming how individuals manage their career development. Almost all of the activities regarding career development have been influenced in some way by the internet and new technologies. In conclusion, it is important that students, as future employees and employers, are educated to use the internet rationally and professionally. Recent discussions about careers emphasise the need for responsiveness to labour market conditions. A career is not something that a person chooses upon graduation, but rather a personal project that is built throughout life. Career management is about having the skills necessary to explore a range of possibilities and respond to opportunities as they arise. It is also about gradually building a professional reputation and network that supports career development. The way these abilities are then combined with existing career management skills is what defines an individual's digital career literacy.

Enhanced digital career literacy offers different possibilities to proficient users: access to career information, opportunity to interact with employers, a place to build and maintain professional networks and manage one's professional reputation. Considering these new tendencies, further activities in this workshop will focus on strategies and aspects of digital career literacy in context of the 7 C's framework (changing, collecting, critiquing, connecting, communicating, creating and curating).

Structure

In this workshop participants will explore the skills students need to develop successfully and pursue their careers using the opportunities supported by the internet and new technologies. The workshop will be interactive and will include participants' review of their own practices. Participants will also identify how these skills could be enhanced and/or developed for this specific target group in addition to a *hands-on* experience in the domain of confidential and sensitive information disclosure as a very important aspect of their digital career literacy. Authors will put an emphasis on how career workers can use the internet and information technology in general as a medium for the delivery of career guidance and to define strategies for the development of digital career literacy among university students.

Objectives

- to frame the relation between student career development and online technologies
- to propose strategies and highlight aspects relevant for the implementation of digital career literacy contents in context of the 7 C's framework
- to explore how digital career literacy skills can be implemented within the student learning experience and where appropriate within student services and activities
- to share examples of good practice amongst experts
- to turn available IT resources into a more useful information utilities

LEARNING ANALYTICS

Lampros K. Stergioulas, Brunel University and University of Surrey, Munir Abbasi, Masoud Fakhimi,
Brunel University, United Kingdom

Learning Analytics promises a huge opportunity for teachers and decision/policy makers to explore new tools and techniques to use data effectively, to bring real changes in teaching and learning, and to transform the accountability, efficiency, and relevance of school education. Nowadays some analytics tools are ubiquitous in schools providing teachers with charts, graphs, and other data representations that help them see how their students are performing and how students interact with one another in web-based learning environments to help the teacher determine how to engage their students online. Emerging tools and technologies for learning analytics aim to capture a significant amounts of "learning resource usage" data from socially powered platforms to enable teachers to measure and analyse a number of relevant variables, such as time spent on a resource, frequency of posting, and number of logins, and other variables which determine performance etc. This empowers teachers to assess progress and focus on individual students, including progress summary, daily activity report, class goals report, progress report, student activity report, etc. Teachers can also be supported in how to personalise learning for students in need for more help in specific areas. New visualisation tools and processes can play a significant role in improving administration/management, research, teaching and learning, and resource provision in school education. Thus Analytics may enable schools to measure their operational performance, and improve the effectiveness of operations, including learning and teaching processes, learners' assessment processes, admission management and drop-out prevention, and resource management. Some of the challenges in School Analytics, which will be discussed in this workshop, are:

- Integrating social and community analytics for learning in the school (with the support of many types of social, community and learner analytics)

- Data analytics of social media, networks, social innovation and creativity: applications to School Analytics

- Applications of analytics for impact assessment of learning interventions in the school, including: Impact of learning technologies, KPIs for learning, Assessment of learning, Measuring sustainability, Personalised learning, Analysis of learning data and Learning analytics tools in the classroom.

- Data compatibility and integration

- Data integrity and completeness

- Scaling up

- Real-time reporting

- Usability, privacy and interoperability issues

- Advances in Teaching and Learning Analytics and how they influence the new digital landscape of school education

BUILDING CULTURAL (SELF-) AWARENESS IN TEACHING/LEARNING PRACTICES IN ONLINE INTERNATIONAL PROGRAMMES

Annamaria Szilagyi, Laureate Online Education B.V., The Netherlands

This session analyses student/teacher roles across cultures as perceived by Nigerian and Saudi Arabian students and thus, enables participants to develop culturally sensitive teaching practices. The presenter analyses student and teacher roles within Nigerian and Saudi Arabian educational cultures, compares Western, Nigerian and Saudi Arabian learning and teaching models, demonstrates learning strategies based on Nigerian and Saudi Arabian students' perceptions and provides tips on how to implement cultural awareness in teaching practices in online international postgraduate and multicultural classrooms. The presenter intends to engage the audience in various interactive activities and discussion topics to promote cultural self-awareness when dealing with international students in online programmes. By the end of the session, participants will be aware of the unique needs of international students in online international postgraduate programmes and understand the importance of cultural self-awareness in teaching practices.

Objectives of the session

This session aims to present:

- diverse student needs and expectations based on culturally different student-teacher roles
- tips and strategies regarding the development of culturally responsive teaching practices

As for **learning outcomes**, participants are going to:

- become aware of the unique needs of international students in online programmes, especially those of the Nigerian and Saudi Arabian student population
- understand the importance of promoting cultural self-awareness in teaching practices and be able to delineate various cultures that students represent in the online class
- become aware of the importance of effective cross-cultural communication

THE CONSTRUCTION AND MANAGEMENT OF THE DISTANCE EDUCATION TEACHING PLATFORM SUPPORTED BY THE MOBILE TECHNOLOGY

Huilin Tang, Yuebo Li, Guizhou Radio & TV University, China

The construction and management of the distance education teaching platform supported by the mobile technology

Being the new stage of modern distance education, mobile learning is now transforming from theoretical research to practice. The four features of mobile learning, i.e. the mobility of the ways of learning, the customization of the learning materials, the portability of the learning device and the relevance of learning situation, are in line with the essential feature of distance learning, i.e. separation of time and space, and they also correspond to the value of promoting the development of learners and meet their demands of individualized learning. Radio and TV universities are confronting two obstacles in their progress of transforming towards open universities – what kind of teaching network platform will they need to develop and how they will carry out the teaching management in a more efficient way. These are directly related to whether the open universities will adapt to challenges of our time in a better way and whether they will have more space to develop or not. The integration of the Three-Network-in-One platforms which are based on radio and TV network, Internet and mobile network, has broken down the barriers between the single network platforms and assure the learners of the learning which is diversified, customized and flexible. The Simultaneous Development of Seven Aspects, which include the optimization of courses, the streamlining of the instructional design, the order-oriented management, the customization of service, the independence of study, the improvement of the teaching skills and the socialization of the teaching assessment, has renovated the traditional teaching management and improved the informatization and standardization of the teaching management in open universities.

AN INTEGRATIVE QUALITY ASSURANCE FRAMEWORK FOR E-LEARNING CONTENTS AT THE NATIONAL LEVEL IN KOREA

Yong Kim, Korea National Open University, South Korea

In this paper, we discuss our research framework of a quality assurance framework that is centred on the learners and developers. This work has given rise to the belief that an integrative framework for quality assurance is an influential and flexible means for examining the quality of various educational contents and services. It is in this way that an integrative framework can be used to deal with the issues above by providing prompt and plausible reflections on the change of content development and delivery technologies. The plausibility of the quality assurance framework can make it possible to contend with various conditions and circumstances in e-learning contexts.

Study Phases

To develop an integrative quality assurance system for major educational contents, we followed a three-stage approach. First, we defined a possible research framework for the present study to integrate each quality assurance process and component in order to evaluate educational contents. In this stage, we conducted literature reviews for each service by possible technology services. In the process, we found common components and characteristics for each service. Second, we discussed and extracted core components to establish a standard for quality assurance; we allocated each component into a specific domain (including usability assurance, quality assurance, and technical assurance); and then we specified the comprehensive and relevant components. Third, we developed an integrative framework using the core components and examined how the framework can create a comprehensive understanding in most quality assurance processes in domestic and foreign countries with regard to e-learning services and educational contents.

Result of Study

We defined three dimensions to evaluate the e-learning contents in an integrative framework: usability assurance, quality assurance, and technical assurance.

- **Usability Assurance**: Usability assurance is a key dimension in ensuring a learner's success. To examine the usability assurance, one should ask how much the content in the service can support the user's learning. In addition, usability assurance includes the satisfaction level of the user with the contents. This domain consists of learning plan, learning efficiency, learning convenience, learning satisfaction, learning outcomes, learning accessibility and learning communications.

- **Quality Assurance**: Quality assurance is another key dimension in the integrative quality assurance framework; it focuses on securing minimum quality of a system's contents for educational purposes. This domain consists of content development, content development method, copyright and ethicality.

- **Technical Assurance**: This dimension encompass the standardized components for contents (e.g. metadata), and examines whether systems minimize errors when executing the contents. This domain consists of metadata, e-portfolio, general web service specification, learning tools interoperability, question and test interoperability and integrity.

Educational Implications

The framework developed in this study is focused on the contents in the Korean education system and is based on a new information technology context. We believe that this paper will contribute to the design of a plan for e-learning quality assurance at the national level by presenting the following: (a) how to cope with quality assurance despite multiple assurance criteria and contexts, (b) the essential components to assure quality of e-learning and educational resources, and (c) how to design the framework in a way that integrates various quality assurance criteria and processes.

QUALITY ASSURANCE FOR OPEN E-TEXTBOOKS – CASE OF "OPEN AGH E-TEXTBOOKS" PROJECT

Karolina Grodecka, Agnieszka Chrząszcz, AGH-University of Science and Technology, Poland

Open AGH: description of the case

Since 2010, when Open AGH, the first repository of academic OER in Poland was launched by AGH-UST, the benefits of open education have been the driving force for development of the strategy towards opening up STEM resources in a more holistic way. Currently the successful project is coming to a second iteration – *Open AGH e-textbook* project. Designing phrase of the functional requirements for the openness was predated by the survey of the University's community. The study aimed to diagnose the awareness of OERs among the academics. The results would indicate the attitudes towards openness and thus the scope for the developments. The priority was given to the quality assurance mechanisms for open e-textbooks, understood as the adjustments of the form and scope to meet the needs of staff and students at the technical university. The results of the survey showed that over 60% respondents recognize the potential of the quality of OER in three aspects: improving the quality of teaching materials, improving the quality of classes and development of better curricula. Correlation of data to the level of OER usage in teaching (23% of respondents) and a very low percentage of use of the materials published in *Open AGH*, we can assume that the current materials are not fully adjusted to the needs of this academic community. In addition closed formats prevent the free use of existing resources and their adaptation.

Open AGH: current development

The philosophy of open e-textbooks at AGH-US is based on the concept of the *flexbook* initiated by CK-12 Foundation. The resources can be therefore freely modified, merged and adapted to the new educational content. A modular structure of the content allows to connect any modules in a learning/teaching path to fit the university's curriculum, consistent with the National Qualifications Framework. Each teacher can develop an individual textbook corresponding to the programme. The e-textbook can be shared online as a link or file, it can be also treasured online for further amendments. The content can be exported (LaTeX formats ODF) to maximise the openness and re-use. Flexible creation of e-textbooks provides students with access to complete materials adapted to the scope of the subject. What is more, each student is able to build own resource based on the available modules. This can be particularly useful for students from other institutions where the curricula are different. Therefore the flexibility and modularity ensures widespread expansion of the content. *Open AGH e-textbooks* are available without any restrictions under Creative Commons Attribution – Share alike license that guarantees an opportunity to adapt resources in order to fit them to the local context (language, learning/teaching needs, culture etc.) The openness of high quality content would lead to the development of new resources available in an open way. The open licence makes it possible to update and improve materials, allowing high quality e-learning components to evolve as users improve content and offer it back to the OER community. As there is still a lack of localized STEM-related digital resources this is an important asset.

Quality assurance of open resources

With a flexibility of the modular e-textbooks AGH, it was crucial to work out the mechanisms to guarantee not only the quality of the modules supplied by the acknowledged authors (academic teachers), but also to ensure the maintenance of high-level content after adaptation as OER publicly available online. The process of reviewing and editorial correction of e-textbooks is inevitably included in the project *Open AGH e-textbooks* as a well-established quality assurance practice. However, when planning the qualitative mechanisms it was required to focus on the development a framework for creation digital content, which would always be tailored to the curriculum. This assumption was considered as crucial for both teachers and students as opened e -textbooks AGH are and will be based on AGH's Syllabus, consistent with the National Qualifications Framework. Such a solution will always ensure the state-of the-art of the textbooks. The implementation involves such a system functionality that would provide each academic teacher with a flexible creation of e-books from predefined modules as AGH's Syllabus was integrated with the system. As a result, a teacher is able to create his/her own e-textbook with existing modular content, already reviewed and approved by the subject's coordinator. Embedding e-textbooks AGH in the context of the broader university's teaching framework provides students with updated high-quality resources tailored to their needs. The release of the first trial e-textbooks in physics and mathematics is planned for March 2014 and is available at http://open.agh.edu.pl/open2/. Whether will qualitative mechanisms that fulfil their task be visible in the next academic year? Full academic year is the optimal time to get teachers and students acquainted with the innovation. The impact of open e-textbooks will be the subject of further studies planned for AGH community in terms of attitudes and awareness about OER.

COLLABORATIVE WORKPLACE: A CASE STUDY OF A HIGHER EDUCATION INSTITUTION

Maja Ćukušić, Andrina Granić, Mario Jadrić, University of Split, Croatia

Introduction

The paper deals with collaboration and knowledge sharing tools in a specific working environment such as a higher education institution (HEI). After elaborating on needs for collaboration within HEIs in the second part of the paper, the third section deliberates on higher education's processes that can benefit from comprehensive knowledge management solution, more specifically its collaboration functionalities. Fourth section presents Microsoft SharePoint as a very strong collaboration platform and details out an ongoing effort of one HEI to make use of collaboration platform features in the form of a case study.

Collaboration platforms for HEIs

Collaboration technologies can make a major contribution to knowledge creation and transfer. Knowledge-based companies such as HEIs depend on a good ICT infrastructure that acts as an effective channel for communication and collaboration. HEIs should cover different levels of collaboration – according to experiences from other universities it is possible to implement standalone instantiations of the same platform to cover the following three levels:

- a platform for communication and collaboration with students where they can publish and share documents among themselves, publish schedules and assignments, facilitate and encourage discussion among students all in one place, etc.
- a platform for communication and collaboration of university's staff, work on projects, reporting, etc.
- a platform for communication and collaboration with partner institutions and other stakeholders.

Such a solution would have dual benefits: those that relate to teachers and other staff, and those that relate to students. A collaboration platform should provide students, parents, teachers, staff, and administrators with a single point of access to information and to technology resources. Based on examples of collaboration platforms in HEIs, the paper presents the features a good platform should entail to empower all types of users. With these functionalities as a sort of "wish list" for a full-featured HEI's collaborative platform we continue with a showcase of well-known Microsoft's packaged product Office SharePoint Server that can be used in higher educational settings.

Microsoft Office SharePoint as a collaboration platform in a HEI

There are many success stories related to implementation of the SharePoint platform in educational settings. We present two covering different core functionalities from University of California and University of Tennessee. Building on good practices and success stories we present business triggers that set off the implementation of the collaboration platform at one of the local institutions – Faculty of Economics, University of Split. These are:

- need for a structured and automated workflow for collaborative preparation, publishing, approval and archiving the material for Faculty's Council (paperless) meetings.
- need for a comprehensive system for tracking career development of the staff.
- need for teamwork support.

Upon decision that platform for internal collaboration should be set up and a short evaluation period, the choice regarding the technical solution was to go with Microsoft Office SharePoint Server. The three business cases formed a good starting point for the test implementation of the complex collaboration platform. Once the cases proved feasible, the implementation of other business process was planned. The business cases served the proof-of-concept purposes. The implementation of the full business scenarios follows.

DREAM OF AND FOR SUCCESS – POSITIVE CONSTRUCTIVE DAYDREAMING AS INTEGRAL PART OF THE MINDWISE EDU-ENGAGEMENT TEACHING AND LEARNING PROGRAM AT THE UNIVERSITY OF SOUTH AFRICA

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The workplace needs a workforce with the necessary knowledge, skills, understanding and attitudes to perform, excel, adapt and innovate at their jobs and professions in an ever changing world and marketplace. The question is – do educational institutions deliver students with these abilities? In theory, they should. According to Bloom's revised taxonomy good teaching includes Remembering, Understanding, Applying, Analysing, Evaluating and Creating. If courses are being presented and taught while touching upon all of these aspects, it should prepare learners adequately for the needs of the real world. Sadly, it seems in practice, it does not always happen. Reasons for this may be many, but one is that teachers and lecturers do not know how to touch all bases. They may be good at presenting facts and even getting students to memorise the facts. They may be good at analysing and applying facts and theories. They may be good at evaluation, and even excellent in creating new knowledge and insights. The reality is that it is difficult to be all of this or to find all of this in one person. Added hereto is that it also is quite demanding to actually teach in ways that reflects all of these aspects. The knowledge explosion is leading to overfull syllabi with not enough time to cover all the necessary basic facts. For this reason many courses get to cover the bottom part of Bloom's taxonomy such as remembering, understanding and applying, but not so much evaluating and least of all creating. That is left to the learner to develop when faced by the reality of the workplace, and that is what the workplace might feel is lacking in the learners and employees. In order to address these kinds of issues, a program is being developed by the author whereby lecturers can aim to foster all of the skills necessary for adequate and lifelong learning, also touching all the bases of Bloom's taxonomy. The program is called "The MindWise Edu-Engagement Program" and entails training in seven aspects foundational to teaching, learning and studying, namely Self-knowledge and Self-management, Mindset Skills, (Grit and Focus), Listening Skills, Reading Skills, Study Skills, Performance Skills and Creating Skills (Daydreaming and Flow). In this paper the theory underpinning each of the aspects of the Mindwise Edu-Engagement Program is being discussed, with more extensive attention given to the aspect of Positive Constructive Daydreaming as a technique to foster the skill of creating in Bloom's taxonomy.

Daydreaming (also called Mind Wandering) is usually seen in a negative light as failure of cognitive control which impedes performance. Research has shown, however, that people spend as much as 47% of their waking hours in daydreaming. If it is so costly, why do people continue to do it? Why would humans develop this ability if it has no positive adaptive benefits? Singer and Antrobus have been researching daydreaming since the 1950's. On the basis of results from a 344 item questionnaire, they identified three broad daydreaming styles: 1) positive constructive daydreaming, 2) guilty-fear-of-failure daydreaming and 3) poor attentional control. They also succeeded to link these daydreaming styles to the Big Five Personality traits. Recent advances in the cognitive sciences are supporting their findings. The discovery of the Default Mode Network (DMN) and the Executive Attention Network (EAN) indicates the minds of humans go into an "idling" state in the absence of external demands, sometimes in a state of "decoupling of attention from perceptual input", and at other times in a state of "meta-awareness". While it is true that daydreaming might be distracting and dysfunctional, research by Schooler et al. (2011) indicated that daydreaming might serve four broad adaptive functions, namely 1) future planning and self-reflection, 2) creativity and problem solving, 3) attentional cycling and rotating through information streams, and 4) dishabituation which enhances learning by providing short breaks over against massed practice. Daydreaming might be either volitional or unintentional. All people have the ability to engage in it, whether it is the negative or positive version thereof. In this sense it becomes worthwhile utilising this strategy in teaching and learning. Instead of trying to prevent oneself and students from engaging in it, it is better to help people use it constructively and wilfully. Learners need to be made aware of the different styles of daydreaming, how to disengage from the distracting versions and how to engage in the constructive styles. Lectures have to be presented in ways that afford short opportunities for structured, positive and constructive daydreaming. Assignments need to include tasks that require, instil and encourage positive constructive daydreaming. The goal of teaching this strategy is to ensure that learners use their innate daydreaming ability for the sake of creative problem solving and solution creating in the real world of life, work and play, thereby creating Meaning in Life.

Succeeding herein will actually be a Bloom-ing dream come true.

SUPPORTING ENTREPRENEURSHIP AT THE BOTTOM OF THE PYRAMID USING MOBILE EDUCATION SERVICES

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Introduction

The implementation of a mobile learning program aimed at poor Brazilian entrepreneurs with no access to smartphones may offer potentially valuable contributions to the development of other learning programs aimed at the bottom of the pyramid.

Background

> *"Low-income markets present a prodigious opportunity for the world's wealthiest companies to seek their fortunes and bring prosperity to the aspiring poor" (Prahalad & Hart, 2002)*

Karnani proposes an alternative perspective focusing on the poor, or the developing countries middle-class, as goods and services producers, not just consumers, concentrating efforts to buy from them in order to raise their real income.

According to The Boston Consulting Group, Brazil "will be characterized by a massive shift into the ranks of middle class and affluent. Some 5.3 million households will rise from the restricted to the emergent middle-class segment (...)" in this decade. Market growth at the bottom of the pyramid opens new business opportunities which can be seized by entrepreneurs from the base of the pyramid itself. Karnani points out that the less privileged are "vulnerable by virtue of lack of education". Therefore, supporting entrepreneurship at the base of pyramid using education services adequate to them can be an important factor to nurture development and alleviate poverty. Private sector initiatives are welcome in parallel with governmental investments and can be a great help. New technologies, in particular those that are already accessible to the poor, such as mobile service systems, can play a decisive role in filling the gaps. In Brazil mobile phones reach virtually the entire population. Data from the Brazilian National Telecom Agency show that 271.10 million mobile phone lines were already active in 2013 with 136.45 accesses per 100 inhabitants. Prepaid services amount to 78.05% of this total reaching 211.58 million phone lines. Mobile broadband had 103.11 million accesses, 1.31 million of them from 4G terminals.

Abril Educação, one of the largest Brazilian education companies, which belongs to the same holding as Abril Publishing, Brazilian leader in the publishing segment of textbooks, launched a new company, Edumobi, with the mission to democratize education, bringing knowledge to people through the cell phone. The courses were designed to comprise a set of questions and answers, based on Willingham, who suggested that in order to learn it was necessary to chew things over, giving thought to what need to be absorbed. The physical limits of SMS (the amount of characters), became then the template to design the quizzes, allowing the instructional designer two teaching moments: the question SMS, and the answer feedback moment. The limits of characters and having to use a totally inquiry-based education posed unique and complex challenges for the content writers, even the ones accustomed to online courses. Student costs to be enrolled in the program were around one dollar a week, comprising 7 classes.

Edumobi platform has reached over 500 thousand registered students since its launch at the beginning of 2013. General themes such as Photography and Dating are among the most popular. Business themes were introduced later in the same year. Numbers are still raw, but the company intends to expand and to make its content available through all major Telecom players.

This experience of a mobile learning program aimed at poor Brazilian entrepreneurs with no access to smartphones has suggested that it is possible, through applied content design, to reach bottom-of-the-pyramid clients, in this case, entrepreneurs. The described initiative has only been applied in Brazil and in a limited batch of students. It would be interesting to test this model in a larger student group, trying to reach poor entrepreneurs from different developing countries all over the world.

A DYNAMICS LEARNING SYSTEM BASED ON SCAFFOLDING APPROACH

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In school science, physics is perceived to be a difficult and unattractive subject for students. The difficulty comes from the abstractness many students experience when they attempt to understand theoretical concepts such as force, acceleration, and voltage. The students simply cannot understand the concepts in physics. Science education is seen as a process where students gradually acquire scientific norms and cultures. In a traditional teacher-centred classroom, students are listeners and the teacher presents the facts and defines important ideas. Student participation is often limited to listening to the teacher and perhaps raising their hands to ask or answer questions. As a result, traditional teaching methods, when used in teaching science, lead students to understanding the subject only at a "knowledge level" that involves memorizing concepts without achieving in-depth understanding. Highly teacher-centred methods of instruction may negatively affect student beliefs regarding science, causing them to view learning science as a simple accumulation of facts, and therefore concluding that science is not interesting. Moreover, such teaching requires students to sit passively and does not engage them actively in learning.

Based on the problems above, many researchers have discussed learner-centred science education. For instance, learning science through inquiry methods incorporating ICT tools and scientific practices may be a desired pedagogical approach for learning science. Many ICT-supported science learning environments have been studied. The study has produced considerable evidence, which demonstrates that such environments have great potential in facilitating the development of cognitive and metacognitive strategies in students. Moreover, such environments help improve the conceptual understanding as well as aspects of motivation, collaborative competence, critical thinking skills, and self-regulated learning skills.

In this research, we focused on dynamics in physics education. Its purpose is to enhance understanding of learners about connection between a state of an object and derivation of an equation in the process of solving a problem. The system we have developed for this purpose has a learning function of relationship between visualized forces and derivation of an equation and a diagnosis function in the learning process. In addition, the learner is asked to draw a figure to visualize forces, and by using the figure in the process of deriving an equation he/she acquires usage of visualized information. In this research, the system gives feedbacks of diagnoses in the processes of visualization of forces and equation derivation from the state of an object given in a problem so that it works as a learning material, which supports visualization and equation derivation.

The system we have proposed in this study will solve the drawbacks of the systems by Shinohara et al. and Koide et al. That is, we restrict the lengths of the arrows drawn by a learner and give appropriate feedbacks so that the learner can acquire proper images of corresponding forces. Also, we have designed the system so that it diagnoses the process of equation derivation in a stepwise manner. From this, the system can easily detect the learner's stumbles.

We conducted an evaluation experiment with 11 liberal arts college students as participants. First, the participants answered a pre-test for 20 minutes. Based on the scores of the pre-test, we divided the participants into two Groups A and B so that their averages and variances of the scores become as equal as possible. The participants in Group A learned by using our system while those in Group B learned by using the replicate system. We spent 5 minutes for explanation of the systems, and 20 minutes for learning. After the learning activities, we conducted a post-test with all of the participants for 20 minutes. The pre-test and the post-test both consist of the problems that are similar to the problems that the participants learned by the systems in their learning activities. The numbers of the problems in the pre-test and the post-test are both 4 and the full marks of the tests are both 7. Two of them ask the participants to drive equations of force equilibrium while the remaining two ask the participants to draw the figures of force equilibrium and vector decompositions.

The average scores for the equation derivation problems of the post-test of Groups A and B increased from those of the pre-test of the groups. Moreover, the average score of the post-test of Group A is significantly higher than that of Group B ($p = 0.04$). On the other hand, the average scores for the figure-drawing problems of the post-test of Group A and Group B increased from those of the pre-test. But, there was no significant difference ($p = 0.14$). Hence, we could not conclude that the significant difference is caused by the learning function of figure drawing. However, the participants who used our system could achieve a better understanding of the figure drawing.

AGRICULTURAL ALLIANCE FOR COMPETENCE AND SKILLS BASED TRAINING THE ACT APPROACH

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Agriculture is suffering from a lack in qualified employees as well as appropriate, tailored-made and modularised VET opportunities. The demand for qualified farm workers and managers is not satisfied by an adequate supply of properly trained staff or training opportunities, especially in the light of environmental (climate change and biodiversity loss), economic and territorial challenges, as well as EU directive reforms (Common Agricultural Policy (CAP)).

Agricultural VET providers, labour market and VET policy makers often use different terminologies and concepts in order to approach training, and a common sector-specific approach with shared definitions among the different actors involved is necessary to create a stronger link between emerging job profiles and training opportunities. Launching ECVET and EQAVET has been a major achievement in Europe, which can ease these processes, but adoption in agricultural E&T is moving slowly.

The ACT project focuses on the development of Pathways for Agricultural Competence and skills based Training (PACT) to reduce the mismatch between new jobs and existing skills in the agricultural sector and to improve the agricultural curriculum design and delivery by innovative VET services and broad dissemination throughout whole Europe.

It will contribute to making definitions of competences reusable and accessible across learning and recruitment systems, thus facilitating the development of additional services related to the generation of personal profiles, achieved learning outcomes and competences, etc. In essence, the outcomes of this effort will facilitate the bond for the actual building of effective pathways between learning and employment through the planned PACT Framework based on EQF and ECVET for the better integration of competence and skills modelling and with clear relevance for the current agricultural labour market as well as technology based solutions and services.

The PACT Framework matching emerging job profiles and existing training opportunities will be a valuable approach such as the linking of training opportunities and units of training to learning outcomes, the expression of job profiles through the use of competence descriptions and the generation of personal profiles of achieved learning outcomes and competences.

The project will act towards the following new situation:

LIBE PROJECT – SUPPORTING LIFELONG LEARNING WITH INQUIRY-BASED EDUCATION

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It is arguably that the surplus of information available in the knowledge society, on a variety of devices and in multimedia formats, can have per se an immediate positive impact on learning. Other than basic ICT skills, the digital competence, intended primarily as the ability to retrieve information and to assess its suitability to learner's needs, can make the difference in learning outcomes.

A learner-focused approach devoted to develop, consolidate and secure transversal competences in retrieving and selecting the text to read and/or data to analyse is the strategic element that can foster the passage between school and university, reducing drop-out rates, modifying the style of learning and nurturing an independent study through ICT in a lifelong perspective.

Low achievers aged 16-24 are LIBE courses target group for two reasons:

- ICT represents for them one of the best motivators to learn, because it can free them from prejudices linked to their own gaps in preparation and, even if almost completely only for social and leisure reasons, it is pervasive in young people's daily experiences
- Compared to the other age groups, young people are less frequently developing their skills through systematic self-study or formal e-learning training courses, and almost never with specific reference to digital competence, as the key information processing competence.

The project LIBE, funded with support of the EACEA in the LLPKA3P programme (Project Ref. No. 543058-LLP-1-2013-1-IT-KA3-KA3MP), aims at designing, developing and try out, in 3 different countries in Europe (Italy, Portugal, Norway), an innovative e-learning management system devoted:

- To develop key information processing skills for ICT (literacy, numeracy and problem solving), with an inquiry-based approach to learning, in low educational achievers aged 16-24.
- To produce a high level of personalization in learning based on: automated computer-based assessment (CBA) and computer adaptive testing (CAT); an innovative way of delivering learning materials, through automated texts modulation, to reduce reading comprehension difficulties.

The project will provide a learning content management system in 4 languages (English, Italian, Portuguese, Norwegian) devoted to information-centred courses to upper-secondary school, undergraduate students and unemployed young people. The innovative educational platform will use automated adapted algorithms in order to modify learning object contents according to learner's lexical profile. The course will offer a full learning experience to improve learner skills into retrieve effectively specialized information on the internet. The inquiry-based learning will be the theoretical model in the design of courses in order to achieve an effective individualization of the path of acquisition of knowledge and to motivate learners.

The LIBE project has a 2-year duration. In the first year, the work will be focused on the production of a Framework for ICT key information processing competences and on the analysis of current OERs and MOOC existing repository in order to propose a sounded solution for an innovative inquiry-based learning approach into the development of the digital competence.

The international consortium of LIBE project is formed by Roma Tre University (Italy – coordinator), Twente University (The Netherlands), Lillehammer University College (Norway), Birkbeck University College (United Kingdom), Porto University (Portugal).

PROFESSIONAL EXPECTATIONS OF GRADUATED STUDENTS FROM THE GRADUATE COURSE PLANNING, IMPLEMENTATION AND MANAGEMENT OF DISTANCE EDUCATION (PIGEAD)

Sandra R.H. Mariano, Universidade Federal Fluminense, Sidinei Rocha-de-Oliveira, Universidade Federal do Rio Grande do Sul, Celso Costa, Carlos Eduardo Mathias Motta, Joysi Moraes, Universidade Federal Fluminense, Brazil

Introduction

Distance education courses started in Brazil with activities from the Instituto Monitor (1939) and the Instituto Universal Brasileiro (1941) which developed courses nationwide using the post office services to send and receive materials and evaluations from students. In the 90s with the broadening access to Information and Communication Technology, the Law which regulates formal education recognizes the internet as a tool for developing education. In the 2000s this modality expanded significantly, increasing from 5,359 registrations in 2001 to 1,113,850 registrations in 2012 in Higher Education. 932,226 of these registrations are in the private sector (INEP, 2013).

As a contribution for the training of professionals to work with distance education modality, the Universidade Federal Fluminense created, in 2008, the course of Planning, Implementation and Management of Distance Education (PIGEAD). This course offers 2500 places per year and has already graduated four classes with approximately 1,000 students each. Despite all investments in training and the growth of interest in the course, few things are still unknown about the professional expectations of the students and its graduated students. Therefore, the main purpose of this work is to analyze the contribution of the course for the graduated students' career and also to analyze their professional expectations for the next 5 years. An online questionnaire was built and sent to the graduated students of 2012. In a population of 1,000 students, 92 answers were obtained.

The profile of the respondents: Mostly female (63%), with an average of the age of 41 years; 40% graduated in Languages and Pedagogy. 95.7% of the respondents were working, 75.6 of those in the public and 24.4% in the private sector; 59.3% were married and 22% single; 38% of the respondents had never worked with distance education activities before PIGEAD and among those who had worked or were working, the majority (48.9%) works with distance education as a part-time activity. Monitoring corresponds to 54% of responses, while the total management activities (coordination of courses, coordination of tutoring, course manager at an institution with distance education) corresponds to only 7.2%.

Items related to career change had lower averages, with the highest average as the employment opportunities. Affirmatives presenting specific items of professional experience in distance education have significantly lower averages (i.e. the course helps to find a new occupation and encourages a career change).The job change emerges as the second lowest average, which can be explained by the large number of professionals in the public sector.

The results presented are preliminary data from a larger study on the influence of the graduate course PIGEAD for professional careers of its graduated students. Among the respondents were women, white, married with children. Both motivations for conducting the course as the professional expectations highlighted the interest in broadening knowledge on distance education and the interest in developing part time activities in this modality, especially in tutoring. The results show that there are few people interested in working full time in distance education courses, directing their career to this professional area.

INNOVATIVE DEVELOPMENT OF THE UNIVERSITY THROUGH UNIVERSITY-ENTERPRISE PROGRAMME

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In today's world higher education has become almost a must for a person to be successfully employed. But pure academic knowledge though still in high demand cannot fully satisfy the needs of a rapidly growing and changing business in a highly developed technological environment. To provide a high rate of employability of their graduates universities themselves need to innovate. The most obvious way to do so is to cooperate with potential graduate employers –- big and small public and private enterprises. Such cooperation can be highly beneficial to both parties in many ways: not only will educational process become more practice oriented but the enterprises will be able to retrain their employees or apply for scientific expertise. This in its turn will trigger the development of science and technology.

The idea of 'University – Enterprise' cooperation fully complies with the government's concept of innovative development of the economy of the Russian Federation till 2020. The concept has been supported by V.V. Putin, former Prime Minister and now President of the RF, who believes that universities should 'become an important element in the national innovation system'[1]. The government has elaborated special programmes to encourage innovative development of higher schools and plans to subsidise their transformations. The Universities may also present their programmes to the open contest for the status of National Research University and get additional support if they win. The transformation of universities into big centres combining education, research and innovation is of more importance as the system of scientific-research institutes successfully functioning in the Soviet time nearly collapsed during the perestroika years and has not been restored so far.

Project

The Plekhanov Russian University of Economics, one of the biggest and oldest in Russia, is undergoing dramatic changes in trying to modernize its educational processes. Different forms of innovative development have been selected in order to participate more actively in the economic growth and make its students more adaptive towards the needs of the present day labour market.

 This paper addresses the core element of the University modernization process, the establishment of University-Enterprise cooperation between Plekhanov University and the State Corporation Rostec (full name: State Corporation for Assistance to Development, Production and Export of Advanced Technology Industrial Product «Russian Technologies» Rostec).

While the first steps of the joint programme – retraining of Rostec managerial staff in Plekhanov University on the one hand and using Rostec companies as the base for Plekhanov students' internship with possible future employment on the other – have been successfully implemented, the partners are now concentrating on closer relationship and are looking for the new spheres of cooperation. The newly created base department in Plekhanov University, 'The Department of Economic Analysis and Corporative Management of Rostec's, a State-owned Corporation, High tech Production and Exports', headed by Dr. N. Volobuev, Deputy CEO of Rostec serves as the platform for further joint work, including scientific research and commercialisation of its results, more active participation of Rostec scientists in curriculum planning and course design of the learning process for full-time graduate students, making it more practise oriented, development of new forms of retraining and internship. The creation of a network of base departments, branches of the above-mentioned one, in the biggest cities of the Russian Federation, where Rostec companies are, has been planned for the nearest future.

Conclusion

University-Enterprise cooperation can be very beneficial to both sides, helping Universities to increase the employability of their students by taking into account the needs of companies while companies will get highly qualified specialists who are always ready to upgrade their knowledge and skills at their alma mater thus supporting the idea of life-long learning. The collaboration of experts from companies and universities can result in creation of new technologies optimising manufacturing and management processes in the companies and lead to their productivity growth and bringing extra funding to the universities.

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[1] Putin, Vladimir: 'Economic tasks' Article in the newspaper 'Vedomosty' (January 29, 2012)

PARADIGM SHIFT IN HIGHER EDUCATION COLLABORATION: COOPERATION INSTEAD OF COMPETITION

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In October 2002 twelve Hungarian Higher Educational institutions founded *MELLearN – the Hungarian Higher Education Lifelong Learning Network* – with the support of the European Commission and THENUCE European Socrates LLL Network. The officially registered Association operates as a non-profit organisation and has currently 18 higher educational institution members. MELLearN works for the public benefit, initiating and coordinating educational, training, research and other academic and scientific activities. During the period of its existence, MELLearN has achieved the implementation of good inter-institutional cooperation between the member universities and represented in unison the importance of life long learning.

The paper focuses on the results and influences of the Network based on a SWOT analysis by reviewing the history of the past 12 years. In the period of its existence the Network had a catalyst role and represented something unique in the mostly divided higher education scene. MELLearN realized the network cooperation between higher education institutes, never experienced before in Hungary, and assisted them in the implementation of lifelong learning with the assistance of European partners.

It is the first and only higher education network in Hungary in the topic of lifelong learning and adult education with national coverage. The Network formed a community of experts for the common activities, and provides opportunities for professional collaboration in the preparation of documents, projects, researches (5 surveys so far), organising events (altogether 18 conferences, workshops). MELLearN means "collaboration instead of competition" for the member institutes who were able to learn about each other while cooperating in different topics and during the conferences (being organised in different institution every year), thus fostering the synergy between the members. It has an innovative approach towards the main questions of higher and adult education: e.g. when the Network was founded, Hungary did not even have an Adult Education Act; it was the first in dealing with new subjects: recognising prior learning (as early as 2005); it provides a ground for discussing new and current topics: training of trainers, modern learning environments, using ICT in learning, etc. In adult education it emphasises the multidisciplinary approach and among other things, contributed to the enclusion of the idea of lifelong learning into the institutional development plans. The Network provides a dissemination possibility for the member institutions, and for the national and international good practices. It has great potential in conducting national researches and emphasises the importance of high quality publications: the majority of publications were published in English-Hungarian (altogether 39 publications). MELLearN has the mission of presenting the situation of the Hungarian higher education system on international forums: e.g. the 7th National and International Lifelong Learning Conference was part of the Hungarian EU Presidency's programmes. In 2010 the Network represented Hungary (assigned by the Ministry of Human Resources) on the EU Peer Learning Forum on LLL in Malta, and presented MELLearN as good example of network cooperation, whereas in 2011 the Network presented its publications at the EU's LLL Conference in Budapest, thus being the only organisation who provided information on the Hungarian higher education scene in English. MELLearN finds it absolutely vital to have a good collaboration with European organisations (e.g. providing materials for EUA's Trend VI survey), and to be involved in projects: the Network participated in ten international and national projects.

THE SELECTION AND TRAINING FRAMEWORK FOR MANAGERS IN BUSINESS INNOVATION AND TRANSFORMATION PROJECTS – THE EDUCATIONAL PATTERN AND RECOMMENDATIONS

Antoine Trad, Webster University, Switzerland, Damir Kalpić, University of Zagreb, Croatia

The riskiest factor in transforming a traditional business environment (BE) into a lean and automated BE is the role of profile and education of business and (e-)business transformation managers (BTM); the influence they have on the concrete implementation part of business transformation projects (BTP). The basic profile and educational prerequisites of such a business transformation manager has not been sufficiently investigated in a holistic manner in order to design the *BTM's profile and its educational prerequisites*; and that is the main goal of the authors' research. In fact actually, there is no concrete educational curriculum for such BTM profiles. This research paper deals with the optimal profile and educational prerequisites of the BTM who has to manage the technical implementation phase of complex business transformation projects; knowing that the BTPs' implementation phase is the major cause of very high failure rates. The implementations of such business transformation projects require a specific set of business architecture and implementation educational and training techniques. The authors have based their research on the main fact that only about 12% of business organizations successfully terminate innovation-related business transformations projects; therefore, there is an essential need for more research on the BTMs' profiles and educational prerequisites. "We know that those organizations that are consistently successful at managing innovation-related changes, outperform their peers in terms of growth and financial performance" (Tidd, 2006).

EXPOSING COMPUTER SCIENCE PROSPECTIVE TEACHERS TO ACADEMIC RESEARCH

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Introduction

The Open University of Israel (OUI) offers a program of study for Computer Science (CS) graduates towards a high school Teaching Certificate in CS. The CS Teaching Certificate Program has two main goals: preparation of CS educators and professional career retraining. The distance learning, self-study and flexible study load practiced at the OUI is especially suited for students who want to pursue the CS Teaching Certificate Program in parallel with their current employment and other responsibilities. The program consists of two components: courses and practical training. Some of the courses are in CS and others in education and pedagogy. In the paper, we describe the seminar "Topics in Computer Science Education" included in the certification program.

Topics in Computer Science Education Seminar

The seminar is based on a reader of academic articles edited by Judith Gal-Ezer. The reader includes several topics that educators should study and become familiar with. In previous studies, researchers found that all CS teacher preparation programs emphasize the importance of reading professional research papers both in CS and in CS education research (Ragonis, Hazzan and Gal-Ezer, 2010). The seminar presents several research papers in the following topics: History of CS; The nature of the field; The details of various CS curricula and study programs on both high school and college levels; A variety of issues concerning problems of teaching programming and The use of tools and aids in CS teaching.

Students are required to participate in tutorials, submit a seminar paper and present it orally. The pedagogy of the course was designed to combine several academic skills: self-study of advanced material; preparing and delivering a 15 minute lecture to fellow students; submitting a seminar paper and presenting the seminar paper.

Students' Views and Attitudes towards the Seminar

The paper presents and discusses the results of a questionnaire conducted among the seminar students in order to evaluate students' views and attitudes towards the seminar and its contribution to their teaching career. The questionnaire was sent to all students who completed the seminar "Topics in Computer Science Education" since 2003.

Discussion

From the answers to the questionnaire, we found that for about 80% of the respondents this was the first time that they were required to prepare a paper similar in its extent to the one required in the seminar. Some students claimed that the 15 minute presentation delivered to fellow students helped them to stick to a well defined schedule and to concentrate on the main issues in the article. They also mentioned that this limitation was helpful when preparing class materials. Writing the seminar paper is the highlight of this seminar. The students claimed that the stages of reading the articles, preparing the paper outline and writing the first draft were the most difficult stages in the process.

We were very satisfied to find that 81% of the respondents claimed that the seminar contributed or contributed significantly to their teaching career. But we were disappointed to find that only 21% claimed that they keep current with CS education research. We assume that this low figure is due to the fact that many schools have only one CS teacher who works in isolation. For these teachers we recommend the use of the Israel National Center for Computer Science Teachers in order to interact with their colleagues. One of the main goals of the teachers' center is to promote pedagogical objectives, inspire colleagues and help them adjust to new courses and topics.

To conclude, we found that most students were satisfied with the seminar and felt that it contributed to their teaching career.

TOWARDS AN OPTIMAL BLENDED TEACHING AND LEARNING ENVIRONMENT: CREATING POWERFUL BLENDED LEARNING ENVIRONMENTS BASED ON THE POWER AND MOTIVATION OF TEACHERS

Demedts Lore, Raes Frederic, Spittaels Olaf, Sierens Eline, Artevelde University College, Belgium

Questions and rationale

Blended learning is a frequently used strategy – especially if the target group mainly consists of students with a (part-time) job – as it combines the advantages of classroom learning and distance learning. Although the concept of 'blended learning' is the main vision of Artevelde University College, it appears that many teachers do not know how to start implementing blended learning in their teaching activities for several reasons: fear for technology, not having a clear view of the (didactical and technological) possibilities, lack of qualitative good motivation, etc.

Therefore, we started looking for an answer to these research questions:

- How can we offer teachers an individually customized blend for their teaching activities?
- Which are the crucial environmental factors that lead to a successful implementation of blended learning?

Based on those two questions we started looking for different types of teachers, based on their ICT-empowerment, motivation, coping strategy and fields of interest. Moreover, we wonder how the learning environment (i.e. the educational system, the institution of higher education and the department within that institution), the target group (e.g. students with a (part-time) job, full-time students, etc.) and the position of the course unit within the curriculum are affecting the use of blended learning. This unique combination of personal and environmental factors could offer a customized blend for teachers, taking into account their skills, their personality and their working context.

This research project was initiated in collaboration with the bachelor of primary education department and the bachelor of early childhood education department of Artevelde University College.

Model

Our model contains three major blocks: the teacher profile, the student & competence based education within the institution and the educational system environment. Those three elements provide us with crucial information to offer teachers a customized blend. In order to determine the teacher profile, we investigate his motivation, ICT-empowerment, coping strategy and interests.

Outcomes

Understanding and development of a customized blend for teachers to implement ICT in an efficient and effective way. Goals of blended learning environments, including pedagogical richness, access to knowledge, social interaction, etc.

It is not about creating the 'perfect ICT teacher' nor the 'optimal blended learning theory'. It is about activating teachers towards a better learning environment. Crucial questions are: "What is within their reach, personal interest and power, and what is required by the educational system? How to support differences between teachers and develop competencies among the teacher's professional career?"

BRIDGING TEACHERS AND TECHNOLOGY: DEVELOPING A TRAINING IN DIGITAL DIDACTICS

Griet Lust, Eline Sierens, Frederik Raes, Artevelde University College, Bert Coolen, Belgian Network for Open and Digital Learning, Belgium

The training's purpose

Already in the 80s, Clark stressed that educational technologies create interesting conditions for learning only when these media are integrated into an instructional method. It seems however that teachers are unsure about the pedagogical implementation of e-technologies and the way these technologies can assist the instructional design of the learning environment. The current ESF (Flemish European Social Fund) project aims at addressing this issue by developing a training programme that explicitly focuses on the development of digital pedagogical skills within teachers. The following two objectives were guiding the training development.

1. The training is *scientifically-based.* First of all, the training is developed starting from scientific insights regarding teacher's knowledge for effective technology-integration i.e., the TPACK model. Basically, the TPACK model identifies the kind of knowledge that is required for technology integration in teaching. The training aims at developing TPACK knowledge by using the technology-mapping technique. In particular, a tool-classification table was used that categorizes technologies based on their learning affordances i.e., how they theoretically support the learning process. In a second instance, the training is based on theoretical insights regarding the way students learn in a multimedia learning environment. The theory of multimedia learning and the principles for instructional design are applied in the training.

2. The training is *hands-on.* The training is focused on the design, development and implementation of technology-enhanced learning environments. Besides a theoretical part, the training will provide good-practices that illustrate the theory and exercises to practice the theory. Moreover, the training aims at empowering teachers by providing instruments such as a step-by-step plan. Those instruments allow teachers to apply the training's content to their own situation.

The training's structure

The training's content will be divided into different modules in line with the different steps of instructional design (Analyse, Design, Development, Implementation and Evaluation). The modules will be provided through a website in addition to face-to-face exercises. Each module will have the following structure: theory – examples of good practice – exercises. In this manner, the training aims at being adaptive to individual's needs. First of all, the different modules allow teachers to navigate throughout the training in line with their own interests and needs. Secondly, the different parts within a module allow teachers to approach the content in line with their learning style. Teachers who are more abstract thinkers for example will possibly prefer the theory-part before going to the good practices and the exercises. Teachers who are more focused on active experimentation on the other hand have the opportunity to start with particular exercises before going to the theory and the good practices.

WORK TRAINING: UNAM'S CONTRIBUTION TO THE MEXICAN SOCIETY

Jorge León Martínez, Edith Tapia Rangel, Universidad Nacional Autonóma de México, México

Introduction

Globalization, which currently plays a crucial role in most organizations, compels public institutions to design and implement policies that favour the development of competences among citizens so they can be better prepared to perform at a professional level. Globalization also requires that organizations make an investment in their most valuable asset: human resources. To hire, develop and retain qualified workers is essential to guarantee growth by offering high-quality products and services, resulting in profits and benefits to workers, employers and society in general.

Work Training

Nowadays, in a globalized world, citizens need to develop new skills and acquire knowledge in order to act satisfactorily in their work life. These demands require a new model of training and education, based on lifelong training which incorporates formal learning, non-formal learning and informal learning. Also here, consider that adult learning is based on learners' experience and require learner's reflective and social processes. Adult learning is problem-oriented, organized in flexible ways, aims to benefit personal development and improve organisational learning processes. The e-learning solutions both individual and organizational learning and development should include: support of both individual reflection and collaborative knowledge building or epistemic social practices; integration of theoretical knowledge and participants' practical experience; learning tasks that lead learners to examine their work under the light of the provided conceptual tools; support for the explication of implicit knowledge; encouragement of collaboration and knowledge exchange between different groups of people; a progressive problem-solving orientation; integration of different forms of representation and different forms of learning activities; and structured support and guidance for learning in all phases of the learning process among other features. The UNAM institutional response to this new landscape is to deploy a number of actions towards updating and training Mexicans by means of different strategies that range from the production of a robust and continuous educational offer to the creation of online free-access spaces for informal learning. These training programs are generated following a development methodology that establishes the following stages in development: project profile definition, content analysis, pedagogical consultation and copy editing, visual communication and integration and implementation, evaluation and updating. Following the methodology described, the UNAM have developed the following proposals: *UNAM RETo Portal (Recursos Educativos para Todos – Educational Resources for All).* The site features different areas to explore and allows browsing the resources by either subject or discipline, so that anybody can acquire knowledge; *Seminar on Budget based on results.* This program in a joint effort and is directed to people who hold public office in the area of budget management at all government levels (federal, state, and municipal). Its goal is to support the implementation of a model of management for Results in the Federal Public Administration; *Health Promotion and Addictive Behaviour Prevention Specialty.* This program is an inter-institutional effort, and is intended for health professionals in the areas of psychology, medicine and social work. Its objective is the training of the health professional to assist and prevent the setting and development of the addictive behaviour. *Training program for the Energy Control National Center.* This program took place at the request of the Energy Control National Center (CENACE), organization that is dependent on the Electricity Federal Commission. The program's objective is the permanent training of its staff so they are in conditions to give a safe, continuous, qualitative and economical energy service to the Mexican public.

In conclusion it can be stated that continuing education based on technologies is vital for workers of the different economic segments of society. It is very important to note that eLearning options for work, should consider andragogical elements such as specific condition and relevance of learning, activity and learning, motivation to learn, learning and organizing information, experience as source of learning and knowledge, problem-based learning, dialogic learning and self learning; to achieve the goal of training people who are already labouring or are looking for work, in a meaningful and comprehensive way, so that the productive activities of the country is rich. With the examples presented, it is proven once again, that the job training allows people to get better jobs within and outside their organizations, thus achieving higher pay, stability, prosperity and social recognition. By creating the Portal UNAM RETo, UNAM seeks not only to provide knowledge, but also to develop in people the basic skills of knowing, living, doing and being; necessary for good performance in hi life, thus fulfilling the institution with its social commitment.

BUILDING AN ENTREPRENEURIAL THINKING WITHIN AN UNIVERSITY

Sandra R.H. Mariano, Rafael Cuba Mancebo, Valeria T. Castro, Isabella Chinelato Sacramento,
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According to Katz, the teaching of entrepreneurship began in the United States in 1947 as from the need to qualify the men who participated in the Second World War for the labour market and mainly to develop new business.

Throughout the history of entrepreneurship as a field of knowledge, it is notorious its influence and socioeconomic impact. Within the European Union (EU)

> *"there is a consensus that the future wealth depends on creating businesses that are deeply rooted in the local economy." (Henry & Cunha, 2006)*

Since the process of industrialization in Brazil occurred later, in the 50s, the area of Entrepreneurship appears only in business schools in the 80s, with the expansion of the course of Administration for Creating New Business – Entrepreneur Training in the School of Business and Administration from Fundação Getúlio Vargas – São Paulo, in 1984.

According to studies by the Global Entrepreneurship Monitor (GEM) 2012, countries with an entrepreneurial activity originated from the identification of an opportunity have a greater economic contribution. Brazil already has most of its entrepreneurial activities originated from the need to create income. This reality could be changed with an entrepreneurial university, which forms and prepare entrepreneurs to the market and to identify needs and social demands.

As part of the role of the university, this identification takes place with the dialogue between the university and the society. It brings to the entrepreneurship education relevance and power of impact, as it is built and validated from the teaching, research and extension activities, a scientific methodology for its evolution as an area of knowledge.

The Graduate Program in Management and Entrepreneurship was created in 2009 at Universidade Federal Fluminense seeking to structure and develop the area of entrepreneurship as a field of knowledge through teaching, research and extension. In this sense, the Program created a sequential and multidisciplinary Entrepreneurship and Innovation course, for students of all degrees; a MBA in Entrepreneurial Management, emphasis on education, aiming to prepare and develop head teachers of public school for an effective public management; and finally, as a result of research, the watchful eye economic demands of the region and the lack of training in entrepreneurship in the third largest university in the country in number of students, the undergraduate course Managerial Process, emphasis in Entrepreneurship was created.

The application of entrepreneurship in different areas and the deepening of research for the methodological construction of the courses reinforced the Program towards designing and building a technological undergraduate degree in Managerial Process, emphasis in Entrepreneurship. The course is born from identifying a lack of active managers in small and medium businesses and the action of the University regarding the entrepreneurial intention of the students. At this stage, the research activities proved essential in the understanding and narrowing of the relationship between society, university and the labour market.

These results show the path followed by the Universidade Federal Fluminense in building an entrepreneurial university that is ready to impact the society economically, politically and socially, through the development of the field of entrepreneurship in education, as teaching, research and extension.

PRE-CALC STUDENTS FROM DIGITAL ONLINE COURSES, PERFORMANCE ON CALCULUS COURSES AT UNIVERSITY LEVEL

Morten Brekke, University of Agder, Norway

E-Learning and computer technology has been an important part of my work as a teacher in engineering education at University of Agder for the past 15 years. Throughout this period the performance and results of my students have improved on my courses. Use of ICT in teaching is an ongoing process. The constant development of new applications and new versions of existing tools make it challenging to keep up as a teacher. But it also makes it very exciting. New applications and tools create new and different opportunities that you can use. With the selection of MyMathLab Global from Pearson Education, I found a tool that satisfied my requirements for digital assessments. In 2011 we started to "live stream" my lectures. My students saw new possibilities with the "live-streaming". Students could see my lectures from home, in the cantina or wherever they are. But most important, they could see my lectures as repetition whenever they wanted to. They could go back and see difficult topics and problems again and again. So with the digital assessment in place and the "live streaming" up and running I saw an opportunity to develop online courses in Mathematics and Physics. We started up our first courses in Mathematics and Physic January 2013. Feedback and performance from students participating has been excellent so far. But to see how successful it has been we need to see how they performed on my MA-154 Calculus course at Campus. Even though it was only 7 students from the first full time online course of spring 2013 who attended MA-154, it clearly indicates whether the level of these students is good enough. This paper will explain how the online courses were conducted and how students performed online and on the campus course MA-154.

Innovation and relevance

I was determined that there not should be any physical meetings on campus during courses. All tasks should be done online. Mandatory tests and exams should be done on their own computers at home. Flexibility and good feedback from teachers makes online students confident. At our University we use Fronter as the Learning Management System. This is my course classroom. Here I give students study plans, weekly tasks and academic content. The most demanding and time-consuming work was to establish the video lectures. I wanted short lectures 5 to 15 minutes on each topic. The lectures in Mathematics were recorded using Camtasia in our own office. The lectures in Physics have now been recorded in our brand new studio. To set the grade in each course I ended up with 7 to 8 mandatory tests, one midterm exam and one final exam for the courses. Duration of tests was 3 hours and 5 hours on exams. On all tests and exams exercises were randomized and values algorithmic. This meant that no students could compare answers with another.

Conclusions

Feedback shows that students from the online courses were very satisfied. During courses they experienced few technical problems, it was easy to access and feedback and support was excellent throughout. To be the first group of students from online courses attending our Bachelor program, I must say that the results are not too bad at all. They do not in any way differ much from our other students. Our online students in general seem to be hard working and conscientious. An interesting reflection is that there was considerable variation in how students work and that some still prefer the textbook and written notes, thankfully. Even though I am a major consumer of ICT in education, I am still a big fan of traditional teaching methods. The fact that some students have chosen to use the Wolfram website has done that I have changed how tests and exams appear. Use of this website will now not be such a big help anymore. I will continue to compare grades from the online course with grades from Mathematic courses at Bachelor programs. The online courses are continually being renewed and upgraded. That is one of the great advantages with online courses. Changes can be made immediately and it is very easy to change academic content. We are currently making new video lectures and do some remake of old lectures. In MyMathLab new and improved tasks and problems are replaced with old constantly. We get more and more experience and get better in every aspect of producing online courses.

DEVELOPING WRITING ENGLISH SKILLS OF COMMUNICATION SCIENCE STUDENTS

Vedrana Vojković Estatiev, University of Zagreb, Croatia

Two key employability skills for today's Communication Sciences students are: written communication and computer literacy, particularly in combination with sound L2 proficiency. Traditional classroom-based writing skills courses offered at the undergraduate level are often not able to provide students with the opportunity to engage in authentic written communication and write for a wider audience, as they will be expected to do in their chosen fields of journalist or public relations professional. The paper describes how a traditional L2 writing skills class at the University of Zagreb, as a result of being offered in an online environment, permitted students to enhance both their L2 writing skills and ICT skills, thereby furthering their employability. Specific Moodle-based activities and other web tools are described which allow the students to participate in genuine written communication in their L2 (English), and write for an audience of peers, not merely the instructor. It is also described how participation in the course allows students to gain knowledge of online collaboration tools and feedback techniques, which adds to their computer literacy.

EFFICIENT AND COMPREHENSIVE APPROACH TO THE EMPLOYEE TRAINING

Julija Lapuh Bele, Helena Miš Šmalc, David Rozman, Darko Bele, B2 d.o.o. Slovenia, Samra Mujačić,
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Training a large number of employees in using new versions of desktop programs represents an organizational challenge and exacts huge costs, especially when the staff is scattered across the country. The differences in prior knowledge, personal needs and work post demands cause difficulties in establishing homogeneous groups, reduce the possibility of customized employee training and has an impact on learning outcomes.

Due to organisational issues, time constraints and financial optimisation the facilitated e-learning model was implemented in one of Slovenian companies that has subsidiaries across the country. In the pilot project, the tasks were precisely defined. The implementation was monitored. The final evaluation was also conducted.

Firstly, technological and pedagogical framework of the project was designed. All activities were defined on the basis of chosen LMS system eCampus and pedagogical model.

Performing the pilot project

The project was carefully planned in order to achieve its ultimate goals with the following stages of implementation:

- e-learning platform implementation,
- pre-testing and assessment of needs through innovative e-survey,
- designing customised e-course programme,
- e-course delivery for a pilot group of 60 employees,
- e-testing (knowledge evaluation),
- project evaluation and final report.

Conclusion

Using e-learning approach was beneficial in many ways:

- employees adapted time and place of learning to their obligations,
- human resources workers spent less time for the organising activities,
- organisation saved time and cost for the training of dislocated participants,
- certificates of the successfully finished e-course were automatically produced etc.

As a result, the client organisation decided after the pilot training to continue and expand their e-learning activities.

SMILEURBO: PROMOTING TEAM COOPERATION IN THE WORKPLACE

Leah Mothersbaugh, Aleksandra Zemke, Smilemundo.org, Spain

Overview

A little village, surrounded by mountains and situated around a lake, is facing very difficult times. Unemployment is very high, people are emigrating, and the rate of child mortality has drastically increased due to lake contamination. The village does not seem to have a bright future. One day, an investor from a developed country arrives to the village with a proposition to buy a piece of land and build a hotel. At this point, it is up to the local village board to decide the future of their community. The board must make a decision as to whether or not they should sell the land, and if so, how they will plan the village's budget in a way that will ensure the development and success of the community in years to come.

Winner of the Diputacio of Barcelona's "Education and Awareness Building for Development" Contest in 2013, *SmileUrbo, interactive role playing game* aims to educate players about the realities of developing countries. Through its live and online components, the game promotes cooperation, communication, creativity, problem solving and time management among its players. In turn, through the reinforcement of these qualities, *SmileUrbo* is able to create a happier, more efficient work environment for all.

Instructions and Objectives

The game is organized into teams of eight, with each player taking on the role of an individual community member. Within three, two-hour sessions, players will propose, discuss, negotiate and vote on solutions to an array of challenges. As the game progresses, live, online *well-being indicators* will track the direct consequences of group decision-making through the changes in the village's unemployment, cost of living, life expectancy, environment and food sovereignty.

While teams of eight compete against each other to create the most sustainable and prosperous village, individual players also aim to score the highest number of individual points.

Lastly, at the end of the game, teams will have the opportunity to view how their final well-being indicators compare to those of other teams, ultimately determining their level of success.

Importance in the Workplace

SmileUrbo emphasizes the importance of each individual's contribution within a group setting, and in valuing and respecting one another. Although players are asked to think about their individual prosperity, their primary goal is to succeed as a team. For this reason, players must prioritize the needs of others, and anticipate how their individual choices will affect the livelihood of the community, in order to succeed.

Lastly, through hands-on, immersive learning, the game encourages an open-minded approach to problem solving, and to working with others of different backgrounds and skill levels to reach a common goal. By practicing the skills needed work together efficiently, *SmileUrbo* aims to create a better and more effective working environment for all.

OU ANYWHERE: DELIVERING CORE LEARNING MATERIALS TO STUDENTS VIA MOBILE APPS

Mark Wade, The Open University, United Kingdom

The Open University is a leader in educational innovation, putting its students at the heart of everything it does. Seeing an increasing number of students accessing its Virtual Learning Environment (VLE) on mobile devices, the University responded to this growing student trend by creating a new app called OU Anywhere.

OU Anywhere is an App which delivers core study materials to student's mobile devices. Over 1,000 eBooks and over 1,000 hours of audio and video study material from over 200 modules are now available to Open University students with Android and IOS mobile devices. The App is free and has been downloaded by over 60,000 OU students.

For the first time in the OU's history, undergraduate students now have the option to download all their course material onto their mobile devices. The University adapted its entire undergraduate curriculum by digitising course material, including text and multimedia resources, optimising them for mobile use. The Open University's method of delivery already enables students to fit study around work and life commitments. OU Anywhere means that students can now easily transport their study materials everywhere, on devices they are already carrying, eliminating the need to carry books.

Students only need to be online to initially download the material following which they will have the flexibility to work offline where and when it is convenient for them. OU Anywhere also provides a seamless route through to the OU's VLE where students can access their study planners and course forums. The app was intended to be an additional service for students to access material, but the benefits are a truly innovative integrated mobile learning experience.

OU Anywhere epitomises the innovation, openness and flexibility at the heart of the OU's mission, and sits alongside the OU's print versions of materials, providing choice for those wanting to learn online or print.

All aspects of the functionality of OU Anywhere will be demonstrated including:

- opening and exploring an Open University eBook from the App,
- playing video and audio in the App,
- accessibility functions including transcripts and closed captions (subtitles).

GAMIFIED E-LEARNING FOR HEALTH CARE WORKERS

Tore Høgås, Norwegian Centre for Integrated Care and Telemedicine, Norway

Background

The health care sector in Norway faces staffing challenges, including maintaining and building competence in the workplace. E-learning in the workplace has become a common delivery method, and the e-learning section *Helsekompetanse* (Health Competence) at the Norwegian Centre for Integrated Care and Telemedicine is in the forefront of this development.

Unskilled labour and staff with moderate reading and writing skills in Norwegian (whether immigrant or not) necessitates practical innovation in delivery methods to improve motivation and comprehension. We have therefore concentrated on developing enhanced learning experiences recently. One such focus area is gamification in e-learning for health care workers.

Demonstration Features

This exhibition will display three gamified e-learning solutions from collaborations with Ageing and Health – Norwegian Centre for Research, Education and Service Development.

The Hand Hygiene Game

The game aims to teach and test basic hygienic principles through a game that mimics the structure of popular mobile games. Students solve tasks in levels, receive stars based on their performance, and gain access to subsequent levels when they have enough stars. There is also a course leaderboard for the overall score of the game.

Unskilled health care workers that seek certification through the blended learning program "I want to be a certified health care worker" have tested the game since November 2013. We will present evaluation results from this test period during the demonstration.

The Blood Pressure Game

This game is similar to the one above, with similar gamification techniques, but the topic is blood pressure readings.

We will present an early version of the game at the demonstration and student testing is scheduled to begin in August 2014.

Interactive Animation Video: Automatic Calendar

This interactive video forms part of an online "Guide to Selecting and Implementing Assistive Aids for Persons with Dementia" developed under the umbrella of The Norwegian Dementia Plan 2015.

It is a scenario of a health care worker meeting a person with dementia in her home, trying to chart her needs for assistive aids. In addition to the video content, it features pop-up questions and information windows to interact with as a basis for knowledge building, reflection and discussion.

In sum, we believe these products and prototypes will spark a fruitful exchange of ideas around gamification in digital pedagogy.

IMPROVE MIGRANT SOCIAL INTEGRATION THROUGH VOCATIONAL LANGUAGE E-LEARNING

Hara Stefanou, Elena Avatangelou, EXUS S.A., Antonia Torrens, Fotis Roussakis, Family and Childcare Centre (KMOP), Maria Tsampra, Evgenia Vathakou, University of Peloponnese, Greece, Licia Boccaletti, Serena D'Angelo, Roberta Barberini, Anziani e non solo soc. Coop., Italy, Aliki Economidou, Cyprus Neuroscience and Technology Institute, Cyprus

MINGLE objectives

The MINGLE project is conceived as a way of integrating migrants into society and particularly the workforce of the receiving country, by improving their access to language training courses and other guidance material. MINGLE aims at providing language vocationally-oriented training addressed to migrants, in particular to Romanians and Bulgarians living or willing to move to Italy, Greece and Cyprus respectively and who are looking for a job in the elderly care and/ or tourism/restaurant sectors. This is achieved by developing a web-based, easy-to-use Distance Learning Application (DLA) and the respective educational content for teaching the language of the receiving country to the migrants.

MINGLE intents to support people willing to improve their language skills at their free time. It can be used by both employed and unemployed people, living in their native or in the receiving countries, who would like to enhance their employability opportunities, improve their working position and integrate in the receiving society.

MINGLE educational model

The MINGLE educational model includes a lot of linguistic activities (listening, reading and comprehension, vocabulary, grammar, phonetics), and communication tools (announcements, email, etc.) that will make learning a pleasant and constructive experience. A total of four courses, two in Italian and two in Greek, have been developed, one for each sector. Special care has been placed on the linguistic peculiarities of the two languages. More specifically the Greek courses have a special focus on spelling and phonetics whereas the Italian ones focus on grammar.

Each course constitutes a complete and comprehensive core divided into five chapters each covering specific linguistic goals, with an increasing level of difficulty from Chapter 1 to Chapter 5. Each chapter is divided in two units with different level of complexity and difficulty. Apart from the "theoretical" part, each chapter also includes exercises so that the users can self-assess their learning level. Each course subsequently ends with the "course exam" which covers the main topics treated in the course chapters. This final assessment provides users with a "Certificate of successful attendance" to the course, provided that they have exceeded a predefined threshold of correct answers.

Content of the elderly care courses:

- Health and elderly care, including appointment with the doctor, understanding the medicine instructions, elderly pathologies;
- Elderly food and feeding;
- Emergency situations: the emergency call.

Content of restaurant/tourism courses:

- Activities at the restaurant;
- In the hotel;
- Health and safety at work and emergency situations.

Additionally, the vocationally-oriented courses have some chapters in common related to transversal issues relevant to both working sectors:

- **Job research and job interview**: users learn how to understand a job announcement, manage a job interview and write a well-structured CV relevant to the placement they apply for.
- **Local services and offices**: learners become familiar with specific terms and procedures of the respective bureaucracies, real life dialogues that can take place in public administration offices and driving licence issues.

USING SOCIAL MEDIA IN THE ONLINE CLASSROOM TO HELP DEVELOP SELF-DETERMINED LEARNING SKILLS

Lisa Marie Blaschke, Carl von Ossietzky Universität Oldenburg, Germany, Cindy Emmans, University of Maryland University College, United States of America, Christine Walti, University of Maryland University College, United States of America/Switzerland

Social Media in an Academic Setting

In order to support the development of self-determined learning skills, instructors in a graduate program in distance education created learner-centered activities that relied on social media for the assignments. Because the instructors were also the designers, they were able to effectively incorporate social media into teaching practice in an effective manner that was meaningful in an academic setting.

Reasons Educators May Not Adopt Social Media

The 2013 New Media Consortium (NMC) HORIZON report on technology in higher education found that while social media have become ubiquitous in personal and professional use and have permeated all sectors of education, it is unclear what impact the media can and will have on education. Possible reasons for this include the fact that many faculty members may be lacking the necessary digital literacy skills to effectively adopt social media into their classrooms. Even those with the requisite skills must be able to integrate the media in pedagogically meaningful ways. Another and perhaps more compelling reason for why educators aren't integrating social media into their teaching might be that it is difficult for teachers to find ways to link social media activities to relevant, meaningful and sustainable products and learning outcomes.

Effective Course Redesign Using Heutagogy (Self-Determined Learning)

One approach to incorporating social media into the classroom is to apply the principles of heutagogy, or self-determined learning. This is the approach that was used by instructors in building social media into learning activities within a foundations course in distance education offered through the Master of Distance Education and E-Learning (MDE) program at the University of Maryland University College (UMUC). The instructors approached the redesign of the course by developing learning activities in a holistic manner, matching the objectives and desired outcomes of the learning activity with the affordances of the technology. In addition, a heutagogical approach characterized by a non-linear course design, double-loop (self-reflected) learning, and collaborative learning was applied; this theory was found to align particularly well with activities involving social media. The activities allowed students to define their individual learning pathways and to use technology in ways that supported their ongoing learning and development.

Social Media Tools That Were Incorporated

The decisions for choosing specific activities for the course took into consideration the benefits of creativity, self-reflection, and skills in learner autonomy and meta-cognition that can occur through the effective use of social media. The tools that were incorporated included mind maps, Twitter, Google Docs, online e-portfolios and Diigo. During this demonstration, we will show you the tools that were incorporated into the course and how they were used to help promote self-determined learning skills for students.

"FROM HEART TO HEART" OR HOW E-LEARNING HELPS INTEGRATE DIFFERENT WORLDS

Danuta Starikova, Moscow Institute of Open Education, Russia

Socialization of children with special needs is actually one of the most difficult tasks. A journey of a thousand miles begins with a single step, leading to the perception peculiarities of children with special needs.

E-learning as a system integrator may help regular classroom and special needs children to actively step into one another's worlds. I think this integration is just as important as another one which was written in the Conference Scope. The project "From Heart To Heart: Regular Classroom And Special Needs Children Mutual Aid" shows how to realize it. In this case, a supportive educational environment (Google APPS) is not sufficient for a successful project. The participants solve creative problems based on the achievements in Russian pedagogy, notably the theory of inventive problem solving (TRIZ).

In the course of the project, regular classroom creates and constantly upgrades the interactive exercises in mathematics, using Logo (an educational programming language) for a specific target audience (children with special needs).

PATHWAY: A TOOL FOR SUPPORTING AND FACILITATING INTERNATIONAL INTERNSHIPS AT-A-DISTANCE

Wim Van Petegem, Mariet Vriens, Roman Verraest, KU Leuven, Belgium

Introduction

In this session we would like to demonstrate the Pathway platform (pathway.sekoialearn.com). This platform is one of the main results of the PROVIP project (www.provip.eu), a two-year project funded by the Lifelong Learning Programme of the European Commission. It is an innovative tool for supporting and facilitating international internships at-a-distance.

The PROVIP project builds on the results of a previous European project: EU-VIP (www.euvip.eu). This project looked into the conditions for success when implementing virtual mobility in international internships. Virtual mobility is hereby defined as "a set of ICT supported activities that realize or facilitate international, collaborative experiences in a context of teaching and/or learning". From a time perspective, we can distinguish three different phases in setting up and undertaking an (international) internship: before, during and after. In each of these phases one or more of the three different stakeholders (student, study programme and company) are involved and virtual mobility activities can help to enable an optimal interaction between the different stakeholders.

A successful implementation of virtual mobility in international internships is not self-evident. Especially in case of fully virtual internships there are a lot of aspects and conditions to consider beforehand. Some of the main conditions for success identified through the EU-VIP project where:

- clear agreements beforehand about goals and roles;
- following an established communication protocol;
- avoid a strict one-on-one setting;
- good student follow-up in order to avoid isolation.

Based on these findings the PROVIP project developed the Pathway platform. This tool is currently in its launch phase and is being tested by students, study programmes and companies in the field of marketing and ICT.

The Pathway tool: features and workflow

The Pathway platform aims to support the virtual internship process during the three different phases (before, during and after) and involves the three different stakeholder groups during this entire process. The main features of the platform are:

- it supports matchmaking between students and companies;
- it supports the creation of an internship charter;
- it enables a close follow-up of interns from a distance;
- it supports online communication and collaboration;
- it provides just-in-time guidelines and advice about the organization of virtual internships.

During the demonstration of the tool we will guide participants through the workflow that was conceptualized in order to optimize the organization of a virtual internship. Participants will be asked to share their insights, ideas and reflections.

Relevance to the conference scope

International internships are becoming more and more important in our globalized world. Due to an increased economic connectivity and integration we experience a constant mobility of people, goods, capital and ideas in the world around us. It is of paramount importance that the future work force possesses the right intercultural and digital skills to deal with the opportunities of this global economy. Internships are an important way of exposing students to complex work problems that require analytical, technical and soft skills. The play an essential role in helping graduates obtain the competencies and skills that are required in our current professional world. The European 2020 strategy considers stronger links between universities and businesses to be essential for Europe to be able to evolve into a true knowledge based economy.

EMPORT – IMPROVE EMPLOYABILITY AND ENHANCE EUROPEAN COMPETITIVENESS THROUGH THE ACQUISITION OF LANGUAGE AND CULTURAL COMPETENCES IN PORTUGUESE

Amador Ordonez, Dirección General de Educación FP y Innovación Educativa, Spain, Rui Azevedo, Universidade Lusófona de Humanidades e Tecnologias, Portugal

The EMPORT project aims to improve the employability of European citizens and company competitiveness through the acquisition or improvement of language skills and cultural competences in Portuguese. The Portuguese language course (A1 and A2 of CEFR levels) is based on real company needs and uses ICT based resources. The course, which is composed of 10 units that are each based on a specific topic, will allow the owner/employee of a company to travel to a Portuguese speaking country and carry out business with their counterparts. But, it also allows tourists to involve themselves more easily with the local people. Furthermore, it allows European citizens to access the culture of Portuguese speaking countries, with a particular focus on Brazil and other thriving economies, such as, for example, Angola and Mozambique, whose official language is also Portuguese.

The EMPORT demonstration will be organized into two main parts. First of all, the aim and aspirations of the tool will be explained. There will also be a brief explanation of the previous research carried out which encompassed: a) available multimedia courses and b) the language needs and cultural competences from those doing business with Portuguese speaking countries. From here, we will move onto a discussion on the production of the website. EMPORT's website (www.learningportuguese.eu) was launched at the beginning of the project and contains information regarding the project, its aims, the expected results and the partners involved. This website also includes the cultural part of the project, including relevant information for company staff dealing with all of these Portuguese speaking countries: Portugal, Brazil, Angola, Mozambique, Cape Verde, Guinea-Bissau, São Tomé e Príncipe and East Timor.

Finally, we will give a demonstration of the multimedia and interactive business language course in Portuguese by showing the audience attending how to take full advantage of the tool. Therefore, we will explain how the course works, its different units (some topics include "Attending a fair", "Money and Banking", "Economy", Customer Service", "Marketing", "Negotiation" and "Entrepreneurship, among others) and the corresponding sections such as "Dialogue", "Vocabulary", "Test Yourself", "Input" and "Share your Proposal". The characters, coming from all of the Portuguese-speaking countries, will also be introduced. Some of the cultural content, which is related both to the topic and the country represented in each unit, will also be presented. Through this demonstration, the EMPORT project aims to disseminate an innovative learning method through an electronic platform that allows people to progress in their careers by improving their competence in Portuguese.

E-LEARNING, OPERATION AND MONITORING OF ELECTRONIC MESSAGING, PROPOSAL FOR DEMONSTRATION

Eva S. Braaten, Norwegian Centre for Integrated Care and Telemedicine, Norway

Introduction

By the end of 2014 it is a requirement that all health-related message exchange between municipalities, hospitals and GPs in Norway must be carried out electronically. This is a large-scale implementation in the health care sector in Norway, and all relevant personnel needs to be trained in monitoring and operating the messaging systems.

This demonstration will showcase the development process and the end product of an online learning program (e-learning) on the operation and monitoring of electronic messaging to be used in the training of personnel in Norwegian municipalities. The exhibited product constitutes an innovation and a development in digital pedagogy as part of this major implementation of electronic messaging in the Norwegian health care system.

The learning program has been developed by the e-learning section at the Norwegian Centre for Integrated Care and Telemedicine (NST) in partnership with FUNNKe (also NST), a regional implementation project to help Norwegian municipalities implementing electronic messaging in the health care sector.

Short Description

The online program is aimed at persons responsible for the operation and monitoring of electronic messages in their municipalities, i.e. be project managers, health professionals, department managers, or IT personnel. Others with responsibility or interest in electronic messaging can also benefit from the program.

The learning program covers the basic topics in electronic messaging, and the content is based on national, regional and local requirements in electronic messaging, but is reworked and presented in order to reach the target group.

The learning program is open and available for everyone, and there is no need for username or password to enter the program. The URL for the learning program is www.helsekompetanse.no/funnke.

Demonstration Features

Electronic messaging in the health care sector is a complicated topic, and the target group of the online learning program needs to become familiar with a range of issues from information security to how to give support to health personnel sending and receiving the messages. The learning objective of the program is that the users of the program will be better able to manage and monitor electronic messages.

The demonstration will showcase:

- The structure and content of the online learning program developed on our Drupal platform (CMS) www.helsekompetanse.no.
- How we have created and are using an animated film, and carefully chosen parts of the film, as a way to visualise the basics of electronic messaging.
- The animated film in full length (4 minutes).

How we have integrated the animated film design, using stills from the film, as the cross-cutting visual theme in the online learning program itself.

BOOK OF PROJECTS

Collection of "Synergy" Synopses

Thematic focus and relevance of the Synergy initiatives

Acronym	TASS	WBCD	QFIC	COOP	EUNI	MLS	ILSD	ROI	INNO	ICT	STRU
DigiSkills							X			X	
eLene2learn										X	
JAMTODAY									X		
GRASS										X	
TRANSIt		X	X								
MEDEAnet									X		
ISE									X		
SoMeCat											X
IDEAS										X	X
LIBE										X	
STAY IN											
VM-Pass			X							X	X
TALOE	X	X	X								
HoTEL										X	X
eMundus									X		X
VISIR							X	X	X		
POERUP											X
ODS											X
LACE		X								X	
EMMA					X				X		X
ProM	X						X			X	X
ARMAZEG											X
CAMELOT						X			X		X
DISCUSS			X							X	
HANDSON											
PEEP			X				X				
MINGLE											X
UDLnet											
e-Hoop											
MAJMIN											
LeHo											X
NEST							X				
careNET			X				X				
CARER+			X								
Let's Study Together!											
Global Classroom											
eCapacit8			X								
eVET2EDU			X							X	
Revive-VET	X			X							
E-SOLVE				X						X	X
iPro			X							X	
EPNET			X				X			X	X
ICT-DRV						X					X
TYYNE											
EDUWORKS	X	X		X			X				
SKILL2E	X	X		X							
SISE				X			X				
StartUP					X						
EMPORT											

Acronym	DPED	TELW	SCL	MIND	GUID	QLTY	NETW	SVET	VWC	CARE	RISK
DigiSkills	X										
eLene2learn					X		X				
JAMTODAY											
GRASS											
TRANSIt	X						X			X	
MEDEAnet											
ISE											
SoMeCat							X				
IDEAS											
LIBE	X										
STAY IN					X						
VM-Pass					X	X					
TALOE					X	X					
HoTEL			X	X							
eMundus											
VISIR	X						X				X
POERUP	X										
ODS							X				
LACE											
EMMA											
ProM							X				
ARMAZEG	X										
CAMELOT	X										
DISCUSS	X						X				
HANDSON	X						X		X	X	
PEEP											
MINGLE	X										
UDLnet											X
e-Hoop	X				X	X					X
MAJMIN											X
LeHo		X				X	X				
NEST							X			X	
careNET									X	X	
CARER+		X	X						X	X	
Let's Study Together!										X	
Global Classroom	X	X									X
eCapacit8							X			X	
eVET2EDU	X		X			X			X		
Revive-VET							X	X			
E-SOLVE									X		
iPro				X							
EPNET											
ICT-DRV	X					X					
TYYNE							X				
EDUWORKS											
SKILL2E						X					
SISE			X				X				
StartUP				X							
EMPORT	X			X							

Conference themes and their related tags

TASS   Evaluation and pre- and post-training assessments: specificities in the work based learning environment: what and how to measure

WBCD   Measuring competence development in work based learning

QFIC   Qualification, competence validation and recognition issues

COOP   Enterprise-education (Academia, VET) co-operation

EUNI   The entrepreneurial university

MLS   Mobile learning solutions at the workplace

ILSD   Informal learning and self-development at the workplace

ROI   Economic aspects of education and training: ROI, benchmarking, performance indicators, success factors

INNO   Innovation in e-learning business models, management processes

ICT   ICTs in support of transitions from school through vocational and higher education into the world of work

STRU   Distance and e-learning and the restructuring of educational levels - vocational, post-secondary, and higher education

DPED   Digital pedagogy in adult and lifelong learning

TELW   Telework and e-learning

SCL   Scaling up work based learning by ICTs

MIND   Educational mindset for the workplace

GUID   Student guidance services and their effectiveness at universities

QLTY   Quality aspects: assessment and evaluation, retention techniques, performance support

NETW   Working and learning in networks, communities of practice, social media – social interactions in workplace based e-learning

SVET   E-learning solutions for vocational education and training

VWC   Best practices adaptable by other white-collar VET stakeholders

CARE   Building ICT competencies for carers

RISK   ICT-enhanced teaching/training of excluded or at-risk groups

Digiskills

Network for the Enhancement of Digital Competence Skills

Website: http://hermes.westgate.gr/digiskills

Runtime: 1 Dec 2012 – 30 Nov 2015

Supported / co-funded by: Lifelong Learning Programme – Erasmus; Multilateral projects

Partners: Ellinogermaniki Agogi (EA), EL; Maria Curie Sklodowska University – University Centre for Distance Learning (MCSU), PL; Computer Technology Institute and Press "Diophantus" (CTI) EL; European Federation for Quality in e-Learning (EFQUEL), BE; European Distance and e-Learning Network (EDEN), UK; Bundesministerium für Unterricht, Kunst und Kultur (BMUKK), AT; Fondation Ynternet.org (Ynternet.org), CH; Confederación Española de Centros de Enseñanza (CECE), ES; University of Split, Faculty of Science (USP), HR

Project representative to be contacted for further info: Eva Suba, EDEN (suba@eden-online.org)

The Digiskills project supports teachers of all levels of education to enhance their ICT competences and combine them with pedagogy, to integrate ICT in the curriculum and in the institutional daily work and organisational development.

With Digiskills teachers/trainers of all levels and areas can: **learn**: browse examples of innovative teaching, **share**: show off their own teaching practices, **connect** and get inspired by each other.

The initiative brings together teachers and by supporting them in peer-learning, it enhances teachers' digital competence development in their own workplace setting. The project aims to serve as an accelerator of the sharing, adoption, usage and re-purposing of the already rich existing eLearning resources for good teaching in schools and universities. One of its goals is to demonstrate the potential of eLearning resources to meet the educational and quality needs of secondary education, higher education and adult learning communities, supported by the Digiskills Inventory of Good Practices and social networking tools.

The core work of the network lies within the connection of best practices from various European countries on school/university education and training as well as community building of teachers and trainers of various sectors.

What happens in the project?

The first step for the network is to make efforts as an accelerator of **sharing, adoption, usage, and re-purposing of the already rich existing e-learning resources**. In the past year, the network collected good practices from teachers around Europe, met them in focus group meetings to discuss their needs and their suggested good practices for teaching with digital media. These practices are being uploaded to the **Inventory of good practices** where they can be consulted, shared by everyone. Every teacher and trainer is invited to become member of this portal, and become part of the community.

Community building among numerous educational institutions in Europe supports the exchange of information in this phase. The members of the Digiskills network empower each other to use, share and exploit unique resources from a wealth of educational repositories, within meaningful educational activities.

The community's philosophy is based on the idea of peer-review supporting the aim to meet the educational and quality needs of these communities, supported by a **social platform** where teachers, students, parents and other community members will be able to discover, try, share, discuss and adapt e-learning resources on their topics of interest.

The project also creates **Good Practice Guidelines** based on the interviews focus group discussions and collection of good practices shared by teachers. This collection will support future activities of teachers for the design and implementation of **effective, meaningful and fun resource-based educational activities**.

eLene2learn

Exploring and promoting the contribution of
ICT and digital media to the development of learning to learn competences in lifelong learning
transitions

Website: http://www.elene2learn.eu

Runtime: 12.2011 – 11.2014

Supported / co-funded by: Lifelong Learning Programme, Key Activity 3 – ICT Network

Partners: METID – Politecnico di Milano, IT; Université de Lorraine, FR; European Distance and E-Learning Network (EDEN), UK; ZMML, Universität Bremen, DE; Ellinogermaniki Agogi, GR; Open University of Catalonia (UOC), ES; University of Helsinki, FI; Maria Curie Sklodowska University – University Centre for Distance Learning, PL; University of Dundee, UK

Project representative to be contacted for further info: Gérard Casanova (info-elene2learn@eden-online.org) or national coordinators (http://www.elene2learn.eu/web/guest/contacts)

The eLene2learn project proposes a multi-stakeholder network, exploring and promoting the contribution of ICT and digital media in supporting the development of learning to learn competencies in lifelong learning transitions. eLene2learn involves schools, higher education institutions and other networks in the identification of current practice, in pilot implementation of a variety of approaches and in drawing out the lessons learnt.

Towards the end of the second year of its lifetime the project has strong quantitative (e.g. over 200 participants at their international events or the 160 members of the eLene2learn Facebook group) and qualitative (positive user feedback and appreciative testimonials) evidences to prove its excellence. The frequent and versatile project activities (national focus group meetings, online thematic webinars, international conference presentations and workshop, online social networking and collaboration) engage old and new representatives of the project's target audiences, who can discuss and exchange strategies and practices in smoothening pupils', students' and adults' move from secondary school to university, their entering into employment, moving back into training / education or to re-skill and upgrade competencies.

Main target groups of the project: (i) Primary, Secondary and Higher education content providers; (ii) Primary, Secondary and HE teachers and tutors; (iii) Primary, Secondary and HE pupils and students; (iv) Adult learners; (v) Companies.

Significant public results:

- eLene2learn Facebook group: https://www.facebook.com/groups/337054472985447/
- eLene2learn YouTube channel: http://www.youtube.com/channel/UCh95O2uu7ElYD_bJ1svohrg
- October 2014: eLene2learn final conference in Barcelona, Spain (full event calendar: http://www.elene2learn.eu/calendar)
- 'How to' guide – collection of national practices, tools and methodologies in the application of ICT to develop learning to learn competencies: http://tinyurl.com/eL2-HTG
- Recording of the 1st eLene2learn webinar (June 2012): http://tinyurl.com/eL2-Webinar1
- Recording of the 2nd eLene2learn webinar (October 2012) on social networks: http://tinyurl.com/eL2-Webinar2
- Recording of the 3rd eLene2learn webinar (June 2013) on digital media, serious games and virtual worlds: http://tinyurl.com/eL2-Webinar3
- Recording of the 4th eLene2learn webinar (September 2013) on blogs and ePortfolios: http://tinyurl.com/eL2-Webinar4
- eLene2learn newsletters: http://tinyurl.com/eL2-NewsL

JamToday

The European Game Jam Learning Hub

Website: http://www.jamtoday.eu

Runtime: 01.2014 – 12.2016

Supported / co-funded by: CIP – This project is partially funded under the ICT Policy Support Programme (ICT PSP) as part of the Competitiveness and Innovation Framework Programme by the European Community.

Partners: University of the Arts Utrecht (HKU) (applicant), NL; Dutch Game Garden (coordinator), NL; MFG Medien- und Filmgesellschaft Baden-Wuerttemberg mbh, DE; European Network of Living Labs, BE; Clicks and Links ltd, UK; Innovazione Nelle ICT s.c.a.r.l., IT; FH Joanneum Gesellschaft m.b.h.; AT; Zürcher Hochschule der Künste, CH; Centro Europeo de Empresas e Innovacion del Principado de Asturias, ES; Conservatoire National des Arts et Métiers, FR; The Glasgow Caledonian University, UK; Fondazione Politecnico di Milano, IT; College of New Technologies, ES; Gemeente Utrecht, NL; Universitaet Linz, AT; Arc Consulting Eood, BG; Vandejong BV, NL; Age Platform Europe Aisbl, BE; Mathema s.r.l., IT; Macromedia Hochschule für Median und Kommunikation, DE; Katholieke Hogeschool Limburg VZM, BE; Fundació Privada pel Foment de la Societat del Coneixement, ES; Atit BVBA, BE; Stockport Metropolitan Borough Council, UK; Eurokleis s.r.l., IT

Project representative to be contacted for further info: Coordinator: Romar Bocur (DGG) (romar@dutchgamegarden.nl); presenter here at EDEN: Stefano Menon (FPM) (stefano.menon@polimi.it)

Game-based learning is becoming more and more popular, with many 'serious games' now being developed. But not enough attention is given to how to implement these games in learning environments and how to make sure there are significant learning outcomes.

Main target groups of the project: students from university and school level, teachers

Significant public results: With the JamToday network, we want to use the principles of applied game design not just to create useful and meaningful games, but also to explicate and design the context (such as the classroom or curriculum) in which games can be most effectively implemented and used.

In this sense, our task is to help turn learning professionals into educational designers with the help of game design knowledge and practice. Equally, we can help to turn learners into game-based thinkers and from only being technology users to becoming ICT practitioners, with a corresponding ability to express themselves in videogames as a medium.

Each year, JamToday will provide opportunities to collaborate at local, regional, national and European levels by establishing a series of game jams around different themes:

- Improving ICT skills (such as learning coding skills or creating games)
- Adopting healthier lifestyles (such as healthy eating or changing antisocial behaviour)
- Supporting learning of mathematics (such as sustaining engagement)

We aim to provide a bridge between different sectors to guarantee the successful uptake of the next generation of educational games across Europe. And we can offer you the necessary structure, guidance, tools and support to get involved.

GRASS

Grading Soft Skills

Website: http://grass.fon.bg.ac.rs

Runtime: 01.2014 – 01.2017

Supported / co-funded by: Lifelong Learning Programme / KA3

Partners: University of Belgrade, RS; KTH Royal Institute of Technology, SE; University of Limerick, IE; University of Zagreb, HR; First Grammar School of Kragujevac, RS; Väsby New Gymnasium, SE; Coláiste Chiaráin, IE; Landsurveying School, HR

Project representative to be contacted for further info: prof.dr.sc. Vladan Devedžić (devedzic@fon.rs)

The GRASS project develops innovative pedagogical approaches and ICT tools and services to support:

- continuous development, measurement, assessment, grading and recognition of learners' soft skills, spanning different ages and educational levels, based on the idea of digital badges (digital credentials)

- monitoring on the long run the accumulation of one's soft skills, in their own ecosystem

- embedding measurement and recognition of soft skills, competencies, and achievements in educational practices at all educational levels (not only to support employers)

- peer assessment of soft skills that is social, transparent and participatory, and "works more like the Web", rather than in teacher-in-control-only way.

The overall objective of this project is to create mechanisms that enable to continuously support, monitor, assess, and acknowledge development of learners' soft skills (i.e. transversal, cross-curricular skills) with the help of state-of-the-art ICT tools. Soft skills include problem solving, initiative taking and entrepreneurship, learning to learn, creativity, innovation, critical thinking, decision making, communication, collaboration, etc. The project will work at different levels of education, with learners of different ages, encouraging them to take diverse learning pathways, accommodating formal, non-formal and informal learning opportunities, and making use of open educational practices and resources available over the Internet.

The project's aims start from one key element, presently entirely missing in the EU practices, visions and policies on soft skills development: GRADING of soft skills. Introducing such novel approach to grading in mutually different educational contexts of the involved partners' institutions will help both the teachers and the learners of different ages to better assess all types of learning outcomes, advantages, and future learning needs. Thus the project will develop novel pedagogical approaches, rich structured sets of soft-skills metrics, and ICT tools and services for acknowledging, grading, awarding and recognizing learners' achievements in developing their soft skills.

Such digital credentials are not intended to be a replacement for the certificates, diplomas and degrees earned in traditional way; the aim is to issue them to complement traditional recognition mechanisms, by representing evidence of additional, transversal competences and learning outcomes. Another aim of piloting these innovations in the partners' institutions is to raise awareness of the novel assessment methods with support of new technologies.

The project's pedagogical approaches and ICT tools that support development and assessment of learners' soft skills will help next-level education institutions and employers to get a better insight into all types of the applicants' learning outcomes, skills/competences and future learning needs.

Main target groups of the project: The project has two major target groups: high-school pupils and university students.

Significant public results: By EDEN conference, the main achieved results will be: Pedagogical approaches, State-of-the-art analysis and Analysis of the Survey of Soft Skills for pupils, students, teachers and employers in the partner countries.

TRANSIt

TRANSversal key competences for lifelong learning: TraIning teachers in competence based education – TRANSIt

Website: http://www.transit-project.eu

Runtime: 11.2012 – 10.2014

Supported / co-funded by: Lifelong Learning Programme, COMENIUS Multilateral projects

Partners: Ellinogermaniki Agogi, EL; NHL University of Applied Sciences, NL; Universal Learning Systems, IE; University of Barcelona, ES; Association de Préfiguration de Internet of Subjects, FR; Bundesministerium für Bildung und Frauen, AT; Computer Technology Institute & Press "Diophantus", EL.

Project representative to be contacted for further info: Katerina Riviou (kriviou@ea.gr)

The project aims to have a positive impact on the development of students' key competencies through building teachers capacity on competence oriented education. To achieve this, a pilot teachers training methodology will be developed on the didactics and e-assessment of key transversal competences, which could be adopted by interested stakeholders promoting educational change. The methods of the project are founded on a holistic view of students learning, personal and social development, going beyond subject boundaries and finding application in a wide spectrum of curriculum subjects. The TRANSIt approach aims to contribute to the development of creativity, adaptation to the rapidly changing circumstances, intercultural and multilingual competences, social development, "learning to learn" competences and an improved perception of one's own capacity to solve problems.

TRANSIt aims to improve: a) teachers' awareness of key competences and b) teachers' professional skills regarding the didactics and e-assessment of the key competences with the use of ePortfolios, supporting them to bring European and national policies into practice. Through a series of demonstrations of best practices the TRANSIt will try to raise the participating teachers' awareness on how they can take benefit from developing their own competences and organising/assessing learning resources in eportfolios, as well as how to exchange resources and competence driven strategies with other teachers around Europe.

Main target groups of the project: Teachers (in-service, pre-service), Teacher trainers, School leaders, Curriculum developers, Educational Policy Makers, ICT support/technical staff

Significant public results:

The first TRANSIt Summer School (http://transit.ea.gr/) has been completed. In the context of the summer school, the *community* "TraIning teachers in competence based education" has been created and is available here (http://ods-portal-dev.intrasoft-intl.com/beta/community/training-teachers-competence-based-educationtransit-crete-summer-school-2013-1167). The description of the *activities/workshops* that took place, as well as the presentations/content delivered during the Summer School are available here (http://ods-portal-dev.intrasoft-intl.com/beta/activities/1167). Participants worked individually and/or in small teams and designed and uploaded competence-based cross-curricular scenarios that apply to Social Sciences, Arts & a combination of other subject fields such as Mathematics & ICT. They are available here (http://ods-portal-dev.intrasoft-intl.com/beta/community/training-teachers-competence-based-educationtransit-crete-summer-school-2013-1167)

In the context of the TRANSIt winter school 2014, a dedicated community has been created and is available here (http://portal.opendiscoveryspace.eu/beta/community/training-teachers-competence-based-educationtransit-vilnius-winter-school-2014-568584). The description of the activities/workshops that took place, as well as the presentations delivered during the course are available in the Activities (http://portal.opendiscoveryspace.eu/beta/activities/568584) area of the community. Participants' 'initial ideas' are uploaded as Educational Objects (http://portal.opendiscoveryspace.eu/beta/el/educational-objects/568584), as well as their transformation to Learning Scenarios (http://portal.opendiscoveryspace.eu/beta/el/educational-scenarios/568584) that were developed with use of the ODS Authoring Tool. Please feel free to join/register the TRANSIt communities and send us your feedback!

- TRANSIt online training resources are available here: http://transit.cti.gr/moodle/
- Project brochures: http://www.transit-project.eu/content/publicity-brochure-0 (EN, EL, FR, ES, CAT, NL, DE)
- Publications:

WBCD **QFIC** **DPED** **NETW** **CARE**

- Riviou, K., Sotiriou, S. (2013). TraIning teachers in competence based education – the TRANSIt use case in Greece, 7th International Conference in Open & Distance Learning (ICODL) - November 2013, Athens, Greece, Volume 3 - Section A: theoretical papers, original research and scientific articles, pp. 6-16, 8-10 November 2013

- Alcaraz-Domínguez, S., Riviou, K., Barajas, M., Sotiriou, S. Designing Quality Key Competence Acquisition Training for VET Trainers: the Case of Spain in Tannhäuser, A.-C., & Feliciano, S. (Eds.). (2013). Improving Quality of Vocational Training - Tools, Frameworks and Current Practices. Brussels: European Foundation for Quality in E-Learning, ISBN: 9789082020519, PP. 84-95, http://papers.efquel.org/index.php/tqm-book/article/view/52/22

- Riviou, K., Ravet S., "TRANSIt: TraIning teachers in competence based education: Using ePortfolios to support key competency acquisition", ePIC 2013, the 11th ePortfolio and Identity Conference, London, 8-10 July 2013

MEDEAnet

MEDEAnet

Website: http://www.medeanet.eu

Runtime: Jan 2012 – Dec. 2014

Supported / co-funded by: LLP KA3

Partners: ATiT, BE; MFG Baden-Württemberg mbH, DE; Educational Radio-Television Directorate, Ministry of Education, Lifelong Learning and Religious Affairs, EL; Information Technology Foundation for Education, EE; ActiveWatch – Media Monitoring Agency, RO; Education Group (EduGroup), AT; Institute for Training of Personnel in International Organizations (ITPIO), BG; CANON Cultuurcel, Flemish Ministry of Education and Training, BE

Project representative to be contacted for further info: Sally Reynolds (sally.reynolds@atit.be)

MEDEAnet aims to promote media-based learning to organisations and practitioners through local training and networking events, the provision of online resources and knowledge sharing. MEDEAnet is also exploiting best practices emerging from the annual MEDEA Awards competition and extending its existing informal network.

The MEDEAnet Consortium aims to extend the reach of the informal network of organisations and practitioners linked to the annual MEDEA Awards, a free-to-enter annual European competition that rewards excellence in the use of media to support learning in all sectors since 2008, by providing opportunities for local events linked to the MEDEA Awards and to involve not only early adopters, but also mainstream practitioners in networking opportunities.

MEDEAnet is also supporting the Media & Learning Association, a legally constituted membership organisation established in 2012 by the European Commission-funded MEDEA2020 project, and providing a bridge to this association by identifying potential members and supporting the recruitment of European practitioners and stakeholders to take up the services and opportunities for partnership offered by the association. Through the MEDEAnet partners this network will reach teachers and trainers who are less skilled and motivated to use media-based learning approaches.

In this way, this 3-year networking project will directly address the priority of promoting digital competence in terms of media familiarity and skill as a key transversal competence for life and employability amongst European-wide stakeholders' communities.

Main target groups of the project: Teachers and teacher trainers, educational innovators, stakeholders and decision-makers in the education and training field, educational media producers, educational technology providers.

Significant public results:

- Series of workshops aimed at teachers and trainers interested in the use of media-supported learning in 7 European Countries
- Annual MEDEA Awards competition
- Annual report 'Charting the status of Media supported Learning in 7 European Countries'
- Annual Media & learning Conference
- Monthly webinar series on various topics related to media-supported learning
- Extensive online campaign to recruit and support a community of interest engaged in the use of media to support learning
- Support and growth of the Media & Learning Association, a new not-for-profit association aimed at supporting the MEDEA community of interest on an on-going, self-sustaining basis.

ISE

Inspiring Science Education

Website: http://inspiring-science-education.eu

Runtime: April 2013 – September 2016

Supported / co-funded by: FP7

Partners: Intrasoft International, LU; University of Bayreuth, DE; Ellinogermaniki Agogi Scholi Panagea Savva, EL; Humboldt-Universitat Zu Berlin, DE; Universitaet Duisburg-Essen, DE; Institute of Educational Policy, EL; Bulgarian Research and Education Network, BG; Croatian Academic and Research Network – CARNet, HR; ATiT, BE; Helsingin Yliopisto Uhelsinki, FI; Tiedekeskussäätiö Heureka Finland, FI; European Physical Society, FR; Cardiff University, UK; MENON, BE; Siveco, RO; Consiglio Nazionale Delle Ricerche, IT; Velti, EL; Open University Guglielmo Marconi, IT; The Serious Games Institute – Coventry University, UK; University of Piraeus Research Center, EL; International University of La Rioja, ES; Nucleo Interactivo De Astronomia, PT; Learnit3d, UK; Dublin City University, IE; Fraunhofer-Gesellschaft Zur Foerderung Der Angewandten Forschung, DE; Institute of Accelerating Systems and Applications,EL; University of Twente, NL; Vernier Technology (Europe), IE; SETApps, EL; Fondazione IDIS-Città della Scienza, IT.

Project representative to be contacted for further info: Sally Reynolds (sally.reynolds@atit.be)

The main purpose behind Inspiring Science Education is to provide digital resources and opportunities for teachers to help them make science education more attractive and relevant to students' lives.

Through the Inspiring Science Education website and the activities organised by the partners, teachers can help students make their own scientific discoveries, witness and understand natural and scientific phenomena and access the latest, interactive tools and digital resources from within their classrooms.

Main target groups of the project: School communities (teachers, students, parents, experts, educational authorities & schools administration, teacher trainers), eLearning tool and service developers (universities, research centres, enterprises) and Educational policy makers involved in science education and research, researchers and experts, curriculum developers.

Significant public results:

- access to online, interactive tools and digital resources from all over the world that can be used for science teaching
- templates, scenarios and methodologies to support science teachers and teacher trainers in their drive to make their teaching more exciting, fun and relevant for students
- a platform that can be used by students and teachers alike to take science teaching beyond the classroom and into the realms of extra-curricular learning
- ways in which students themselves can be involved in scientific research activities,
- A strong support network for teachers

SoMeCat

Social Media as a Catalyser for Cross National Learning

Website: http://www.somecat.org

Runtime: 10.2013 – 09.2014

Supported / co-funded by: EU FP7 Era.Net RUS (Russia) (http://www.eranet-rus.eu, Project 135)

Partners: Zurich University of Applied Sciences, Center for Innovative Teaching and Learning (Coordinator), CH; Ankara University, TR; Department of Informatics; Perm State University, RU; Department of Political Science; nexus Institute for Cooperation Management, DE

Project representative to be contacted for further info: Christian Rapp, Coordinator (rapp@zhaw.ch).

Short Description of the Project:

SoMeCat builds on existing research in two areas:

1.   To what extent are and can Social Media be used for teaching, learning and research?
2.   Do and how diaspora groups use Social Media? If so, for what purposes?

By combining these two strands of research we finally ask: "To what extent do diaspora groups use social media for learning, teaching and research?"

In the **first work package**, using internet/ database research, we studied and documented the state of the art of (i) Social Media usage in higher education and (ii) Social Media usage by diaspora groups.

In the **second work package** we analysed and documented (i) Social Media offers for diaspora groups in the participating countries (Russia, Turkey, Germany, and Switzerland) by means of internet research and content analysis; (ii) Social Media usage of diaspora groups by interviews and focus groups (Two universities in each partner country were selected. Altogether 80 respondents were interviewed). Based on the results recommendations for decision makers were developed.

In the **third work package**, utilizing a mixed method approach, we researched and documented Social Media usage by higher education institutions (a. institutional level i.e. existing Social Media strategy and training opportunities for instructors; b. individual level i.e. instructors and students) by means (i) of interviews and focus groups (Two universities in each partner country were selected. Total number of respondents is 144), and (ii) an online teaching style survey (for an explanatory factor analysis). The online survey was conducted to explore which characteristics of instructors make them use or integrate Social Media into their courses without any outside effect. What are their intrinsic motivation and expectations for doing that?

Basing on the data a social media strategy for higher education institutions and recommendations for decision makers were developed. Basing on the results (which among others showed that most students use various social media services for different learning activities whereas instructors in most cases do not (fully) utilize social media services for their teaching) of the first three work packages, in **work package four** an online social media toolkit targeting instructors in higher education is designed, programmed, and will be implemented and tested. The toolkit will assess the instructors teaching situation (by asking questions regarding goals, content, instructional method and assessment types) and suggest the best fitting social media class by using an algorithm rooted in various instructional theories. Guidelines how to use the suggested social media class will be provided to the instructors. A functional prototype will be available March 2014. Hence, the pilot test results will be shared with the audience of conference, testing at the venue will be possible.

We would be happy to use the opportunity of the synergy strand to discuss the following issues with the participants (and others that will be raised by the participants):

- Use of social media in higher education – use cases/ experiences/ best practices, implementation issues (institutional & individual level), research themes.

- Testing and feedback on the social media toolkit, presenting and discussion its theoretical assumptions. Incorporating the toolkit in competence development schemes of instructors.

- Needs of and utilizing the potential of diaspora students/ instructors.

- Optional: The project is interdisciplinary, international with partners in Eastern Europe. The coordinator is currently running a second project (funded by Swiss National Funds "Scopes" line) with related topics with partners in Ukraine, Armenia and Russia. Although no theme of the conference exchange about running projects in the area of e-learning with partners in Eastern Europe would be possible. A particular focus could be exchange about experiences/ best practices on how to evoke institutional change in Eastern European HE institutions.

Main target groups of the project: (i) Instructors in Higher Education, (ii) Diaspora Students and Instructors, (iii) Decision makers (recommendations for decisions makers were developed)

Significant public results: Work package reports for WP 1-3 (empirical WPs of the project) are currently edited and will be published Open Access on website. Prototype of Social Media Toolkit is available for public testing from end of March 2014 onwards: https://www.eduhub.ch/conferences-events/eduhub-webinars/social-media-for-education/

IDEAS

Identifying Effective Approaches to Enhancing the Social Dimension of HE

Website: http://www.equityideas.eu

Runtime: 10.2013 – 9.2015

Supported / co-funded by: European Commission, LLP Programme, Erasmus

Partners: MENON Network, BE; Universidade Catolica Portuguesa, PT; European Students Union, BE; KIC Malta, MT; ECHO-European Centre for Diversity, NL; EURASHE, BE

Project representative to be contacted for further info: Sadie King (S.King@TavInstitute.org)

The IDEAS project aims to:

- Create a database of programmes/initiatives/policies at micro/meso level for enhancing equity in access, participation and completion of Higher Education from across Europe
- Screen the database for evidence of a causal link between the initiatives and improvements in equity for their target groups.
- Understand the environmental, social and political enabling factors which allow successful examples of practices to take root
- Select 4-6 practice examples based on criteria and success, and disseminate these widely to promote scaling up of the examples in institutions throughout Europe.

We will work along three steps:

Step 1: Collection of Case Studies

Case studies will be sourced from three sources: Desk research of academic papers, conference publications in recent years and EU projects, contacts and networks of the partners and a call for contributions of examples circulated through HE research publications and networks. Case studies will be mapped using a qualitative questionnaire, which will take note of: a) Objectives of the intervention, b) Target groups it is aimed at, c) Environmental / socio-economic environment (enabling factors), d) Tools used to achieve the project goals, e) Methodologies applied, f) Resource implications, g) Indicators of Success. We will attempt to collect 70 case studies.

Step 2: Analysis of Cases

The first step of the analysis will be to create a typology of interventions, so as to allow grouping and comparison of similar types of interventions. Following this, case analysis will proceed along three tracks: a) Determining a causal link between the intervention and its results, b) Determining the efficiency of the intervention in terms of effect vs. resources applied and c) Identifying enabling factors which assist equity interventions (classified by type of intervention).

Step 3: Creating a Toolbox of Effective Approaches

Based on the analysis above, the project will conduct an in-depth analysis of the most efficient cases, with the clearest links. The purpose of this level of analysis will be to extract the generic success factors underpinning the cases, so as to extrapolate them into general approaches which may be transversal and which would offer the opportunity of scaling up. These will be used to create a toolbox of effective equity approaches, describing how to increase access, participation and/or completion of specific target groups given certain environmental/social conditions backed up by the evidence collected in the project.

LIBE

Supporting Lifelong Learning with Inquiry-based education

Website: http://www.libeproject.it

Runtime: 01.2014 – 12.2015

Supported / co-funded by: EACEA, LLP- KA3MP

Partners: Roma Tre University, IT; Lillehammer University College; NO; University of Twente, NL; Birkbeck University College, UK; Porto University, PT

Project representative to be contacted for further info: Gabriella Agrusti (gabriella.agrusti@uniroma3.it)

It is arguably that the surplus of information available in the knowledge society, on a variety of devices and in multimedia formats, can have per se an immediate positive impact on learning. Other than basic ICT skills, the digital competence, intended primarily as the ability to retrieve information and to assess its suitability to learner's needs, can make the difference in learning outcomes.

A learner-focused approach devoted to develop, consolidate and secure transversal competences in retrieving and selecting the text to read and/or data to analyze is the strategic element that can foster the passage between school and university, reducing drop-out rates, modifying the style of learning and nurturing an independent study through ICT in a lifelong perspective.

The project LIBE, funded with support of the EACEA in the LLPKA3P programme (Project Ref. No. 543058-LLP-1-2013-1-IT-KA3-KA3MP), aims at designing, developing and try out, in 3 different countries in Europe (Italy, Portugal, Norway), an innovative e-learning management system devoted:

1. To develop key information processing skills for ICT (literacy, numeracy and problem solving), with an inquiry-based approach to learning, in low educational achievers aged 16-24 (Comenius, Erasmus, Leonardo da Vinci)

2. To produce a high level of personalization in learning based on:

    – automated computer-based assessment (CBA) and computer adaptive testing (CAT),
    – an innovative way of delivering learning materials, through automated texts modulation, to reduce reading comprehension difficulties.

The project will provide a learning content management system in 4 languages (English, Italian, Portuguese, Norwegian) devoted to information-centred courses to upper-secondary school, undergraduate students and unemployed young people. The innovative educational platform will use automated adapted algorithms in order to modify learning object contents according to learner's lexical profile. The course will offer a full learning experience to improve learner skills into retrieve effectively specialized information on the internet. The inquiry-based learning will be the theoretical model in the design of courses in order to achieve an effective individualization of the path of acquisition of knowledge and to motivate learners.

Main target groups of the project: Low educational achievers aged 16-24 in European countries.

Typically young face higher unemployment rates than older workers. Unemployment rates for 16-24 year olds are particularly high in Italy and in Portugal. In Norway, despite scoring high among the countries who participated in the latest OECD Survey on adult literacy, the Programme for the International Assessment of Adult Competencies (PIAAC), one in three adults' literacy skills do not meet the needs of the labour market. At individual level, not finding a job in the few years immediately after education may entail a disadvantage for the rest of the career.

In addition to this, low achievers aged 16-24 represent an ideal target group for courses enhancing digital competence for two reasons:

• ICT represents for them one of the best motivators to learn, because it can free them from prejudices linked to their own gaps in preparation and, even if almost completely only for social and leisure reasons, it is pervasive in young peoples' daily experiences

- compared to the other age groups, young people are less frequently developing their skills through systematic self-study or formal e-learning training courses, and almost never with specific reference to digital competence, as the key information processing competence.

Significant public results: LIBE international Launch event was held in Rome, Università degli Studi Roma Tre, in January 2014 and it attracted around 65 participants. All the dissemination materials of the event are available at www.libeproject.it.

STAY IN

Students Guidance at University for Inclusion

Website: http://stay-in.org

Runtime: 01 Oct 2012 – 30 Sep 2014

Supported / co-funded by: Lifelong Learning Programme – Erasmus; Multilateral projects

Partners: UNIMC – University of Macerata, IT; BUTE – Budapest University of Technology and Economics, HU; US – University of Seville, ES; MELIUS – International Mobility and Employment, IT; EDEN – European Distance and e-Learning Network, UK; ARCOLA Research llp, UK; Lynx s.r.l., IT; ESU – European Students Union, BE.

Project representative to be contacted for further info: Gigliola Paviotti, University of Macerata, (gigliola.paviotti@unimc.it)

STAY IN aims to provide a comprehensive on-going guidance service, including e-guidance, to students in higher education to contribute to increasing their educational achievement.

Regarding the issue of 'wider participation' it has been noted that even where flexible provisions are established (i.e. availability of distance learning offers, flexibility of teaching and evaluation, language courses for migrants' students etc.), improved access does not lead directly to improved rates of success: there is a missing link. For this reason, the STAY IN project seeks to focus on the student experience, providing support by means of flexible guidance/counselling services able to support students from under-represented groups throughout all study career, in presence (offices) and at a distance (e-guidance) to avoid drop out, and to pursue educational attainment.

In STAY IN, a special platform is being developed to give students support to find information, to tackle practical problems, but also to give real counselling service. Services can be interactive (counsellors to student, or peer to peer) or non-interactive (self-paced information); synchronous or asynchronous; textual or audio-video (online meetings). Moreover, the platform has the capability of managing users and of keeping track of all the services provided. Its architecture allows several independent counselling provider to be managed by a single, multilingual installation.

Main target groups of the project:

Guidance and counselling workforce at HEI; Students involved in tertiary education; Future students, likely to be involved in tertiary education; HEI managers; Researchers and practitioners in the field of guidance and counselling, inclusion, ICT-based services and related topics; Policy makers in tertiary education and inclusion.

Significant public results:

'Guidance for inclusion: practices and needs in European Universities', (April 2013) covering: results of the analysed practices; approaches and features of guidance and counselling services that are potentially transferable to HEI's; results of the student survey; recommendations for guidance and counselling services. http://stay-in.org/research/guidance-for-inclusion-practices-and-needs-in-european-universities/

The key outcome of STAY IN will be an **eGuidance platform for European universities**, designed and developed in order to address the specific needs of higher education institutions and higher education students for guidance and counselling services, and suitable for supporting on-going guidance and counselling.

VM-Pass

Implementing Recognition of Virtual Mobility and OER Learning through a Learning Passport

Website: http://vmpass.eu

Runtime: October 2013 – December 2015

Supported / co-funded by: LLP Centralised – Erasmus MP

Partners: University of Leicester, UK; EFQUEL – European Foundation for Quality in e-Learning, BE; Universidad Internacional de La Rioja, S.A. ES; Vytautas Magnus University, LT; Baden-Wurttemberg Cooperative State University, DE; EDEN – European Distance and e-Learning Network, UK; Katholieke Universiteit Leuven, BE; MENON Network EEIG; BE.

Project representative to be contacted for further info: Anthony F. Camilleri, EFQUEL (anthony.camilleri@efquel.org)

Despite the rise of Virtual Mobility and OCW (Open Course Ware)-based opportunities for learning at institutions, around Europe – recognition remains uneven, and serves as a major barrier to uptake of these flexible forms of learning. In the past year, both UNESCO and the European Commission have called for this problem to be addressed through improved recognition tools. Thus, VM-Pass will aim to increase inter-institutional recognition of virtual mobility and OCW-based courses, by:

- Building on results from OER test project and piloting the use of a student-held learning passport to facilitate recognition & mobility;

- Planning, testing and creating a recognition-clearinghouse to support the verification and investigation of learning passports;

- Creating a typology of quality systems used in VM and OER systems, to support the learning passports and recognition-clearinghouse;

- Engaging in dialogue with multiple institutions around Europe so as to mainstream use of the recognition tools created by the project.

These activities together will provide recognition offices a tool which will reduce the bureaucracy involved in recognition processes, allow them to share experiences with peers and compare their recognition decisions' with other institutions – thus promoting harmonisation of recognition. All of this together, should make it easier for students to have their VM learning recognised, and thus increase the volume of students taking advantage of this flexible learning pathway, without increasing the administrative burden on their home institutions.

Main target groups of the project:

This project is squarely focused on Higher Education Institutions who intend to recognise learning experiences based on virtual mobility (including OER-based learning) or are already experimenting to do so. The project intends to involve these institutions in the two projects in two ways:

- A selection of HEIs will be involved directly in the project's activities through participation in the living laboratory on recognition of learning based on VM;

- The wider HE community will be kept informed of the activities and successes of the project, with the hope that through continued information they will eventually join the project activities beyond the end of its life as part of its sustainability activities. This category activity will also indirectly target HE researchers, and the rest of the E&T Stakeholder Community.

Significant public results: The **recruitment brochure** will be distributed to the delegates of the EDEN 2014 Annual Conference.

Former recruitment **seminars**: March 13: 1st online seminar in the frame of the Open Education Week:
http://www.openeducationweek.org/ai1ec_event/join-the-vm-pass-living-lab/?instance_id=
April 25: 1st face-to-face seminar in the frame of the 2014 OCWC Global Conference in Ljubljana
May 8-9: 2nd face-to-face seminar in the frame of the EFQUEL Innovation Forum in Crete

TALOE

Time to Assess Learning Outcomes in e-Learning Project

Website: http://taloe.up.pt

Runtime: Jan 2014 – Dec 2015

Supported / co-funded by: Lifelong Learning Programme – Key Activity 3 – ICT; Multilateral projects

Partners: University of Porto, (Co-ordinator), PT; Dennis Gabor College, HU; University of Zagreb University Computing Centre – SRCE, HR; Innovate4Future – Center for Advanced Educational Solutions, RO; University of Padua, IT; European Distance and e-Learning Network – EDEN, UK; European University Continuing Education Network – EUCEN, ES.

Project representative to be contacted for further info: Alfredo Soeiro (taloe@up.pt)

The main goal of TALOE is to develop a web-based platform to help teachers and trainers decide on the e-assessment strategies to use in their online courses. The main idea is that a teacher will describe the learning outcomes of their course or module and the TALOE platform will analyse them and provide an e-assessment strategy that is consistent with the intended learning.

To be able to develop the practical tool, the consortium will have to achieve the following goals:

1. Research and select innovative e-assessment practices that take advantage of the use of technology
2. Develop a web-based tool that is easy to use by the stakeholders
3. To test the implementation of the tool with real case studies
4. To distribute and disseminate the TALOE tool among the communities of stakeholders

It is intended that the TALOE tool will be freely available to different stakeholders. These include Higher and Continuing Education institutions as well as vocational training organizations. It is also available for stakeholders associated with processes of recognition and accreditation.

The tools of TALOE and user guides will be developed in English and will be translated into German and French to facilitate its use by different audiences.

Main target groups of the project:

The main target groups of TALOE project are: Teachers and trainers from all levels of education: they may use the TALOE tool to define e-assessment strategies for their courses or modules

Other targets include:

*   Researchers dealing with Learning Outcomes and e-assessment
*   Recognition and accreditation staff may use TALOE to verify the validity of assessment methods of prior learning or to provide evidence for accreditation of programmes
*   Programme developers may use TALOE to define e-assessment strategies recommendations for new online programmes
*   Decision makers may use TALOE to define valid e-assessment strategies for their institutions
*   Networks and initiatives operating in the fields of LOs, assessment, vocational training, higher education, continuing education and recognition and accreditation

Significant public results: 1st leaflet: http://taloe.up.pt/wp-content/uploads/2014/01/flyer-taloe-JanLeaflet.pdf; 2nd leaflet will be distributed to the delegates of the EDEN 2014 Annual Conference.

HoTEL

Holistic Technology Enhanced Learning

Website: http://www.hotel-project.eu

Runtime: 10.2012 – 9.2014

Supported / co-funded by: European Commission, DG CONNECT – FP7

Partners: MENON Network, BE; Brunel University, UK; Universidad Internacional de la Rioja, ES; European Foundation for Quality in eLearning, BE; ATOS, ES; European Learning Industry Group, AT

Project representative to be contacted for further info: Fabio Nascimbeni (Fabio.nascimbeni@menon.org)

The HoTEL Support Action aims to contribute to more effective, holistic and faster innovation cycles in European TEL, by increasing quality at the level of the cycle itself and of the different phases foreseen, that can be replicated in the future.

HoTEL has created an Innovation Support Model (ISM) which is specific to the TEL domain, to support new models of learning through ICT, analyse the specific elements of innovation, assess the potential impact at the micro (technology-learning), meso (organizational-learning) and macro-level (policy); present results of the analysis and assessment to a community of innovators, researchers, decision makers; collect the results of field-test and in-depth contextualized proof-of-concept activities.

The ISM is now being tested through three Learning Exploratorium Labs (one in higher education, one in a corporate setting, one within an international professional network focused on eLearning quality) where the Innovation Cycle is being applied to 30 real-life innovations so to validate and improve it.

Main target groups of the project: The focus of the support action is on adult learners and the ways they use or might use ICT to learn as a structured and fully organized activity, but also as a side effect of work and personal development in many fields.

Significant public results:

- D1.1.1 HOTEL Emerging Technology Landscape Workshop (http://www.hotel-project.eu/content/d111-hotel-emerging-technology-landscape-workshop)

- D1.1.2 Emerging Technologies Landscape report (http://www.hotel-project.eu/content/d112-emerging-technologies-landscape-report)

- D2.2.1 HOTEL Report on good practice of innovative applications of learning theories in TEL (http://www.hotel-project.eu/content/d221-hotel-report-good-practice-innovative-applications-learning-theories-tel)

- Learning theories map (http://www.hotel-project.eu/content/learning-theories-map-richard-millwood)

eMundus

Exploring successful patterns of HE collaboration
enhanced by open education

Website: http://www.emundus-project.eu

Runtime: 10.2013 – 9.2015

Supported / co-funded by: European Commission, DG EAC – Erasmus Mundus.

Partners: MENON Network, BE; University of Leicester, UK; International University of La Rioja, ES; University of Sao Paulo, BR; Universidad Autonoma Metropolitana, MX; Moscow State University of Economics, Statistics and Informatics, RU; OER Foundation, NZ; Athabasca University, CA; Universitas Siswa Bangsa Internasional, (Indonesia), RI.

Project representative to be contacted for further info: Fabio Nascimbeni (Fabio.nascimbeni@menon.org)

eMundus is a new project supported by the European Commission (Erasmus Mundus programme) that will explore the potential of Open Education, MOOCs and Virtual Mobility to support long-term, balanced and inter-cultural academic partnership.

The project brings together a truly international consortium, coordinated by the MENON Network (Belgium), with the University of Leicester (UK), the International University of La Rioja (Spain), the University of Sao Paulo (Brazil), the Universidad Autonoma Metropolitana (Mexico), the Moscow State University of Economics, Statistics and Informatics (Russia), the OER Foundation (New Zealand), the Athabasca University (Canada) and the Universitas Siswa Bangsa Internasional (Indonesia).

In the next 24months, the project team will work to:

- **Map** the global state of the art of MOOCs and Virtual Mobility developments and identify successful cooperation patterns among higher education institutions.
- **Share** useful tools and successful practices around Open Education, MOOCs, and Virtual Mobility.
- **Mainstream** the best practices of the world leaders in the field towards universities that are beginning to adopt MOOCs and Virtual Mobility as strategies for their internationalization.

If you work in Higher Education or if you are an Open Education enthusiast, you can become an **eMundus Community Partner** by commenting and enriching the project wiki, proposing tools to be included in the eMundus repository, joining one or more of the eMundus webinars and events, and more.

Significant public results: Website: www.emundus-project.eu

VISIR

Vision, Scenarios, Insights and Recommendations on how ICT may help making lifelong learning a reality for all

Website: http://visir-network.eu

Runtime: 11.2011 – 10.2014

Supported / co-funded by: Lifelong Learning Programme (LLP), Key Action 3: Information and Communication Technologies (ICT)

Partners: MENON Network EEIG, BE; European Association for Adult Learning (EADL), NL; European Distance and e-Learning Network (EDEN), UK; European Foundation for Management Development (EFMD), BE; European Learning Industry Group (ELIG), AT; European Interest Group on Creativity and Innovation (EICI), DE; European Foundation for Quality in e-Learning (EFQUEL), BE; SCIENTER, IT; K.U. Leuven, BE.

Project representative to be contacted for further info: Fabio Nascimbeni (fabio.nascimbeni@menon.org)

The rationale of VISIR is that use of ICT for learning in Europe is gaining ground, and that in order to uncap its potential as a driver of change for our economies and societies, we need to move from fragmentation and piloting to effective systematic adoption.

To address this need, seven European networks and two research centres have joined forces and are working to address three major gaps: the 'understanding gap', the 'networking gap', and the 'mainstreaming gap' of ICT for learning in Europe.

VISIR has the following objectives, corresponding to specific activities:

- To provide a long-term vision on the contribution of ICT for transforming education and training systems in line with the needs of the future European knowledge society, and to structure it along possible scenarios for change.

- To guarantee stakeholders' involvement and engagement in the development and validation of such a vision through four cross-sectoral stakeholders consultations among ICT-for-learning experts, practitioners and decision makers from the public and private sector.

- To facilitate the emergence of grassroots ICT-for learning innovation by identifying at least 100 successful micro-innovation practices (short cases studies identified, described and available for social tagging) and to catalogue them according to transversal issues.

- To facilitate exchange of ideas and emergence of insights around these practices through the organisation of six transnational seminars focusing on specific dimensions of innovation (such as assessment, quality, students involvement, economics of education) of ICT-for-learning.

- To mainstream innovation by promoting these 'practices that work' both towards E&T policy makers and towards a number of ICT-for-learning communities, through web dissemination among the participating network (with an estimated direct 'one-step' reach of 1600 institutions and 24,000 professionals and practitioners) and two mainstreaming international events.

- To provide recommendations and guidelines for policy and practice on how to contribute to closing the understanding, networking and mainstreaming gaps that hinder the meaningful exploitation of ICT in European Lifelong Learning.

In its first two years of work, VISIR has produced and validated a long-term vision on the contribution of ICT for transforming education and training systems towards 2020, though the analysis of existing 'domains of change', it run two stakeholders consultations; it prepared, set up and launched a system for collection and display of grassroots ICT-for learning innovation (with more than 120 successful micro-innovation practices identified and the 23 best practices selected); it organised three transnational exchange seminars (on the issue of e-assessment, learning and the future workplace and learning innovation for regional development) and it planned the next three seminars of this kind. Finally, VISIR organised the 1st Mainstreaming Seminar in March 2013, in collaboration with other projects working in the field of ICT for learning, in the Committee of the Regions in Brussels, reaching more than 150 participants and engaging a different range of stakeholders, from policy makers to researchers to grassroots innovators.

ILSD **ROI** **INNO** **DPED** **NETW** **RISK**

Main target groups of the project: i) learning practitioners in Europe (within and outside the participating networks); ii) Learning E&T policy makers in Europe; iii) European networks in the field of education, Lifelong Learning, innovation and ICT-for learning

Significant public results: Collection of and Analysis of Micro Innovation Cases on ICT for Learning; Stakeholder Consultations; Vision Reports (all available on the website of the project at http://visir-network.eu)

POERUP

Policies for OER uptake

Website: http://www.poerup.info

Runtime: Nov 2011 – June 2014

Supported by: Lifelong Learning Programme – Key Activity 3 – ICT; Multilateral projects

Partners: University of Leicester, (Co-ordinator), UK; Sero Consulting, (Project manager), UK; EDEN – European Distance and e-Learning Network, UK; Open Universiteit Nederland, NL; Université de Lorraine, FR; Athabasca University, CA.

Project representative to be contacted for further info: Paul Bacsich (paul.bacsich@sero.co.uk)

By carrying out research to understand how governments can stimulate the uptake of OER by policy means (and not just funding), POERUP aims to contribute to the implementation of LLL. Simultaneously POERUP aims to foster the potential of new media for enhancing innovation by researching policies designed to foster a "lifelong learner" mindset in learners: leading to curiosity, creativity and a willingness to "consume" OER. To do so the project team investigated the "end-user – producer communities" behind OER initiatives and what (or who) it is that actually provides the energy that make OER work or not.

Main target groups of the project:

- HE Institutions and schools
- National governments, ministries
- Networks interested in OER
- Networks targeting policy makers and researchers (such as EADTU, EUN and EUA)
- Networks targeting students (ESU, etc.)
- Broader university, school and educational world inside and outside Europe

Significant public results:

- http://poerup.referata.com/wiki/All_countries
- http://www.poerup.info/resources/2013_poerup_leaflet_web.pdf
- http://www.eden-online.org/nap_elgg/pg/pages/view/3207/issue-1-sept-2012
- http://www.eden-online.org/nap_elgg/pg/pages/view/3628/issue-2-may-2013
- http://www.eden-online.org/nap_elgg/pg/pages/view/8591/issue-3-december-2013
- The HE policy recommendations (release 1) http://www.scribd.com/doc/169430544/Policies-at-EU-level-for-OER-uptake-in-universities
- The VET policy recommendations (release 2) http://poerup.referata.com/wiki/File:POERUP_D4_2C_v0.7.pdf
- The schools policy recommendations (release 2) http://poerup.referata.com/wiki/File:POERUP_D4.2S_v0.7.pdf

ODS

Open Discovery Space: A socially powered and multilingual open learning infrastructure to boost the adoption of eLearning resources

Website: http://www.opendiscoveryspace.eu

Runtime: 04.2012 – 03.2015

Supported / co-funded by: CIP-ICT PSP-2011-5; Theme 2: Digital Content, Objective 2.4: eLearning

Partners: Coordinator: Intrasoft International SA, Luxembourg, see more at: http://opendiscoveryspace.eu/consortium

Project representative to be contacted for further info: Nikolas Athanasiadis (contact_ods@intrasoft-intl.com)

Open Discovery Space aims to serve as an accelerator of the sharing, adoption, usage, and re-purposing of the already rich existing educational content base. First of all, it demonstrates ways to involve school communities in innovative teaching and learning practices through the effective use of eLearning resources. It also promotes community building between numerous schools of Europe (as of February 2014 over 460 schools have been engaged in the ODS activities) and empower them to use, share and exploit unique resources from a wealth of educational repositories, within meaningful educational activities. In addition, ODS demonstrates the potential of eLearning resources to meet the educational needs of these communities, supported by a European Web portal: a community-oriented social platform where teachers, pupils and parents are able to discover, acquire, discuss and adapt eLearning resources on their topics of interest. Finally, the project will assess the impact and document the whole process into a roadmap that will include guidelines for the design and implementation of effective resource-based educational activities that could act as a reference to be adopted by stakeholders in school education.

Upon the completion of its planned activities, Open Discovery Space will have contributed to the modernisation of school education, supported stakeholders in acquiring digital competences, stimulated demand for innovative eLearning resources and engaged teachers and pupils in the development of innovative educational practices. Crucially, this project will strengthen European integration by increasing cooperation across state borders, bringing together different cultures and supporting multi-lingual practices.

Main target groups of the project: (i) Primary and Secondary education content providers, (ii) Primary and Secondary teachers, (iii) Educational policy makers, (iv) Parents.

Significant public results:

- ODS Facebook page: https://www.facebook.com/opendiscoveryspace.eu
- ODS video playlist: http://tinyurl.com/ODS-PlayList
- All public events are available on the website at http://opendiscoveryspace.eu/event/calendar
- iPad or PC - Comparing Tablets and PCs for Science Teaching Purposes (http://tinyurl.com/SW-ODS1)
- Open School Learning – a vision to improve European schools towards 2030 – using the results of the Open Discovery Space project (http://tinyurl.com/SW-ODS2)
- Broadening Teacher Experience Through International Research and Training Opportunities (http://tinyurl.com/SW-ODS3)
- Further public reports and documents at http://opendiscoveryspace.eu/download/publications
- ODS repositories: http://opendiscoveryspace.eu/repositories

LACE

Learning Analytics Community Exchange

Website: http://www.laceproject.info

Runtime: Jan 2014 – Jun. 2016

Supported / co-funded by: FP7

Partners: Open Universiteit Nederland, NL; Cetis, the Centre for Educational Technology and Interoperability Standards at the University of Bolton, UK; Institute for Educational Technology at the Open University, UK; Infinity Technology Solutions, IT; Skolverket, the Swedish National Agency for Education, SE; Kennisnet, NL; Høgskolen i Oslo og Akershus, NO; ATiT, Audiovisual Technologies, Informatics and Telecommunications, BE; EDEN, the European Distance Education Network, UK.

Project representative to be contacted for further info: Sally Reynolds (sally.reynolds@atit.be).

LACE partners are passionate about the opportunities afforded by current and future views of learning analytics (LA) and educational data mining (EDM) but we are concerned about missed opportunities, undesirable consequences of mis-application, investment funding failing to realise value, market failure, etc. LACE is our response, a project to reduce risk and to increase benefit through an approach that accounts for the necessary unity of research, policy and practice.

LACE will:

- Organise a range of activities designed to actively and passively integrate communities that are conducting LA/EDM research, early practitioner adopters, and those who are building first-generation commercial or open-source software. This integration would be used to stimulate creativity and accelerate the identification of viable and effective solutions to real problems, and hence to drive both current research and technology transfer.

- Create and curate a knowledge base of evidence. This will capture evidence for the effectiveness and the relative desirability of the outcomes resulting from use of various tools and techniques.

- Actively participate in the exploration of plausible futures for learning analytics and EDM by combining the creation of imaginative scenarios with participatory workshops and structured methods including a Policy Delphi to assess differences of opinion about the feasibility and desirability of possible future states, thus informing future research and policy agendas.

- The LACE project brings together existing key European players in the field of learning analytics & EDM who are committed to build communities of practice and share emerging best practice in order to make progress towards four objectives.

Objectives: (i)Promote knowledge creation and exchange; (ii) Objective 2 – Increase the evidence base; (iii) Objective 3 – Contribute to the definition of future directions; (iv) Objective 4 – Build consensus on interoperability and data sharing.

Main target groups of the project: Researchers, practitioners and stakeholders interested in learning analytics and how learning analytics can be used to enhance ICT-supported learning in particular. LACE will target schools, higher education and workplace learning separately while helping to support cross-sector learning and exchange where relevant in the area of learning analytics.

Significant public results: Conference and event presentations; Workshops and learning opportunities both on and off-line; Evidence hub; Community and network support.

EMMA

European Multiple MOOC Aggregator

Website: http://europeanmoocs.eu

Runtime: Feb 2014 – Jul. 2016

Supported / co-funded by: FP7

Partners: Universita Degli Studi di Napoli Federico II, (Contractor), IT; ATOS, ES; IPSOS SRL, IT; Fundacio per a la Universitat Oberta de Catalunya, ES; Open Universiteit Nederland, NL; Universidade Aberta, PT; University of Leicester, UK; Universite de Bourgogne, FR; Tallinn University, EE; Universitat Politecnica de Valencia, ES; CSP – Innovazione Nelle ICT S.C.A.R.L., IT; ATIT BVBA, BE.

Project representative to be contacted for further info: Sally Reynolds (sally.reynolds@atit.be).

The objective of this project is to pilot a number of trusted elements to put in place a unique platform to support ICT-based innovation in higher education and training approaches, thus scaling up existing trials and translation solutions. Validation and evaluation processes will also be tested during the pilot.

EMMA aims to showcase excellence in innovative teaching methodologies and learning approaches through the large-scale piloting of MOOCs, providing a system for the delivery of free, open, online courses from diverse European universities with the goal of preserving Europe's rich cultural, educational and linguistic heritage and promoting cross-cultural and multi-lingual learning.

MOOCs are a recent development, rapidly becoming a significant trend in higher education. The open nature of MOOCs provides opportunities for expanding access to higher education and creating a space for experimentation with online teaching and learning. This exploration of new approaches for higher education provision has generated significant interest from governments, institutions and others. Building on existing and proven technology, EMMA will provide an opportunity, even for smaller institutions, to share high-quality content. EMMA will provide a framework and infrastructure, while participating institutions will remain autonomous in their choice of design, methodology and tools.

EMMA will operate in two main modes; as an aggregator and hosting system of courses produced by European universities; and as a system that enables learners to construct their own courses using units from MOOCs as building blocks. The EMMA Consortium aims at a multi-lingual, multi-cultural approach to learning by offering inbuilt translation and transcription services for courses hosted on the platform.

The pilot will operate in 2 steps, first by making available a significant number of existing courses from project partners and/or MOOCs providers and then by bringing on board a second tier of universities keen to experiment with MOOCs. Pilots will run in 7 countries with a total of 16 MOOCs and will involve at least 60.000 users. Courses will be offered in the language of each country, in English, and the pilot will trial an embryo form of multi-lingual translation by offering courses in Italian and Spanish as well. Advances in learning analytics will feature in the analysis and evaluation work and a series of innovative approaches will be trialled to make the piloted service sustainable in the medium to long term.

Main target groups of the project: Academics, administrators and senior staff in European universities interested in launching MOOCs, stakeholders and decision-makers interested in the value and impact of MOOCs

Significant public results:

- Online service for aggregating European MOOCs and making them available to the public
- Support and help to Euopena HE providers interested in the MOOC phenomenon

ProM

Building skills for educational mobility

Website: http://www.prom-mobile.eu/the-project/?lang=en

Runtime: 10.2012 – 09.2014

Supported / co-funded by: LLL / Leonardo da Vinci

Partners: Centre international d'études pédagogiques (CIEP), FR; Réseau Européen d'Associations des Professeurs de Langues (REAL), BE; Università degli Studi di Pavia, IT; European Distance and e-Learning Network (EDEN), UK; The Association of Language Testers in Europe (ALTE), UK; Center für berufsbezogene Sprachen, AT; Académie de Versailles, FR.

Project representative to be contacted for further info: Dénes Zarka (zarkakis@eden-online.org)

ProM is a European project aiming to provide a self assessment tool and a comprehensive professional training programme to European teachers by distance learning, to support the management, planning and implementation of mobility initiatives.

Main target groups of the project:

- Teachers: to take the ProM training modules, and

- Teacher trainers and decision makers: to integrate these modules into their teacher training programmes.

Significant public results:

- Teachers take a quick online self-assessment to assess their current skills level on mobility management. They will then receive recommendations, tailored to them, as to which of ProM's online training modules would best suit their needs.

- Teachers take the recommended ProM training modules to acquire or enhance their professional skills required on mobility initiatives (exchanges, work placements and ICT partnerships) through an e-learning platform: http://prom.eden-online.org

- Teachers will have the opportunity to sign up to one special supported online module which will include feedback from experienced tutors. Those taking part will be trained alongside colleagues from other European countries, developing international links and creating a dynamic international network.

ARMAZEG

Developing Tools for Lifelong Learning in the Transcaucasus Region: e-Learning

Website:

Runtime: December 2013 – November 2016

Supported / co-funded by: Tempus

Partners: Katholieke Universiteit Leuven, (coordinator), BE; State Engineering University of Armenia, AM; Ministry of Education and Science of the Republic of Armenia, AM; Institute of Informatics & Automation Problems of NAS RA, AM; Orbeli Institute of Physiology of NAS RA, AM; Armenian State Pedagogical University after Kh. Abovian, AM; St. Andrew the First-Called Georgian University, GE; Georgian Technical University, GE; Università degli Studi di Firenze, IT; University of Granada, ES; European Distance and E-Learning Network, UK; Ivane Javakhishvili Tbilisi State University, GE.

Project representative to be contacted for further info: Mariet Vriens (Mariet.Vriens@kuleuven.be)

The Tempus project ARMAZEG aims to stimulate educational reform in Armenian ad Georgian universities in order to answer the challenges posed by globalization. The main goal is to further implement e-learning with a focus on developing lifelong learning methodologies. The project will be realized in four consecutive steps:

1. An assessment of the current situation and development of a vision and implementation strategy;
2. The establishment of e-learning centres in the participating Armenian and Georgian institutions;
3. Professionalization of teaching staff in the field of e-learning;
4. Set-up of concrete pilot projects.

For the realization of this step-by-step plan the Armenian and Georgian institutions can count on the support and expertise of three European Partners (KU Leuven, University of Granada and University of Florence.)

Main target groups of the project: Higher education stakeholders (University management, lecturers, administration staff, students)

Significant public results:

- Documents:
    - Vision on e-learning and ICT for LLL in Armenia and Georgia
    - Policy recommendations regarding e-learning and ICT for LLL in Armenia and Georgia
    - Long-term capacity building strategy regarding e-learning competences for staff
    - Quality assurance framework for e-courses
- Established e-learning centres with trained staff and specific business strategy
- Training material for teachers regarding e-learning and ICT for lifelong learning
- Pilot projects (implemented e-courses)

CAMELOT

CreAting Machinima Empowers Live Online Teaching

Website: http://camelotproject.eu

Runtime: 12.2013 – 11.2015

Supported / co-funded by: LLP / KA3 ICT

Partners: Information on all nine partners is available here: http://camelotproject.eu/project-consortium/

Project representative to be contacted for further info: Dr Michael Thomas (mthomas4@uclan.ac.uk)

The Lisbon Key Competences underline the importance of language learning, online learning and intercultural communication among the key priorities. With ever increasing widening participation in education and the turn towards open access in educational resources, it is important to identify new ways of engaging learners utilising new pedagogies and new technologies to motivate language learners in the pursuit of lifelong education. The motivation for the CAMELOT project (**Cre**Ating **M**achinima to **E**mpower **L**ive **O**nline language **T**eaching and learning) derives from this network of key factors.

Moving pictures, sound and stories are becoming one of the most powerful ways of communicating learning content in the digital age. An increasing number of learners today across all educational sectors use digital video as the favoured means of communication. *Youtube* has become the second most popular online community after *Facebook* and the second largest search engine after *Google* – not only as a tool of self-expression but also as a tool for learning. CAMELOT derives from the shared interest of the partners in the use of a new generation of cost effective digital video tools and applications to enhance the student experience in an EU language learning context.

Compared to language learning conversations recorded with traditional technology, there is a distinct difference in the case of recording in virtual worlds such as Second Life. In the latter, learners can join online environments and navigate to the virtual site where the videos were shot and re-enact the conversation with avatars at hand. This is independent of the location where the learners connect. This is why the process can be referred to as 'live video production'. The distinctive foci of CAMELOT are evident in four main development areas:

- Language learning in authentic virtual environments with a task-based approach
- Real-time animation video production
- Field testing *machinima* across four educational sectors (school, HE, adult education, and vocational)
- Teacher training course and pilot test

The aim of the CAMELOT project, then, is not simply to provide visually appealing, authentic conversations in the target language that teachers can readily use, but to provide the know-how, both technological and pedagogical, for teachers to create and adapt their own *machinima* to their own particular teaching environment. By providing example materials as indicators of the potential for language learning and training guidelines, both concerning the technical practicalities necessary to create *machinima* and how to use them, CAMELOT will provide a range of educational benefits:

- Fit for purpose education– teachers can create learning environments for their students
- Learner autonomy – students learn and practice at their own pace
- Learner empowerment – learners can try a new language without feeling self-conscious
- Collaborative learning – teachers and students can jointly create environments
- Low cost and yet high quality video productions

Main target groups of the project: Leonardo da Vinci (Language Learning), Grundtvig (Adult Education), Comenius (Schools), Erasmus (Higher Education)

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Significant public results:

CAMELOT seeks to:

1. provide structured and creative opportunities for learners and teachers to use immersive worlds;

2. extend the pedagogical potential of immersive environments by allowing learners to create videos with the target language, then experience authentic cultural artefacts (e.g., create and record a dialogue in French about visiting Paris and then visit virtual Paris in-world);

3. promote the know-how of live video production to a community of EU educators;

4. cascade teacher autonomy by empowering them with the relevant pedagogical and technical know-how.

DISCUSS

European Platform for Communities of Practice in Lifelong Learning

Website: http://www.discuss-project.eu

Runtime: 11.2013 – 10.2015

Supported / co-funded by: Lifelong Learning Programme (LLP), Key Action 4: Dissemination and Exploitation of Results

Partners: Ludwig-Maximilian-University Munich (LMU), DE; Praxis und Wissenschaft (PW), DE; PASCAL Centre, University of Glasgow, UK; NEXUS Europe, IE; IDEC, EL; MENON Network EEIG, BE; Observatory for Lifelong Learning Development (ODIP), RO; Information Systems Management Institute (ISMA), LV; Hellenic Association for Education (HAEd), EL.

Project representative to be contacted for further info: Thomas Fischer (thomas.fischer@menon.org.gr); Randolph Preisinger-Kleine (rp@pw-projekt.de)

Dissemination and exploitation of projects results are currently the major mechanisms to increase the impact of project results. There are nevertheless indications that there is a need for further improvement in the cooperation between Lifelong Learning (LLL) projects and exchange with users that can significantly increase peer learning, capitalise on previous efforts, create synergies and develop innovations. Moreover, there is a growing need for long-term collaboration among projects and target groups beyond the lifecycle of projects.

DISCUSS will bridge this gap by incubating Communities of Practice (CoP), helping to stimulate dialogue and exchange between beneficiaries and users of the Lifelong Learning Programme (LLP): practitioners, researchers, experts, learners, stakeholders and decision makers. The major results of the project will be five CoPs, each one dedicated to major thematic areas/priorities of the Lifelong Learning Program:

- Validation of informal learning;

- Improving the quality of adult education; promoting social and economic cohesion through improved adult learning opportunities;

- Creativity and innovation incl. intergenerational learning, learning for senior citizens and family learning;

- Improving quality assurance systems in VET;

- Development of basic skills and transversal key competences; reinforcing key competences such as digital competence, bridging the worlds of education and work.

Furthermore a state-of-the-art platform and collaborative tools, which can be used by the community members to share project information and good practices, discuss and collaborate on common issues and get engaged through professional and social interactions will be developed. The project takes advantage of advanced community design based on the concept of 'expansive learning', which allows the communities to share knowledge and bring together expertise in a cross-program setting.

DISCUSS is expected to have a major impact both during the project implementation and after its conclusion.

Main target groups of the project: Practitioners in the field of Lifelong Learning (LLL) incl. researchers; teachers, trainers, facilitators, mentors; human resources staff; administrative and support staff in educational establishments; decision and policy makers

Significant public results: Background Report on Communities of Practice (CoPs); Establishment of 'Communities of Practice' (Cop) structured around the themes of the Lifelong Learning Programme (LLP); DISCUSS Platform & Tools; Moderator Concepts; Project Website; Webinars; Final European Conference; Roadmap for Mainstreaming; various promotional materials such as newsletters, videos, presence on social media e.g. Facebook, LinkedIn etc.

Hands-On ICT

Hands-On ICT: Learn, practice, teach creativity and ICT

Website: http://handsonict.eu

Runtime: 01.2013 – 04.2015

Supported / co-funded by: Lifelong Learning Programme, KA3 Multilateral projects

Partners: Fundació per a la Universitat Oberta de Catalunya, (Coordinator), ES; Ellinogermaniki Agogi, EL; Open University of the Netherlands, NL; Euro-Mediterranean University, SI; MirandaNet Ltd., UK.

Project representative to be contacted for further info: Katerina Riviou (kriviou@ea.gr)

The Hands-On ICT (HANDSON) project aims at facilitating the integration of ICT tools in teaching and learning by developing a learning-by-doing environment to be explored by themselves or with the guidance of a mentor. The environment offers teachers a set of learning activities complemented with 1) the competences it addresses, 2) the lesson plan, 3) the open source ICT tool, 4) the open content, 5) a sandbox for the tool. In addition, teachers find a ready-to-use online space to bring students over to carry out the activities with the appropriate ICT.

In sum, HANDSON is a holistic environment that provides teachers everything they need to learn in relation to the choice making and use of the most suitable ICT tools for a given pedagogical activity while also providing the cloud arena for putting into practice these activities with students.

The initial activities will be based on creativity techniques. By addressing transversal competences in today's knowledge society we reach out to teachers across a wide variety of sectors and subject contents. The HANDSON environment allows for the practice required to really learn a creativity method.

Main target groups of the project: The HANDSON environment main targets are SE and VET teachers and HE faculty members. Teacher trainers are also main users of the project outputs.

Significant public results:

http://handsonict.eu/, https://twitter.com/handson_ict, http://www.youtube.com/watch?v=kjfCy-YEQF8&feature=youtu.be.

Riviou, K., Barrera C.F. and Domingo M.G. "Design Principles for the online Continuous Professional Development of Teachers", 14th IEEE International Conference on Advanced Learning Technologies (ICALT 2014), Athens, Greece, IEEE Computer Society, 7-10 July 2014 (accepted for publication), 2014

PEEP

Policy for Educator Evidence in Portfolios

Website: http://peepproject.eu

Runtime: 05.2012 – 05.2014

Supported / co-funded by: Lifelong Learning Programme, KA1-ECET

Partners: The College of Teachers at the Institute of Education, London, (Coordinator), UK; The University of Economics and Innovation, Lublin, PL; The Intercultural Cooperation Foundation, Sophia, BG; TEETCH for Corporate Education, London and New York; Latvia Culture College, Riga, LV; Ellinogermaniki Agogi, Athens, EL; The General Teaching Council for Wales, Cardiff, South Wales, UK.

Project representative to be contacted for further info: Katerina Riviou (kriviou@ea.gr)

The PEEP policy describes and advocates an ePortfolio career-tracking system for European Union (EU) educators (teachers/trainers) in order to strengthen professionalism and raise standards of teaching and learning. It argues for a need to include non-formal (planned activities) and informal evidence (acquired from normal experiences) as well as formal qualifications, in order to provide a more complete picture of an educator's knowledge and competence. Professional principles (well-qualified, lifelong learning, mobility and partnership) rather than arbitrary standards are suggested as being more enduring and meaningful in transnational contexts as the criteria for selecting appropriate evidence. These are defined for the beginning, middle and specialist stages of a career. The policy and ePortfolio platform were piloted in the partnership countries. Recommendations are made from stakeholder feedback regarding the development of the ePortfolio career record. It is suggested that this tool becomes a mandatory recording system of continual professional development for EU educators in order to assist and confirm professional status and provide a useful passport for mobility. Backing of governments and employers is necessary for EU implementation.

Main target groups of the project: Educators, Teacher trainers, assessors

Significant public results: PEEP eportfolio tool: http://peep.ea.gr/, http://www.peepproject.eu/

PEEP Policy Document, http://portal.opendiscoveryspace.eu/beta/sites/default/files/peep_policy_document_2014.pdf

Designing & Validating an E-portfolio tool for tracking teacher competencies & development throughout a career according to EU Principles, 2014 EDEN Annual Conference, Zagreb, 10-13 June

A teacher community has been created on the ODS portal "Record your professional development!" http://portal.opendiscoveryspace.eu/beta/community/record-your-professional-development-413178

MINGLE

Migrant language and social integration

Website: http://mingle.exus.co.uk

Runtime: 11.2012 – 10.2014

Supported / co-funded by: EACEA – LLP – Grundtvig

Partners: EXUS, Family and Childcare Centre-KMOP, University of Peloponnese, EL; Anziani e non solo soc. Coop.-ANS, IT; Cyprus Neuroscience and Technology Institute, CY.

Project representative to be contacted for further info: Hara Stefanou (chstef@exus.co.uk)

MINGLE objectives

The MINGLE project is conceived as a way of integrating migrants into society and particularly the workforce of the receiving country, by improving their access to language training courses and other guidance material. MINGLE aims at providing language vocationally-oriented training addressed to migrants, in particular to Romanians and Bulgarians living or willing to move to Italy, Greece and Cyprus respectively and who are looking for a job in the elderly care and/or tourism/restaurant sectors. This is achieved by developing a web-based, easy-to-use Distance Learning Application (DLA) and the respective educational content for teaching the language of the receiving country to the migrants.

MINGLE intent to support people willing to improve their language skills at their free time. It can be used by both employed and unemployed people, living in their native or in the receiving countries, who would like to enhance their employability opportunities, improve their working position and integrate in the receiving society.

MINGLE educational model

The MINGLE educational model includes a lot of linguistic activities (listening, reading and comprehension, vocabulary, grammar, phonetics), and communication tools (announcements, email, etc.) that will make learning a pleasant and constructive experience. A total of four courses, two in Italian and two in Greek, have been developed, one for each sector. Special care has been placed on the linguistic peculiarities of the two languages. More specifically the Greek courses have a special focus on spelling and phonetics whereas the Italian ones focus on grammar.

Each course constitutes a complete and comprehensive core divided into five chapters each covering specific linguistic goals, with an increasing level of difficulty from chapter 1 to chapter 5. Each chapter is divided in two units with different level of complexity and difficulty. Apart from the "theoretical" part, each chapter also includes exercises so that the users can self-assess their learning level. Each course subsequently ends with the "course exam" which covers the main topics treated in the course chapters. This final assessment provides users with a "Certificate of successful attendance" to the course, provided that they have exceeded a predefined threshold of correct answers.

Content of the elderly care courses:

- Health and elderly care, including appointment with the doctor, understanding the medicine instructions, elderly pathologies;
- Elderly food and feeding;
- Emergency situations: the emergency call;

Content of restaurant/tourism courses:

- Activities at the restaurant;
- In the hotel;
- Health and safety at work and emergency situations.

Additionally, the vocationally-oriented courses have some chapters in common related to transversal issues relevant to both working sectors:

- **Job research and job interview**: users learn how to understand a job announcement, manage a job interview and write a well-structured CV relevant to the placement they apply for.

- **Local services and offices**: learners become familiar with specific terms and procedures of the respective bureaucracies, real life dialogues that can take place in public administration offices and driving licence issues.

Main target groups of the project: Migrants, mainly from Rumania and Bulgaria, in Italy, Greece and Cyprus looking for work in tourism and elderly care sectors.

Significant public results:

- MINGLE web-based Distance Learning Application (DLA) with 4 integrated courses regarding tourism and elderly care sector in both languages.

- Nov.2013 and Apr.2014: Two articles have been published in the Bulgarian newspaper in Cyprus.

- 10/6/2013: EXUS participated Athens EACEA 'Meeting of Greek centralised projects: Leonardo Da Vinci, Grundtvig, Adult Learning Agenda' which took place in the Athens University History Museum, Athens, Greece. The MINGLE project was presented during the EACEA meeting, informative material was disseminated and networking with similar projects took place.

- 21/9/2013: ANS and KMOP presented MINGLE project within a conference for the SET CARE program (www.setcare.eu) which took place in the University of Athens, Greece.

- 23/4/2013: KMOP through the transnational meeting for the project Re-PoD (http://www.repod.org), which was held in Bulgaria, had the opportunity to inform Bulgarian individuals (relatives of people with Down Syndrome) about MINGLE project in an event that was held by the Bulgarian partners.

- 3/12/2013: ANS presented MINGLE project within the 4th meeting of the AMICO project (http://amico-online.org) which took place in Carpi, Italy.

UDLnet

Universal Design for Learning: A Framework for Addressing Learner Variability– UDLnet

Website: http://www.udlnet-project.eu

Runtime: 12.2013 – 11.2016

Supported / co-funded by: Lifelong Learning Programme, COMENIUS Multilateral networks

Partners: Ellinogermaniki Agogi, EL; Universal Learning Systems, IE; National and Kapodistrian University of Athens, EL; Pan Cyprian Organization "Angalia Elpidas", CY; The Finnish Association on Intellectual and Developmental Disabilities, FI; NHL University of Applied Sciences, NL; Centrum für angewandte Systemlösungen e.V.v, DE; Spanish Confederation of Education and Training Centres, ES; Enable Ireland Disability Services Ltd, IE.

Project representative to be contacted for further info: Katerina Riviou (kriviou@ea.gr)

Article 24 of the UN Convention on the Rights of Persons with Disabilities states that persons with disabilities should be guaranteed the right to inclusive education at all levels, regardless of age, without discrimination and on the basis of equal opportunity. State Parties should ensure that children with disabilities are not excluded from free and compulsory primary education, or from secondary education. Still, there is a long way ahead before reaching a society where equal opportunities are guaranteed for all.

Inclusive and quality education is a key means to achieve this goal. In many special as well as mainstream schools, however, there is still much uncertainty and a lack of knowledge. Though the policy context supports a shift to inclusion, professionals need more support to develop their practice. In order to bridge the gap between policy and practice the UDLnet network aspires to address this necessity collecting and creating best practices under the framework of Universal Design for Learning (UDL) on the following envisaged themes: inclusive learning environments, accessible resources, teachers' and school leaders' competences, examination of barriers and identification of opportunities. Moreover, current needs related with the use of mobile devices will be investigated, and the proposed network will cater for the delivery of accessible educational resources through wireless and mobile devices along with the application of the UDL framework in real inclusive educational practices.

UDLnet building upon experience of previous and current projects aims at exchanging/creating good practices on inclusive education for students with disabilities, and not only, across Europe, in order to cater for their wholesome development, smooth transition in the next grades and consequently for employability, working inclusion and for active European citizenship.

Main target groups of the project: Teachers (in-service, pre-service), Teacher trainers, School leaders, Curriculum developers, Educational Policy Makers, ICT support/technical staff

Significant public results: A summer school on "Teacher Competences Fostering Inclusive Learning" is to be held in Attica, Greece on July 13-18, 2014, organized by Ellinogermaniki Agogi. The aim of the course is to have a positive impact on the development of students' transversal competences, creativity, collaboration, and effective communication skills by promoting the use of real world authentic learning activities by immersing participating teachers in the process of resource based approaches via their interaction with a unique collection of open educational resources (OER). More information: http://udlnet.ea.gr

e-Hoop

Unified e-Hoop Approach to Learning Differences

Website: http://www.e-hoop.info

Runtime: 12.2012 – 11.2015

Supported / co-funded by: Lifelong Learning Programme (LLP), Key Action 3: Information and Communication Technologies (ICT)

Partners: Hellenic Open University (HOU), EL; Cyprus Neuroscience & Technology Institute (CNTI), CY; Cosmic Innovations, CY; New Technologies and Learning in Europe (NTL), DE; The Youth Career and Advising Center (JKC), LT; Dafnord Association, FI.

Project representative to be contacted for further info: Elena Aristodemou (elena@cnti.org.cy); Thomas Fischer (thomas.fischer@menon.org.gr)

e-Hoop approaches the issue of different learning abilities and adopts a collaborative approach between adults and children and will create a universal, dynamic and adaptable e-learning environment able to offer free personalised training solutions to all learners regardless of their learning, cultural and social background. The e-learning environment can be used, modified and expanded by educators, while learners with diverse needs can easily use and benefit from the platform.

The universal learning environment will be based on an Open Source (OS) training platform that will apply to different cultural and learning styles, and will allow the adaptation of learning content based on the individual learner characteristics via learners' classification. The learning environment aims to fully exploit broadband technologies and paradigms. The benefits of the learning environment comprise:

- Free personalized training, to all learners of all ages especially those who face high risk of social and cultural exclusion;

- The platform is operating under an Open Source (OS) license facilitating extension and modification, allowing to every educator and learner to benefit from it;

- Educators can upload their own Learning Objects (LOs) to the platform thus supporting the concept of personalised learning;

- A fun learning environment that engages learners thus decreasing dropout rates;

- Provision of diagnostic tools enabling learners to adapt their learning experience, to their individual needs.

Placing focus on combating poverty and social exclusion the e-Hoop project proposes a new conceptual framework of inclusion and proposes a unified way to address 'learning differences'.

Main target groups of the project: Educators, primary school students and special educators with their students; organisations and schools tackling people at risk of social exclusion of various cultural backgrounds; local centres for and organisations of physically disabled people

Significant public results: Structured Democratic Dialogues (SDD) on Obstacles to the ideal Educational Institution; Literature Review and Country Briefs on Special Needs Education; Report and Online Database of existing FLOSS Tools supporting Personalized Learning; Training Unit and Definition of the Top-10-Reasons for Using the Platform for Educators and Top-10-Reasons for Learners; Design, Piloting & Implementation of the e-Hoop Learning Platform; Administrator & User Manuals; Learning Content & Learning Object Sequencer, Mini-Diagnostic Tools; Website; Final Conference; e-Hoop Guide of Good Practice

MAJMIN

Major Competencies to Manage Minor Offenders

Website: http://majmin.eu

Runtime: 2011 – 2014

Supported / co-funded by: 517580-LLP-1-2011-1-RO-LEONARDO-LMP

Partners: University of Piteşti, RO; Foundation "Vocational Education and Training EPA 21 Century", BG; University of Nicosia, CY; Syddansk Erhvervsskole, DK; Tandem Plus Network, FR; Cooperativa Sociale Cooss Marche Onlus SOC. COOP. P.A., IT; The Group for European Integration, RO.

Project representative to be contacted for further info: Dr. Dumitru Chirlesan (dchir@gie.ro) and Prof. Camelia Maria Morăreanu (georgeta.chirlesan@upit.ro)

The goal is to increase the specific professional training provisions that will enforce the involvement of different parts involved in the management of juvenile crime, for a better response to the needs for social inclusion of minor offenders.

The general objectives are:

- to upgrade the professional competencies by specific professional training of different categories directly or indirectly involved in the management of juvenile criminality and in the assistance of minor offenders;
- to endow the family members with specific competencies;
- to increase the functionality and inter-operability of the structures that manages the juvenile crime.

Main target groups of the project:

Direct beneficiaries:

- Professionals directly involved in juridical assistance (lawyers, magistrates, policemen);
- Professionals directly involved in penalty assistance (guardians and other prison personnel);
- Professionals directly involved in social assistance (probation counselors, social operators, social assistants);
- Professionals directly involved in pedagogical assistance (educators, teachers, tutors, other didactic personnel);
- Professionals directly involved in psychological assistance;
- Professionals directly involved in medical care;
- Family members that should take care of minor offenders.

Indirect beneficiaries:

- The state structures that manage the juvenile crime (probation services, child assistance and protection directorates, police, penitentiaries administration);
- Minor offenders.

Significant public results:

1. Research Report;
2. EQF based curriculum for VET training of professionals;
3. VET provisions;
4. Training course;
5. International symposium under EfVE.

LeHo

Learning at Home and in the Hospital

Website: www.lehoproject.eu

Runtime: 01.2014 – 12.2016

Supported / co-funded by: LLP – KEY3 Networks / 543184-LLP-1-2013-1-IT-KA3-KA3NW

Partners: Fondazione Politecnico di Milano (Applicant),IT; Università degli Studi di Perugia, IT; Bednet, BE; Staatliche Schule fur Kranke Muenchen, DE; MMB, DE; EDEN – European Distance and E-learning Network, UK; Funditec, ES; Children's Hospital School of Leicester, UK; + Third Country 57357 – Children's Cancer Hospital, EG.

Project representative to be contacted for further info: Matteo Uggeri (matteo.uggeri@polimi.it)

The issue of providing education to children and youngsters with medical or psychological needs which preclude them from accessing mainstream education it's a world-wide problem and every country has its own solution for it. We think that an international confrontation on this subject may be very useful, as in some countries – probably – there are online/digital solutions that may help the schools and the family to guarantee the right to education also to those children who suffer from serious diseases that force them to stay in the hospital or at home for long time.

Main target groups of the project: teachers active in home and hospital education

Significant public results: At the time when the EDEN workshop will take place, the LeHo project should have been produced a *Key educational factors and related ICT tools table* to be used in the field of Home and Hospital Education (HHE), a *Glossary of terms in use in HHE and ICT*, a draft of the *National Institutional Environments* in the partners countries. Moreover, *Focus Groups* with teachers and medical staff will take place all around Europe in the partnership countries, providing feedback on the themes above mentioned.

The *Online Hub* of the project is already up and running at the moment of this submission, and it provides documents on the mentioned deliverables and room for the international and national communities on the theme of home tuition and hospital learning. Some of the communities are already taking place online through social media (https://www.facebook.com/LeHo.ar?ref=br_tf – Arabic FB page; https://www.facebook.com/LeHo.ar?ref=br_tf – International FB group) or official online websites (http://pso.istruzione.it – the Italian portal with his forum).

NEST

Network of Staff and Teachers in Childcare Services

Website: http://nest-project.eu

Runtime: Nov 2011 – October 2014

Supported / co-funded by: Lifelong Learning Programme

Partners: NEST coordinator: Innovation in Learning Institute, Friedrich Alexander University, Erlangen – Nürnberg, Germany, see more at http://nest-project.eu/contacts/

Project representative to be contacted for further info: Eva Szalma (szalma@eden-online.org)

The state of the art in staff development in Early Childhood Education and Care is related to the fragmented situation of systems and provisions across EU: a common vision for childcare services is currently lacking in Europe; just as levels of investment differ greatly between Member States, picture also varies significantly in relation to childcare workforce. Childcare workers are qualified in all aspects of ECEC in some country (must hold a degree and be involved in continuous training) where in other countries they don't have formal education path and recognized professional profile. Given this varied background in the EU, there are no common recommendations/curricula, and there are very few possibilities of sharing and peer support – this is the field where the NEST network is trying to make a difference.

The NEST project established a network in Early Childhood Education and Care (ECEC) staff development. There are working groups in Italy, Spain, Hungary, Slovenia, Finland, Greece and Germany with an international group currently forming. The NEST network promotes peer learning and support among ECEC staff and contributes to overcome local visions, by creating links between institutions/practitioners/professionals, and by collecting learning resources in ECEC. This online-based pool of (learning) resources and information allows sharing for ECEC workforce and institutions at all levels in EU. Both the NEST portal and the Resources section is multilingual.

Main target groups of the project: Primary target groups: Practitioners, childcare workers, researchers, policy makers (DE, IT, ES, SL, EL, HU, FI + international/EN)

Secondary target groups   : Parents, teachers, educational professionals, training institutions of ECEC workers (DE, IT, ES, SL, EL, HU, FI + international/EN)

Significant public results:

- National and international network of ECEC professionals
- Three national events (Italy, Hungary, Spain)
- Online ECEC platform with social web functions – multilingual
- Pool of Resources - a multilingual, searchable database categorized by referred age and key concepts defined by the network members, containing over 250 resources in 7 languages (up to now)

careNET

careNET: Building ICT competencies in the long-term care sector to enhance quality of life for older people and those at risk of exclusion

Website: http://www.carenetproject.eu

Runtime: 01.2012 – 02.2014

Supported / co-funded by: Lifelong Learning Programme – Key Activity 3 – ICT; Multilateral projects

Partners: IFEF – IPERIA, FR; KCL – King's College London, UK; IRS – Institut per la Ricerca Sociale, IT; UNIPI – Κεντρο Ερευνων Πανεπιστημιου Πειραια, EL; FBIS – Fundación Burgos para la Investigación de la Salud, ES; UCL – University College Lillebælt, DK; EDEN – European Distance and e-Learning Network, UK; TLCR – Telecentre Europe, BE.

Project representative to be contacted for further info: Eva Suba, EDEN (suba@eden-online.org)

Care-workers in home care and older persons are exposed to the risk of social exclusion as they are both often at the margins of society and likely to be the victim of exclusion in the fast-changing digital world. The acquisition of digital skills is essential for both those in the care sector and families. In response to these pressing needs, the careNET project has identified key digital competences to support inclusion of care-workers in a new world of professionalization and led on-the-job experiments with household carers in partnership with older people. The careNET project (co-funded by the Lifelong Learning Programme of the European Commission) focused on social inclusion through the development of ICT (Information and Communication Technologies) competences for care recipients above the age of 65 years in long term domiciliary care and care workers. In the context of the everyday life in domiciliary care, careNET explored in seven partner countries if and how care workers support the elderly as care recipients in handling their lives with the use of ICTs. In the care services provided for elderly people, the focus was on care workers help with and teach the use ICTs and Internet.

Main target groups of the project: Care-workers, trainers, institutions and organisations involved in training in social care, vocational training institutions, TEL experts and people aged 65+.

Significant public results: The project developed the Map of domains for common and specific digital competences for domiciliary care workers and care recipients aged 65+ years. The digital competences are defined by an analysis of 'day-to-day' activities in real context of work and life, against a background of affordances of available technology. The identified competences are described in the Map of domains of competence. Data has been collected in France, United Kingdom, Italy, Greece, Spain, Denmark and Hungary to provide the content for the descriptions of the competence areas and interrelated competences in the Map of domains of competence. A survey with self-administered questionnaires has provided quantitative data about the use of ICTs in care for analysis concerning common digital competences. Focus group interviews and individual interviews have provided qualitative data for analysis regarding specific digital competences for both target groups. In relation to the identification of the Foundational Competences, the research on Digital Competence from the DIGCOMP project at the Institute for Prospective Technological Studies (IPTS), Joint Research Centre has been used initially in relation to define areas the common competences. The Map of domains of competence was used in the careNET project to the design and develop learning paths and resources for the identified ICT competences for care recipients and care workers. These were tested in the pilot phase in Spain and France as the validation of the work.

The pilots of the CareNET project lasted 3 months. They implemented and validated the careNET learning architecture, pathways and resources previously produced based on the Map of domains of competences. The Spanish and French partners carried out trainings through a specific ICT tool, a digital tablet, involving 120 care workers and care recipients. During these trainings the participants used a Virtual Learning Environment (VLE) consisting of three tools: a social network, a learning platform and a competency wiki. Through the VLE and the related "Learning Relay Centers" provided by the project partners, the trainees learned in an innovative surrounding. In Spain, the pilot took place in the city of Burgos. In France, IPERIA implemented the pilot in 5 territories. The Synergy Strand presentation will introduce the results of the pilots and the related validation seminars involving stakeholders of the field as well as the Maps of domains of competences and related learning paths.

CARER+

Ageing well in the community and at home: developing digital competences of care workers to improve the quality of life of older people

Website: http://www.carerplus.eu

Runtime: 01.2012 – 02.2014

Supported / co-funded by: Lifelong ICT Policy Support Programme (CIP-ICT PSP-2011-5,) Theme 3: ICT for Health, Ageing Well and Inclusion, Objective 3.2: Digital competences and social inclusion

Partners: Iperia, (coordinator), FR; Fédération des Particuliers Employeurs de France, FR; Télécentres Europe, BE; 3s Unternehmensberatung GmbH, AT; Istituto per la Ricerca Sociale, IT; Università degli Studi di Macerata, IT; King's College London Learning Institute, UK; Arcola Research Ltd., UK; European Distance and e-Learning Network, UK; Foundation EOS, RO; Latvian Information and Communication Technology Association-LIKTA, LV, Latvijas Samariešu apvienības-LSA, LV; Iniciadoras Innovadoras, ES

Project representative to be contacted for further info: Eva Suba, EDEN (suba@eden-online.org)

The CARER+ project identifies and validates ICT and non-ICT competences in the domiciliary care working sector to support older persons in the home – anticipating a new and vital role for care workers, as a 'CARER+'. It does so by developing a set of learning paths and educational resources for mobile and work based learning, that respond to major challenges to their professionalization: isolation, access to technology, flexibility of study modes, lack of support and motivation, formal accreditation, recognition of prior experience, and scalability.

Main target groups of the project: The primary target groups are the relevant actors of social care sector: care workers and caregivers, their trainers within VET and Adult Education, older people, policy and decision makers, families, associations of care recipients and caregivers.

Significant public results:

Carer+ addresses the development of digital competences and digitally-supported professional skills for care workers, including actively into the process care recipients. Followed by the establishment of the Competence Framework published on the CARER+ Portal (http://www.carerplus.eu) in the form of a Wiki for social carers including the ICT elements and skills, the learning pathways and architecture was established and respective learning tools and platforms were created. Care workers in the CARER+ project will have free access to modern ICT tools; they can freely attend a 200 hours training and they can apply and try their new skills in the practice of home care. They have free access to a tablet, which they can use during the home care service provision to older people. Via this tablet and their own ICT devices they are connected to the learning platform as well as care-relevant tools of their everyday work. In the currently running so-called pilot phase- carers participate in a 200 hours blended-learning process with 40 hours face-to-face learning, completed by 160 hours of online learning. This training was developed to enhance the care worker's digital competencies and helped establish new working practices. Thanks to the CARER+ Competence Framework (http://www.carerplus.eu/developing-training/wiki/digital-competence-framework) and the learning architecture, personalized learning paths can be realized. Care workers then provide 6 months home care service to older people by using the device and competences. The entire process is accompanied by extensive evaluation and validation scheme, producing thus valuable findings of impact assessment. The Piloting phase is currently being implemented at 10 sites involving 500 users (250 carers and 250 older people): in France, in Italy, in Romania, in Latvia and in Spain.

The participation in CARER+ project pilot phase is completely free. Participants are not charged by any fee. Carers are requested to take part in the research activities by answering questionnaires and participating in group interviews related to their experiences of the trainings. After the initial pilot phase carers will take part in the research phase. This will involve collecting information from carers by using individual or group interviews (focus groups) or filling out questionnaires. These research activities will help investigators of the project learn about the impacts and the effectiveness of the project and benefits that can possibly be provided to the care worker.

CARER+ is open to other initiatives, organisations, to join the programme (http://www.carerplus.eu/content/open-call-interest). Trainers, VET institutions, universities and institutes are welcome to be part of the stakeholder validation scheme, where they are invited to take part at evaluating the results in workshops and via questionnaires. They have access to all reports and results relevant to their area. Stakeholders and users can join the project activities by:

- Reviewing the outcomes at key milestones of the project

- Ensuring quality outputs

- Keep the project objectives and outputs in-line with stakeholders needs and interests

- Detect critical issues, potential risks and conflicts at early stage and keeping the governing bodies informed about them.

The Carer+ partnership invites you to join in and get involved at different levels depending on your time and interest. We are calling on all stakeholders and users to get involved in evaluation and peer reviewing in a set of actions carried out through this project by actively engaging in our activities through our European portal (discussions, online surveys etc.) and by participating in Review and Validation workshops on the themes of

- Identification of digital competences of care workers

- Curriculum and learning resources

- Impact assessment and policy recommendations.

"Let's Study Together!"

"Let's Study Together!"
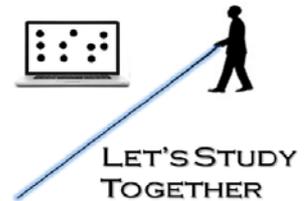
Website: http://www.linkedin.com/groups/Studirajmo-zajedno-Lets-study-together-5182024?gid=5182024&mostPopular=&trk=tyah&trkInfo=tas%3Astudira%2Cidx%3A1-1-1, https://www.facebook.com/StudirajmoZajedno (implementation of official web portal is planned in May 2014)

Runtime: 8.2013 – 2.2015

Supported / co-funded by: European Social Fund (IPA for the Human Resources Development Component in Croatia 2007-2013 / Integration of disadvantaged groups in regular education system name)

Partners: Faculty of Economics (applicant), HR; County Association of Blind People Split, HR; County Association of Blind People Zadar, HR; Faculty of Philosophy, HR; Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, HR; Faculty of Science, HR; Centre for Teaching Development and Digital Media, Aarhus University, DK; AIESEC Split, HR.

Project representative to be contacted for further info: Tea Dragičević (tea.dragicevic@efst.hr)

Project "Let's Study Together!" is an initiative to enable blind and visually impaired persons to study at two Faculties in Split: the Faculty of Economics and the Faculty of Philosophy. Apart from providing access to academic studies, this complex action also intends to ensure that blind and visually impaired persons (VIPs) are included in the student environment in the widest sense. Hence the title of the project – "Let's Study Together" – which reflects the project's philosophy that adequate conditions must be put in place at two faculties both for education and the social inclusion of VIPs. Education will be implemented using e-learning methodology, because it includes the delivery of just-in-time information and guidance from experts. The approach was chosen in view of specific needs of the target group and the likely limitations in their mobility. Learning Management System used in project is Moodle, since it is indisputably the adequate tool for on-line education. Project has four results: (i) Learning process adapted to the needs of visually impaired (including activities such as developing Moodle user interface, designing Text Reader Ready Module for education materials etc.), (ii) Increased interest of visually impaired for studying, (iii) Two faculties capacitated for visually impaired persons and (iv) Inclusion of visually impaired persons in student community ensured.

Main target groups of the project: Main target group are visually impaired persons (blind and partially sighted people) in Split-Dalmatia, Šibenik-Knin and Zadar Counties, age 15 to 25.

Significant public results: The project is still in progress, however the achieved result so far are listed below: established contacts with blind and visually impaired persons, target group completed, conducted Moodle e-learning workshops and gathered user requirements for Moodle adjusting, gathered list of courses for developing and adjusting teaching materials, execution of study tour to Denmark (visited Centres for blind and partially sighted, University of Aarhus), established collaboration with AIESEC, gathering database of students which applied for working on the project in progress etc.

Global Classroom

G L O B A L CLASSROOM

The new learning platform – a new telepresence learning system

Website: http://globalclassroom.eu

Runtime: 01 2011 – 12 2014

Supported / co-funded by: EU Socialfund

Partners: VUC Storström, DK; CELF, DK; EASJ, DK;

Project representative to be contacted for further info: Kristian Madsen (krm@vucstor.dk)

In 2011 the partners started to implement a new learning platform with its own conference servers that can host simultaneous interaction to and from 90 devices during a video conference. On this platform we have developed the Global Classroom concept, where the students can participate in classes from home on an equal footing with the students who choose to be present in the classroom. The new learning platform has a budget of DKK 26m (around 3,5m Euro) for the implementation of the platform, development of the teaching and, not least, enhancement of the teachers' competencies. The general purpose of the EU project is:

- To create new education opportunities and motivate young people to complete a youth education;
- To design new forms of learning sparsely populated areas with use of telepresence;
- To provide the educational institutions with the necessary competencies.

We evaluate the teaching via the Global Classroom setup continuously, and have now a number of recommendations for this setup:

- The teacher must make an extra effort to build relations to the students in all the rooms.
- Increase the collaboration between the teachers on the teaching principles and didactical choices and the progression in the students' study competencies.
- The tuition must be sequenced, i.e. brief intensive blocks rather than long presentations - interaction is invigorating.
- Use the interactive boards actively – by both the teacher and the students in all the rooms.
- All materials must be available from the school's learning management system.
- The interaction between teacher and students must be mediated and facilitated. An open discussion, where the person who speaks the loudest gets the attention, does not work through a sound system.
- Interactive media and materials work well for everybody no matter where the teacher is. The students at a distance feel that they are treated equally well and have equal opportunities for communicating with their fellow students and the teacher.
- The tuition must be planned to such an extent that the students know how to continue on their own if the connection is interrupted for brief or longer periods.

In 2014 VUC Storström has developed The Global Sports Academy together with the Danish Football Association. The aim is to give young professional players an opportunity to follow normal education through telepresence, since they otherwise will drop out of their education.

In 2013 the partners of the new learning platform formed a Knowledge Centre for Applied ICT in education together with Roskilde University, University College Zealand and Lolland Municipality.

Based on the experienced with telepresence VUC Storström has provided training for teachers using telepresence in the EU Crossborder project COHAB (DK, SE, DE, PL, LT).

Main target groups of the project: The target group is young adults on the Higher Preparatory Examination program, i.e. full-time students at an upper secondary level who for a multitude of reasons may need flexibility. The groups who have completed or are in the process of completing the program comprise students with special needs. For instance (single) parents or students who for mental reasons find it difficult to attend the class every day in the classroom together with many other students. The majority of the students are ordinary young adults, and they are all enrolled

under the same guidelines as everyone else in the Danish adult education system. So they do not have especially weak or strong academic skills.

Significant public results: Two major conferences with speakers from Denmark, USA, Netherlands and live interaction with use of telepresence. More than 50 presentations at other conferences in Denmark, Finland, Sweden, United Kingdom, USA and Vietnam. In 2013 the Global Classroom concept was awarded with a Silver Medal at the Annual US Distance Learning Award 2013.

eCapacit8

Strengthening occupational health professionals' capacities to improve the health of the ageing workforces

Website: http://www.e-capacit8.eu

Runtime: 01.02.2013 – 30.1.2015

Supported / co-funded by: Health Programme EU

Partners: Nofer Institute of Occupational Medicine (Lodz), PL; National Institute of Public Health (Prague), CZ; AGH University of Science and Technology (Krakow), PL; Croatian National Institute of Public Health (Zagreb), HR; Kooperationsstelle Hamburg IFE GmbH (Hamburg), DE; Institute of Preventive Medicine, Environmental and Occupational Health (Athens), EL; University of Medicine and Pharmacy "Iuliu Hatieganu" (Cluj Napoca), RO

Project representative to be contacted for further info: Agnieszka Chrząszcz (agniech@agh.edu.pl)

The ageing of European societies has already become a fact. The share of 'ageing part' of EU population will increase significantly over the coming years. This, in turn, will influence not only healthcare and social security systems but also the national economies. One of the intersections at which employees' ageing exerts its most profound effects is that of employment and health. Demographic changes and the resulting prolongations of retirement ages yield inherent challenges, in as much for the employers as for the workers themselves.

On the one hand, it should be in the job- givers' interest to foster the motivations and competencies of their staff and thus achieve the desired productivity levels. On the other hand, it should be an ultimate concern of the employees to remain healthy, both mentally and physically, and thus upkeep their abilities to work. Health and safety management can play into the benefits of both parties, provided that the sides know either how to work out the 'right' approaches themselves, or where to seek assistance from.

In that regard**, the capacities and experiences of occupational health professionals (OHPs)** – as of the medical specialists that the individuals most frequently encounter whilst being employed – **seem of particular relevance**. The arising question however, is not only whether the OHPs are ready to meet the increased numbers of older workers, but also **solve their age-related health problems.**

In order to prepare the OHPs for the upcoming challenge, it is necessary to use a systematic approach. One, that will consider the equal importance of such factors as: changing the **attitudes** towards ageing in general, the increase of manager's **knowledge** about age-related health issues, **workplace health promotion**, achievement of **work-life balance** and the **capacities of health systems**, and **OH sub-systems in particular**, to respond to the increasing needs of older employees.

Therefore, **the ultimate aim of the project is to ''e-CAPACIT8'' European occupational health professionals (OHPs) by providing them with country-specific, online educational materials**. With them at hand, the OHPs will be given the opportunity to improve their knowledge about the health problems experienced by ageing workforce in their country. **Additionally skilled OHPs**, should in turn, be better able to meet the needs of older workers, bearing in mind their health status, and thus **provide an age tailored service**. It is anticipated that, in the longer term, the actions undertaken within the project will prompt the OHPs to more actively engage in solving the problems of the ageing workforce, for example through the provision of support and promotion of workability.

The general objective of the 'e-CAPACIT8' project is **to strengthen the capacities of European occupational health professionals (OHPs), so that they can facilitate the process of workers' ageing**. The primary objective is built on **four specific objectives** namely:

- to **analyze** and **review** the state of the art of the European OHPs' **training curricula**;
- to **identify** and continuously **enroll** the biggest possible number of **stakeholders** in the project, throughout its duration;
- to **develop training material** for use through the platform;
- to **launch the functional version of the e-learning platform** and actively **enroll** active **users**.

The platform will provide the end-users with a searchable repository of targeted materials availiable as OERs, in a form of modules, handbooks, case studies and multimedia. The choice of an e- learning platform, as of the most effective way to provide information to OHPs was built on the following premises:

OHPs are normally occupied with several commitments and **have their daily routines full**. It is a **flexible** and **cost-effective** approach, which does not require one to attend a meeting in a defined place or at a defined time (i.e. it would not disturb the daily activities of OHPs). It **allows** one **to go back** to the materials and re-consult them at a point they are needed. It is most the most feasible means of **providing knowledge** to end-users located **across** as many as **13 Member States and beyond**.

Main target groups of the project: The target groups of the "e-CAPACIT8" project can be specified twofold. First of all, it will be **the representatives of different OH professions** (i.e. physicians, nurses, safety engineers, psychologists and ergonomists), who **will directly benefit** from the legacy of this enquiry. Although the project's general objective is to strengthen the capacities of OHPs, **chances are it will also exert positive effects on the older workers themselves.** It will do so by improving the quality of encounters between the employees and their "e-CAPACIT8ed" OHPs.

Significant public results: e-learning platform with OER related to OHPs and curricula in the respective area

eVET2EDU

Supporting Vocational Teachers and Trainers in e-Learning

Website: http://evet2edu.eu

Runtime: 10.2012 – 9.2014

Supported / co-funded by: LLP Leonardo da Vinci

Partners: Coordinator: Centre of e-Learning, AGH-University of Science and Technology, PL; CARNET, HR; RPIC-ViP, CZ; Vytautas Magnus University (VMU), LT; CPI, SI; Universidad de Murcia, ES; CESIE, IT; HIST, NO; Obrtna technicka skola, HR.

Project representative to be contacted for further info: Agnieszka Chrząszcz (agniech@agh.edu.pl)

General aim of the project is to **support trainers and teachers** from VET sector in implementation of dynamic, open and innovative methods by adapting and transferring validated e-learning course for vocational schools and training sector. The course is based on innovative pedagogical methods (e.g. online collaboration, reflection, peer learning) and uses various open tools. It will enable teachers and institutions to integrate them with new qualification framework and current teaching practice.

The final product – e-learning course on "e-Learning design and course moderation" consists of **10 modules** that cover around **60h of learning and are equivalent to 3 ECTS**. The course is based on social constructivism approach, stimulates self-direction of the independent learners and supports gaining experience from real practice. Assignments are designed to stimulate reflection and conscious development of a learner in a peer group. Activities are short and interactive but they also comply with accessibility rules. Communication is crucial and it encompasses discussion board, chatting and videoconferencing.

Course is designed in Moodle VLE but it includes external tools (open and/or free – FLOSS), such as collaborative whiteboard, videoconference, group editing and co-working. Additionally there is a detailed course guide for moderators and learners' guide. The course is very practical and proved useful (according to 7 evaluation questionnaires). Participants are encouraged to interact within the group and create meaningful and relevant artifacts.

The course focuses on e-learning design and e-moderation on a basic level. It takes 3 months and appox. 60 hours to complete, that is equivalent to 3 ECTS. The community and interactions between its members are the focal point of the social learning. As collaboration was indicated as pivotal for VET teachers it was also the driver for designing the course. The learners were to support each others as practitioners experienced in teaching. It was assumed that they would need support in re-directing this experience into e-learning practices and into mastering online moderation and collaboration.

There are 3 main pedagogical pillars of the course that is authentic learning and reflection together with a portfolio-based competence development.

Authentic learning is reflected on two levels: (i) meta-level of the course which becomes a learning environment and a reference point for evaluation. The experience of participation on e-learning course while learning about designing e-learning is a strong authentic factor; (ii) activities that reflect actual, authentic situations that can be planned and can occur online and require adequate response from the course participants.

Due to the wide scope of the course that is on the verge of pedagogy and technology authors decided to embed reflective practice into the course to deepen learning and drive off from the technological component. As a reflection is always related to the real experiences, in combination with the authentic activities it enables the learner to experience real-life situations and draw conclusions for the future actions. Short but regular reflective tasks accompany the learners along the course together with a formative feedback from the moderators.

The authors defined 9 competences that need to be mapped with evidence during the course. The selection of evidence is autonomous and each participant can focus on different modules or activities according to their understanding and interpretation of the competences proposed.

1. To contextualize e-learning competences in VET
2. Digital competence, using ICT tools for teaching and learning in VET context

3. Work collaboratively online synchronously and asynchronously (sharing ideas, communicating...)

4. Analyse competences in general and participant's own competences;

5. Critically adopting general e-learning principles and particular solutions in their context

6. Design engaging e-tivities for individual or group work in accordance with the learning outcomes

7. Create and manage (publish, select, re-use, share, and evaluate) audio-visual teaching /learning materials in accordance with the learning outcomes

8. Facilitate, inspire and motivate participants in an e-learning environment in order to achieve the learning outcomes

9. Metacognition (awareness and critical reflection on own teaching and learning competences)

In order to verify the design of the cMOOC the piloting was conducted in 8 countries with overall 300 users registered from Norway, Spain, Poland, Croatia, Slovenia, Lithuania, Czech Republic and Italy. The openness of the course was temporary restricted for the piloting to the VET teachers of professional subjects.

The course consisted of 10 modules, each containing activities and localised resources. The driving concept was design of e-tivities for VET and its constant development with:

- content (OERs and licensing, evaluation of OERs, developing short educational videos and infographics, users generated content)

- pedagogy (activity-driven design, e-tivities, facilitation and scaffolding, moderation strategies, motivation and support for learners, online collaboration, using web-conferencing for competence development)

- technology (open source and free solutions, Moodle, collaboration tools, mobile devices for video making, web-conferencing)

The majority of the course structure and content was cross-national. However some localised features were also present: the local facilitation and feedback was given by the local facilitators and the certification was issued separately in each country for the piloting. Also the source materials, examples and case studies were localised to reflect the actual situation of the participant's country. Such an approach ensured more flexibility (one course, one handbook) but also make the product targeted (variety of examples).

There was also a debate about the course environment (Moodle enhanced with dispersed applications) and its impact on the collaboration and innovative learning design. The important issue to be discussed is whether the provision of a dispersed learning environment and social networking is a part and parcel of a collaborative learning. For this particular community social networking has often been an ethical dilemma whether engagement with students should or shouldn't take place (e.g. via popular social software). Security of data means not only system security but also creating a comfort zone for learning, exchanging opinions, taking challenges and making mistakes. Adding to the fact that the level of media competence was extremely diversified the decision about semi0centralised learning environment was justified.

The initial evaluation results show that the overall dropout rate was around 1/3 which in fact reflects the general trend in that respect. Many claim that with the drop-outs rates high and the completion rate of the MOOC participants rather low. Learning about Social Learning, http://arxiv.org/abs/1312.2159) the effectiveness of that open form of teaching is questionable. However for many VET teachers it is a great opportunity to become a part of a learning community online, as the course provided time and space for active engagement and practice. It is also the opportunity to become a lifelong learner in an authentic environment as a result apply the skills to the educational context of the school.

Main target groups of the project: teachers, trainers, educators, institutions of VET

Significant public results: e-learning course available in 9 languages for self-learning or download as OERs; facilitator's handbook;

Revive-VET

Review and Revive VET Practices

Website: http://www.reviveproject.eu/vet/

Runtime: 09.2011 – 11.2013

Supported / co-funded by: LIFELONG LEARNING PROGRAMME / LEONARDO DA VINCI Transfer of innovation

Partners: European Foundation for Quality in E-Learning (EFQUEL), BE; Budapest University of Technology and Economics (BME), HU; SCIENTER, IT; Lithuanian Association of Distance and E-Learning (LieDM Association), LT; Kaunas Food Industry and Trade Training Center, LT; Fondo Formación Euskadi (FFE), ES; European Distance and E-Learning Network (EDEN), UK.

Project representative to be contacted for further info: Airina Volungeviciene (info@isi.vdu.lt)

The Revive-VET project aim is to help building up a well performing VET system, and to avoid the child illnesses in a VET system developing program, or tear down the operational and/or strategical barriers with the use of self checking in a currently running VET service. To facilitate this, Revive-VET provides a Quality Criteria Tool which is the final result of the project.

Main target groups of the project: The project addresses the need to develop the key skills and competences (in particular digital and technological competences) of VET teachers and trainers, institution managers in any sector, and basically anyone developing or establishing VET.

Significant public results:

- Case development methodology adapted to VET sector;
- Peer review methodology adapted to VET sector;
- Training material on application of adapted case development, peer review methodologies and Revive methodology;
- 32 developed cases in the areas and levels selected.

E-Solve

E-learning SOLutions for VEt

Website: http://esolve.gtk.uni-pannon.hu

Runtime: 10.2013 – 10.2014

Supported / co-funded by: LLP / LdV

Partners: University of Pannonia (PE), HU; DOBA Faculty of Applied Business and Social Studies Maribor (DOBA), SI, European Foundation for Quality in E-Learning (EFQUEL), BE; European Distance and e-Learning Network (EDEN), UK

Project representative to be contacted for further info: Zsolt Kosztyán (kzst@vision.vein.hu)

Dozens of excellent ideas have materialised with the support of the Lifelong Learning Programme in different areas of VET systems. The E-SOLVE project aims to distil valuable knowledge from Leonardo da Vinci projects – selecting sectoral best practices and focusing on solutions that can be utilised in white-collar vocational education and training by a broader audience of stakeholders.

The project target group are the development organisations that are providing the IT background and other, creative elements for the e-learning programmes. Providing them a virtual expo would ease not only their promotional activities but also market research, as they could benchmark their products. Creating a healthy competition among such service providers would also enhance the quality of education and training.

Main target groups of the project: Vocational Educational Training Providers, Adult Learners and Trainers, Educational Course/ Content Developers

Significant public results/expected results: Summer Camp in Hungary, Final Conference for the Stakeholders, Video Interviews of the Best Project developers

iPro

The iProfessional

Website: http://www.ipro-project.eu

Runtime: 10.2013 – 10.2015

Supported / co-funded by: Lifelong Learning Programme; Education Audiovisual and Culture Executive Agency; Erasmus.

Partners: The Institute for Postgraduate (IPS) studies, a Division at the University of National and World Economy (UNWE), BG; Institute for Training of Personnel on International Organization (ITPIO), BG; Audio-visual Technologies Informatics and telecommunications (ATiT), BE; Telecentar, HR; Dun Laoghaire Institute of Art Design & Technology (IADT), IE; Asociatia Agentia de Monitorizare a Presei, RO; Uniwersytet Łódzki (UL), PL; Tiber Umbria Comett Education Programme (TUCEP), IT; Vilnius Gediminas Technical University (VGTU), LT.

Project representative to be contacted for further info: Philip Penny (philip.penny@iadt.ie)

The aim of the iPro project is to set up a pilot collaboration between HEIs and VET providers in 8 European countries to investigate the potential for a closer collaboration between the world of the interactive media and arts design business and the higher and further education institutions for Media and Arts Design Studies. The collaboration will focus on detection of possible skills and competences mismatches between education and the professional world and will consequently put in place a pilot mechanism to address this mismatch by designing and piloting a curriculum design framework for use in this specific sector.

The project also aims to build, test and then distribute a research based model framework that will assist the Education sector and especially VET and the Higher Education Institutions to match, in a digital way, the curriculum of their students in Media and Arts Studies with the professional requirements expressed by the international community of media and arts businesses. This framework will demonstrate its effectiveness and quality in a series of pilots projects in the participating HEIs, as well as in other institutions that express their interest.

Digital Media, Arts and Culture in general are increasingly globalized, both regarding consumption markets and business creation. Trade agreements, international co-productions, legal issues such as IPR are no longer contained by borders. It is therefore paramount that the workers in this area are also internationally savvy and that they recognize beside the importance of regional qualities and requirements of the media and arts, the international and intercultural issues. Businesses expect from education that alumni come prepared to the profession with a good view on the present state of the art of their profession, and that includes obviously these important international aspects of multilingualism, multi- or inter-cultural competences.

On a regional or national basis it is difficult to put the importance of these to the same value within the curriculum, as well as all other professional skills related to Media and Arts design, it is only when put in the international perspective and even global perspective that HEIs will see their importance: to build an alternative to the predominance of North American companies and capital in the market and to the global spread of their digital media products.

The present situation of the process of European integration seems to offer an opportunity to bring together the measures which promote diversity, a real characteristic of the European culture, with the necessary strengthening of identity through media, arts and culture in general.

Main target groups of the project: (i) Higher education institutions; (ii) University students; (iii) SMEs; (iv) Corporations; (v) VET institutions; (vi) VET students.

Significant public results: The main public result or output will be a research based model framework that will assist the Education sector and especially VET and the Higher Education Institutions to match, in a digital way, the curriculum of their students in Media and Arts Studies with the professional requirements expressed by the international community of media and arts businesses.

EPNET

Europortfolio: a European Network of Eportfolio Experts and Practitioners

Website: http://www.eportfolio.eu

Runtime: 01.2013 – 12.2015

Supported / co-funded by: LLP / KA3-ICT

Partners: University of Zagreb, (coordinator), HR; ADPIOS, FR; Centre for Recording Achievement, UK; AGH University of Science and Technology Centre of e-Learning, PL; Danube University Krems, AT; University of Southern Denmark, DK; Open University of Catalonia, ES; TLT Group, US.

Project representative to be contacted for further info: Igor Balaban, Assistant Professor (igor.balaban@foi.hr)

EPortfolio related work is patchy across institutions, regions and sectors. This reflects several factors:

- Leadership: while European practice is recognised worldwide, a shared practice and infrastructure has not emerged.

- Fragmentation of initiatives: Most occur at individual, local and organisational levels, few at regional, national and international levels.

- Fragmentation of technologies: despite work on interoperability (e.g. IMS and LEAP 2A standards) ePortfolios are not interoperable across ePortfolio platforms and information systems in education, human resource development and employment.

- Fragmentation of actors: distance, language and cultural barriers affect the ability to share information and build knowledge.

- Fragmentation of information: there is no single point from which it is possible to find all relevant information on ePortfolios initiatives, technologies, practice and actors.

Main goal of the initiative is to establish a European Cooperation Network of experts and practitioners from four sectors in the field of ePortfolios: Further and Higher Education; Vocational Education and Training; Employment (human resources management, career counsellors, etc.); and Lifelong Learning (all the actors of non-formal and informal learning) in order to address the problems mentioned above.

This will be achieved by main outcomes: (i) Establishment of a wide network of committed stakeholders across nations and sectors, including ePortfolio experts, researchers, practitioners, educational institutions and leaders, employers, policy experts and policy makers as well as interested communities such as school networks; (ii) Development of a fully self-sustainable Europortfolio Learning Community Portal that will support the work of the Europortfolio community and will contain

EPNET initiative aims at:

- Defining a framework for the integration of ePortfolios in all 4 targeted sectors.

- Transfering crucial knowledge from early adopters of ePortfolio initiatives to new ePortfolio initiatives.

- Contributing to the definition and implementation of ePortfolio policies, based upon evidence-informed practice, and a shared European perspective.

- Raising awareness among educators, end-users and employers/ enterprises to promote technological innovation in education as well as practices of reflective learning.

- Developing an agenda for further action, in particular encourage the emergence of new ePortfolio initiatives to contribute to innovative learning practices, transparency and quality assurance of educational systems, formal and informal.

- Developing the Europortfolio Learning Community Portal as a self-sustainable European ePortfolio information platform and social community of actors with live stream of current practices.

- Enhancing the dialogue with international research networks, policy makers and educational leaders with the creation of an international network of experts and practitioners.

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Main target groups of the project: The target groups are ePortfolio experts & practitioners, Policy makers and global ePortfolio community.

Significant public results: Current public results are as follows:

- Europortfolio Learning Community Portal available at: www.europortfolio.org, www.eportfolio.eu.

- Europortfolio, a not-for profit association of a wide network of committed stakeholders across nations and sectors being developed with the support of European Commission, dedicated to exploring how ePortfolios and ePortfolio related technologies and practices can help empower individuals, organisations and wider society. Europortfolio provides a network for those doing ePortfolio and related work across Europe; to build the use of e-portfolios across communities, and to provide opportunities for future partnership working.

- Interactive map available on the Portal showing ePortfolio related initiatives, people, institutions, activities, projects, and events.

- On-line webinars organized by the Europortfolio community.

- Newsletters.

ICT-DRV

Preparing and keeping professional drivers qualification
up-to-date for their changing job requirements with multimedia-based
learning

Website: http://www.project-ictdrv.eu
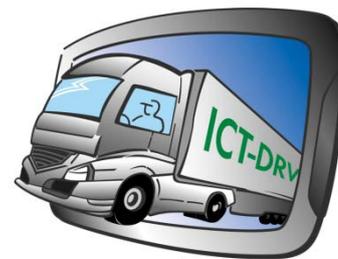
Runtime: 12.2012 – 05.2015

Supported / co-funded by: Lifelong Learning Programme / Leonardo da Vinci

Partners: DEKRA Akademie GmbH, Germany (full list of partners: http://project-ictdrv.eu/index.php?id=16)

Project representative to be contacted for further info: Claudia Ball (Claudia.Ball@dekra.com)

Professional drivers range in Europe under the top ten jobs employers are having difficulty filling with qualified employees. At the same time this occupation is characterised by a fundamental increase of qualification requirements during the past decades. This situation is especially challenging for the transport industry due to the rather low level of professional qualification within this occupation and a mostly negative image of the job that characterises this occupation nearly all over Europe.

These circumstances and the implementation of EC directive 2003/59 assign the challenging task on initial and continuous vocational education and training (I/CVET) in Europe to prepare all professional drivers for their continuously changing job requirements and to keep them qualified for their job once they entered into the labour market. Technology-based training opens up additional innovative opportunities in order to reach professional drivers in Europe and to achieve the high quality of training necessary in order to foster drivers' employability and safety on European roads.

It is the overall aim of the ICT-DRV project to enhance I/CVET for professional drivers in Europe with the means of technology-based training under special consideration of computer-based distance learning and simulator-based training approaches. A special focus is put on the exploration of opportunities, limitations and requirements to enhance professional driver training (in the framework of EC directive 2003/59) with technology-based training approaches and elements. A better ability of training to respond to work organisation and work reality of professional drivers in Europe is aspired in this way.

So far a widespread integration of technology-based learning into professional driver training is hindered by strong scepticism of involved actors towards technology-supported learning and by legal regulations still applying an input orientation with a focus on traditional class-room based training. Both barriers are based on missing trust into technology-based tools, the applicability of such tools within professional driver training and their appropriate application within VET for drivers with their special needs, characteristics and work reality. The projects focus is put on the facilitation and improvement of the learning process and transfer in the context of technology-supported learning.

ICT-DRV intends to lay grounds for the formation of trust and a widespread acceptance of technology-supported learning within professional driver training in Europe. The project consortium develops indicators and recommendations for a high-quality integration of technology-based training into professional driver I/CVET and facilitates a culture of quality improvement and innovation at all levels of professional drivers I/CVET and with regard to the integration of technology-based learning into the regular I/CVET of professional drivers.

Main target groups of the project:

Professional drivers, Employers within transport, Social partners, Policy and decision makers and vocational education and training providers concerned with professional driver training

Significant public results:

- An interdisciplinary conference on technology-based training within professional driver qualification bringing together participants from VET providers, developers of related training tools, transport and logistics industry, policy makers and public administration concerned with professional driver training, science and research as well as social partners in February 2015;

- Pilot test applications of computer- and simulator-based training offers under special consideration of the target groups characteristics, work reality and instructional design considerations;

- Recommendations for a high-quality integration of computer- and simulator-based learning (elements) into the qualification of professional drivers with a special focus on EC directive 2003/59 on professional driver qualification in Europe;

- A virtual platform for the future interdisciplinary network on technology-based learning within professional driver qualification.

TYYNE

TYYNE – Working life as a learning environment

Website: http://wiki.eoppimiskeskus.fi/download/attachments/8226492/TYYNE-raportti_10062013?api=v2

Runtime: 09.2012 – 05.2013

Supported / co-funded by: European Social Fund / Operational Programme in mainland Finland, national section, operational line 3

Partners: Association of Finnish eLearning Centre, FI; Aalto University, FI; HAMK University of Applied Sciences, FI; Otava Folk High School, FI.

Project representative to be contacted for further info: Ari-Matti Auvinen (ama.auvinen@hci.fi)

The TYYNE project focused on working life as a future learning environment. The work done was founded on several complementary forms of activity. These included literature reviews, expert panels, two-tier Delphi inquiries and active work in various social media channels. The study dealt with the multidimensional relationship between working life and learning, which was approached through exposing the backgrounds for modern phenomena with the help of field-specific literature and through the work of expert panels. The project also estimated future trends and enriched views concerning those using participatory working methods such as Delphi inquiries and expert panels.

The key premise for this study was that multi-faceted, extensive and continuous learning will be the most essential aspect of all work in the future. Information processing and new learning are almost without exception involved in all current and future professions – including those that are usually not considered knowledge-intensive. Work in the future will clearly be community-based in nature, and expert tasks conducted alone are already vanishing. High standard competences of individuals will be important in the future as well, but individual expertise will need to be related to the collective competences of the work community.

Developments at work will require more extensive and faster learning. In this way, the boundary between working and learning will become artificial: in the future, working will be continuous learning. A key observation made in this study was that the great change in learning can be summarised as learning transforming itself from individual activity to community-based activity. The key word for the community-basis of learning is network. Learning networks are diverse, multi-faceted and multidimensional – and community-based learning will be increasingly founded on open implementations that do not recognise organisational boundaries. Community-based forms of activity are supported by e.g. trends that increase the significance of communities of practice for learning, promote openness and transparency, and solidify community-based models in the arrangement of work.

These increasingly blended types of work arrangements – such as flexi time and remote work – also mean that community-based learning makes better use than before of various information and communications technology solutions and services. One of the important features in community-based learning is the increase in open sharing.

Learning in future work environments will take place at all times and everywhere. Various learning features are increasingly embedded in our tools, and support for learning will become a standard feature of their diagnostics. Continuously developing, diverse mobile solutions will ensure that opportunities for learning – whether we are acquiring or disseminating information – are available at all times.

The significance of informal learning will grow and gain strength in working life. In our quickly changing environment, the traditional course-oriented modes of competence development have their restrictions, because most of our current learning takes place when we work and communicate with the other members of our work communities. The traditional educational methods still have an important but a more specifically defined role.

Significant public results: The TYYNE project activated the discussion of the future of working life as a learning environment in Finland. The four expert panels enabled various stakeholders to discuss the issue. TYYNE project had an active presence in several social media. The two-tier Delphi survey was participated by tens of Finnish experts. Thus a community-of-practice was created to Finland. After the project, several videos in Finnish were published by the organizers. On the basis of the work of the project, 15 recommendations were given to promote learning in future working environments in a versatile manner; the full project report with a summary and recommendations in English (including also good essays by Mr. Esko Kilpi in English) can be found at
http://wiki.eoppimiskeskus.fi/download/attachments/8226492/TYYNE-raportti_10062013?api=v2

EDUWORKS

Crossing borders in the comprehensive investigation of labour market matching processes:
An EU-wide, trans-disciplinary, multilevel and science-practice-bridging training

Website: http://www.eduworks-network.eu

Runtime: 10.2013 – 09.2017

Supported / co-funded by: EU-Funded FP7 Marie Curie Initial Training Network

Partners: University of Amsterdam, (coordinator), NL; Central European University, HU; Corvinno Technology Transfer Center, HU; University of Salamanca, ES; University of Siegen, DE; Trinity College of Dublin, IE; Associated partners: http://eduworks-network.eu/pages/associated-partners

Project representative to be contacted for further info: Dr. Gábor Kismihók (g.kismihok@uva.nl)

The objective of EDUWORKS is to train talented early-stage researchers in the socioeconomic and psychological dynamics of the labour supply and demand matching processes at aggregated and disaggregated levels. EDUWORKS brings together researchers from several academic disciplines, namely: Labour Economics, Sociology of Occupations, HRM, Lifelong Learning, and Knowledge Management.

EDUWORKS focuses on matching processes at three levels and on one overarching topic:

- Individual level fit between job demands - persons' abilities
- Meso-level employers' demands for occupational skills versus occupational dynamics
- European and national level labour supply and demand matches and mismatches
- Knowledge Management for supply and demand matches

The specific research training aims of the research in the ITN are to develop expertise in:

- Investigating demands – abilities fit, that is the extent to which individual skills and abilities match the demands (tasks) and requirements of organizations, and the ways in which organisations allocate tasks to jobs
- Investigating the mechanism concerning the division of work reflected in task sets of occupations and the shaping of occupational boundaries, the skill sets related to these occupations and the ways in which organisations define their skills need
- Investigating the wide range of mechanisms causing skills mismatches in national and European labour markets, including the impact of the 2008 crisis on skills-occupation mismatch in Europe, and workers' responsiveness to labour market shortages concerning gender, age, and ethnicity
- The establishment of a common language on the basis of which future investigations on the topics may draw to further facilitate training and knowledge exchange.
- The strengthening of interdisciplinary research cooperation so as to advance our understanding of the matching mechanisms and the interactions between different levels of aggregation, including research cooperation with private and academic organisations

Main target groups of the project: Academia, Industry, Policy

SKILL2E

Sustainable Know-How in Intercultural Learning in Student Placements and the Knowledge Transfer to Enterprises

Website: http://skill2e.fh-salzburg.ac.at

Runtime: 10.2010 – 12.2012

Supported / co-funded by: EC-Erasmus Multilateral Projects / Co-operation between Universities and Enterprises

Partners: Salzburg University of Applied Sciences, (coordinator), AT; 12 partners from universities (7) and enterprises (5) from Austria, Finland, Romania, Spain, Turkey, United Kingdom, USA – The consortium partners: http://skill2e.fh-salzburg.ac.at/index.php?id=3

Project representative to be contacted for further info: FH-Prof. Mag. Dr. Gabriele Abermann (gabriele.abermann@fh-salzburg.ac.at)

The Skill2E Project aimed at securing sustainable intercultural competence acquisition of students during a transnational placement. To achieve that, a comprehensive supportive framework with intervention measures both at the universities and the enterprises were designed and prototypically implemented. These measures include the use of an assessment instrument to tailor pre-departure training as well as monitor student progress as regards intercultural competence skills gain and the pre-departure training concept to sensitize students for intercultural issues during their placement. The on-line reflection scenario and cultural mentoring in the enterprise are both intended to heighten awareness, critical thinking as well as their reflective capacities. The SKILL2E evaluation model made use of the innovative online Q-sorting method to leverage responses for fine-tuning the concept

The pilot cases clearly showed the benefits of the SKILL2E approach for all target groups involved. Universities gained a better understanding for the necessity of supporting students in placements abroad to really achieve a sustainable skills gain. Participating students reported a much higher sensitivity and thus learning curve with respect to cultural differences, be they organizational or related to the host country culture. Enterprises testified to an increased awareness that leveraging cultural differences is a win-win situation for all involved and a must in an increasingly globalized and collaborative workplace environment

Main target groups of the project:

- Students spending a placement abroad are supported by the SKILL2E intervention measures in transforming their experiences into sustainable intercultural competence acquisition or gain

- Higher educational institutions represented by placement supervisors, curriculum designers and institutional policymakers can implement the SKILL2E model to enhance the learning experience and competence gain of their graduates.

- Enterprises can use the SKILL2E cultural mentor concept as a means to better integrate and leverage the potential of employees and placement students with a diverse cultural background

Significant public results:

- The **Assessment Instrument Selection Report** detailing the selection and prototypical implementation of an instrument that accountably measures the intercultural competence gain of students in transnational placements and supports their cultural awareness and self-reflective capacities

- The **SKILL2E Pre-departure Training Concept** based on proven theory, feedback from the pilot implementations and providing minimum learning outcomes in order to be effective

- The **SKILL2E Online Communication Scenario** for reflecting the intercultural experiences. It defines a common framework while utilizing existing institutional infrastructures and culture-specific approaches

- The **Skill2E Cultural Mentor Concept** facilitating the integration of placement students into the workplace environment and fostering the full utilization of their potentials by reducing culturally induced misunderstandings and frictions

- The **SKILL2E Enterprise Handbook** presenting the prototypical implementation of the cultural mentor concept through best practice examples and critical incident analysis, accompanied by the **SKILL2E Enterprise Workshop Brochur**e.

- The **Skill2E Evaluation Model** using a comprehensive and outcome-oriented mix of qualitative and quantitative measures

SISE

Synergetic, interactive and self-organised E-Learning in enterprises with complex value added chain

Website: http://mediendidaktik.uni-due.de/sise

Runtime: 03.2011 – 09.2014

Supported / co-funded by: Federal Ministry of Education and Research Germany and the European Social Fund/ project executing organisation national aeronautics and space research centre of the Federal Republic of Germany (DLR)

Partners: University Duisburg-Essen – Learning Lab, (coordinator), DE; THERA-Trainer – medica Medizintechnik GmbH, DE; RWTH Aachen – Chair of Textlinguistics and Technical Communication, DE; FIR (Institute for Industrial Management) at the RWTH Aachen University, DE; MUL Systems GmbH, DE; reinisch AG, DE.

Project representative to be contacted for further info: Gianna Scharnberg (gianna.scharnberg@uni-due.de)

Today, (online-) learning is most often separated from the workplace and, thus, limits opportunities to use knowledge exchange between peers for informal learning. SISE (Synergetic, interactive and self-organised E-Learning in enterprises with complex value added chain) is a joint project that systematically addresses this shortcoming and develops a social environment for workplace learning that directly links social interchange and work. With this, it addresses the problem how manufactures with complex products can effectively generate and share knowledge within teams and between departments.

SISE is developing and testing an innovative software solution, based on Microsoft Sharepoint, that combines knowledge exchange and learning environment. The testing takes place in cooperation with an industry partner who produces appliances for the medical sector. The resulting platform will likewise be transferred to any producing enterprise. In this project, workplace learning is based on communication and group interactions, integrating formal and informal learning with the use of web 2.0-technology. With this, SISE aims to increase synergy by fostering knowledge exchange and learning within the working environment.

Thereby, synergetic use of information and knowledge objects means to

- classify existing resources, such as official documents, technical data or meta data,
- prevent redundant knowledge object,
- standardise the creation and management of information and knowledge.

The knowledge sharing between every element within the added value will be improved by

- facilitating peer-to-peer feedback and interaction for information and knowledge,
- establishing a reward system for created content,
- identifying and developing additional information objects for the value added chain.

The learning process will be simplified and allow the employees to self-organise themselves by

- supporting self-directed knowledge communication processes,
- reducing training resources,
- encouraging the employees to share their formal and informal knowledge by a badge reward system.

The SISE platform is currently being tested in a five step process. First results will be available at the end of Mai. Respectively, recommendations and guidelines for transfer will be available in October 2014.

Main target groups of the project: all employees in an enterprise with complex value added chain

Significant public results: recommendations and guidelines for transfer and implementation for producing enterprises

StartUP

Intelligent training needs assessment and Open Educational Resources to foster entrepreneurship

Website: http://www.startupproject.eu

Runtime: 01.2013 – 08.2015

Supported / co-funded by: Lifelong Learning Programme - KA3 – ICT Multilateral Projects

Partners: SOPHIA Research & Innovation, (coordinator), IT; BEST Institut für berufsbezogene Weiterbildung und Personaltraining GmbH, AT; UPM, Universidad Politécnica de Madrid, ES; FWE, Foundation for Women Entrepreneurs, MT; CECE, Confederation of Education and Training Centres, ES; Inova Consultancy, UK; Profesia, IT.

Project representative to be contacted for further info: Cristina Stefanelli, SOPHIA R&I (cristina.stefanelli@gmail.com)

Linkage with Open Educational Resources and the entrepreneurial sector is in an early stage of investigation. StartUP aims to fill the blank spot for where no open and flexible entrepreneurial training opportunities are in place for reaching the lifelong learner.

The project aims at developing an innovative pedagogy and assessment approach, based on Open Educational Resources (OER), to support the diverse individual learning pathways and to better assess all types of learning outcomes and future learning needs related to entrepreneurship competences (entrepreneurial mindset and sense of initiative), a key competence for the lifelong learner. The project challenges the matching process between available OER and individual training needs, with the aim to promote the use and re-use of OER in a pedagogically-rich context, increasing the number of OER users and foster the effectiveness of OER for entrepreneurial educational purposes.

StartUP is to pilot entrepreneurship in a novel way, as prospective part of the curriculum for learners. It also includes the training of trainers to the use and adoption of OER. With innovative ICT tools and combined institutional approaches, StartUP takes up the development of entrepreneurial competence by increasing use of OER.

Main target groups of the project: StartUP addresses a wide target audience, composed by secondary school, higher education teachers and students, VET trainers and trainees, adult learners and professionals.

Significant public results: Website: http://www.startupproject.eu

EMPORT

Improve employability and enhance European competitiveness through the acquisition of language and cultural competences in Portuguese

Website: http://www.learningportuguese.eu

Runtime: 01 Nov 2012 – 31 Oct 2014

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The EMPORT project aims to enhance the employability of European citizens and competitiveness of companies by means of acquisition of language and cultural competences in Portuguese, with particular attention to the Brazilian variant.

The project completed a research on Portuguese speaking countries, regarding to available ICT based courses and materials and the situation and needs of the target group; focusing mainly on business related staff, higher VET organizations' students and university students. Based on the research results, a language course is being produced that is extensively building on ICT based tools: using of animations, pictures, sound files, etc.

Main target groups of the project:

Companies' staff, adult learners interested in learning Portuguese for better performing their work; University and VET students, mainly those following courses in business related professional areas, or in those where Portugal, Brazil or other Portuguese speaking countries are relevant, such as stone, textile, shoes, etc.; Universities, VET organizations and other education and training organizations; Adult learning organizations giving courses for Portuguese;

Significant public results:

- Research on the available multimedia courses and other language opportunities for Portuguese languages, highlighting those resources for Brazilian Portuguese.

- Research about the needs regarding language and cultural competence of staff from companies dealing with Brazil or other Portuguese speaking countries.

- Development of a website about the Portuguese language and the culture of Portuguese speaking countries.

- A multimedia and interactive Portuguese language course, which will use both, Portuguese from Portugal and Portuguese from Brazil.