Chapter 1
MOOC and OER:
Identity Management

Ana Nobre
Universidade Aberta, Portugal

Elena Maria Mallmann
Universidade Federal de Santa Maria, Brazil

Vasco Nobre
Universidade Aberta, Portugal

Mara Denize Mazzardo
Universidade Aberta, Portugal

ABSTRACT

Open educational resources (OER) and massive open online courses (MOOC) are new and emerging issues in the international higher education context. Under the exponential growth of the supply of courses and related publications, the purpose of this chapter is to foster scientific discussion on the socio-cultural and economic impacts, as well as its technological and pedagogical implications. Supported by the methodological typology of bibliographical studies, systematized interpretative-critical analysis based on review of the concepts, and principles guiding OER and MOOC, the authors' reflections show that the enlargement terminologies without epistemological delimitation have provoked theoretical and practical mistakes. In the final considerations, the authors systematize broader problematizations around the open educational practices in universities aimed to five dimensions: spatio-time-content, theoretical models, principles of pedagogical innovation, economic aspects, and fundamentals of collaborative culture.

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INTRODUCTION

Massive Open Online Courses (MOOC) are rooted in the ideals of open education and Open Educational Resources (OER), respond to the needs and desire to learn from all people, without demographic, economic and geographical constraints (Yuan & Powell, 2013). The open education movement is empowered by the Internet and combines the sharing of ideas, resources and practices among all people. In this context, MOOCs and new trends can contribute to increasing access to knowledge through lifelong learning and training courses.

A MOOC is an open, free, massive online course, offered through virtual learning environments, Web 2.0 tools and social networking connectivity (McAuley, A., Stewart, B., Siemens, G. & Cormier, D., 2010). Connectivism, presented as a new learning theory, was the theme of the first MOOC, organised by George Siemens and Stephen Downes in 2008, named "Connectivism and Connective Knowledge". The course was designed for 25 students from the University of Manitoba, Canada, who paid to participate and was made available, with open access, to anyone who had an interest. More than 2,300 people participated in the course without paying fees and without getting credit for it, and this expressive participation originated the MOOC designation, coined by Dave Cormier and Bryan Alexander (Siemens, 2012). The pedagogical conception of the course originated the designation cMOOC, that means connectivist MOOC.

In 2011, Sebastian Thrun and Peter Norvige, from Stanford University, organised a MOOC on the topic "Introduction to Artificial Intelligence" which attracted 160,000 students (Bates, 2015). These were followed by MIT and Harvard, which also began offering massive courses, based on knowledge transmission mainly through videos of short duration and high quality. The Coursera, Udacity and EDX platforms have attracted thousands of students. These courses were named xMOOC by Stephen Downes in 2012, being the most popular type of MOOC currently offered (Bates, 2015).

The differences created the cMOOC (connectivist) and xMOOC (traditional format) names and Downes (2012) stated that, *regardless of type, MOOCs will cause changes in the way universities offer courses.*

A hybrid version originated from the cMOOC and xMOOC models, combining components of xMOOC and cMOOC (Chauhan, 2014). Other names and conceptions continue to emerge, as the sMOOC - social MOOC, that provides social learning experiences, marked by interactions and participation, accessible from different platforms and integrating participants' real life experiences (Morgado, L., Mota, J, Quintas-Mendes, A., Fano, S., Fueyo, A., Tomasini, A.,... Brouns, F., 2014).

With the increase of the MOOC offer, there are considerable differences in their conception and they reflect different objectives and philosophies (Bates, 2015).

However, Clark (2013) points out that diversity is a positive thing to learn from these experiences and to move forward, without getting stuck in the arguments of traditionalists and modernists, because what is important is to focus on the real needs of real learners.

The MIT OpenCourseWare, of the Massachusetts Institute of Technology (MIT), launched in October 2002, is one of the events that contributed to the emergence of Open Educational Resources and later the MOOCs. Following the launch of MIT OpenCourseWare, which started to make free course materials available on the Internet, other higher education institutions in several countries also started to make available the teaching materials of their courses and in 2005 the OpenCourseWare Consortium was created (Hylén, J., Van Damme, D., Mulder, F., & D'Antoni, S., 2012). In July 2002, at the Forum on the Impact of Open CourseWare for Higher Education in Developing Countries, an event promoted by UNESCO, the term Open Educational Resources (OER) was coined and conceptualised, as:

the open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes (UNESCO, 2002).

In 2012, the concept was expanded by UNESCO, in order to specify that OER are public domain resources or made available with an open license.

The concept of OER is a development for Open Education because it goes beyond the availability of resources for free, highlighting the condition of being in the public domain or made open with open licenses, that allow, in addition to access and use, the adaptation (production of derivative works) and redistribution of resources.

BACKGROUND

The initial motivating questioning of this reflection was to query if Massive Open Online Course (MOOC) is an Open Educational Resource (OER)? OER and MOOC are emerging themes in the context of international higher education. Both offer courses as related publications has grown exponentially (Mattos & Bruno, 2014). This, on the one hand, has encouraged the scientific discussion on the socio-cultural, economic impacts and technological and pedagogical outlines. On the other hand, it has generated misunderstandings and confusion as it is not always clearly explain the boundaries between applied concepts. The diversity of terminologies and nomenclatures is up since we are surprised with new terms, acronyms and abbreviations for each new text found. To Nóvoa (2014) *words are not guilty. The*

problem is not in the words but in the ideologies of "modernization" that look especially for the "economic value of universities (p. 14).

Therefore, it is necessary to build an interpretive-critical analysis guided by review of the principles and historical milestones that contributed to the evolution of contemporary concepts that populate the academic discourse. In the same vein, it is more than necessary to clarify the concepts and theoretical options, even if these are not always confluent with the dynamism and productive fluidity that has marked the work of researchers and university professors.

So, in this article, the agenda is the first part to discuss elements of the landmarks of MOOCs and OERs highlighting concepts and definitions to the innovation purposes in higher education. In the second, we present a reflective analysis of some examples of MOOCs and some of its resources on the OER characteristics?

In the third part, mies broad issues will be presented on the OER and MOOC interface considering five dimensions: spatio-time-content; theoretical models; principles of pedagogical innovation; economic aspects and fundamentals of collaborative culture. Conclusively, it problematizes aspects of convergences between OER and MOOC.

1. International Movement: Towards Innovation in Higher Education?

OER has effectively led innovation in the higher education context? The implications and challenges that roll around the teaching work with the production of knowledge that involves other people besides himself has been little discussed in the light of educational innovation. The international movement around OER and MOOC has raised followers everywhere, from the most naive to the most justified. But these speeches have not been able to break down the barriers of implementation, productivism and consumerism and poor technological and pedagogical fluency. What remains effectively to access, production and sharing of knowledge are governed by ethical and philosophical principles of freedom, independence and democracy? Even with the heightened disclosure of information on the Internet we lack critical training to evaluate what is important to know. The Darwinian sense of the amount of calls, information, images and sound at high volume seems to abduct and crush hard knowledge produced rigorously scientific ideas, classical culture, knowledge that is important to know the school, the world of work and social life. In the Internet mediated communication times, the disclosure of sensationalist information, sexist and racist, especially in social forms such as networks, has added more and more followers with space extended to advocates of dictatorship, military interventions even in countries with legislation and democratic practice. Modes of interaction and socialization over thousands of years has not been enough to consolidate multiple

religious possibilities, gender and sexuality. In the 21st century, open information production practices seem to accentuate these differences, not as acceptance of difference, but as a way to fight it (Nobre, A., Mallmann, E. & Mendes, A. 2015).

Therefore, we questioned about the OER and the open educational practices (OEP) in higher education, especially those linked to MOOC that generate impacts and are mobilized by educational concepts guided by the principles of collaborative production and shared mediation of knowledge in networks. Nóvoa (2014) says that in the context of high productivity, excellence and entrepreneurship *it is no longer to emphasize the importance of knowledge for economic and social development. What counts now is the actual economic value of universities* (p. 13).

This worries us, because the school in general, and the university, more specifically, has been considered in the history of mankind the knowledge of building space-time to strengthen socialization systems, culture, democracy and freedom. While that statement Nóvoa (2014) questions our knowledge and make contemporary education in universities, allows us to unfold the discussion to specific situations and conditions of teaching and the way we learn and we develop intellectually. If what counts in universities is economic value, which is ultimately the role of resources and courses that promise access to knowledge without paying for it, without the need to establish long-term relationships with certain institutions?

1.1 Massive Open Online Courses (MOOC)

A literature review has been carried out and over a hundred texts about MOOCs have been analysed. Media such as *The Chronicle of Higher Education* and blogs represent an important information source on MOOCs, given the fact that academic research on the field is recent. For the theoretical-conceptual matrix of our reflection we prioritise reasoning based primarily on writings published in scientific journals, research reports of faculty projects and completion of master's and doctoral programmes. We combined the data produced and organised also from our own experiences as active learners in MOOCs. Looking at the initials of MOOC, "Massive" indicates an important scale, the existence of thousands, tens of thousands of learners at the same time. We lose sight of the person/individual. However, that doesn't mean to depersonalise! "Open" refers to a model that intends to remove obstacles, with no economic or geographic barriers. But still, courses usually require a previous enrolment. "Online" is on the internet, in a digital global world. An internet where one may easily establish connections in the different fields of knowledge. Finally, "Course" is the challenge of MOOCs, as they specialise in specific subjects. It is, hence, one of their riches.

In the context of a shared education and free access to knowledge, the path of open education tends to expand due to the mediation of network technologies.

Connected computers were a key to that study were available more easily, creating more autonomous learners access to knowledge and personal development of each. They just created new formats courses, among them the MOOCs. In 2008, George Siemens and Stephen Downes publish a free and open online course with the title 'Connectivism and connectivist knowledge. " In the same year, Dave Cormier first mentioned the acronym MOOC designating online courses with free access to the participation of a large number of people. This open and massive course model calls for democratization processes of education on a global scale.

The acronym MOOC (Massive Open Online Course) is used for courses that are run in online education platforms. MOOCs are considered open courses, free of charge, which can have hundreds, thousands or even tens of thousands of learners at the same time (Karsenti, 2015a). The term currently designates the courses themselves and this is the meaning used in this paper. The huge participation in MOOCs attracted the attention of national and international public institutions. Since 2011, major American and European universities have intensively participated in this "new kind of gold rush". Higher education institutions around the world increasingly follow this innovation that displays epic numbers: 36 million students; 300,000 students and more in one single course; 4,317 courses; 450 universities involved; 203 countries represented; 40 languages displayed (Karsenti 2015b).

The first MOOC were designed based on connectivism ideas whose central argument is that knowledge is created based on relationships between people connected to each other and the content that can manipulate freely. The connectionist approach advocates a decentralized learning in which courses are co-built with learners/participants, organized into networks through new content or new relationships. Thus, the creation of new connections becomes the basis of learning. The focus is to sensitize the learners/participants for learning where they define the objectives and organize networking according to the most prominent thematic interests.

In the context of a MOOC, the expression learners/participants seems to be more appropriate. We can not call them "registered" because not all MOOC have a compulsory enrollment. Even for those who are enrolled, resources and activities are visible, but participation is not necessary. We can not call students because there is no institutional link and not all courses generate credits and/or certifications. In this case, learners/participants refers to those who actually do the activities, consult the resources, interact with colleagues, participate in the forums, seek additional information and suggest complementary materials. It serves both MOOC that require prior registration and for those who give credits or some type of certification.

In order to encourage the generation of new ideas, the sharing of diverse perspectives and creating projects to solve specific problems, the MOOC are designed with the following features:

- **Free:** Any kind of restrictions. There is no physical boundary line even when technological resources and Internet connection are required;
- **Public:** Anyone can enroll in a MOOC. For now, such access is free of charge even if it has no link with a school/institution/university. They do not require pre-qualification;
- **Large Scale (Or Scale Heretofore Unknown):** This online course gender, unlike traditional courses where there is a limited number of participants is structured to support a massive number of learners/participants;
- **Decentralized:** No displacements required for synchronous activities and a single course can be offered by various institutions and/or groups. There is a criterion that there is direct human relationship, because there is not always a central teacher, can be only one faculty member to direct a lot of information that are shared by network participants;
- **Connection on Social Networking Platforms:** Even in courses organized on specific platforms such as Moodle and Coursera, usually explores creating groups of external social networking platforms.

They offer complete courses experiences through an online platform where videos are provided, a large number of resources (hyper) textual and hypermedia. Integrate OER and discussion forums where learners/participants interact and even work with peer review. In addition, usually require adherence to questionnaires that pretends to diagnose profile, understanding and perception of the available materials and the organization. According to Dave Cormier, MOOC is an event where people who have a common interest can share ideas and experiences based on both the course material as what is available on the Internet in blogs, comments or discussion forums. Thus, we can say that a MOOC is a "system" that brings together educational learners/participants from various places and contexts, but as shared thematic interests. So are the learners/participants themselves responsible for the dissemination of the courses. In this case, the social networking platforms can work very well. Among the different formats and purposes of MOOC, Stephen Downes and Gearge Siemens propose xMOOC and cMOOC typology to describe the different types.

This division between xMOOC and cMOOC can be placed, depending on the course, more in design than in practice. In general, we can say that most MOOC incorporated both connectivist dimensions as the network interactions are equally important and potentiating new ways of teaching and learning:

- Learn the connectivist mold is a phenomenon of the network that is influenced by social factors and the technology that supports it;
- Connectivism is a response to increasing access to and sharing of knowledge;

- Connectivism also appears linked to increasingly changing procedures, whether this sharing of knowledge, either by opening the permission to remix all available knowledge.

The MOOC time line created by Hill (2012) helps in understanding and problematizing the different origins and future challenges due to the theoretical models adopted (Figure 1).

Based on the considerations made so far, we can systematize some notes in a comparative table (Table 1), taking as reference dimensions such as autonomy, content, teacher, pedagogical model, social format and institutionalization.

Figure 1. The MOOC time line
Source: Hill (2012)

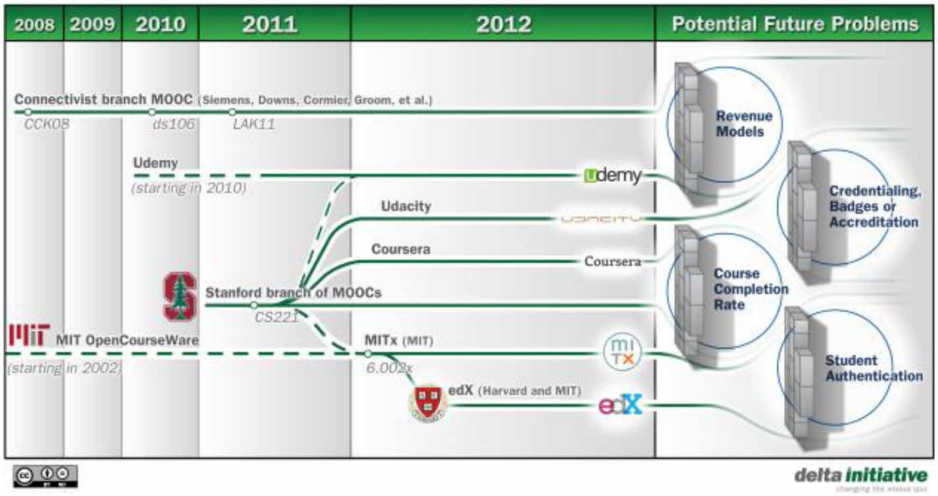


Table 1. Analysis dimensions of xMOOC and cMOOC

	cMOOC	xMOOC
Autonomy,	Total	Partial
Content	Decentralized	Centralized
Teacher	Leader	Directive
Pedagogical model	Learner-centered	Content-centric
Social format	Social networks and virtual communities	Group Platforms and Virtual Environments
Institutionalization	Partial	High

Source: Own elaboration

In the cMOOC the learners / participants have autonomy for construction, research and elaboration of answers / solutions. The contents are decentralized because they can be enriched with additional data and sharing among the participants. The teacher takes the lead in indicating resources, directing information and suggesting peer evaluation dynamics. In this way, the pedagogical model is centered on the learners / participants who organize themselves in social networks and virtual communities, share information in blogs and are not limited to the interaction in the platforms offered by the institutions that originated the courses.

The xMOOCs, on the other hand, are highly institutionalized because the courses offered are organized around highly structured content in virtual environments platforms that work very well with well-constituted groups. Pedagogically they are content-centric, which is why they usually have a large number of resource sets and activities over short periods of time. There is a teacher that provides the main content of the course / module and can participate in the discussions. It is also responsible for organizing, scheduling and managing the scoring system for accreditation and / or certification. The autonomy of the learners / participants is considered partial since the sequences are previously planned in the content. As there are possibilities for contribution with external and / or complementary content and the potential for interaction is also great, it cannot be said that autonomy is null.

This division between xMOOC and cMOOC can be situated, depending on the course, more in conception than in practice. In general, we can say that most MOOCs have incorporated both connectivist dimensions since network interactions are equally important and potentiating new ways of teaching and learning.

Learning in the connectivist way is a network phenomenon that is influenced by social factors and the technology that supports it. It results from increased access and sharing of knowledge and is linked to the growing transformation in procedures, both from this sharing of knowledge, and by opening up permission to remix all available knowledge.

Therefore, in this reflection, we problematize evidences in the relations between REA and MOOC.

1.2 Open Educational Resources (OER)

We share the view that the production, overhaul and open distribution of educational content is a way to expand access to education at all levels and modalities, including non-formal. OER are guided by these principles of flexibility and openness. Based on recent settings Commonwealth of Learning (2011) and UNESCO (2012), OER involve developing, publishing and reuse under permissive licenses. That is, for modules, textbooks, articles, videos, software, text, images, materials or techniques can be considered REA it must at least be available in a flexible license or public

domain. So, in summary, it is a permission for others to make use without problem or changes copyrighted (OKADA, 2014). For Ferreira (2012):

under the OER epithet are identified multiple communities involved in open sharing practices of educational materials on the Web and, crucially, in the dissemination of said democratizing values that align the possibilities of this sharing.

The "Forum on the Impact of Open Software Teaching in Higher Education in Developing Countries", held in 2002 under UNESCO management is one of the milestones on OER. In 2012 it was held the "World Congress on OER" which generated a document called "Declaration of Paris", which systematizes a definition for OER widely disseminated and accepted by the community:

teaching materials, learning and research in any media, whether digital or otherwise, that are within the public domain or have been released under open license that allows access, use, adaptation and free redistribution by third parties, by any restrictions or few restrictions. Open licensing is built within the existing framework of intellectual property rights, such as are defined by whether relevant international conventions and respects the authorship of the work (UNESCO, 2012).

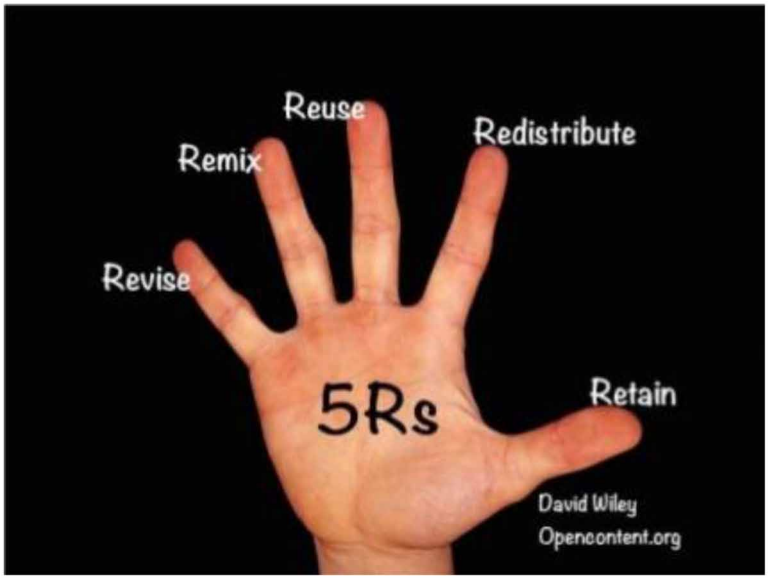
This international movement advocates a sharing of education, which show advantages for those who publish and for those who reuses and redrafting the information. From that UNESCO marking in 2012, means that educational resources should be available (free access) so they can be used and re-used collectively for the benefit of a community, a nation or humanity in general.

Based on the UNESCO definition, it is understood that the teaching materials, learning and research with open licensing can be widely used and modified. This appeal, in part, was implicit in the previous concept has not overcome it is the learning objects based on Wiley propositions (1998; 2000). Mattos and Bruno (2014) and Amiel (2014) point out that the differences between the initial concepts of learning objects and recent concepts of OER do not relate only to reuse permissions, but explicitly refer to the permissions for making changes in content.

Amiel, Orey and West (2011) express their preference for OER term because, according to the authors, it is wider due to the principle of openness involving the learning objects.

Still in the field of definition of terminology on OER, Wiley (2007) defines three inseparable elements of the concept of OER: the notion of "open"; the permissions associated with it defines as the five Rs (Figure 2): *Reuse, redistribute, revise, remix, retain*; and, finally, the options for technology and the means used. Within the meaning of the author, although the issue of accessibility is a necessary feature

Figure 2. Representation of Wiley's Five Rs of Open Content (2014)
Source: "Hand" by Golan Levin, CC-BY-2.0, modified by Quill West CC-By-4.0 http://www.slideshare.net/UnaDaly/oer-overview-porterville-summer-institute



of OER, any resource that is not effective OER if you have an open license with permissions for each of the five Rs:

1. **Retain:** Right to make and have copies of the content. To retain is necessary to know the concept and features of OER, know where to find, select, organize a collection and a form of quick access.
2. **Reuse:** Right to reuse content in various ways. Plan and implement educational activities with OER, indicate as complementary study material for students and active methodologies, such as the Flipped Classroom.
3. **Review**: The right to adapt, adjust, modify the feature. By adapting a teacher resource is expanding reuse, producing resources to contexts/specific needs and practicing authorship. It also allows updating content.
4. **Remix:** The right to match the original or revised content with other open content to create something new. Production of new resources from existing. The teacher to adapt and remixing OER Greek quality.
5. **Redistribute:** Right to share copies of the original content and/or revised. The ability to share OER selected, adapted and remixed increases the availability and dissemination of OER.

Through the realization of opening 5R, we have the opportunity to understand what differentiates OER other resources that only allow access. However, to affect the opening 5R resources must have licenses that permit the production of derivative work. Figure 3 shows a summary of open licenses correlated with the 5R's opening.

With the internet, universal access to education is possible, but its potential is hindered by increasingly restrictive copyright laws and incompatible technologies. Creative Commons licenses are one of the most advanced structures for non-software resources and provide *legal tools that define the conditions under which the creator makes his work available to the public, shared, remixed, used commercially or any combination of the three.* (Creative Commons).

The GNU FDL (Free Documentation License) is sometimes uses, but this system is complex in comparison with the CC license.

Figure 3. Opening 5R correlation.
Source: Own elaboration

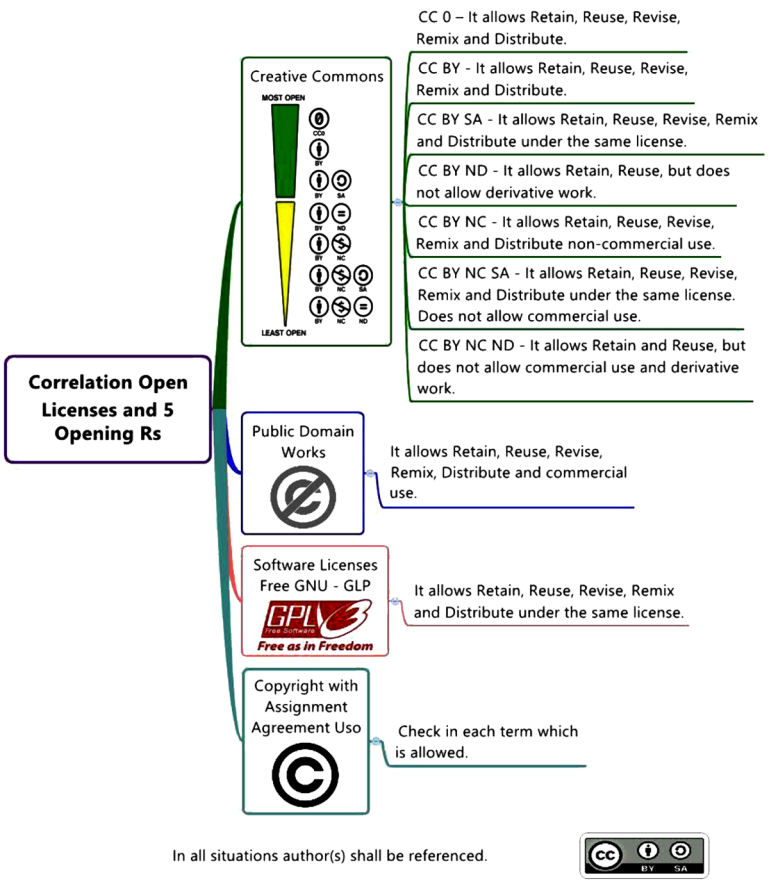


Figure 4 shows the "spectrum of rights", with the most limited left, then the various licenses of Creative Commons and finally the most open, which correspond to resources in the public domain.

To identify whether a resource is an OER, the simplest way is to look at the license. The published works are by default protected by copyright laws. If the published resource has an associated open license (the © familiar to draw attention), then we can assume that is an OER. If not, it means, unfortunately, that the most likely are protected by copyright law, so that the copy is illegal.

RESEARCH METHODOLOGY

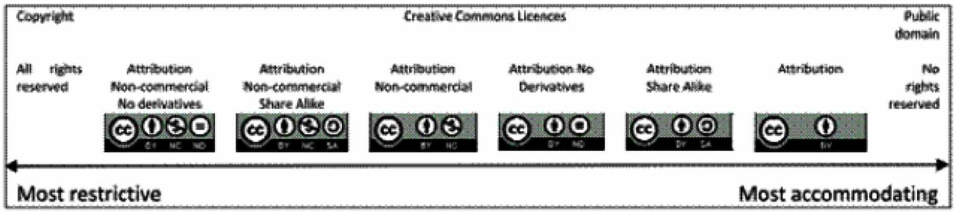
This research is part of a qualitative paradigm, assuming as a study of exploratory nature. As such, the following examples are presented could have been designated by case studies. However, due to the size of the work, which limits the introduction of complementary information which could lead to data triangulation processes thus greater contextualization of the studies, it was decided to assign them only examples. These are situations that later will be subject to further deepening, with enlargement of the sheer size of the samples.

We also highlight the use of the content analysis technique in order to detect trends that could be interpreted (Coutinho, 2015; Bardin, 2015; Krippendorff, 2004). For this purpose have been established three categories (Wiley, 2007), one for each instance defined and established after the initial reading of the corpus analysis.

EXAMPLES OF ANALYSIS MOOC COURSES BASED ON THE OER MOVEMENT

There are numerous initiatives in the framework of OER with different models of organization and operation, mainly in the field of higher education. Wiley (2007)

Figure 4. The "Spectrum of Rights"
Source: Hodgkinson-Williams and Gray (2009)



illustrates this diversity (Figure 4), identifying three models of OER, based on criteria such as size, organization and content creation, among other services:

- MIT model with a high degree of centralization and coordination in terms of organization and delivery of services, whose work is carried mainly by employees paid under the project;
- The USU model, with a mixture of centralization and decentralization, either the organization or services, in which the work is distributed by paid staff, but many volunteers;
- Rice and model, almost entirely decentralized, whose services are also almost entirely provided by volunteers.

In view of this, in this reflection, we question evidence in relations between OER and MOOC according to Wiley table (2007).

In Table 2, 3 and 4 are examples corresponding to 3 MOOCs courses coming from distant continents and countries and taught in different foreign languages.

- **sMOOC Step by Step (2ed) – 2015:** This course offered in 5 languages (English, French, Italian, Portuguese and German), with teaching materials in different formats (video, audio, text etc.), was developed by a multidisciplinary team of 10 European institutions and is available in Ecolearning platform.
- **REL 2014 – Pour une Éducation Libre - in French:** Proposed by the International Organisation of the Francophonie (OIF, 2012) according to the fourth axis of the integrated OIF strategy *Horizon 2020*.
- **Digital Skills For Collaborative OER Development (DS4OER):** English language proposed by Otago Polytechnic and has the support of the New Zealand National Commission for UNESCO.

Figure 5. Diversity of models used in the open educational resources initiatives in higher education
Source: (Wiley, 2007:10)

	MIT	USU	Rice
Course production goals	All courses offered by MIT	Many courses offered by USU	Many courses offered anywhere
Control over courses produced	High degree of control	Small degree of control	Practically no control
Cost per course produced	USD 10 000	USD 5 000	USD 0
Organisation size	Large	Medium	Small

Table 2. Identity valences over the OER in the MOOC sMOOC step by steo (2ed) - 2015

MOOC	sMOOC Step by Step (2ed) – 2015 https://hub0.ecolearning.eu/course/smooc-step-by-step-2ed/	
Wiley Model (2007)	USU The team was formed by a multidisciplinary team of educators. Each class, classified by language, was accompanying a teacher. The environments were the Eco Elearning Communication Open-Data and social networks.	
License	All course videos are available on Youtube with attribution license Creative Commons (reuse allowed) Ex E.g: https://youtu.be/Zdj_hfe3vYo	In most texts available (in pdf format) is not in the license.
Imagens	 Session 2 Activity The license contained in the resource Available in: https://hub0.ecolearning.eu/media/attachments/PT_Session_2_-_Template_-_Project_Definition.pdf	 Session 3 - The license does not appear in the feature and thus can not be considered an OER. Available in: http://hub0.ecolearning.eu/media/attachments/PT_-_Presentation_VIDEO_1.pdf
It is OER?	Yes	No

Source: Own Elaboration

Licenses make the difference between online digital resources available and open educational resources. The MOOC courses are shown in Table 5.

This table (Table 5) we have 3 MOOCs and 3 licenses. Thus, most MOOCs allow users only fair-use rights, or rights stated in specific licenses. Most of them can not be legally copied, and users can not update or use them to create their own courses (Grodecka, K. & Śliwowski, K. 2014). OER are not MOOCs and MOOCs are not an OER.

As the MOOC are available on the network, they seem to be one of the ways to enable OER, expand access and shared content production. According to Mattos and Bruno (2014) *the current possibilities of Open Education are materialized in online social networks*. We can therefore say that the MOOC and OER potentiate the contemporary university education? Promote learning throughout life to include practices of technological and digital basis? For Pereira, Quintas-Mendes and Morgado (2012):

Table 3. Identity valences of OER in MOOC course REL 2014 - Pour Une Education Libre

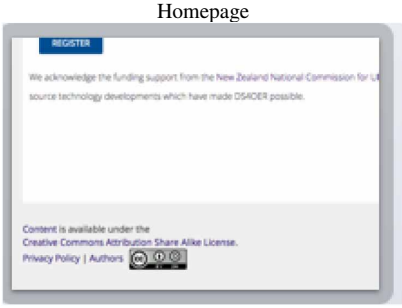
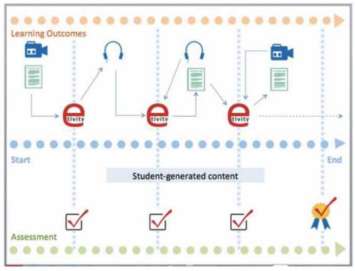
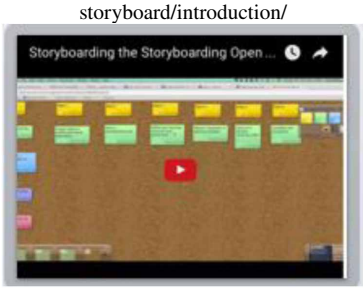
MOOC	REL 2014 – Pour Une Education Libre http://rel2014.mooc.ca/	
Wiley Model (2007)	*USU* and *RICE* The organization claims to be a connectionist framework. There are the course "facilitateurs" that present themselves as aggregators of content to simplify access to productions of learners/participants. Are as convergence points that redistribute the productions.	
License	In its home page provides a global license but both documents as the activities are not licensed.	Documents (video or pdf) as the activities are not licensed.
Imagens	http://rel2014.mooc.ca/ Homepage  	Theme Presentation Video 2 unlicensed https://www.youtube.com/watch?v=Mk98FqsJIcw 
It is OER?	Yes	No

Source: Own Elaboration

are patent the requirements for educational institutions covering a larger and more diverse population range, so that they do meet the emerging patterns of participation and educational engagement.

New methodological proposals and oxygenation of their theoretical arguments to theories of learning with the advent of networked technologies imply understand the system of relationships that is in educational situations. According to Anderson (2003) learning can take place provided that at least one of the three forms of interaction (student-teacher, student-student and student-content) is high level. To which the author calls the Interaction Equivalence Theorem (IET) understanding that is not absolutely necessary at the same time there are very high levels in the three types of interaction. Apparently, OER organized didactically in short courses

Table 4. Identity valences of OER in MOOC course Digital skills for collaborative OER Development (DS4OER)

MOOC	Digital Skills for Collaborative OER Development (DS4OER) http://ds4oer.oeru.org/	
Wiley Model (2007)	*USU* The course has a high degree of organization with specification of objectives and goals from the beginning. There are ways to be covered from reading the guidelines, registration, access to materials such as hypertext and video and conducting activities.	
License	On all pages that explain the current structure there is a license (reuse allowed and share alike required)	In all activities there is the same Creative Commons license course. In some explanatory videos the license permits reuse as Youtube terms.
Imagens	http://course.oeru.org/ds4oer/ Homepage  	 Activity: Developing Storybord Source: http://course.oeru.org/ds4oer/learning-pathways/developing-a-storyboard/introduction/  explanatory vídeo: example as Youtube terms (reuse allowed) https://www.youtube.com/watch?v=phicI4xVNv0
It is OER?	Yes	Yes

Source: Own Elaboration

Table 5. Identity valences of OER in MOOC courses by licenses

Course	License	Authorization
sMOOC Step by step (2ed) – 2015		All new work done based on their must be licensed under the same license, so any derivatives, by nature, can not be used for commercial purposes.
REL 2014 – Pour une éducation libre		New creations that is the dissemination and use of licensed materials.
Digital skills for collaborative OER Development		Creation of new jobs but always with the same license.

Source: Own Elaboration

type MOOCs, lectures, maps, pictures, slides, animations, simulations and virtual worlds, allow and enable access for teachers and students to knowledge and a wide variety of methodologies (Nobre, A. Mallmann, E., 2016).

GREATER PROBLEMATIZATIONS

With the advent of OER and supply of MOOC (both cMOOC models as the xMOOC) envision new possibilities of interaction that would not be possible without the communication supported by networked technologies. Are aspects that highlight changes in the modes of production of the existence of culture, livelihood and social life that impact the knowledge we seek to know and how we mobilize to achieve it.

The health of body and soul in the face of changes in interaction habits because every time connection and everywhere seems to be increasingly a field conducive to research. The fragility of the contours of ethics and respect for diversity deserve increasingly reflective and analytical concentration. As conduct changes are quick, spontaneous and often momentary both is not always linger. The consumerist desires seem to be increasingly extended when the objects that we are accessible to one click on online shopping and has become obsolete within which we expect the delivery of the same in our informed addresses. Incidentally, inform addresses is, for many people, an act of great difficulty. Learning throughout life, the search for education and training, globalization has become increasingly nomadic people. Living in a city, a country and work in another for many is already routine. The travel time, regardless of the speed and comfort of mobility technology, it is usually a connection time with some information or with someone who is not there but elsewhere, it is the virtual, which means the content it is in the cloud.

Table 6. Wider problematizations on OER and MOOC in higher education

Pimensions	Problematizations
Spatio-Time-Content	OER and MOOC are suitable for whom, in what context, for which public? There are more or less appropriate content for OER and MOOC? Who defines the contents of OER and MOOC? OER and MOOC meet the emerging demands for content and connectivity?
Theoretical Models	What are the concepts and scientific, technological and educational values underlying the OER and MOOC in contemporary higher education?
Pedagogical Innovation	OER and MOOC involves didactic and methodological renewal in higher education? OER promote innovation MOOC and vice versa?
Economy	Free access promotes democratic and social participation in the production of scientific and technological knowledge?
Collaborative Culture	OER and MOOC strengthen interaction mediated by networked technologies and make our most collaborative educational practices in higher education?

Source: Own Elaboration

In this context, our reflections show that the enlargement terminologies without epistemological delimitation has provoked theoretical and practical mistakes. Systematize broader problematizations around OER and OEP in universities aims to five dimensions: spatio-time-content; theoretical models; principles of pedagogical innovation; economic aspects and fundamentals of collaborative culture (Table 6).

These problematizations indicate us that it may be time to rethink how we develop the teaching-learning processes in higher education. Or simply watch all these changes and investigate how we teach and learn faster and faster and with better insight. The arguments around the open education, OER and MOOC need to be the center of attention and more refined analysis. They will meet, in fact, the most emerging educational demands or the movement itself creates these demands? In other words, to the extent that universities now offer MOOC wantonly on certain content, without extending the understanding and the political and ideological implications, they are not helping to make these same contents, chosen by them, a new marketing requirement?

CONCLUSION

MOOC= Open Course Online + OER is the equation that made possible the emergence of this new type of course. However in the world of MOOC, in order to identify the challenges posed to the use of OER should exist the orientations to help

Table 7.

MOOC and OER
MOOCs involve the aggregation of OER Three types of OER: documents, tools, scenarios MOOCs are an extension of theOER . the online courses are really open, the resources of the course must also be. A MOOC requires OER management by learners and facilitators, regardless of the model The learner can be its own designer (at least in part). The MOOCS platforms (Coursera, edX, ...) and other are not designed to do this.

to recognize them. Before you can Reuse, Remix, Revise, Redistribute the OER, you still have to be able to find it and identify it as such.

Some environmental models are conducive to reuse and aggregation of OER in the MOOCs. Participatory and open learning environments are characterized by the continuity of design after deployment. We follow the course but we have our own tools. This encourages emerging learning with shared engineering between teachers and learners (see Table 7).

In the course of the interpretive-critical analysis built, we argue that the spread of OER and MOOC movement ruled in knowledge access speech puts us a series of questions. Therefore, search results in contemporary higher education are required to tell us if OER and MOOC are more a phenomenon of something created at the heart of online interaction or effectively treat themselves to a new way of learning and, in addition to access, share knowledge production. In the context of high productivity, excellence and entrepreneurship seems to be no need to accentuate the importance of international movements and initiatives such as the OER and the MOOC for social and cultural development. Perhaps, in view of openness, flexibility, free sharing and democratization of access can already glimpse the horizon the centrality of knowledge and not only, the actual economic value of universities.

In short, we need to work both Global: standardization of web referencing of linked data, and work Local: Instituitions, Universities …

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