

OER MOOC COURSES AS AN IMPLEMENTATION TOOL OF REGIONAL POLICY OF THE EUROPEAN UNION

This article is devoted to the use of e-learning as an implementation tool of regional policy of the European Union. This article attempts to bring the innovative capacity of e-learning to educate citizens on the topic of EU regional development policies, and to identify and specify e-learning innovations that are directly relevant to the needs Rural SMEs and micro-enterprises in EU regions. This requires linking various different arenas of European policy: Common agricultural policy, information society, business policy, education policy and social and regional policies. E-learning providers also face significant costs that hamper the adjustment process: production software, multimedia content and learning management platforms. A major problem is the often limited recyclability of learning objects and learning scenarios; so if the learner groups are small, the return on investment may be insufficient. Innovative e-learning includes new approaches to recycling content (content sharing) and learning scenarios. Modern computers are generally over-specified for the needs of most e-learning applications.

Keywords: OER; MOOC; Euroregion Siret-Prut-Nistru; Euroregion Dniester; Carpathian Euroregion; moodle, VLE, regional policy of the European Union, Committee of the Regions (CoR)

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ОЕР МООС- КУРСИ ЯК РЕАЛІЗАЦІЯ ІНСТРУМЕНТОМ РЕГІОНАЛЬНОЇ ПОЛІТИКИ ЄВРОПЕЙСЬКОГО СОЮЗУ

Цю статтю присвячено використанню електронного навчання в якості інструменту реалізації регіональної політики Європейського Союзу. Ця стаття намагається довести інноваційний потенціал – електронного навчання з метою навчання громадян на тему політики регіонального розвитку ЄС, а також визначити і вказати адресу електронного навчання інновацій, які мають безпосереднє відношення до потреб сільських МСП і мікропідприємств у регіонах ЄС. Це вимагає ув'язки різних арен європейської політики: загальної сільськогосподарської політики, інформаційного суспільства, бізнес-політики, політики в галузі освіти та соціальної і регіональної політики. Постачальники електронного навчання також стикаються зі значними витратами, які перешкоджають процесу коригування: виробництва програмного забезпечення, мультимедійного контенту та навчальних платформ управління. Основною проблемою є обмеження вторинної переробки навчальних об'єктів і навчання сценаріїв; так що якщо кількість учнів у групі невелика, то окупність інвестицій може бути недостатньо. Інноваційне електронне навчання включає в себе нові підходи до змісту переробки (обміну контентом) і сценаріїв навчання. Сучасні комп'ютери, як правило, задовільняють задані потреби більшості додатків електронного навчання. Багато країн мають схеми, де комп'ютери перероблені промисловості і торгівлі, освіти.

Ключові слова: OER; MOOK; Єврорегіон Сірем-Прут-Дністер; Єврорегіон Дністер; Карпатський Єврорегіон; електронне навчання, VLE, регіональна політика Європейського Союзу, Комітету регіонів (КР)

I. INTRODUCTION

The article is dedicated to the design and implementation of a European project such projects HORIZON 2020 to be integrated into a theme close to the theme "ICT 2015 - INFORMATION AND COMMUNICATIONS TECHNOLOGIES" (H2020-ICT-2015 "Technologies for better learning and teaching human").

Project is being planned in the context of the Siret-Prut-Dniestr Euroregion cooperation with the Carpathian Euroregion (<http://www.tradecarp.com/en/index.html>), the Euroregion Dniester (<http://dniester.eu/>) and has so far as potential members: "Alexandru Ioan Cuza" University from Iași, and Technical University "Gh. Asachi" from Iași (moodle.ee.tuiasi.ro) and Inter-University Network of Republic of Moldova (which includes all major universities in the Republic of Moldova).

The main objective of this project is: running OER MOOC courses by using moodle platform under the coordination of the Committee of the Regions (CoR; <http://cor.europa.eu/>). These online courses are devoted to the instruction of broad categories of citizens interested in knowing EU Regional Policies and cross-border cooperation.

II. SPNE PROMOTING EUROPEAN UNION'S REGIONAL POLICY AND CROSS-BORDER COOPERATION

Promotion of European regional policy is part of the tasks of the Euroregions. Euroregions mission is to develop and strength the relationships among the communities and local authorities, in different fields of activity, in order to assure the sustainable development and the compliance with the European standards.

The Euroregions include the border areas of five countries: Poland, Slovakia, Hungary, Ukraine, Republik of Moldavia, Romania. Social and economic potential of the Euroregions creates the premises for cross-border cooperation in various areas, including (among others):

- development of cooperation relations between higher education institutions in the region, exchange of students and teaching staff;

- implementation of new technologies, staff training;
- promoting implementation of know-how and information technologies.

One of these Euroregions, the Siret-Nistru-Prut Euroregion Association, with the headquarters in Iasi, is promoting the enlarging and improving of the relationships between the collectivities and local authorities in the spheres of economy, education, culture, science, sport and ensuring of a sustainable development of the region, in the context of European Union required standards. Siret-Prut-Nistru Euroregion Association is member of the Association of European Border Regions (A.E.B.R. <http://www.aebr.eu/>) that is acting for the benefit of all European border and cross-border regions. From this prospect, A.E.B.R. actions are in conformity with European Union policies regarding regional development and community representativity at European level.

Figure 1. Experimental OER MOOC on Moodle Platform Siret-Prut-Nistru Euroregion (Romania / Republic of Moldova)

II.1 PROJECT GOALS AND TARGET GROUPS

The Project proposal aims at use best MOOC experiences in Europe (like Project ECO, <http://ecolearning.eu/>). To do so Project will use MOOC moodle partner platforms integrating different modules provided by some Project partners, to train citizens in subjects of European Union's Regional Policy and Cross-Border Cooperation.

Main project objectives are:

- To set up a framework for designing and implementing MOOCs.
- To increase awareness in Eastern Europe on the open educational resources benefits for European citizens and institutions.

Project target groups are: Students of last years of the universities; Academic staff of the universities; Representatives of youth organizations; Members of the administration and organs of local and regional self-government communities; Representatives of national minority organizations; Representatives of NGOs; Legal practitioners; Experts for specific topics in the Project agenda; Members of governmental bodies related to European integration; Journalists and; The wide public.

II.2. GENERAL PRESENTATION OF OPEN EDUCATIONAL RESOURCES AND MOOCS

Open Educational Resources (OER) have the potential to broaden access to education and to improve the quality and cost-effectiveness of teaching and learning in Europe. The best way to put OERs into practice is through Massive Open Online Courses (MOOCs). MOOCs are large-scale courses that represent one of the latest developments in open education, an initiative that is always trying to improve quality, access and equality in education and training.

MOOCs can be implemented in formal, informal and non-formal learning, and make learning ubiquitous.

Project will use leading-edge technology to create a combined Moodle MOOC platform – based on individual platforms and resources provided by project partners – making it possible to combine and transfer pilot activities in all the hubs involved.

Project will contribute to increasing awareness of the advantages of open education in Europe. The project will prove the potential of MOOCs (courses and communities) for breaking down technological barriers in learning across people with special needs or at risk of exclusion.

MOOCs adopted definition: MOOC is an online course designed for large number of participants that can

be accessed by almost anyone anywhere as long as they have an internet connection, is open to everyone without entry qualifications and offers a full/complete course experience online for free.

A MOOC includes educational content, facilitation interaction among peers (including some but limited interaction with academic staff), activities/tests, including feedback, some kind of (nonformal) recognition options and a study guide / syllabus.

II.3. MOODLE PLATFORM USED IN DELIVERING MOOCS

Moodle is an open-source learning management system (LMS) that allows users to build and offer online courses. It was built for traditional online classrooms rather than MOOCs, which attract a large number of students. Moodle is suited for organizations that want a full-featured, customizable LMS. The platform offers educational tools, analytics and SCORM compliance. The trade-off is that the platform is over 10 years old. The number of configuration options can be daunting, and system performance suffers with larger numbers of students.

III. PEDAGOGICAL CHARACTERISTICS OF MOOCS

1. People learn by association, building ideas or skills step-by-step. For example by mnemonics, training drills, imitation, instruction. Associative learning leads to accurate reproduction or recall. The dominant approach in Content-MOOCs is associative learning.

2. People learn by constructing ideas and skills through active discovery. For example by exploration, experimentation, guided discovery, problem-solving, reflection, etc. Constructive learning leads to integrated skills and deep understanding. The task-based MOOCs lay emphasis on active discovery by learners. Some assignments are still based on associative learning but most are based on the approach of Constructive learning. But perhaps we should not use term Task-based MOOCs because in all approaches the learners have tasks and assignments. The difference depends how open, how complex and authentic such a task is.

3. People learn by constructing ideas and skills through dialogue. For example by discussion, debate, collaboration, shared knowledge-building, etc. Social constructive learning also leads to integrated skills and deep understanding. The main approach of the original MOOCs is Social constructive learning although elements of constructive learning are also present (i.e., exploration is more important than any particular content).

4. People learn by participating in a working community. For example by apprenticeship, work-based learning, legitimate peripheral participation, learning networks, etc. Situated practice leads to the development of habits, values and identities. Hence MOOCs using the approach of situated practice are missing. MOOCs to be developed under this approach can be linked to massive simulation and/or games to networked learning i.e. learning in massive online learning networks or to concepts like Virtual Internship and Virtual Business Learning (Jansen et al., 2003)

IV. MOOCS EU POLICY SUBJECTS

Moodle MOOC platform intends to offer a collection of e-learning courses on several subjects such as EU institutions, decision-making, EU law and policies, and recent developments after the coming into force of the Lisbon Treaty. Primary sources of information are OER teaching and learning multimedia resources.

Some of important MOOC subjects are:

1. EU Decision-Making is a course designed for professional citizens with aspirations to contribute to the public good. Course provides an introduction to important concepts and analytic frameworks for management, leadership, and decision making. The course includes material on topics such as aligning mission and strategy, performance measurement, basic marketing and operations, motivating people, biases in decision making, and working in teams. Other notions are devoted to: Delegated and Implementing Acts; The European Parliament; Ordinary Legislative Procedure; The European Commission: Policy Preparation and Internal Decision-Making; Leadership Architecture: the Multiple Presidencies; The Council of the European Union and European Council.

2. EU Policies course offers the theoretically informed study of the EU policy-making across a selection of key issue areas. The principal aim of the course is to provide a detailed knowledge of how national and EU institutions interact in European policy making. To achieve this, the course is divided into two parts. The first introduces principal theories of policy making along three core policy dimensions: agenda setting, decision making and policy implementation. In the second part the conceptual insights gained will be used to analyze a number of substantive policy areas. These will typically include: the single market, social and environmental policies, cohesion policies, Common Agricultural Policy, Economic and Monetary Union, Justice and Home Affairs and EU foreign policy.

Other subjects pertaining to EU Policies course are: Environment and Climate Change Policy; The European External Action Service; A Practical Guide to the European Neighborhood Policy; The Common Security and Defense Policy; Common Foreign and Security Policy after Lisbon; EU Rules on State Aid; EU Public Procurement Policy; Structural Funds Implementation; Public-Private Partnerships - A key tool for Europe 2020.

3. EU Law course give the students an insight into the law of the EU, a vast and fascinating area of law which forms an integral part of the legal systems of its Member States. The course is divided into three parts. In the first part, we will pay attention to the creation and the development of the EU, its institutional structure and functioning, and the specific nature and sources of EU law. In the second part, we will examine how EU law impacts on the lives of EU citizens as well as on companies that are established or provide services in the EU. In the

final part, we will tackle Europe's common currency crisis, investigating causes, effects and possible routes out of this existential crisis of the Union. Other subjects suitable are: The EU Courts; Infringement Procedure; Introduction to the EU Legal System.

4. European Union Public Management course is devoted to effective management of EU projects from the project idea to the application writing, till the management and execution of granted projects to finally the reporting and documentation is crucial to an efficient integration of EU project activities in the portfolio of an organization. The key of an EU project is To reduce the burden and cost of administration and management. Also in order to obtain the financial success, the effective planning, management and monitoring tools are also crucial for successful outcomes of projects. EU project management involves tools, techniques and methods of international project management in a specific manner. This course provides students with an introduction to EU project management and the hands on approaches to effectively plan and execute an EU project. Other notions presented are: the foundations for the advanced project management courses later in the programme and provides a comprehensive overview on call documents, project application structures and contents, as well as how to organize EU projects within an organization. Further course develops student's competences to align a project idea with a specific funding programme and call, creating a match with EU strategies, funding programme priorities and specific call objectives. Project Cycle Management is also presented.

V. CONCLUSIONS

This paper is a synthesis that presents the conception of a project devoted to use moodle Virtual Learning Environment for the development of MOOC courses which mainly contains OER materials in order to educate the citizens of European cross border regions in the subjects of EU policies.

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References

1. Carpathian Euroregion (<http://www.tradecarp.com/en/index.html>)
2. Euroregion Dniester (<http://dniestereu.eu/>)
3. Euroregion Siret – Prut – Nistru; <http://www.euroregiune.org/en/>
4. European Committee of the Regions (CoR); <http://cor.europa.eu/en/>
5. Association of European Border Regions (A.E.B.R); <http://www.aebr.eu/>
6. Technologies for better human learning and teaching ICT-20-2015; <http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/9086-ict-20-2015.html>
7. Inter-University Network of Republic of Moldova; <http://crunt.utm.md/>
8. Open Professionals Education Network; <https://open4us.org/find-oer/>
9. Daniel, J. S. (1996). Mega-universities and knowledge media: Technology strategies for higher education. Psychology Press.
10. Daniel, J., Vázquez Cano, E., & Gisbert, M. (2015). The Future of MOOCs: Adaptive Learning or Business Model? RUSC. Universities and Knowledge Society Journal, 12
11. Markkula, M., & Dipoli, T. K. K. (2006, April). Creating favourable conditions for knowledge society through knowledge management, eGovernance and eLearning. In Proceedings of FIG Workshop, Budapest, Hungary (pp. 30-52).
12. MARKKULA, Markku. eLearning in Finland: enhancing knowledge-based society development: report of the one-man-committee appointed by the Ministry of Education. Ministry of Education, 2004.
13. <http://www.openuped.eu/> (The OpenupEd project is carried out with the support of the European Commission, Dg EAC, under the Lifelong Learning Programme)
14. Project ECO, <http://ecolearning.eu/> (ECO will contribute to increasing awareness of the advantages of open education in Europe. The project will prove the potential of MOOCs (courses and communities) for breaking down technological barriers in learning across people with special needs or at risk of exclusion.)
15. Jansen, D., M. Van Laeken, & Slot, W. (2003). Virtual business E-learning: an approach to integrating learning and working. In: W. Jochems, J. Van Merriënboer, R. Koper (Eds.). Integrated e-learning; implications for pedagogy, technology and organization. p. 51-64. New York: RoutledgeFalmer.
16. Laschewski, L. Innovative E-learning in Rural Areas: A Review. http://www.prismanet.gr/eruralnet/themedia/File/WP4_report_Final.pdf
17. <http://www.eadtu.eu/home/projects>
18. "Quality Provision in CrossBorder Higher Education" http://www.unesco.org/education/guidelines_E.indd.pdf
19. MOOC - What does MOOC stand for? - Acronyms and Abbreviations <http://acronyms.thefreedictionary.com/MOOC>
20. Regional Versus Individual Aspects of the Digital Divide , http://www.researchgate.net/publication/23646833_Regional_Versus_Individual_Aspects_of_the_Digital_Divide_i

n_Germany

21. eLearning Communication Open-data, <https://learninglovers.wordpress.com/2014/12/09/elearning-communication-open-data-eco/>

22. Definition Massive Open Online Courses (MOOCs),
http://www.openped.eu/images/docs/Definition_Massive_Open_Online_Courses.pdf

23. Elearning, Communication and Open-data: Massive Mobile,
http://dspace.ou.nl/bitstream/1820/5597/1/ECO_D2.2_Instructional_design_and_scenarios_v1.0.pdf

24. EIPA - e-Learning, <http://www.eipa.eu/en/pages/display/&tid=214>

25. International Business School Austria; www.ibsa.co.at

26. DiscoverEd; <http://discovered.creativecommons.org/search/>

27. Jorum - "free learning and teaching resources, created and contributed by teaching staff from UK Further and Higher Education Institutions" <http://www.jorum.ac.uk/>

28. OCWFinder; <http://www.ocwfinder.org/>

29. OER Commons; <http://www.oercommons.org/>

30. Temoa - "a knowledge hub that eases a public and multilingual catalog of Open Educational Resources (OER) which aims to support the education community to find those resources and materials that meet their needs for teaching and learning through a specialized and collaborative search system and social tools."

31. University Learning = OCW+OER = Free custom search engine - a meta-search engine incorporating many different OER repositories (uses Google Custom Search)

32. XPERT - "a JISC funded rapid innovation project (summer 2009) to explore the potential of delivering and supporting a distributed repository of e-learning resources created and seamlessly published through the open source e-learning development tool called Xerte Online Toolkits. The aim of XPERT is to progress the vision of a distributed architecture of e-learning resources for sharing and re-use."

33. OER Dynamic Search Engine - a wiki page of OER sites with accompanied search engine (powered by Google Custom Search)

34. JISC Digital Media maintain guidance on finding video, audio and images online, including those licensed as Creative Commons.

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