

# EDEN 2018 ANNUAL Conference

Exploring the Micro, Meso and Macro  
Navigating between dimensions  
in the digital learning landscape





# **EDEN 2018 ANNUAL Conference**

## **Exploring the Micro, Meso and Macro**

Navigating between dimensions in the digital learning  
landscape

EDEN 2018 Annual Conference

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### **CONFERENCE PROCEEDINGS**

Edited by

Airina Volungeviciene, András Szűcs

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## Introduction

The demand for people with new, enhanced skills is growing. The volume of information produced and shared in all fields is overwhelming. Building the data economy became part of the EU Digital Single Market. Powerful and sophisticated ICT is part of everyday life, and the world of learning is not an exception. Pressure is on all players of the online education community to keep up with new learning solutions, and better supply the skills currently demanded by growing economies.

Open Education continues its success, providing radical advances in knowledge acquisition, sharing, distribution, and improving business models. Digital credentials and open badges are the new currencies which are beginning to transform the economic models in education.

Social and economic tensions continue to raise the issues of scalability, the micro-credentialling of education, training and skill development processes. Practitioners and stakeholders are eagerly seeking right approaches to providing learning opportunities, and many scholars are researching holistic answers.

Micro, meso and macro aspects provide an interesting range of lenses for considering the problem. These aspects may be applied in a general sense, distinguishing between the learning of individuals, learning at the institutional or group levels through a meso lens, and the learning of organizations or societies directed through policies through the macro lens.

Navigating these dimensions are the reshaping of digital pedagogy and online instructional design; the social elements including digital societal mechanisms and the position of the individual in our new era. We have need of systematic awareness and research in the critical era of sustainable socio-cultural aspects as they relate to learning.

European Union initiatives emphasize solutions to emerging needs and seek to improve competitiveness and professional development; enhance cross-sectional skills; and fuel the engines of social innovation – creativity, entrepreneurship, critical thinking and problem solving.

The EDEN 2018 Genova Conference aims to respond to contemporary needs by:

- tracking and demonstrating evidence about the mechanisms and value chains across micro-, meso- and macro-learning
- exploiting the socio-cultural specifics related to the granularity of learning
- digging deeper into finding viable, achievable and scalable solutions
- learning more about didactical design through peer learning and scholarly observation
- discussing structural and operational questions of collaborative - social technologies

Andras Szucs  
Secretary General

Airina Volungeviciene  
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## **TRADITIONAL AND ON-LINE UNIVERSITIES, A PARTNERSHIP FOR THE PRESENT AND THE FUTURE OF EDUCATION**

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### **Background: the challenges to the University in the knowledge society**

New technologies allow a direct connection between the university and the user, by means of a simple PC, a tablet or a smart phone: lessons, multimedia products, databases, self-assessment systems, exams organisation and other training materials can be quickly forwarded and this promotes collaborative learning processes inside dynamic virtual environments. In the *virtual classrooms*, it is possible to reproduce teaching-learning activities as it happens in actual classrooms, but it is also possible to significantly increase the amount of information and start up multiple interactions in real time among individuals belonging to different cultural levels, having different traditions and experience and coming from educational environments of different countries of the world.

Physical distances are overcome and the communication global system allows delocalising the delivery and use of a globalised knowledge. In this context the idea itself of education and training is changing and this requires targeted public policies. The cognitive society creates new educational needs as well as the tools and solutions to meet them.

The challenges that educational institutions, and the University in particular, are called to face are linked to the fact that classrooms or lecture halls are no longer the only places where one can follow study courses: anybody from anywhere, if he has the required technological equipment and the appropriate materials can build his own environment to carry on his own educational and self-learning process.

In order to educate and train citizens, together a new model of social ethics, it is necessary to establish new systems, new public policies and also new organisational models for universities at local, national and international levels. We will witness an uncontrolled process that will lead us towards a more and more de-schooled society; it will be up to the agencies separated from the educational institutions and software designers to create for tomorrow's citizens the new competences that society requires.

Therefore, the problem is no longer whether education reproduces social inequalities or not, but rather today's question, common to all universities worldwide, is how to adjust to this system and create, in the framework of globalised economy, systems that could develop integrated teaching and learning processes, since they use different languages to communicate



knowledge. These should also be open processes, since they should have no spatio-temporal limits. Educational and training policies should guide this process and this should happen by starting a stable dialogue among different environments, since the entire world is involved in great changes that are still in progress.

## **The renaissance of the University**

Internet has evolved into global platform ever richer in content and is becoming the prevailing infrastructure for the exchange of knowledge between people. The generations of new students, the digital natives, will no longer do unless you use the network to develop knowledge and skills. The transformation of the University is really happening.

The creation of a global network for Higher Education in which teachers and students from different parts of the world participate in the collaborative construction of knowledge is not a utopia, indeed it can be a cure to bring a new vitality to the University by featuring them on the networked economy global.

The University of the twenty-first century should increasingly be characterized as a global network, an ecosystem, should make deep structural changes while many universities around the world fail to meet the learning needs, the majority of undergraduate courses churn skills that are not required by the labour market, more and more students around the world enrol in college courses online or distance universities. In fact, e-learning is a reality in full growth; nowadays is estimated approximately \$91 billion, and is expected 168.8 billion dollars by 2018. In the United States, according to the National Centre for Education Statistics (2012) is progressively growing – for the ninth consecutive year – the number of students enrolled in at least one online course and at the end of 2011 had exceeded 6.7 million, among the student population (Koller, 2012). The 69.1% of Deans and Presidents of U.S. institutions of higher education online learning in 2011 considered a key factor in the change of traditional universities (Babson Survey Research Group, 2013). The birth and development of initiatives MOOC (Massive Open Online Courses), with an overall target, they made up these numbers even further.

The European Union in 2011, was the second largest market for e-learning, has a growth rate of 5.8% per annum, which leads from 6.1 billion dollars in 2011 to the expected 8.1 billion dollars of 2016. There are approximately 3 million students enrolled in online courses, half of whom were enrolled in Distance Teaching University and Open University, while the other half at traditional universities that offer distance learning courses.



Figure 1. Growth rates for 2011-2016 global macro-regions

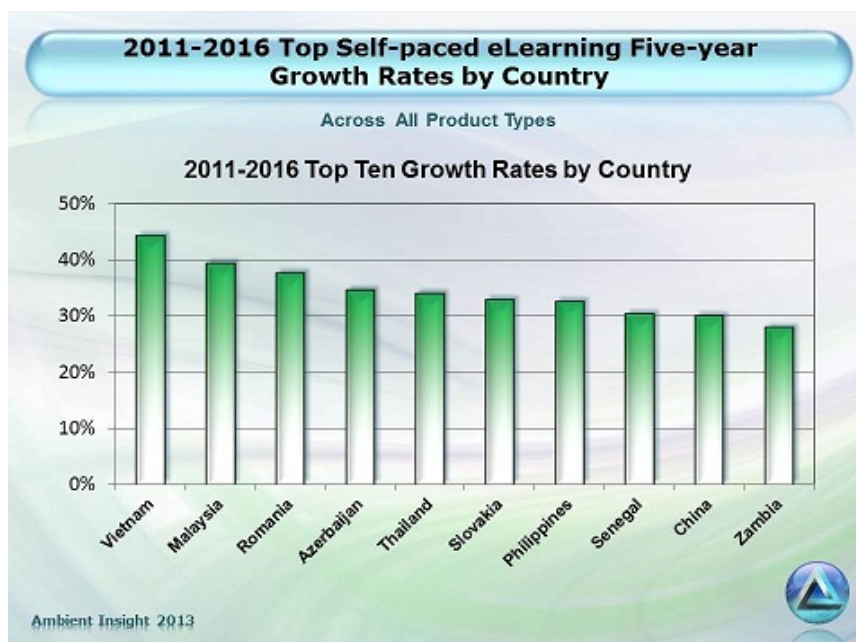


Figure 2. 10 countries with the highest growth rate in the field of e-learning (METAARI, 2016)

## **Distance Universities and International Alliances for a shared networks of knowledge**

The process, enhanced by telecommunication technologies, tends to build a pedagogical society inside the knowledge society. The awareness of this fact highlights the fact that it will be ever more crucial to establish cooperation relations among academic institutions of various countries of the world to be able to produce academic contents to be delivered online and to jointly create systems and structures for the new models of distance universities and quality e-learning. In this new setting the distance university can help traditional universities to develop new shared networks of knowledge capable to overcome geographical frontiers. In principle,

everybody recognises that knowledge, know-how and everybody's skills are the sources of all richness. In principle, everybody believes that the development of a country, its reforming and change processes can be put into practice only if there are people capable of realising and managing these reforms, to participate in the change in a constructive way. Otherwise, these facts are reduced to mere abstract rules. Education is also a tool by which a new model of truly globalised society can be realised.

Today, to start up cooperation relations among academic institutions of different countries of the world and to jointly develop Internet-based training contents is of highly important from a strategic, cultural, political and economic perspective. The production of Internet-based educational contents by lecturers coming from the best universities allow to develop a quality e-learning model and promotes the cultural and industrial development of a society based on Knowledge Economy.

A distance university that is born from a multicultural partnership allows to:

- promote universities' internationalisation processes;
- design and implement common curricula enabling to experiment and implement what is provided for in the Bologna and Sorbonne Declarations;
- supply those attending it the skills required to live in a globalised world
- promote the production of Internet-based multimedia educational contents also in different languages.

These considerations are at the basis of our personal engagement and of that of the group of people who, in these years, have been working with us to realise, jointly with the International Telematic University UNINETTUNO, a Euro-Mediterranean and international Area for Education and Research resulting from the cooperation among distance universities and traditional universities.

### **The case of the International Telematic University UNINETTUNO, approach and models**

The International Telematic University UNINETTUNO was established further to the success of the Med Net'U – Mediterranean Network of Universities project, which boasts the participation of 31 partners belonging to 11 Mediterranean countries (Algeria, Egypt, France, Jordan, Greece, Italy, Lebanon, Morocco, Syria, Tunisia and Turkey). All partners worked together and created a true technological network based on receiving and transmitting digital satellite technologies. Today, all partners can produce, broadcast and receive educational contents, via Internet, via satellite and on satellite television. A technological network that is supported by a network of people, of intelligences that can interconnect and share their knowledge and the jointly developed a virtual area for higher education and for the circulation of knowledge in the Euro-Mediterranean and capable of giving rise to the International Telematic University UNINETTUNO. The development of Med Net'U from project to system, with the birth of the International Telematic University UNINETTUNO, was supported by the Governments of the partner countries and was made effective by the conclusion of academic

agreements with several universities of the Arab World. We jointly succeeded in developing the International Telematic University UNINETTUNO and make it rapidly become one great university in which prestigious lecturers of important European and Mediterranean Universities deliver their courses in several languages in various faculties including engineering, philosophy, conservation of cultural heritage, law, economics, psychology and communication sciences. Thanks to the cooperation of the professors of different universities did we succeed in creating in the Internet ([www.uninettunouniversity.net](http://www.uninettunouniversity.net)), where teaching and learning are carried out in 5 languages: Italian, French English, Arabic and Greek and very soon even in Russian. The students of the International Telematic University UNINETTUNO come from 130 different countries of the world; they, with no more space and time limits, can attend the university and they can choose whether to studying the language they prefer on television and in the Internet. In the Didactic Cyberspace it is possible to access the different learning environments: get digitised videolessons linked in a multimedia and hypertextual way to books, texts, selected bibliographical references, lists of websites and virtual laboratories. In the virtual classroom the professors and tutors of each subject interact with the students and support their learning processes. Through forums and chats intelligences get interconnected and knowledge is exchanged.

### ***Common and shared curricula a successful model***

In these years the International Telematic University UNINETTUNO has been designing and realising common curricula that are recognised in Europe and in some countries of the Arab World. In the process of definition of the study programmes UNINETTUNO made reference to the guidelines provided for by the Bologna/Sorbonne process and by ECTS, European Credit Transfer System as it regards the programmes structuring. In particular, all our degree courses follow the European Qualification Standards. For instance, for the design of the Psychology Study Programme UNINETTUNO took into account the standards of the EuroPsy, European Qualification Standard for Psychologists, as it regards the scientific-disciplinary sectors and training credits to be allocated to each discipline and therefore it is accredited among the EuroPsy certified courses. This process of adjustment to the international standards enable these study courses and titles being recognised at European level.

As it regards, instead, the partner Universities based on a country that did not join the Sorbonne/Bologna process, UNINETTUNO developed a model for the design of common curricula that has been already successfully tested. A concrete example is the one that enabled the conclusion of an agreement aimed at a double title jointly with Helwan University; after a first phase of analysis of the contents of the respective study programmes for the degree course in Computer Engineering both at a general structuring level and at the level of contents treated in the individual course, it appeared that, in spite of the different timing structure, the issues and courses treated in the 3 years of UNINETTUNO degree course corresponded to the first four-year course delivered in Egypt. As a consequence, we designed a common study programme according to which the students get an Italian (and therefore European) study title that is further integrated by including the subjects that are envisaged by their fifth year of study – and that are not comprised in UNINETTUNO three-year study programme – thus enabling

them to get an Egyptian five-year study title. This process of analysis, comparison and integration can be extended to any other country and degree courses: the analysis and comparison of the programmes allow for integrating the study programme that it will be possible to complete at local level, thus enabling the student to be awarded a Italian three-year degree and complete their study path and get a four-year or five-year degree in their own country of origin, taking the exams covering the scientific/disciplinary sectors that are not envisaged by UNINETTUNO three-year degree courses. Another model of cooperation between the International Telematic University UNINETTUNO and the Universities of other countries is linked to the possibility of harmonising the three-year study programme adopted by UNINETTUNO to five-year study programmes; in these cases, the study programme proposed to the students will include the UNINETTUNO 60 ECTS/year standard programme adding up courses and contents corresponding to further 20/25 ECTS enabling the student to be awarded a three-year degree allowing him, at the end of these three years, to complete the first four years of the five-year study path of their country of origin, thus following a path that he will complete adding one final year and the final exam.

The analysis and integration of the study programmes allow for the realisation of study path able to supply the competences required by the new labour markets. The great value of this process of integration of the study programmes and creation of competences at global level is that the outcome of this integration meets the actual needs of the society in which we live. On the contrary, if Universities are cut off from the outside world, the answers they give to the needs of the current society will be inadequate.

### **The internationalisation of the University**

The approach and the model developed by the International Telematic University UNINETTUNO can make educational context of various countries of the world and of the Mediterranean Region and worldwide, cooperate and create shared knowledge networks that enable to enrich the curricula with new contents. Thanks to the mutual knowledge of their cultural, religious and political specificities, belonging to the history and cultures of the different Countries, it is possible to create, through the cooperation with other universities, a new training model, based on ethical values able to qualify, in terms of moral and social terms, the coherence of the study programmes, that are enriched by the cultural specificities supplied by each university and teacher involved.

Today we work together and operate within a Euro-Mediterranean Common Area to launch a process of harmonisation of the Euro-Mediterranean educational and training systems by sharing psycho-pedagogic models and human and technological resources. Our working group is aware of the fact that this cooperation enables to create a new model of distance university within which one can move without boundaries and where, thanks to the new technologies, beside the physical moving of professors and students, the mobility of ideas is easier and easier.

The experience made with the International Telematic University UNINETTUNO in the Mediterranean Area confirms that it is possible to share study programmes and to create new educational models.

So doing we really succeeded in starting new fruitful alliances that allow providing the new generations with knowledge and tool required to meet the challenges of the labour market of a globalised society and to dialogue with the various cultures of the world.

## **Conclusions**

Developing knowledge helps consider cultural, religious and political differences as a resource for mankind and not as tools for conflicts and wars. In my opinion, the respect for differences is not possible if educational and training systems are still based on study courses that are exclusively related to the contents of the culture of a single country. In our educational institutions, history, philosophy, law, religion, art and literature are often taught by delivering contents which are too stuck to the local context and which do not provide the appropriate tools to enable people to live inside a globalised society.

Television and the Internet can bring knowledge and expertise to the homes of every citizen of the world with no limits of space and time; everybody can attend courses to acquire literacy, to attain new skills, but also to consolidate a system of shared values.

If one wishes to build and transfer knowledge, borders are uncertain, frontiers are places of continuity and not of conflicts.

Democratising the access to knowledge helps reducing ignorance, feeding the minds of all men and women, and to allow everybody to start from the same starting point and thus eradicating the slavery of ignorance.

Today, knowledge networks can generate new wealth, they can offer the teachings of scientists and of the best intellectuals of the world to everybody in an open and democratic way. Distance university allows interaction between teachers and students from different universities and actually gives a prompt answer to demands for internationalisation of the training and educational systems to build the competences required by the new global labour markets.

When the Internet-based courses contents and the modes of delivery are carried out by university teachers at international level, control upon contents' quality is performed by the academic world and users are guaranteed as "consumers of education" since courses suppliers are easily identifiable. If it is right, that the quality brand will determine the competitive challenge on education global market, a distance university based on a network of the best universities of different countries, will certainly win the challenge. Today distance university can meet the requirements of the new knowledge market: show its quality label; guarantee the user; help in transforming the university into an open system, fit for keeping up to date and integrating all knowledge available in the Web and for realising knowledge interchange at global level.

## References

1. Ausubel, D. P. (1978). *Educazione e Processi Cognitivi*. Milano: Franco Angeli.
2. Babson Survey Research Group (2013, January 8). Babson Research Study: More Than 6.7 Million Students Learning Online. CISION PR Newswire [Blog post]. Retrieved from <http://www.prnewswire.com/news-releases/babson-research-study-more-than-67-million-students-learning-online-186023812.html>
3. Bloom, B. (1982). *Tassonomia degli Obiettivi Educativi: Area Cognitiva*. Teramo: Giunti & Lisciani.
4. Garito, M. A. (1997). *Tecnologie e processi cognitive*. Milano: Franco Angeli.
5. Garito, M. A. (2006). *L'Ambiente di Apprendimento – Web design e processi cognitive*. Milano: McGraw Hill.
6. Horowitz, R., & Saumels, S. J. (1987). Comprehending Oral and Written Language: Critical Contrasts for Literacy and Schooling. In R. Horowitz & S. J. Samuels (Eds.), *Comprehending Oral and Written Language* (pp. 1-46). San Diego, CA: Academic Press.
7. Johnson-Laird, P. N. (1983). *Mental Models: Towards a Cognitive Science of Language, Inference, and Consciousness*. Cambridge: Cambridge University Press
8. Koller, D. (2012). *What we're learning from online education*. TED Conference, August 2010. Retrieved from [http://www.ted.com/talks/daphne\\_koller\\_what\\_we\\_re\\_learning\\_from\\_online\\_education/transcript](http://www.ted.com/talks/daphne_koller_what_we_re_learning_from_online_education/transcript)
9. METAARI (Ambient Insight) (2016). *International eLearning Market Research*. Retrieved from <http://www.ambientinsight.com/Reports/eLearning.aspx>
10. National Centre for Education Statistics (2012). *Enrollment in Postsecondary Institutions, Fall 2011; Financial Statistics, Fiscal Year 2011; and Graduation Rates, Selected Cohorts, 2003-2008: First Look (Provisional Data)*. Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012174rev>
11. Norman, D. A. (1988). *The Psychology of Everyday Things*. New York: Basic Books Inc. Publishers.
12. Tapscott, D., & Williams, A. D. (2006). *Wikinomics: How Mass Collaboration Changes Everything*. New York: Portfolio.
13. Vygotskij, L. S. (1978). *Mind in Society*. Massachusetts: Harvard University Press.

