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The Power Of The Three Words And One Acronym: OER vs OER

Subtitle: I'm not an **O**gre of the **E**nchanted **R**ealm (of cyberspace).
I'm an **O**mnipresent **E**ducational **R**escuer (because I use the OER!)

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Abstract

The present paper describes the Romanian initiatives related to Open Educational Resources (OER). We start from a national report developed by the first author under the umbrella of the European project POERUP, based on a documentary and a field work research. Although the aim of this paper is to focus on the state of the art of OER in the Romanian education system, our goals are to promote a background of research about the use of OER in universities; to contribute to a better knowledge of teachers' and students' perception and practices on the use of OER in academic life; to suggest key aspects and make suggestions on how to integrate OER in the HE area. The Romanian Report can be found here: <http://poerup.referata.com/wiki/Romania>. For more information about the POERUP project see <http://poerup.referata.com>.

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1. Introduction

Over the recent years one can notice a continuous attention directed towards new innovations in education. The growing ubiquity of social media, the emerging mobile technologies, the augmented reality (Johnson et al., 2014) become more deeply integrated into the teaching-learning process and also create new opportunities of reinventing the way in which educational actors both perceive and access learning. Two major challenges in academia that involve tremendous development and innovation are OER-based learning and MOOC (POERUP, 2013a).

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In this paper we start by briefly discussing the background of adopting OER in the educational system in Romania. We identified elements of major educational transformations of using OER in Romanian education and also extended and refined the framework of OER initiatives in the Romanian educational context.

2. How open is Romania toward OERs?

2.1. National Educational Landscape

First coined by UNESCO in 2002, the concept of “Open Educational Resources” (OER) refers to any teaching, learning and research materials that are freely and openly available for use, to be shared, combined, adapted or expanded by teachers, educators, students and independent learners, without an accompanying need to pay royalties or license fees (OECD, 2007; Butcher et al., 2011; UNESCO, 2012). Through the years a variety of institutions, organizations or foundations like UNESCO, OECD or the European Union were preoccupied to launch (providing financial support, too) various initiatives across the world for programs and projects related to OER. Some of the current initiatives which act as driving forces for transforming education and learning at all levels are: Open Education Europe (Opening Up Education Through New Technologies), SCALE CCR (Up-Scaling Creative Classrooms in Europe), OEREU (Open Education Resources and Practices in Europe) and POERUP (Policies for OER Uptake). Worldwide there are many initiatives about a number of key areas concerning the OER development (POERUP, 2013a). In this general context Romania appears active in the OER movement mainly through institutions/groups or individuals engaged in specific projects or programmes, but also through some proposals of policies at the governmental level. An important milestone in the participation of Romania in the OER field could be considered the implementation of the strategic national project “Knowledge Economy Project” (KEP, 2005-2013 - <http://ecomunitate.ro>) implemented by the Ministry of Communications and Information Society and funded by the World Bank. In September 2, 2008 the Creative Commons Romania version was launched with the help of ApTI (The Association for Technology and Internet) - <http://creativecommons.org/licenses/by-sa/3.0/ro/>, <http://wiki.creativecommons.org/Romania>. This launch followed a period of prior work with iCommons, the entity managing these licenses internationally, which involved the translation of licenses and their adaptation to the Romanian legal framework, a public consultation period, and finally the availability of these licenses in Romania. One of the important activities of the KEP project towards the field of open education was the elaboration in 2007 of a set of recommendations for the Romanian Ministry of Education for policies supporting the Open Source (OS), Open Educational Resources (OER) and Open Educational Practices (OEP): to adopt a clear definition of open licenses and to support the principle that public funded products should carry such licenses; to facilitate the sustainable implementation of OER by creating incentives for use and reuse, and funding technical infrastructure to increase access to OER (Holotescu, 2007). Some of these recommendations were specified in the "Proposal for public policies for ICT integration in the pre-university system" and adopted by the Ministry of Communications and Information Society and by the Ministry of Education, Research, Youth and Sport in 2007: diversification of the educational resources for schools, encouraging educational software market, usage of open / free educational resources, development and sharing of resources by teachers; quality criteria / development standards / evaluation / selection are necessary. The activities in the KEP project have led the schools towards a shift in focus from the resources themselves towards the practices associated with the creation, use and management of OER: that is, open educational practices (OEP) (Holotescu, 2012). Likewise, the Government Programme for 2013-2016 adopted in December 2012 specifies that the Ministry of Communications and the Ministry of Education will collaborate to support the innovative integration of Web2.0 and Open Educational Resources in education. Thus, Romania becomes one of the countries preoccupied to incorporate / integrate OER into its national policies by promoting the use of open/free resources; development and sharing of resources by teachers especially in the pre-university system (POERUP, 2013b).

2.2. Romanian OER initiatives

Following the *POERUP OER Classification Scheme* (POERUP, 2013a) in Table 1 we briefly summarize a number of Romanian OER initiatives carried out at all educational levels. The categories presented in (POERUP,

2013a) are marked with (*), while the others are the authors' proposals for extending the classification. Although many of the projects are not full OER products, some are accompanied by policies and legal recommendations.

Table 1. Dimensions of Open Educational Resources

| Categories | Dimensions | Examples of Romanian OER Initiatives |
|---|---|--|
| Licensed used: | Various Creative Commons Licenses | - Projects and sites that offer information/workshops about copyright issues, open licenses and OER: Open Educational Resources Policy in Europe (project of Creative Commons that brings together a coalition of international experts associated with CC to strengthen the implementation of open education policies across Europe http://oerpolicy.eu/?s=romania), http://kosson.ro , http://acces-deschis , http://copy-me.org , http://www.ordu.ro , http://dreptuldeautor.noisieu.ro/creative-commons - Different products developed under CC licenses can be found at http://ro.creativecommons.org |
| Are created using: | Collaborative applications, Open Source Software | - Open Source projects and authors are listed at http://linux.punct.info - IOSSPL Project (http://iosspl.org) proposes to develop a complete web-based, standards-compliant, open-source library software system which will become available for implementation in all public libraries in Romania in the long run |
| Are distributed on: | Specific directories/ repositories/ portals, Social Media platforms | - Digital resources on the KEP portal created by teachers and pupils in the pre-university system, by using different Web2.0 technologies - Open materials and discussions around them can be found on the platforms: http://forum.portal.edu.ro , http://didactic.ro , http://e-scoala.ro , http://www.dascal.ro , http://educatie.inmures.ro/ |
| Cover: (*) | A wide range of topics | - KEP published the guide "OER for different disciplines" http://tinyurl.com/KEPOERguide |
| Are used at different educational levels: (*) | Pre-university, University, Adult Education, Personal Development/LLL, Informal Learning / Serendipity, Smart Cities | - Most of the national projects related to OER are designed / implemented for the pre-university level, while in academia they are implemented by a university or a group - Projects under CC licenses for Informal Learning / Serendipity: Romanian Encyclopedia http://enciclopediaromaniei.ro , Veioza Arte http://veiozaarte.ro - a video sharing platform acting as an open source production house for the Romanian cultural scene, Local Records http://www.localrec.ro are collections of audio products, Braşov Creative Commons Film Festival http://bvccfilmfest.tumblr.com - City Projects http://cityprojects.ro is a community proposing/working on software projects for local communities/ smart cities, based on open data |
| Are found using: | Specific search engines, Directories, Linked Data | |
| Are influenced/supported by policies / recommendations at different levels: (*) | UNESCO / global, European, National, Regional, Institutional | - Policy proposals at a national level: support for OER and Web2.0 in KEP and in the Government Programme for 2013-2016 |
| Granularity: | Little (distributed on SM platforms, collections of digital assets: curricula, syllabi, assignments, tests, projects) Big (open online courses, open textbooks) MOOCs | - Proposals for MOOCs: at university level - Credis Bucuresti with TICE-Online (http://www.unibuc-virtual.net/140217-online-tice , a MOOC platform based on Google Apps), University Politehnica Timisoara (Andone and Vasiu, 2014), University "Vasile Goldis" Arad in partnership with Fédération Européenne des Écoles - and a MOOC for LLL developed on a microblogging platform (Holotescu et al., 2013) - Experiments for integrating MOOCs in blended academic courses can be found at University Politehnica Timisoara (Holotescu, Grossek and Cretu, 2014) |
| Format: (*) | Text, Audio, Video, Multimedia, Simulations, Animations | - There is a debate going on about digital textbooks 1 st and 2 nd grade textbooks, however the legislative proposals do not mention copyright issues (Pavel et al., 2014); the textbooks will be published and downloaded from a section of the Ministry of Education site http://www.manuale.edu.ro |

| Categories | Dimensions | Examples of Romanian OER Initiatives |
|------------------------------|--|--|
| Assessed/evaluated by: (*) | Quality procedures, Peer-reviewing, User-driven models | <p>- Math videos: http://profesorultau.ro (only some are free), http://math-pdr.com</p> <p>- Interesting audio/video OER are provided by the projects under CC licenses for Informal Learning / Serendipity, listed above</p> <p>- Peer-reviewing is used in most cases to assess the resources quality</p> <p>- A cycle to develop/evaluate/improve learning scenarios can be found at http://www.cirip.ro/status/4360149?lg=en</p> |
| Use different patterns of: | Certification, Accreditation | - Teachers trained in KEP, Didatec project (http://ctmtc.utcluj.ro/sites/didatec_) received certificates, acknowledging also their skills in using/creating OER (Andone and Vasii, 2011) |
| Require: | Teachers training / courses | <p>- Training related to OER, OS, open collaboration platforms/applications, CC licenses, for teachers from schools participating in the KEP pilot program (2007)</p> <p>- Training/summer camps related to OS: OOSS - Open Source Summer School, Summer Camps in Eforie, Gălăciuc-Focșani, București, Intel Student Open Lab</p> <p>- Training/courses related to open educational pedagogies are offered by Moodle Romania, Didatec, iTeach, Sloop2desc, ActiveWatch Media Monitoring, UPT Technology Enhanced Learning hosted by Cirip.eu, Compendiu.ro (the links for these courses and other similar projects can be found at http://poerup.referata.com/wiki/Romania#Regional_OER_initiatives)</p> |
| Have as verbs: | Create, Use, Adapt, Exchange, Share, Reuse, Collaborate, Personalize, Mix, Evaluate, Validate | |
| Are promoted by: | Case studies, Best practices, Research, Guides, Journals, Events /conferences / workshops, Communities of practice | <p>- Summer Camps (organized yearly) and the Seminar “Open digital resources in educational practices” (2012) - KEP activities, at a national level, for teachers and pupils in the pre-university system</p> <p>- KEP launched two guides in 2012, having as central topics the OER and collaborative technologies (Web2.0) in education: "Integration of new technologies in education" and "Using ICT for educational activities"</p> <p>- The interest and use of open source software by teachers, pupils, and students in Romania are very important, but there are mainly institutional/group/personal initiatives; important groups/communities: Free Unix for Romania, Association ProLinux, LUG - Linux Users Group, Rosdev - Romanian Open Source Development, Ubuntu Romania, Foundation Ceata, Community ROSEdu, ApTI - Association for Technology and Internet, ORDU - Romanian Organization for User Rights, The Free Software Group - FSG, Society of the free software authors, OpenGIS (the links can be found at http://poerup.referata.com/wiki/Romania#Regional_OER_initiatives)</p> <p>- Conferences/events related to Open Source: Informatics at the Castle, RILW - Romanian Internet Learning Workshop, eLiberatica - The Benefits of Open and Free Technologies, Programatica Open Source, ROSE Romanian Open Systems Conference and Exhibition, LOAD - Linux Open Alternative Days, OSOM – Open Source Open Mind, FLOSS Camp (the links can be found at http://poerup.referata.com/wiki/Romania#Regional_OER_initiatives)</p> <p>- Open journals related to open education are http://iteach.ro/experiencedidactice, http://www.elearning.ro</p> <p>- A Romanian Coalition for Open Educational Resources was created in October 2013, gathering persons or organizations that support and promote the concepts of open access and OER (http://www.acces-deschis.ro/ro/oe/60-coali%C8%9Bia-red)</p> |
| Enable / are connected with: | Open access, Open content, Open educational practices / open pedagogy / open collaboration, Mobile learning | - The activities in KEP have led the 255 schools involved in the project towards a shift in focus from the resources themselves towards the practices associated with the creation, use and management of OER: that is, open educational practices (OEP) |
| Are funded/financed | Global funds, Institutions, Foundations, Projects, | - Knowledge Economy Project was funded by the World Bank |

| Categories | Dimensions | Examples of Romanian OER Initiatives |
|--------------------------------|---|---|
| by: (*) Foster: | Governments, Partnerships Acquisition of specific competences needed by teachers and learners to adopt open educational practices; Lifelong learning and social inclusion | - Other projects at schools and universities level were financed by state or by structural funds |
| Challenged by: | Low digital fluency of faculty, Relative lack of rewards for teaching (Johnson et al., 2014); Confusion (and fear) concerning intellectual property rights, Lack of a culture of knowledge-sharing and re-use | |
| Are published in language: (*) | Romanian, English, other languages, provide a transcript for (collaborative) translation | - Most of the resources are created in Romanian; a number are in English, like the new project http://copy-me.org or Sloop2desc - developed in European projects; the KEP pilot course has also an English version at http://timsoft.ro/pilot - OERs published on Social Media platforms can be translated collaboratively. |

3. In the end ...

There is no doubt that the OER initiatives in Romania at all educational levels are a real gain for teachers and learners, tailoring education as a real engine for change. We appreciate that Romania is active in the OER movement on the following axes/directions:

- trainings/courses related to OER and OEP organized for both pre-university and university sectors
- proposals at a governmental level related to OER and Web2.0, more for pre-university – but not yet in formal policies
- national events related to open resources produced by pre-university teachers; national guides were published too
- directories with open resources (more numerous for pre-university level)
- projects in development for MOOCs at university level and for continuing education
- strong communities/events for open source, open access, open data, open licences.

To foster the OER inclusion in Romanian academia and in the educational system in general, a set of recommendations is listed in Table 2. Some of them are quoted from the report written a few years ago (Holotescu, 2007), but they have not been fully implemented, while others have been recently proposed by POERUP (2013c).

Table 2. Guidelines for adopting / improving OERs in higher education

| 2007 | 2013 |
|---|---|
| The already existing publicly funded educational content should be used more intensively by teachers and students: connections with curricula, the skills they develop should be more clear; encourage and support the sharing of best practices; should be also licensed under CC. | Public outputs from the European Commission programs should be made open, for example by using Creative Commons licenses. |
| Create a repository with the educational projects in which Romanian schools, universities and educational organizations have participated, under CC licenses. | Budgets for digital education should include money for developing and maintaining OER. |
| Partnership of the Ministry of Education with publishers, broadcasters, libraries, cultural institutions to provide open access to their own resources. | OER should be allowed on approved materials lists. |
| All teachers training programmes should contain topics related to OER, open licenses and collaborative/free tools to create educational materials in a collaborative manner. | Encourage Europe-wide validation of the learning acquired online (not only via OER and MOOCs). |
| Encourage a competitive market for the production of educational resources, guarantee | Strong / ongoing collaborations between |

transparency of supply and equal opportunities to market actors. Define a set of quality criteria.

schools, universities and other educational stakeholders with regard to OER projects.

We hope that this paper will be a starting point for a much greater story, a useful reference point for further discussions within and between different institutions and policy makers in charge with OER policies.

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