



Development and innovative
implementation of MOOCs
in higher education



MOOCs: STATE OF THE ART

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MOOCs: State-of-the-art

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Note: This guide is a review of important articles, studies, projects related to MOOCs and an original curation of Romanian MOOCs initiatives.

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Ramona-Alice BRAN has been teaching English for social sciences since 2005. While working at the Faculty of Sociology and Psychology she has constantly pursued her interest in American literature and cultural studies. Consequently, in 2014 she defended an interdisciplinary PhD thesis at the Faculty of Cultural Studies from the *Technische Universität* in Dortmund, Germany. So far, Ramona-Alice Bran has authored and co-authored numerous journal articles, as well as two textbooks. She is currently preoccupied about integrating OER and MOOCs in her teaching activities. At the same time, she intends to create an online bilingual dictionary comprising terms from the area of social sciences.

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Laurențiu Gabriel ȚÎRU is lecturer at the Sociology Department, Sociology and Psychology Faculty of the West University of Timișoara. He obtained Ph.D in Sociology in 2008, at the 'Alexandru Ioan Cuza' University of Iași, with the subject 'Identity construction and manipulation through mass-media'. His academical preoccupations cover fields as: research methodology and communication sociology of values and mass-media sociology.

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Senior researcher

Laura MALIȚA graduated Informatics (BA) and Sociology of the Political and Administrative Institutions (MA). She has a PhD in Web Sociology, being continuously involved in (inter)national projects and activities with topics related to web social learning, web social aspects and users' behaviour, online communications.

She was benefited of a European Integration scholarship named "N. Titulescu" on the topics of social integration. She is certified as a Trainer of Trainers. Since 2000 she is continuously involved as partner or coordinator 20+ (inter)national projects. She is an academic teacher since 2000. She has also experience as Erasmus teaching professor. She was a teacher for European Master of Adult Education (7 universities and countries). At WUT she teaches about using social media applications in learning and professional development process, also for other purposes (i.e. in the first semester she had a transversal discipline with students from all the 11 WUT's faculties).

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Senior researcher

With a background in Chemistry (PhD since 2004) assistant professor **Vlad CHIRIAC** has done many activities related to new trends in teaching STEAM to both high school pupils and students. He now is enrolled in a Master Degree in Education Sciences trying to enrich his expertise since working in IT field.

Vlad CHIRIAC PhD. is involved for the past 5 years in the National Committee of The Pupils Chemistry Olympics and other pupils contest, especially interdisciplinary as Earth Science Olympics (Chemistry, Physics, Biology, Geography) and Junior Science Olympics (Chemistry, Physics and Biology). He has both valued chemistry papers published and educational aimed works. He was involved in project which had the goal to transform way STEM disciplines are teach in both schools and universities. With a constant interest in innovating ways to teach STEM he joined Education Science studies lately.

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Senior researcher

Professor Carmen HOLETESCU has conducted innovative research over the last 15 years, in open education (OE), conceiving and building SM learning spaces and integrating emerging educational technologies, OERs and MOOCs in formal/informal learning settings.

She has also been involved in many European projects on new collaborative technologies, to training teachers/e-trainers and participants with different backgrounds, also persons in disadvantaged situations.

In 2007, as an Expert in the Knowledge Economy Project, she was the author of the 1st national recommendations on OE for the Romanian Ministry of Education.

She is a Certified Online Instructor of University of Maryland University College, USA, acting as Online Tutor for 12 years, between 2002-2013. She has facilitated online courses in CS field, working with students worldwide in multicultural settings.

Carmen Holotescu is also the organizer and chair of many national and international conferences, workshops and webinars on OE.

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Doctoral researcher

Luiza VLAICU holds a BA diploma in Social Work and is currently a PhD student in Sociology, with a social work thematic focusing on organizational culture in public social work institutions. She has participated in various social work projects.

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Alexandru TOPÎRCEANU was born on October 26 1987 in Timisoara, where I live to this day. I followed the German school Nikolaus Lenau (from Kindergarten to highschool), and then started my studies at the Politehnica University Timisoara (UPT). There, I finished my bachelor in 2010 in computer science, and followed a master in software engineering at the Faculty of Automation and Computers.

Currently I occupy the position of Phd student at the Department of Computer and Software Engineering, UPT, and teaching assistant in the same department. My thesis, which was started in 2012, is entitled "Structural and Behavioral Analysis and Modeling of the Society" and deals with the topics of social networks analysis, network topologies, opinion diffusion, and computer simulation.

My professional activity includes participation at programming contest, like "Noi Info", where I won 4th and 2nd places in game development; 1st national and 5th international prize at the "Solar Schools" inventics competition. Also, I participated and won, or ranked very good, in many competitions as a student (CEC, iTEC, ACM, BitDefender), and one mentionable accomplishment is the ranking in the world's top 6 at the Microsoft Imagine Cup competition in Poland 2010.

He worked as a Java software engineer at Continental Automotive for 1 year, and am currently a research member of the ACSA group in UPT, and the Morpheus team, dealing with complex networks and network medicine topics. I teach Android development, Codesign, Computer Organization and Algorithms Design at the Romanian and English sections in the Department of Computer and Software Engineering.

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Post-
doctoral
researcher

Dorin Florin NEAGOE – is a good organizational spirit, attention to details, capable to collaborate and interact with the audience, all this gained during the practical activities held during the master "Social reintegration on Criminal Justice" at the rehabilitation center for minors from Buzias.

Sociological study regarding the expectation of the students from Petrov Braca Highschool- Varsac (questionnaire preparation, interviews, preparation of project site, etc.).

Network Administrator in the "Skills needs of graduates and employers. I have gained knowledge in using the computer, different programs and operating systems during the computer courses and seminars.

Good team player, organized, sociable, innovative, I can work with deadlines.

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Technical
support

CONTENT

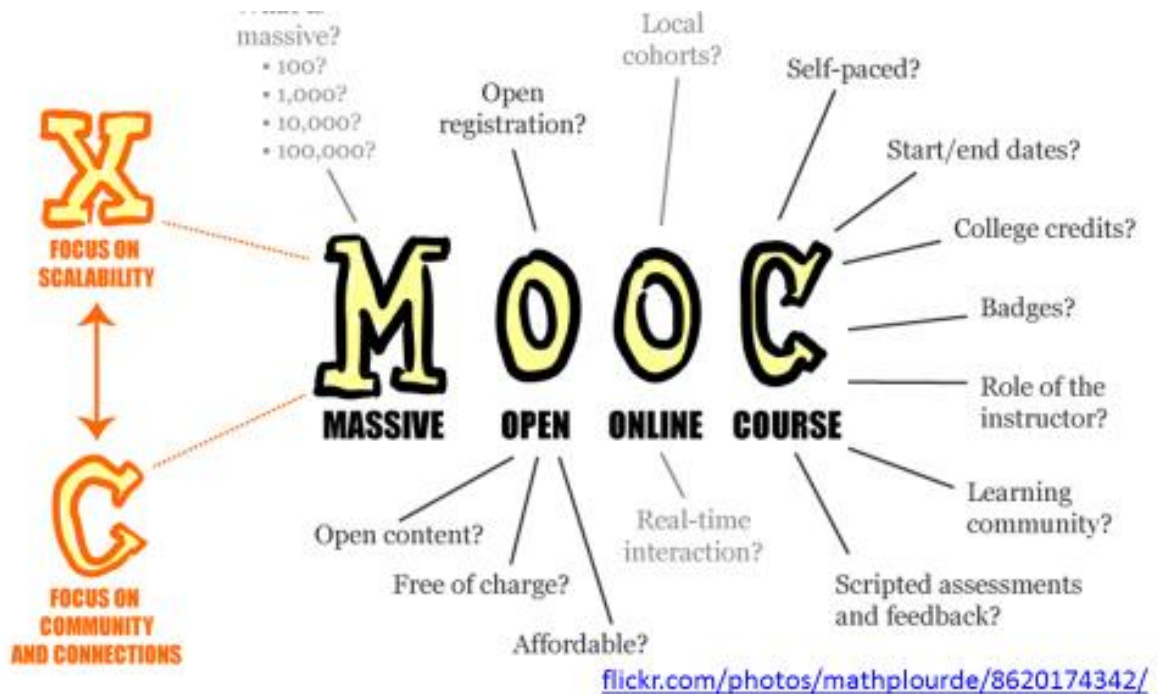
1. Definitions
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1. Definitions

A Massive Open Online Course (MOOC) is open to interpretation. There does not exist an unambiguous, straightforward definition of a MOOC that is broadly accepted.

The definition stated by the HOME and OpenUpEd projects and mainly used in Europe is:

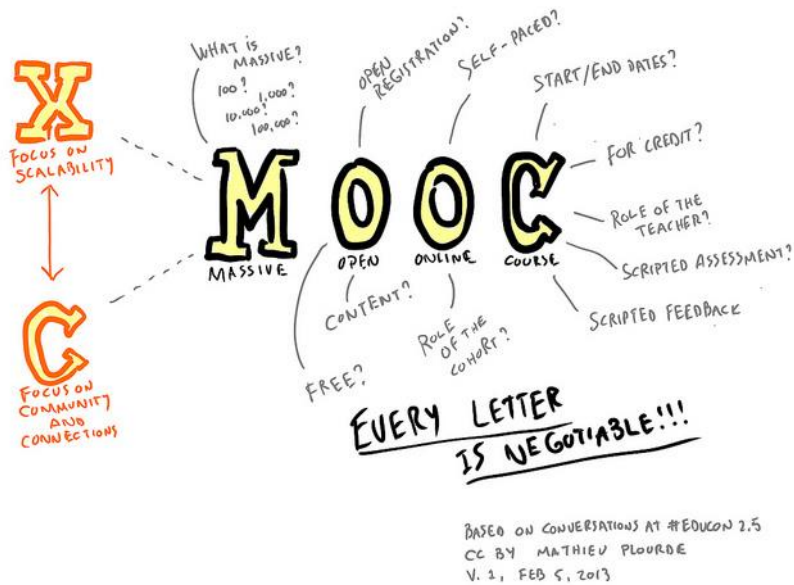
"MOOCs are online courses designed for large numbers of participants (>148, Dunbar number), that can be accessed by anyone anywhere as long as they have an internet connection, are open to everyone without entry qualifications, and offer a full/complete course experience online for free" (http://eadtu.eu/documents/Publications/OEenM/Institutional_MOOC_strategies_in_Europe.pdf).



2008 - 1st cMOOC: George Siemens and Stephen Downes co-taught "Connectivism and Connective Knowledge" - 25 tuition-paying students at the University of Manitoba, Canada plus ~2300 participants worldwide.

web.archive.org/web/20080629220943/http://lrc.umanitoba.ca:83/connectivism/

Every letter in MOOC is negotiable and there is a lot of discussion going on about the meaning of each letter.



Source: <https://www.flickr.com/photos/mathplourde/8448541815>


MOOC is a *core key of Open Education*: **Open education** is a mode of realizing education enabled by digital technologies aiming to widen access and participation to everyone. It offers multiple ways of teaching and learning, building and sharing knowledge, as well as a variety of access routes to formal and non-formal education, bridging them. Open education means access to content, courses, support, assessment and certification in ways that are flexible, and accommodate diverse needs. Barriers, as regards for example entry or cost, are reduced or eliminated.

Source: OpenEdu JRC IPTS Report “Opening up Education: a support framework for HE institutions”, 2016, <http://ec.europa.eu/jrc/en/open-education>; check also <http://www.slideshare.net/inamor/opening-up-higher-education-in-europe-56009940>, final framework <http://publications.jrc.ec.europa.eu/repository/handle/JRC101436>.

Also MOOC is a part of the OER movement.

What are OERs?

Open Educational Resources




Big and Little OERs
(Weller, 2010)

Massive OERs = OpenMOOCs
(ECO Project, OE Consortium + EdX)

„are any type of educational materials that are in the public domain or introduced with an open license.

The nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them. OERs range from textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation.”

<https://ocw.mit.edu/help/faq-fair-use/>


Other approaches for MOOC definitions can be found at:

- State of Open Education - presentation for OEW 2016 - <http://www.slideshare.net/wfvanvalkenburg/state-of-open-education>.
- OpenupEd Definition Massive Open Online Courses (MOOCs) - http://www.openuped.eu/images/docs/Definition_Massive_Open_Online_Courses.pdf

MOOCs (Massive Open Online Courses) can be seen as a term or word related to the scalability of open and online education. Some even argue that it is a political instrument and as such a concept that should be broadly defined. This document re-defines MOOCs so that it becomes clear what the differences are to other implementations of open and online courses.

- The **massive** characteristic could also depend on the language of the MOOC <http://project.ecolearning.eu/should-moocs-be-massive/> - for Romanian language the number of participants: 250-2500.
- @diando70, @alacre: Massive means also "intercultural, diverse, global" at #emoocs2016 - <https://twitter.com/diando70/status/702042890894254081>.
- Check <https://scholar.google.ro/scholar?q=definitions+of+MOOC+pdf>.
- Oxford Dictionary: "A course of study made available over the Internet without charge to a very large number of people: anyone who decides to take a MOOC simply logs on to the website and signs up." - http://www.oxforddictionaries.com/us/definition/american_english/mooc; check also <https://www.edsurge.com/research/edtech-wiki/moocs>.
- What is a MOOC - David Cormier - <https://www.youtube.com/watch?v=eW3gMGqcZQc>.
- Video on Open Education - <http://clintlalonde.net/2016/10/12/open-puts-the-public-in-public-education/>.
- BizMOOC Outcome: About MOOCs, online courses and open education <http://bizmooc.eu/wp-content/uploads/2016/02/BizMOOC-paper-00-Defining-the-context-for-MOOCs.pdf>.
- Definition review - <http://eu.wiley.com/WileyCDA/WileyTitle/productCd-1119276128.html>

MOOCs and Higher Education: Implications for Institutional Research: New Directions for Institutional Research, Stephanie J. Blackmon (Editor), Claire H. Major (Editor), ISBN: 978-1-119-27612-8, 112 pages, August 2016, Jossey-Bass: Take a broad, balanced look at the present and potential MOOC landscape in higher education. This special volume highlights current trends and issues related to the emergence and development of a new instructional form in higher education: Massively Open Online Courses (MOOCs). In these online distance education courses, enrollment is usually open to anyone who wishes to take them. This volume provides institutional researchers with information about the possibilities and challenges for current and future research on MOOCs.

- Massive Open Online Courses: Variations on a New Instructional Form, Claire H. Major, Stephanie J. Blackmon: This chapter provides a detailed discussion of the term MOOC and offers a taxonomy on the ways to classify the new instructional form. https://books.google.ro/books?hl=en&lr=&id=xwcEDAAAQBAJ&oi=fnd&pg=PA11&ots=-8LqzBUYpy&sig=G54d5qGCXcAeGlrBrWHWDhQ73LY&redir_esc=y#v=onepage&q&f=false.

A kind of Manifesto:

Posthumanism and the MOOC: opening the subject of digital education - Jeremy Knox - Springer, February, 2016 (<http://link.springer.com/article/10.1007/s11217-016-9516-5/fulltext.html>).

As the most prominent initiative in the open education movement, the Massive Open Online Course (MOOC) is often claimed to disrupt established educational models through the use of innovative technologies that overcome geographic and economic barriers to higher education. However, this paper suggests that the MOOC project, as a typical example of initiatives in this field, fails to engage with a theory of the subject. As such, uncritical and problematic forms of humanism tend to be assumed in the promotion and delivery of these courses: the expectation of rational and self-directing individuals, with a universal desire for education. This fundamental orthodoxy limits both the understanding of technology and the possibilities for a concept of 'openness' in education. Given the global scale of the MOOC, and its high-profile associations with elite universities, the need for critical alternatives is pressing. In this paper I draw on critical posthumanism—an umbrella term for a range of philosophical and theoretical positions—for two purposes. Firstly and principally as a perspective through which to critique the educational reliance on humanism that is maintained in the project of the MOOC, and secondly to suggest alternative frameworks for thinking about the intermingling of humans and technologies in education. Space and time are considered as the two principal sites with which technological change is realized, and the promotion of the MOOC is shown to mask spatial and temporal conditions through adherence to an underlying humanist framework.

Making Sense of MOOCs: Musings in a Maze of Myth, Paradox and Possibility - Sir John Daniel, *Journal of Interactive Media in Education*, 2012 - <http://jime.open.ac.uk/articles/10.5334/2012-18/>

MOOCs (Massive Open Online Courses) are the educational buzzword of 2012. Media frenzy surrounds them and commercial interests have moved in. Sober analysis is overwhelmed by apocalyptic predictions that ignore the history of earlier educational technology fads. The paper describes the short history of MOOCs and sets them in the wider context of the evolution of educational technology and open/distance learning. While the hype about MOOCs presaging a revolution in higher education has focussed on their scale, the real revolution is that universities with scarcity at the heart of their business models are embracing openness. We explore the paradoxes that permeate the MOOCs movement and explode some myths enlisted in its support. The competition inherent in the gadarene rush to offer MOOCs will create a sea change by obliging participating institutions to revisit their missions and focus on teaching quality and students as never before. It could also create a welcome deflationary trend in the costs of higher education.

Jemni, M., & Khribi, M. K. (2016). *Open Education: from OERs to MOOCs*. Springer - uploaded at https://drive.google.com/file/d/0B_Hu8z--34eSa0hQbzdPSjlySDQ/view?usp=sharing

- New Models of Open and Distributed Learning - Stephen Downes

- Intercreativity and Interculturality in the Virtual Learning Environments of the ECO MOOC Project - Sara Osuna-Acedo, Divina Frau-Meigs, Lucía Camarero-Cano, Adeline Bossu, Raquel Pedrosa and Darco Jansen
- Quality Frameworks for MOOCs - Darco Jansen, Jon Rosewell and Karen Kear
- Designing Massive Open Online Learning Processes: The sMOOC Pedagogical Framework - Francis Brouns, António Teixeira, Lina Morgado, Santiago Fano, Aquilina Fueyo and Darco Jansen.

2. History/Initiatives in USA, Europe, Romania

In 2008 the first MOOC (cMOOC) was run: George Siemens and Stephen Downes co-taught “Connectivism and Connective Knowledge”, in which took part 25 tuition-paying students at the University of Manitoba, Canada plus 2300 participants worldwide.

<http://web.archive.org/web/20080629220943/http://lrc.umanitoba.ca:83/connectivism>.

How socioeconomic status impacts online learning: Is online learning truly opening as many doors as anticipated? (<http://news.mit.edu/2015/how-socioeconomic-status-impacts-online-learning-1217>)

Discussed the results of the study **Democratizing education? Examining access and usage patterns in massive open online courses** <http://www.sciencemag.org/content/350/6265/1245.full>: Young students enrolling in HarvardX and MITx on edX live in neighborhoods where the median income is 38 percent higher than typical American neighborhoods. Among teenagers who register for a HarvardX course, those with a college-educated parent have nearly twice the odds of finishing the course compared to students whose parents did not complete college. At exactly the ages where online learning could offer a new pathway into higher education, already affluent students are more likely to enroll in a course and succeed.

Less Experimentation, More Iteration: A Review of MOOC Stats and Trends in 2015

(<https://www.class-central.com/report/tag/mooc-roundup-2015/>) check all reports at <https://www.class-central.com/report/> such as By The Numbers: MOOCs in 2015, MOOC Trends in 2015: The Death of Free Certificates.

MOOC Trends in 2016: MOOCs No Longer Massive - We've gained the ability to take MOOCs at any time, but lost something in the process - <https://www.class-central.com/report/moocs-no-longer-massive/>

Check Class Central's 2016: Year in Review - <https://www.class-central.com/report/tag/mooc-roundup-2016/>.

European Commission - Press release: How digital is your country? New figures show action needed to unlock Europe's potential - Brussels, 25 February 2016 - http://europa.eu/rapid/press-release_IP-16-384_en.htm

From connectivity and digital skills to public services, EU countries have made progress since last year which marked the launch of the Digital Single Market Strategy by the European Commission. The European Commission published the results of the 2016 edition of the **Digital Economy and Society Index (DESI)**. The findings show that Member States have made progress in areas such as connectivity and digital skills, as well as in public services, since the publication of the Commission's **Digital Single Market Strategy** last year.

Digital in 2016 - <http://www.slideshare.net/wearesocialsg/digital-in-2016>

We Are Social's DIGITAL IN 2016 report, collating all the key data, statistics and trends you need to understand the state of digital, social and mobile media around the world today.

Fotakis, C., Rosenmüller, M., Brennan, J., Matei, L., Nikolov, R., Petiot, C., Puukka, J. (2014). **The role of Universities and Research Organisations as drivers for Smart Specialisation at regional level**. EU Directorate-General for Research and Innovation. Available at https://ec.europa.eu/research/regions/pdf/publications/ExpertReport-Universities_and_Smart_Spec-WebPublication-A4.pdf

The objective of this report is to look into the role of universities and research organisations in smart specialisation initiatives, examine associated strengths and weaknesses, identify opportunities and propose recommendations to stakeholders and policy makers.

How are Higher Education Institutions Dealing with Openness? A Survey of Practices, Beliefs, and Strategies in Five European Countries - <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/how-are-higher-education-institutions-dealing-openness-survey-practices-beliefs-and?search>

Open Education is on the agenda of half of the surveyed Higher Education Institutions (HEIs) in France, Germany, Poland, Spain and the United Kingdom. For the other half of HEIs, Open Education does not seem to be an issue, at least at the time of the data collection of the survey (spring 2015). This report presents results of a representative survey of Higher Education institutions in five European countries (France, Germany, Poland, Spain and the United Kingdom) to enquire about their Open Education (OE) practices, beliefs and strategies (e.g MOOCs). It aims to provide evidence for the further development of OE to support the supports the Opening Up Communication (European Commission, 2013) and the renewed priority on Open Education, enabled by digital technologies, of ET2020.

The Digital Revolution – Lord Kenneth Baker's new report and 8 point plan for education, 9 May 2016 - <https://www.data.org.uk/news/the-digital-revolution-lord-kenneth-baker-s-new-report-and-8-point-plan-for-education/>

Full report: <https://www.data.org.uk/media/1666/digitalrevolution.pdf>

Lord Baker's eight-point education plan:

1. Primary schools should bring in outside experts to teach coding
2. All primaries should have 3D printers and design software
3. Secondary schools should be able to teach Computer Science, Design and Technology or another technical/practical subject in place of a foreign language GCSE
4. The Computer Science GCSE should be taken by at least half of all 16 year olds
5. Young apprenticeships should be reintroduced at 14, blending a core academic curriculum with hands-on learning
6. All students should learn how businesses work, with schools linked to local employers
7. Schools should be encouraged to develop a technical stream from 14-18 for some students, covering enterprise, health, design and hands-on skills.
8. Universities should provide part-time courses for apprentices to get Foundation and Honours degrees.

MOOCs in Europe - report EADTU, June 2016 -
http://eadtu.eu/images/publicaties/MOOCs_in_Europe_November_2015.pdf, from
<http://eadtu.eu/home/publications>

There are 2 chapters about Romania:

- **Methods and Models of MOOCs Integration in Traditional Higher Education** by *Diana Andone* cites the article https://www.researchgate.net/publication/260987116_Integrating_MOOCs_in_Blended_Courses
- **A summer-day's MOOC** by *Sander Schroevers, Hans Seubring-Vierveyzer*, Part-time Academy, Amsterdam University of Applied Sciences (HvA): Analysing case studies of short-term faculty-led international experiences in Romania, Georgia, and the Netherlands, it reports on the process of trying to internationalise the non-mobile student in Higher Education, and to offer a distance MOOC-situated learning alternative for overseas students partaking in selected STIE programmes. The findings may have practicable implications for those who are involved in considering a similar blend of short-term international experiences programmes with open online courses. **Romanian partner:** Facultatea de Business of the Universitatea Babes-Bolyai (in Cluj-Napoca, Romania).

Trends in Learning 2016 - MOOCs - <https://www.youtube.com/watch?v=jzhL7wJPiqo> at Open University channel <https://www.youtube.com/user/TheOpenUniversity/videos>.

The future of jobs and MOOCs - <https://www.youtube.com/watch?v=mKZoWoY7RDs> at UC Berkely events <https://www.youtube.com/channel/UCFkid-1EIBbauJLbMFDp2Cg>.

Romania Education System at Eurydice - <https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Romania:Redirect>

Incomplete and old.

Projects / Studies related to MOOCs in Romania - at the end of the guide.

3. Important European projects, results

European Projects related to MOOCs

The European Association of Distance Teaching Universities

OpenupEd openuped.eu

HOME Higher Education Online: MOOCs the European way
home.eadtu.eu

Mundus Fostering international Higher Education collaboration through ICT and open education
meion.org/projects/mundus

EMMA EUROPEAN MULTIPLE MOOC AGGREGATOR
The European Multiple MOOC Aggregator
platform.europeanmoocs.eu

ECG Elearning Communication Open-Data
ecoflearning.eu

mmovee moveproject.eu

LangMOOC langmooc.com

izMOOC MOOCs for the world of business
izmooc.eu

“MOOCs are online courses designed for large numbers of participants (>148, Dunbar number), that can be accessed by anyone anywhere as long as they have an internet connection, are open to everyone without entry qualifications, and offer a full/complete course experience online for free”.

eadtu.eu/documents/Publications/OEenM/Institutional_MOOC_strategies_in_Europe.pdf

Adapted from slideshare.net/grosseck/miniatelier-de-initiere-in-mooc

Through the years a variety of EU institutions, organizations or foundations were engaged in launching initiatives for **programs and projects related to Open Education**. Some of the recent and 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),
- OpenupEd (a pan-European MOOC initiative), - check European MOOC Model - <http://www.openuped.eu/15-english-content/news/179-european-mooc-model>
- SCORE2020 - Support Centres for Open education and MOOCs in different Regions of Europe 2020 - <http://score2020.eadtu.eu/>; check <http://score2020.eadtu.eu/events/99-increasing-the-uptake-of-moocs-by-regional-support-centers>
- OERup! (Erasmus+ project focusing on OERs for Adult Education, one partner is IREA - Romanian Institute for Adult Education),
- POERUP (Policies for OER Uptake), the last one continuing on the related projects SharedOER and ADOERUP (Adult Education and OER),
- HOME (Higher education Online: MOOCs the European way),
- EMMA (European Multiple MOOC Aggregator)
- D-Transform (Transforming universities for the digital age)
- MOOQ - European Alliance for Quality of Massive Open Online Courses, called MOOCs - <http://mooc-quality.eu/> ; started in 2016
- eMundus: MOOCs and virtual mobility - A project supported by the Erasmus Mundus programme of the European Commission - <http://wikieducator.org/Emundus/Europe>.

Some **strategic studies** are (<http://is.jrc.ec.europa.eu/pages/EAP/eLearning.html>):

- OpenEdu (proposing a framework for opening up practices in HEIs) <http://is.jrc.ec.europa.eu/pages/EAP/OpenEdu.html>

OpenEdu runs 5 studies:

1. MoocKnowledge: a survey on MOOC learners (a knowledge base with a European view on MOOCs) (ongoing) - first results slides 30 - 45 - <http://www.slideshare.net/inamor/opening-up-higher-education-in-europe-56009940>
2. OpenCred: desk research and case studies on recognition of non-formal learning via MOOCs (ways in which the main open education collaborative networks, consortia and platforms in Europe offer recognition for open learning) (May-November 2015)
3. OpenSurvey: a representative survey of higher education institutions in 5 European countries to enquire about their openness strategies (ended Nov 2015)
4. OpenCases: case studies on openness in higher education (ended Nov 2015)
5. BMOpen: exploring a framework for assessing & developing business models for open education (ongoing).

- **European Framework for Digitally-Competent Educational Organisations** (DigCompOrg) - <https://ec.europa.eu/jrc/en/digcomporg>

Promoting effective digital-age learning

The impact of digital technologies, content and processes can be seen in all educational sectors (e.g., schools, higher education and also informal and non-formal learning), affecting all aspects of the educational value chain (e.g., curricular reform, teaching and learning practices, assessment, initial and continuing teacher professional development) and encompassing all educational actors (teachers, learners, school leaders).

Digital technologies are enablers of a step change in learning and teaching practices; however, they do not guarantee it. To consolidate progress and to ensure scale and sustainability, education institutions need to review their organisational strategies, in order to enhance their capacity for innovation and to exploit the full potential of digital technologies and content.

Several frameworks and self-assessment tools are in use in a number of European countries, but no attempt has hitherto been made to develop a pan-European approach to organisational digital capacity. A European reference framework that adopts a systemic approach can add value by promoting transparency, comparability and peer-learning.

- **DigComp Guidelines on the adoption of DigComp** - http://www.telecentre-europe.org/wp-content/uploads/2016/02/TE-Guidelines-on-the-adoption-of-DIGCOMP_Dec2015.pdf

DigComp: 5 competence areas and 21 specific competences

An important evolution envisaged for the DigComp framework 2.0 is the articulation of digital competence proficiency at 8 levels rather than the previous 3. This aims to provide a more detailed description of what characterizes each level (one learning outcome is provided per level, combining knowledge, skills and attitudes) and what

varies when moving on to the next. This change should overcome the lack of clear distinctions found in some competences before. The DigComp version 2.0 with 8 levels will be validated in the course of 2016.

JRC-IPTS is also working on two new adaptations of DigComp (so called “derivative frameworks” for specific contexts). In the course of 2016, The Digital Competence Framework for Consumers (DigCompConsumer) will be published in collaboration with DG Justice and Consumers. By mid-2017, in collaboration with DG Education and Culture, a framework for the teaching profession (DigCompTeach) will be finalised. <https://ec.europa.eu/jrc/en/digcomp/governance> (Digital Competence Framework for Citizens).

"Open Educational Resources Policy in Europe" (<http://oerpolicy.eu/>) is a project of Creative Commons (<http://creativecommons.org/>) that brings together a coalition of international experts associated with CC to strengthen the implementation of open education policies across Europe.

The aim is to take advantage of the current high profile of open education in Europe, demonstrated by the prominent place of OER in the new educational initiative "Opening up Education" (<http://www.openeducationeuropa.eu/>).

Project plan in the project wiki at https://wiki.creativecommons.org/wiki/European_OER_Policy_Project.

“Open Education: OER, OCW And MOOCs” - (<http://epthinktank.eu/2013/10/01/open-education-oer-ocw-and-moocs/>) lists a few important European Projects.

Make it Digital (<https://www.futurelearn.com/courses/collections/make-it-digital>) - *collection* of FutureLearn MOOCs - Make it Digital is the BBC’s major, UK-wide initiative to inspire a new generation to get creative with coding, programming and digital technology.

As one of Make it Digital’s 50 partners, FutureLearn is providing high quality online learning to young people, teachers or anyone with an interest in improving their digital creativity skills.

MOOC European Stakeholders Summit - annual conference, the first was invitation based, in 2013 (<http://moocs.epfl.ch/eu-mooc-summit> - Lausanne, Switzerland, <http://www.emoocs2014.eu> - Lausanne, Switzerland, <http://www.emoocs2015.eu/> - Mons, Belgium, <http://www.emoocs2016.eu> - Graz, Austria).

EMMA - <http://platform.europeanmoocs.eu/>.

HOME - <http://home.eadtu.eu/> , <http://home.eadtu.eu/results> - building a MOOC European strategy.

Do we need a shared European MOOC platform?
https://www.researchgate.net/publication/277010530_Do_we_need_a_shared_European_MOOC_platform

Conference: HOME - Higher education Online: MOOCs the European way, At Porto, Volume: Position papers for European cooperation on MOOCs.

In the last few years, Massive Open Online Courses (MOOCs) have dominated the discussion of the role of online learning in the future of higher education (HE). The MOOC movement is mostly based in the USA where the for-profit educational start-ups such as Coursera, Udacity, and the MIT and Harvard-founded non-profit platform edX take the lead. On the European level, many Member States have recognized the potential impact of technology on education and e-learning initiatives have been launched. Some universities have joined the USA initiatives and others were created, like the pan-European initiative OpenupEd, supported by the European Commission (EC), as well as FutureLearn, Iversity, France Université Numérique (FUN), UNEDcoma or Miríada X. Nonetheless, European initiatives have been isolated and fragmented and the EU risks in lagging behind the USA and some Asian countries that are investing in ICT-based strategies to reshape education and training. The EU recognizes that has a role to play in the promotion of best practices and support exchanges across Member States. The EU intervention concerning the deployment and availability of digital technology and content through financial support, public-private partnerships and recommendations, could generate economies of scale and interoperability benefits, thus avoiding fragmentation. One solution that fits this line of action would be the creation of a shared European MOOC platform, where HE institutions (HEI) could publish their courses. Such platform would enable the collaboration of (pan-)European HEI in the development of new educational solutions which could otherwise be out of reach if designed by each institution on its own, promoting their international reach, including recruitment and support.

D-Transform <http://www.dtransform.eu/>

The goal of D-TRANSFORM is to implement a training program for leaders of European universities (presidents, vice-presidents) focusing on the major role played by digital technologies and Open Educational Resources (OER) in the necessary transformation of their institutions. The premise is that e-education (digital pedagogy and training) can become a strategic tool for European universities, enabling them to be pedagogically more effective, more cost-effective, more attractive and able to meet the needs of the professional world with regard to youth training and life-long learning.

BizMOOC - <http://bizmooc.eu>

<http://bizmooc.eu/index.php/outcomes/> The European-wide Knowledge Alliance ‘BizMOOC’ started on 1st of January 2016 and will run over a period of 3 years. The EU-funded project tackles the European challenge of enabling businesses, labour force and universities to increase their activities and exploitation (economies of scale) of the MOOC potential. It focuses on work force & HEI-training and the acquisition of labour market key competences through applying

new methodologies for online teaching & learning. This will be achieved by creating common standards & frameworks on MOOCs by integrating the experiences from Higher Education and the business world.

The consortium consists of 11 full partners and 3 associate partners out of 11 countries deriving from HEIs & Industry (large companies & SMEs), NGOs, networks, cluster. Jointly they will establish of a common body of knowledge on MOOCs, identify needs, gaps & reasons for businesses, labour force and HEIs to boost their MOOC activities which will result in guidelines, recommendations & good practice published in an interactive, open access MOOC BOOK. Based on this, 3 Pilot MOOCs focusing on LLL and business key competences “Learning to learn (through MOOCs)”, “sense of initiative (entrepreneurship & intrapreneurship)” and “innovation, creativity & problem-solving” will be developed to test different methods & didactical approaches.

BizMOOC benefits businesses, HEIs, teachers, learners & policy-makers through the core results MOOC BOOK (business & quality models, methods & tools, IPR strategies, certification, competence-based education etc.), Pilot MOOCs, BizMOOC Community & events.

4. Paradigms/Variants (models and structures)

From cMOOCs (network-based/connectivist MOOCs) and xMOOCs (content-based MOOCs – "x" representing "extension", "experimental" or "multiplied" up) to BOOCs (Big Open Online Courses), SPOCs (Small Private Online Courses), SMOCs (Synchronous Massive Online Courses), DOOCs (Distributed Online Collaborative Courses), DLMOOC (Deep Learning MOOC), MOOL (Massive Open Online Labs), MobiMOOC (Mobile MOOC), DOCC (Distributed Open Collaborative Course), PMOOC (Personalized MOOC), MOOR (Massive Open Online Research).

GROOC - MOOC for groups <https://www.edx.org/course/social-learning-social-impact-mcgillx-groocx> (check below at Workshops/MOOCs).

Nano Open Online Courses (NOOCs) (NOOCify the MOOC <http://www.slideshare.net/zaid/noocify-the-mooc-52772591>).

NOOCs mission is to empower learners to explore, learn and be assessed (certified) on the essentials of one competency, skill or area of knowledge at a time within 20 learning hours or less. Each NOOC can be facilitated by one or more facilitators, depending upon one's preferences and ability.

5. Dimensions/evaluation criteria for MOOCs

When speaking about the dimensions and evaluation criteria for MOOCs, one should consider:

- 1.institution that offers the course,
- 2.course advertising / mode of subscription,
- 3.topics,
- 4.central platform for content/activities/interaction,
- 5.social media platforms,
- 6.microblogging usage,
- 7.connection with OER,
- 8.mobile learning features,
- 9.duration,
- 10.facilitators/guest lectures,
- 11.number of participants /completion rate,
- 12.facilitation for sense of community/ learning community nurture/ pedagogy,
- 13.feedback/assessment,
- 14.certification (from Holotescu, Grosseck & Cretu, 2013 - https://www.researchgate.net/publication/236135978_MOOC's_Anatomy_Microblogging_as_the_MOOC's_Control_Center);
15. quality evaluation <https://www.yumpu.com/en/document/view/52822564/moocs-and-quality-a-review-of-the-recent-literature>.

Check also <http://mooc.efquel.org/a-new-classification-for-moocs-grainne-conole/>, resources on students retention feedback <http://www.dontwasteyourtime.co.uk/mooc/moocs-question-on-purpose-quality-student-retention-feedback-etc/>.

Open licenses for MOOCs:

- <https://creativecommons.org/2015/06/02/edx-makes-it-easy-for-authors-to-share-under-creative-commons/>
- <https://twitter.com/hashtag/openmoocs>
- <http://www.oeconsortium.org/2014/06/agenda-quarterly-membership-meeting/>
- <http://www.slideshare.net/UnaDaly/openmoocs-using-oer-to-enhance-collaboration-and-reduce-costs>.

The term “**2 Sigma**” comes from the results of the study, which showed that students who were provisioned with a combination of one-on-one mentorship and mastery learning performed two standard deviations (“sigma”) higher than students in a conventional classroom setting” - *Bloom’s 2 Sigma Problem* <http://web.mit.edu/5.95/readings/bloom-two-sigma.pdf>, Meet a Udacity Coach for Introductory Programming - <http://blog.udacity.com/2013/09/meet-udacity-coach-for-introductory.html> (<http://techcrunch.com/2016/01/09/how-startups-are-solving-a-decades-old-problem-in-education/>).

popular phenomenon with a global reach. The review categorises the literature into eight different areas of interest, introductory, concept, case studies, educational theory, technology, participant focussed, provider focussed, and other, while also providing quantitative analysis of publications according to publication type, year of publication, and contributors. Future research directions guided by gaps in the literature are explored.

A Systematic Analysis and Synthesis of the Empirical MOOC Literature Published in 2013–2015; George Veletsianos and Peter Shepherdson - <http://www.irrodl.org/index.php/irrodl/article/view/2448/3655>

A deluge of empirical research became available on MOOCs in 2013–2015 and this research is available in disparate sources. This paper addresses a number of gaps in the scholarly understanding of MOOCs and presents a comprehensive picture of the literature by examining the geographic distribution, publication outlets, citations, data collection and analysis methods, and research strands of empirical research focusing on MOOCs during this time period. Results demonstrate that (a) more than 80% of this literature is published by individuals whose home institutions are in North America and Europe, (b) a select few papers are widely cited while nearly half of the papers are cited zero times, and (c) researchers have favored a quantitative if not positivist approach to the conduct of MOOC research, preferring the collection of data via surveys and automated methods. While some interpretive research was conducted on MOOCs in this time period, it was often basic and it was the minority of studies that were informed by methods traditionally associated with qualitative research (e.g., interviews, observations, and focus groups). Analysis shows that there is limited research reported on instructor-related topics, and that even though researchers have attempted to identify and classify learners into various groupings, very little research examines the experiences of learner subpopulations.

State of the MOOC 2016: A Year of Massive Landscape Change For Massive Open Online Courses - <http://www.onlinecoursereport.com/state-of-the-mooc-2016-a-year-of-massive-landscape-change-for-massive-open-online-courses>

Going on eight years since MOOCs first entered the scene, massive open online courses have gone from cameras at the back of U.S. college classrooms to several full-fledged ecosystems in the global industry of online learning. Touted initially by creators for growing opportunities in the verticals of Distance Education, Lifelong Learning, Continuing Education, and making a college education both free and accessible, MOOCs have also been criticized heavily by established academics for sanctioning edutainment, teaching methods that are unprofessional, as well as the corporatization of higher education.

Despite this hefty resistance from public educators, MOOC providers like Coursera, Udacity, edX, and FutureLearn keep popping out courses left and right, although increasingly, with fees. Hosted by such illustrious institutions as Stanford, MIT, Yale, Harvard, and world-renowned international universities like Heidelberg, the Indian Institute of Technology, the Sorbonne and at least 563 other universities, the number of massive open online courses has exploded in recent years.

MOOC Course Report: April 2016

List of 625+ Free Online Courses Starting in April 2016 - <https://www.class-central.com/report/mooc-course-report-april-2016/>

MOOC Course Report is a *monthly column* published by Class Central during the first week of each month. MOOC Course Report aims to provide a comprehensive list of course starting and/or available in the month of publication.

The disruptive potential of the Massive Open Online Courses: A Literature Review, Jacoby, J., Journal of Open, Flexible and Distance Learning, Vol. 18, No. 1, Nov 2014 - <http://www.jofdl.nz/index.php/JOFDL/article/view/214>

The Massive Open Online Course (MOOC) is a rapidly evolving phenomenon which has stimulated discussion in universities around the world. A central theme of these discussions, and much of the published literature on the phenomenon, is the potential of the MOOC to disrupt the way universities do business. The aim of this narrative literature review is to clarify disruptive innovation theory, and to examine the influence of MOOCs on higher education. Evidence from this review suggests that although MOOCs might have had a significant effect on a range of issues (including definitions of completion pedagogical approaches, delivery methods, certification, and business models), more systematic research is needed to evaluate the level, extent, and permanence of any disruption that may occur.

Who's Benefiting from MOOCs, and Why, Harvard Business Review - <https://hbr.org/2015/09/whos-benefiting-from-moocs-and-why>

In the last three years, over 25 million people from around the world have enrolled in Massive Open Online Courses (MOOCs) offered by Coursera, EdX, and other platforms. Initially heralded as a revolution in higher education access, expectations have been tempered as research revealed that only a small percentage of these millions were completing the courses, approximately 80% already had at least a bachelor's degree, nearly 60% were employed full-time, and 60% came from developed countries (defined as members of the OECD). MOOCs seemed to be serving the most advantaged, the headlines blared, and most people weren't even completing them. 52% of MOOC participants do so to help build a career, 87% produced some type of career benefit.

Check also The Future of Online Schools: Technology Leading the Way - <http://www.onlineschoolscenter.com/future-of-online-schools>

Massive Open Online Courses: what will be their legacy?, John Daniel - 2 March, 2016 - <http://femsle.oxfordjournals.org/content/363/8/fnw055>

Massive Open Online Courses (MOOCs) dominated discussions of online learning and higher education in the news media and in universities between 2012 and 2015. However, fashions pass, needs change and technology evolves. This Commentary looks back, pauses on the present, and then looks forward. Whilst MOOCs are a significant milestone on the road that online teaching and learning is following, open, distance and online learning started long before MOOCs and will continue to grow in importance when MOOCs are just an interesting footnote in its development.

By the same expert check also: **MOOCs and higher education: evolution or revolution?** - <http://blog.oup.com/2016/04/moocs-higher-education/>

On MOOCs at *Oxford University Press's Academic Insights for the Thinking World* - <http://blog.oup.com/?s=mooc>.



source <http://elearninginfographics.com/mooc-today-and-tomorrow-infographic/>

6. MOOCs integration in traditional education (pre-university, university, Master levels), continuous/Adult education, specializations, nanodegrees

MOOC: A viable corporate learning alternative
(<http://www.nationmultimedia.com/business/MOOC-A-viable-corporate-learning-alternative-30275724.html>)

Arguments why MOOCs are so valuable in the corporate learning world.

K-MOOC - Korean National Strategy for MOOCs -
http://www.iite.unesco.org/files/news/639201/DJHwang_Korea.pdf.

OpenCases: catalogue of mini cases on open education in Europe (2015) -
<https://ec.europa.eu/jrc/en/publication/opencases-catalogue-mini-cases-open-education-europe>.

OpenCases: Case Studies on Openness in Education (2016) - results of
<http://is.jrc.ec.europa.eu/pages/EAP/opencases.html>

http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101533/jrc101533_opencases%20case%20studies%20on%20openness%20in%20education.pdf.

Opening up Education: A Support Framework for Higher Education Institutions – OpenEdu Framework <http://publications.jrc.ec.europa.eu/repository/handle/JRC101436>.

eMundus Recommendations related to Open Education targeted to three stakeholder categories: leaders/executives/international relation officers within universities; academic networks and policy makers in Higher Education - <http://www.emundus-project.eu/recommendations-to-enhance-international-he-cooperation-through-open-education/>.

Exploring the relation between Open Education and International Higher Education Cooperation – **eMundus Final Publication** –

<http://www.emundus-project.eu/wp-content/uploads/2016/01/eMundus-Final-Publication-finalweb.pdf>.

Towards a New Pedagogy: Five ways MOOCs are influencing teaching and learning -
<http://teachonline.ca/tools-trends/massive-open-online-courses-moocs/towards-new-pedagogy>

It is time to explore the extent to which MOOCs are enabling innovation, engagement and equity in higher education and to examine extent; have they inspired new approaches to teaching and learning across the gamut of activity in colleges, polytechnics and universities? It is also appropriate to look at the implications of MOOCs for public policy and the reform and continuing development of higher education.

There are *five ways in which MOOCs are currently having an impact on teaching and learning*:

1. Encouraging and enabling unbundling – the separation of design, development, delivery and support for learning.
2. Changing the nature of credit granting and credentials.
3. Supporting and accelerating the development of blended learning.
4. Supporting the development of learning portfolios.
5. Demonstrating the power of learning communities and peer tutoring.

MOOCs showcase the developments which online learning and other innovations have been encouraging for some time: they are not so much initiating these developments as acting as an accelerant for them.

Check also the *articles* about Massive Open Online Courses (MOOCs) at <http://teachonline.ca/tools-trends/massive-open-online-courses-moocs>.

Emergence and Innovation in Digital Learning: Foundations and Applications, Edited by George Veletsianos, May 2016, Athabasca University Press -
<http://www.aupress.ca/index.php/books/120258>

Educational systems worldwide are facing an enormous shift as a result of sociocultural, political, economic, and technological changes. The technologies and practices that have developed over the last decade have been heralded as opportunities to transform both online and traditional education systems. While proponents of these new ideas often postulate that they have the potential to address the educational problems facing both students and institutions and that they could provide an opportunity to rethink the ways that education is organized and enacted, there is little evidence of emerging technologies and practices in use in online education. Because researchers and practitioners interested in these possibilities often reside in various disciplines and academic departments the sharing and dissemination of their work across often rigid boundaries is a formidable task.

Contributors to *Emergence and Innovation in Digital Learning* include individuals who are shaping the future of online learning with their innovative applications and investigations on the impact of issues such as openness, analytics, MOOCs, and social media. Building on work first published in *Emerging Technologies in Distance Education*, the contributors to this collection harness the dispersed knowledge in online education to provide a one-stop locale for work on emergent approaches in the field. Their conclusions will influence the adoption and success of these approaches to education and will enable researchers and practitioners to conceptualize, critique, and enhance their understanding of the foundations and applications of new technologies.

MOOCS AND EDUCATIONAL CHALLENGES AROUND ASIA AND EUROPE, May 2016 - http://www.icde.org/index.php?option=com_content&view=article&id=522%3Aicde-members-collaboration-on-publication-of-new-book-on-moocs&catid=23%3Anews&Itemid=169

The Korea National Open University (KNOU), The Universidad Nacional de Educación a Distancia (UNED), Spain, Open University of China, Open University of Japan and University of the Philippines Open University, all members of ICDE have recently collaborated on the publication of a new book on MOOCs.

Language MOOCs. Providing Learning, Transcending Boundaries, Ed. by Martín-Monje, Elena, Bárcena, Elena, DE GRUYTER OPEN - <http://www.degruyter.com/view/product/455678>

Language MOOCs (or LMOOCs) are dedicated Web-based online courses for second languages with unrestricted access and potentially unlimited participation. They are generating interest and expectation in the contexts of university education, lifelong learning and online training in general. This pioneering book presents an initial analysis of the theoretical and methodological issues underlying LMOOCs and presents empirical evidence of their potential for the development of language communicative competences, based upon previously unpublished research. It provides a mosaic-like view of LMOOC research, not only with respect to the geographical and institutional origin of its authors, but also to the heterogeneous nature of their respective academic backgrounds, and suggests directions for future development. As in other types of online language courses, the integration of the results of multidisciplinary research projects and teaching experiences related to LMOOCs is fundamental to make the field advance steadily and respond to some of the real challenges and problems faced by individuals working and living in competitive plurilingual societies today.

Articles at <http://www.chronicle.com/specialreport/Mapping-the-New-Education/21> , FB Page <https://www.facebook.com/relearningproject/>



Framework from <http://www.chronicle.com/article/How-For-Profit-Education-Is/234550?cid=cp21>

Coursera's superheroes: Meet the Mentor team in +200 courses - <http://coursera.tumblr.com/post/151389966612/courseras-superheroes-meet-the-mentor-team>

What European Leaders in EdTech Think of the State of MOOCs: Part I Where MOOCs have settled within EdTech, and the ongoing Learning Management System fever - <http://www.class-central.com/report/european-leaders-edtech-think-state-moocs-part-1/>.

Bryant Nielson: 13 Megatrends in MOOCs, 2014 - <http://www.linkedin.com/pulse/20140331132021-16131081-13-megatrends-in-moocs>

1. Adoption at Corporate Universities

MOOCs are starting to be adopted in corporate universities from tech companies to the manufacturing industry to the financial sector. This is part of an even larger trend in which online, connected digital learning environments are replacing traditional instructor-based and computer-based training formats.

2. Facilitating Learning Organizations

In education, MOOCs have moved education out of formal classrooms and expanded the definition of “student” to include anyone with a computer, an Internet connection, and a desire to learn. In the same vein, MOOCs are redefining what training means to companies—training is no longer something that takes place just in seminars and workshops, but rather something that happens constantly, in many different ways, throughout entire organizations.

3. Updating the Competency-Based Training Model

Companies in many industries are facing a skills gap, and they need a more efficient way to prepare employees for the workforce. This, along with digital learning environments, are driving a trend toward competency-based training, where the knowledge and skills an employee learns are being decoupled from the time that employee spends learning. In higher education, this has been referred to as the “unbundling of time.”

4. Microlearning Paths

At the same time as MOOCs are making the training world much bigger, they are in some sense making the scope of that training much smaller. Bite-sized learning and on-demand, employee-driven microlearning are facilitating the integration of training into on-the-job activities.

5. Lifelong Learning

One of the biggest impacts MOOCs have had is to make education available to people of all ages. As a result, lifelong learning has become one of the biggest trends in recent years: in their spare time, people who once might have flipped on the television are now booting up their computers to learn and accessing learning resources on their mobile devices whenever they have a few minutes of downtime. Companies can capitalize on this lifelong learning trend both by offering engaging courses to the public and by recognizing their employees’ independent learning endeavors.

6. More Social, More Collaborative

One of the biggest criticisms of MOOCs has been that learner-instructor interaction is completely absent and learner-learner interaction is inefficient at best. But this is starting to

change. New learning platforms and models are being tested to enhance learning in MOOCs by making the courses more social and more collaborative.

7. Gamification

Gamification and MOOCs started to become buzzwords in corporate training at about the same time. Gamification has revolutionized training in general by making it more engaging and more effective. As MOOCs and gamification converge, they will have an immense impact on workplace learning.

8. Mobile Learning

As more people are using different types of mobile devices, mobile learning and bring-your-own-device (BYOD) training are being experimented with in many organizations. MOOCs are just starting to go mobile, and this likely represents the next big phase in their development.

9. Flipping the MOOC

MOOCs are being used more and more often in flipped blended learning environments. Rather than all training taking place in-person or online, employees watch videos and do some activities online and then come together for practice, role play, problem-solving sessions, and other types of collaborative activities.

10. The Changing Role of the Instructor

In training, as in education, the instructor is no longer just a human content-delivery system. With almost all of the world's knowledge available at our fingertips, instructors are moving from being conveyors of knowledge to being curators and learning guides. This transition is redefining what it means to be a trainer in today's learning organizations.

11. Alternative Credentials

MOOCs and other digital learning environments are causing us to rethink our current model of credentialing, both for traditional students who are prospective employees and for employees participating in training. Verified certificates, digital badges, digital portfolios, knowledge graphs—these and other forms of alternative credentials are being tested in the job market and the workplace.

12. Training for Millennials

Millennials and the generations that will come after them are digital natives whose educational, social, and professional lives take place largely online. These younger employees expect their training to be just as digitally connected as the rest of their lives. MOOCs provide one part of the answer for companies looking to attract and retain tomorrow's top talent.

13. MOOCs as Relationship Builders

MOOCs have not just moved training out of the classroom, but out of the company entirely. Today, organizations are experimenting with using MOOCs to build relationships with current employees, prospective employees, customers, and business partners alike. In this way, MOOCs are serving as a new form of educational social media.

Extended presentations of the megatrends and other articles on MOOCs can be found on Nielson's page at https://www.linkedin.com/today/author/0_0J3ZCzXvICcX1tRV2q5aaK.

7. Certification/Diploma types

Validation of Non-formal MOOC-based Learning: An Analysis of Assessment and Recognition Practices in Europe (OpenCred) -
<http://publications.jrc.ec.europa.eu/repository/handle/JRC96968> ; check also
<http://www.slideshare.net/inamor/opening-up-higher-education-in-europe-56009940> -
produced by the OpenEdu Project <http://is.jrc.ec.europa.eu/pages/EAP/OpenEdu.html>

In delivering the MOOCs, the following issues needed for future recognition by other HEIs and employers have to be assured:

- Identity verification of the participants
- Suitable supervised assessment and evaluation of students participation,
- Issuing (digital) certificates/online badges acknowledging learning,
- Quality assurance and management of the courses,
- Award of credit points for transversal courses,
- Information and collaboration with potentially recognizing institutions or bodies.

Check the summary at <http://openeducationstudio.eu/content/mooc-credentialisation>.

Institutional MOOC strategies in Europe. Status report based on a mapping survey

conducted in October - December 2014 - Darco Jansen, Robert Schuwer, December 2015, HOME Project -

http://eadtu.eu/documents/Publications/OEenM/Institutional_MOOC_strategies_in_Europe.pdf

Massive Open Online Courses (MOOCs) have continued to attract considerable media coverage as governments and universities respond to the open and online education movement. Three years after the MOOCs began its rise, it is clear that the HE institutions in the EU are gaining speed in this movement.

This report on MOOCs intends to contribute to literature on MOOCs in Europe. Its specific aim is to present data on the perception and objectives of European higher education institutions on MOOCs and the main drivers behind the MOOC movement. In addition, the report makes a comparison with similar studies conducted in the United States in 2013 and 2014 and to data produced by the European University Association (EUA) between October and December 2013. The report made clear that involvement is still increasing, but also that arguments to get involved differ from those in the US.

The main source is a survey conducted by the project HOME - Higher education Online: MOOCs the European way, partly funded by the European Commission's Lifelong Learning Programme. The survey was conducted in October - December 2014. In total 67 institutions responded out of 22 European countries representing in total about 2.8 millions of students.

Comparing Institutional MOOC strategies - Status report based on a mapping survey conducted in October - December 2015 - HOME Project, Darco Jansen - Programme manager EADTU, Miriam Goes-Daniels - Researcher EADTU - EADTU, August 2016 - http://eadtu.eu/images/publicaties/Comparing_Institutional_MOOC_strategies.pdf

6 answers from Romania, which are not analysed separately.

An Assessment-Recognition Matrix for Analysing Institutional

Practices in the Recognition of Open Learning - http://openeducationeuropa.eu/en/article/Assessment-certification-and-quality-assurance-in-open-learning_From-field_40_1 (republished at <http://openeducationstudio.eu/content/mooc-credentialisation>)

This paper shares some of the early findings of the OpenCred study, conducted by the Institute of Learning Innovation at the University of Leicester in collaboration with the European Commission's Institute for Prospective Technological Studies (IPTS) and funded by the IPTS.

It describes a range of institutional initiatives by higher education institutions in Europe in recognising non-formal learning achievements in open education. Recognition of learning is almost always conferred in consideration of the type of assessment used, and so a matrix has been developed to show the relationship between these two features. The vertical axis of the matrix comprises a five-level hierarchy of formality of recognition (from no recognition to full recognition in line with the European Credit Transfer System), while the horizontal axis represents a five-level hierarchy for robustness of assessment (from no assessment to formal examinations).

Examples of European open education initiatives are discussed and plotted on the assessment-recognition matrix. The paper concludes with a summary of the tensions between assessment procedures used and the nature of recognition awarded, and offers recommendations for institutions wishing to evaluate the nature of recognition awarded to students in open education. It also identifies further areas in which the framework could develop.

MOOCs: international credit transfer system edges closer: Six universities in talks on global credit transfer system for online courses - Jan 4, 2016 <https://www.timeshighereducation.com/news/moocs-international-credit-transfer-system-edges-closer>

“Universities are set to pilot a global credit transfer system that will allow students to use courses taken online to count towards their degrees.

Six universities from Australia, Europe, Canada and the US are seeking to establish a new alliance in which each organisation’s massive open online courses (Moocs) are formally accredited by partner institutions.

The proposed scheme could be similar to the European Credit Transfer System, which enables universities to recognise marks gained by students while studying at other institutions within the European Union.

However, the proposed system – involving Delft University of Technology; Swiss Federal Institute of Technology in Lausanne (EPFL); the Australian National University; the University of Queensland; the University of British Columbia; and Boston University – is believed to be the first international initiative relating to online courses.”

Rethinking Courses, Credits and Credentials - Commonwealth of Learning Blog - <http://www.col.org/news/col-blog/rethinking-courses-credits-and-credentials>

“While MOOCs have advanced the possibilities of enhancing the quality of open and distance learning, it is important to revamp the existing systems to design courses that are suitable for the new world. So, we are back to the question: what is a course? In the context of MOOCs, a course may be considered a short micro-unit of learning that can be completed within 10-15 study hours. However, in other contexts, using a credit value of the course to plan, design and cost courses would be important for planning and managing the process of course design, development and delivery. The micro-credit based courses could disrupt the education system in the 21st century by providing just-in-time training opportunities and promote work place-based learning. *At COL, we are working to develop a **framework and guidelines for quality assurance and accreditation of MOOCs**. The objective is to develop an in-depth understanding of the emerging challenges to assist quality assurance agencies and institutions to be more open to new developments to support the lifelong learning paradigm.*”

Public Digital Policies in Higher Education – A comparative survey between Spain, France, Italy and the United Kingdom - D-Transform Project - <http://www.dtransform.eu/public-digital-policies-in-higher-education-survey-report-available/>

This survey focuses on a comparative analysis of national policies for university digital transformation, implemented since the beginning of the 21st century. The main outcome of the survey is that no generalization is possible. . While all policies can be categorized within the general trends of the digital transformation, the dynamic of each higher education system puts different actors at the centre, according to the general logics of the systems. The challenge is then to produce conclusions that allow each partner country to engage in a transformation adapted to its own national context.

Top universities could give students credit for completing cheap online courses - <http://www.afr.com/technology/apps/education/top-universities-could-give-students-credit-for-completing-cheap-online-courses-20160226-gn4ggi>

In a move that could hasten the acceptance of cheap online degrees the University of Queensland and the Australian National University are considering giving academic credit for massive open online courses (MOOCs).

The two universities, both charter members of US online course provider edX, are discussing an international alliance with other universities in which each of them will offer credit for MOOC courses originating with other group members.

At least four overseas universities have been in discussions about the alliance with the University of Queensland and ANU. These are Delft University of Technology in Holland, Swiss Federal Institute of Technology, the University of British Columbia and Boston University.

"We've opened discussions about what we would have to do to enable students to do MOOCs from other unis and get credit," said John Zornig, director of UQx, the unit of the University of Queensland that runs its MOOCs.

Europass and Open Badges

<http://www.eportfolio.eu/community/projects/badge-europe>

<http://www.europortfolio.org/articles/research/launch-badge-europe>

<https://prezi.com/azbjhaxjhthf/open-badges-for-europass/>

<http://www.openbadgenetwork.com/new-europass-decision-and-the-role-of-open-badges/> - 10 Oct 2016

Poster OB - <https://twitter.com/mediendidaktik/status/786656005010628608>

8. Business Models

Eyeing Revenue Sustainability: The Two Biggest MOOC Providers Adapt How Their Courses Work (<https://www.class-central.com/report/coursera-paywall-edx-discontinues-free-certificates/>)

The free certificate or statement seemed to be a feature blocking the monetization of this education phenomenon. Udacity was the first to move away from the model of free certificates, and now Coursera and edX seem to be following suit: Coursera to introduce a paywall for graded assignments, and edX discontinues free honor code certificates.

Springboard Raises \$1.7M For Its Mentor-Based Approach To Online Learning (<http://techcrunch.com/2015/12/17/springboard-raises-1-7m-for-its-mentor-based-approach-to-online-learning/>)

Springboard (<https://www.springboard.com/>), an India-U.S. company formerly known as SlideRule, has raised a \$1.7 million seed round to accelerate its concept of learning through engagement with others. It has adopted individual mentors, who provide a weekly catch-up session with their students, while partnering with other MOOCs for course content, creating its own where it sees gaps in the market.

“Our data science course, for example, costs \$500 per month and lasts for three months. It is self-paced, but most working professionals (who are our primarily audience) will take three months to get through it [alongside their job].

We give certifications that can be displayed on LinkedIn, but the main outcome is a final portfolio project. [Our students] can take that to prospective employers who, especially in tech and progressive companies, tend to look at work products as a sign of how good a candidate is, rather than degree.”

Business Model of ECO Project http://project.ecolearning.eu/wp-content/uploads/2016/03/ECO_D6.4_25_agreements_with_external_institutions-v1.0.pdf

Check other results <http://project.ecolearning.eu/about-eco/results/>.

Business Models for Opening up Education: Sustainability of MOOCs, OER and related online education approaches in higher education in Europe - <http://www.dtransform.eu/resources/#O1-A2>

This D-TRANSFORM report is designed to provide guidance for senior managers in higher education institutions, mainly in four Member States of the EU – France, Italy, Spain and UK – when they come to consider whether to deploy MOOCs and related approaches, and how to justify such decisions in terms of business models and strategic relevance.

There is a focus on public sector institutions, but the full range of university provision is considered, including the open universities and innovative private providers of higher education.

In order to give the work the widest possible relevance to Europe, three other European countries are looked at (Hungary, Ireland and and Belgium Francophone Community) and guidelines given so that readers can research information for their own countries in order to create relevant business models.

The report looks in detail at business models for US-based MOOC aggregators such as Udacity and Coursera, but with the focus on lessons that can be adapted for the European scene. This differs in several ways from the US, including on accreditation issues. It also draws insights from the range of OER, MOOC and online learning developments across Europe.

The report aims to be up to date with MOOC developments until March 2016. Many interesting developments have only fully come to light in the last few months.

Business Models for Online Education and Open Educational Resources, Chitu Okoli, Ning Wang, 2016 - http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2577676

This project aims to determine the key stakeholders, goals and existing business models for online education and open educational resources (OER) by focusing on three major research questions: Who are the key stakeholders involved in the creation, use and distribution of online education and OER? What are the goals of these online education and OER stakeholders? What business models exist that try to achieve the goals of various online education and OER stakeholders?

To answer these research questions, we consulted 19 leading experts in online education and OER using the Delphi survey method. At the end of three rounds, in addition to the business models that we originally identified and suggested, the experts identified a total of 18 business models for online education, 15 of which currently exist and 3 of which are proposed as potential models. In particular, the experts highlighted ten models (eight existing and two potential) as particularly important and noteworthy; they analyzed these ten in greater detail than the other 8 models.

This report presents ALL the data collected from the expert, including their detailed comments on each model. The report authors' detailed analysis on the models is still being prepared; preliminary results are presented in Okoli, Chitu and Ning Wang (2015). Business Models for Online Education and Open Educational Resources: Insights from a Delphi Study. Proceedings of the 21st Americas Conference on Information Systems. Puerto Rico. August 13-15, 2015 (available on SSRN).

Report on Business Model for OERup! (Holotescu, Grosseck, 2015):

Business Models for OER/MOOC

No	Business Model	Description	Comments	Examples
Existing BM				
1	Donations and grants	A non-profit organization manages the online education offering and receives donations and grants for continuous funding. Funds are used to provide revenue to content creators and the content and course administration (if included) is provided at no charge to students. In some cases, content creators volunteer their contributions for no compensation. Sponsor might be acknowledged in course materials or receive other benefits.	This popular model is not very sustainable because it isn't regular or dependable, concerns about project continuity. Most OER projects	Khan Academy - http://www.khanacademy.org ; Wikibooks - http://wikibooks.org ; OpenStax College http://openstaxcollege.org ; WGBH sponsorship by Biogen Foundation - http://www.wgbh.org ; MIT OpenCourseWare - http://ocw.mit.edu ; Internet Archive - http://archive.org .
2	Online program of traditional institution	A traditional face-to-face educational institution establishes and administers an online education program that	The (high) tuition could be a barrier to students; Institutions are being forced to add this model to their	MIT OpenCourseWare - http://ocw.mit.edu ; university online offerings; libraries.

No	Business Model	Description	Comments	Examples
		<p>provides an online outlet for its educational materials and programs. Funding is obtained through various means including general institutional resources (free to students), student tuition, or dedicated donations.</p>	<p>current offerings , if they want to stay relevant in today's educational landscape; OER are rarely produced by traditional institutions.</p>	
3	Community -based production	<p>Members of a community of practice or interest group create materials for each other's use. This can also be called a "prosumer" model.</p>	<p>To be successful, often the model depends on a few core people. The community should be facilitated/nurtured and methods to activate members should be used.</p>	<p>Wikipedia - http://wikipedia.org; WikiEducator - http://wikieducator.org</p>
4	Advertising	<p>Paid advertising is placed on OER content. The students do not have to pay. The model can include anything from extended training to the provision of learning materials to stimulate interest in a</p>	<p>It's worth exploring this model as a possible source of sustainable funding; Attention should be paid to ethical issues related</p>	<p>Academic Earth - http://academicearth.org; OpenStudy - http://openstudy.com.</p>

No	Business Model	Description	Comments	Examples
		hobby, vocation or product line.	to exposing students to advertising.	
5	Cooperative production consortium	Free and open peer-reviewed collection of online teaching and learning materials and faculty-developed services contributed and used by an international education community. People may purchase memberships, or member institutions may pledge to commit a certain amount of capacity (there are different sub-models here), but essentially each contributes a little, and everybody uses the totality of the results.	The collaboration is a partnership among different institutions and organizations for the creation and distribution of educational materials.	Merlot.org - http://merlot.org ; Le Mill - http://lemill.net ; Book in Progress Italy - http://www.bookinprogress.org ; Open Education Consortium - http://www.oeconsortium.org ; BCCampus - http://bccampus.ca ; OERu - http://oeru.org .
6	Governmental or foundation sponsorship	A government, non-governmental organization, or non-profit foundation establishes and administers an online education program or resource centre with educational materials and	Usually government funding is a relatively long-term source of funding, but depends on fluctuating government revenues and even political	UK OER Program 2009-2012 - https://www.jisc.ac.uk/rd/projects/open-education ; Commonwealth of Learning - http://col.org ; Saylor.org - http://saylor.org ; Wikiwijs - wikiwijsleermiddelenplein.nl .

No	Business Model	Description	Comments	Examples
		<p>programs. This is different from the Donations and grants model in that the program is directly administered and primarily funded by a governmental agency or a similar entity that has a much larger scope of concern (and resource allocation) than just the specific online education program.</p>	<p>priorities. The disadvantage of the model is that once the government funding stops, the entire project often terminates completely. Government funding seems likely to require the outcomes to be open. Most OER projects start up through some funding initiative and then to move to an alternative model once that initial funding finishes.</p>	
7	Institutional subscriptions	<p>A provider gives educational materials away for free to individuals, but charges subscription fees to institutions to use them across larger populations.</p>	<p>Because of the restrictions placed on distribution by large institutions, could be questionable if this model is compatible with OER.</p>	<p>Monterrey Institute's HippoCampus - http://www.hippocampus.org.</p>
8	Selling course experience	<p>The online materials are free, but students pay</p>	<p>The learners have to clearly perceive a</p>	<p>Some MOOC platforms: Udacity MOOC platform -</p>

No	Business Model	Description	Comments	Examples
	only Revenue opportunities by offering personalized programs/certificates	for the online education experience, including having a teacher guide them and respond to questions throughout the course. The “experience” might include a schedule, corrected assessments, proctored exams, a completion certificate, or other value-added educational experiences. They normally pay for each course they enroll in. Course creators and teachers are paid for providing the courses.	high quality educational service.	<p>http://udacity.com offers courses for Microsoft/Google, also specific nanodegree programs - http://udacity.com/nanodegree;</p> <p>EdX Verified Certificate of Achievement - https://www.edx.org/verified-certificate;</p> <p>Coursera Specializations https://coursera.org/specializations;</p> <p>FutureLearn Statements of Participation/ Statements of Attainment by exam - http://about.futurelearn.com/about/faq;</p> <p>Peoples-uni - http://www.peoples-uni.org;</p> <p>MIT MicroMaster’s - http://www.technologyreview.com/news/542201/take-free-online-classes-get-course-credit-at-mit;</p> <p>other examples at https://onlinelearninginsights.wordpress.com/tag/udacity-nanodegrees/</p>
9	Individual expert contributions	An expert provides resources for the good of the community with the goal of making some body of knowledge widely known.	The expert reputation is recognized by a community of practice/interest.	<p>Stephen Downes’s Guide to the Logical Fallacies - http://onegoodmove.org/fallacy;</p> <p>early version of Khan Academy;</p> <p>history of philosophy podcasts - http://historyofphilosophy.net;</p> <p>OpenFiction Project - http://tofp.org;</p> <p>Jane Hart's Educational Tools Directory - http://c4lpt.co.uk/directory-of-</p>

No	Business Model	Description	Comments	Examples
				learning-performance-tools.
10	Selling courseware / Freemium	Learners pay for access to the online materials. They might pay for each course or for multi-course access with a subscription model. Course creators are paid for providing the courses. In a "freemium" option, part of the content or course is free, but learners pay if they want full access.	Similar to what many software business do.	Lynda - http://www.lynda.com ; Udemy - http://udemy.com ; CreativeLive - http://creativelive.com ; Kaplan - http://kaptest.com ; Study.com - http://study.com ; Pearson - http://pearson.com .
11	Ancillary product	Access to the online course is a value-added feature for the purchase of something else, e.g. online course included with purchase of textbook.	This has been a common model for textbook publishers	Flat World Knowledge - http://flatworldknowledge.com .
12	Syndication	Course creators license course materials to distributors who modify it or manage courses.	Value added for learners is typically in having course materials localized, facilitated or credentialed.	WGBH - http://www.wgbh.org ; edX - http://edx.org .
13	Attracting future	Learning analytics data data from	The market niche is most	Some MOOCs platforms.

No	Business Model	Description	Comments	Examples
	students	<p>student registrations/ participation could be used by institutions to attract new students.</p> <p>A small number of institutions (including MIT and Harvard) also claimed to be using such data to improve the quality of the learning experience in their more traditional forms of learning, MOOCs being an opportunity to experiment in a low risk environment.</p>	likely for postgraduates, not undergraduates.	
14	Increased awareness of an institution's brand	<p>MOOCs can offer a university the opportunity to:</p> <ul style="list-style-type: none"> - Create examples of high quality online student experiences that are usually only available through formal online / distance education routes. - Increase in recognition as a leader in public education. - Promote 	<p>For the research community the potential gain is likely to be increased awareness of research accomplishments through increased citation and a potential increase in the number of graduate student applicants.</p>	Universities offering MOOCs / partners with MOOC platforms.

No	Business Model	Description	Comments	Examples
		<p>awareness of the institution's research contributions to a wider range of individuals.</p> <p>student applicants.</p>		
15	Employee recruiting	<p>Learning analytics data is obtained from an online learning platform and this data is used to match students to companies.</p>	<p>The content is free to the end-user, but the provider earns money with selling the data.</p> <p>There are ethical aspects involved</p>	<p>Piazza - https://piazza.com;</p> <p>Facebook - http://facebook.com;</p> <p>Google - http://google.com;</p> <p>Some MOOCs platforms: Coursera Career Services - http://blog.coursera.org/post/37200369286/coursera-and-your-career.</p>
16	Corporate training	<p>A company creates learning materials for in-house training or (less commonly) to train recruits before employment. The company may develop materials itself, or, rather than relying on indirect payment methods like vouchers and reimbursements, it may contract with online learning providers to create customized, just-in-time professional development courses.</p>		<p>Some MOOCs platforms.</p>

No	Business Model	Description	Comments	Examples
17	Virtual charter school	A virtual charter school meets government regulations to provide a complete government-certified education for K-12 students. When registered as a charter school, it receives government subsidies for the education of registered students.	This is a legal option within some charter school systems in the United States.	K12 International Academy - http://www.icaademy.com .

Potential BM

1	Content creation by classroom students	Each term or year of a class or course creates learning materials for the next term or year. The purpose is to stimulate learning by teaching.	Even a promising model, it would only work within narrow settings like in individual classrooms or schools; it probably cannot produce materials general enough for widespread use.	Digital Storytelling at the University of Mary Washington - http://ds106.us .
2	Content creation by MOOC students	Participants of MOOCs from diverse backgrounds, and	Probably this model could be more successful in cMOOCs.	

No	Business Model	Description	Comments	Examples
		<p>academic preparation can develop resources for each other. MOOCs become venues to create communities of learning and communities of practice. Those networks connect and share information and resources. They can share information and multiple sources to enhance their knowledge and this becomes OER.</p>		
3	OER curation	<p>A computer system, a person or an organization will curate open resources on specific topics and provide access to others via search by topic, ages, level of knowledge and so on. This would be a repository of resources developed by all the business models suggested and curated by an organization or a self-curating system.</p>		

The table from above is based on the following studies:

Okoli, C., & Wang, N. (2015). Business Models for Online Education and Open Educational Resources. Article at <http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1102&context=ameis2015>, full report available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2577676.

Downes, S. (2007). Models for sustainable open educational resources. *Interdisciplinary Journal of Knowledge and Learning Objects* (3), pp. 29–44. <http://ijklo.org/Volume3/IJKLOv3p029-044Downes.pdf>.

De Langen, F. H. T. (2013). Strategies for sustainable business models for open educational resources. *The International Review of Research in Open and Distributed Learning* (14:2), pp. 53–66. <http://www.irrodl.org/index.php/irrodl/article/view/1533/2485>.

Burd, E. L., Smith, S. P., & Reisman, S. (2014). Exploring Business Models for MOOCs in Higher Education. *Innovative Higher Education*, 40(1), 37-49.

POERUP. (2013). POERUP Deliverable D2.3. Report on Comparative Analysis of Transversal OER Initiatives (section 4.11). http://poerup.referata.com/w/images/POERUP_D2.3_Comparative_Analysis_of_Transversal_OER_Initiatives_v1.0.pdf.

How to make a European MOOC platform sustainable? (from EMMA Newsletter)



Carmen L. Padrón-Nápoles



Lydia Montandon

Carmen L. Padrón-Nápoles & Lydia Montandon, ATOS, Spain

“We are reaching the end of our European Project EMMA and, although the sustainability of the platform has been a concern throughout the project, we are now faced with “what will happen next?”

We have been able to demonstrate that most of EMMA's key values are beneficial to our users, both students and education professionals. EMMA's features, such as the multilingual translation and transcription facility and the learning analytics services for monitoring and evaluating MOOCs, are highly appreciated. We have committed organisations that are having a great success with their MOOCs on EMMA and have learned how to make the best of EMMA. EMMA supports teachers in designing, developing and deploying successful MOOCs and actually offers a series of MOOCs targeting continuous professional development, in particular for education and training professionals.

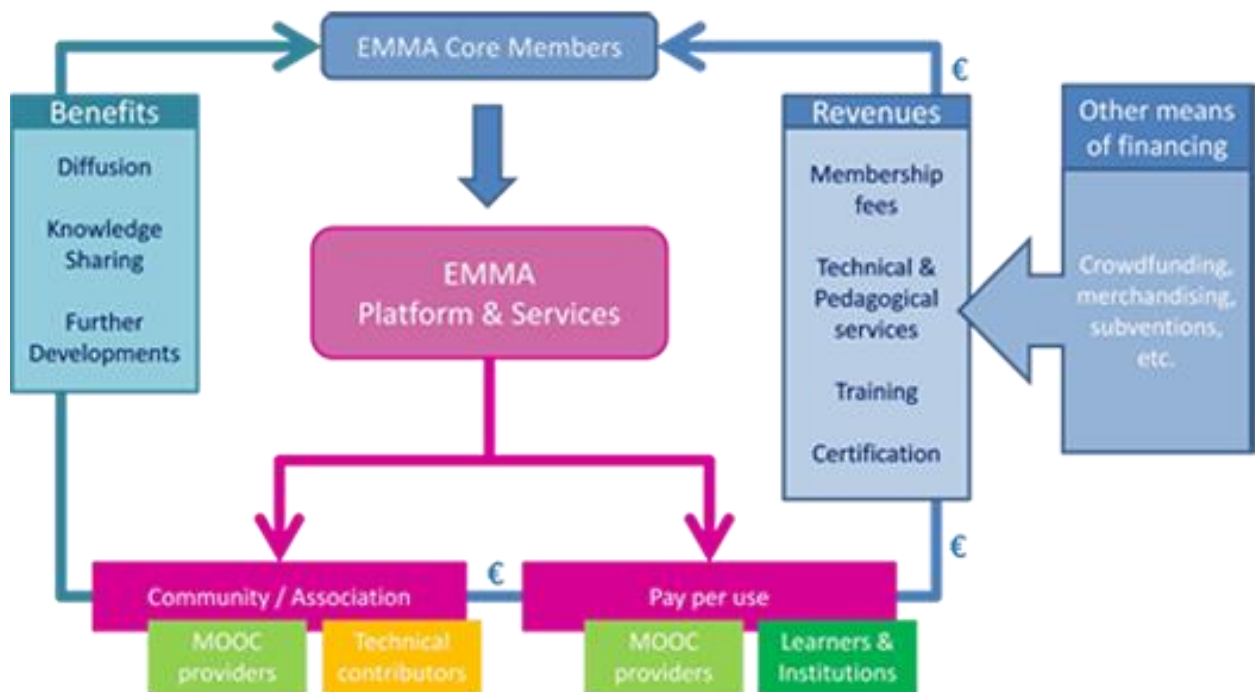
However, is this enough to keep the EMMA infrastructure running in the long term? We know that developing good quality MOOCs is expensive, and running them successfully is not only costly but depends on extended networking capacities. Additionally, the platform and related services need to be maintained and upgraded. Finally, competition is worth taking into account, as EMMA is not the only MOOC platform on the European landscape, although not many initiatives can claim to be of European dimension/coverage.

Several business models are being adopted by existing MOOC platforms and financing options are variable. Usually diversification of revenue streams is the most viable solution, with a tradeoff between membership or certification fees, public or private grants. However, in EMMA, we believe that education can be seen as a common good and not a profitable business. Although we expect that part of the revenue may come from membership fees (i.e. organisations interested in hosting MOOCs on EMMA and thus benefiting from all services, while expected to bring in a critical mass of potential learners), we are looking at alternative ways to make EMMA sustainable in the future.

Jeremy Rifkin suggests that “the collaborative economy is coming on strong”¹ and in our eyes, EMMA could become a nice case of shareconomy, where MOOC and technology providers join forces to offer added value for themselves and to be shared with peers. In the picture below, we can see how the left hand side of our model is based on the more you contribute, the more you get back, such as a reduced member fee. Complementarily additional options are considered, as depicted on the far right side, such as an outside organisation pay per use approach and other means of financing.

Finally, if, based on the most successful and long-lasting MOOCs experiences, EMMA could reinforce its value proposition with a stronger focus on a specific target group, it would then be able to really position itself as unique in the European market. It would be the moment to seek alliances with European national MOOC platforms as a channel to engage more users and thus ensure a more stable future.”

¹Jeremy Rifkin, *The zero marginal cost society: the internet of things, the collaborative commons, and the eclipse of capitalism* (New York: Palgrave MacMillan, 2014).



EMMA shared economy & revenue streams hybrid model

9. MOOCs/workshops with topics related to Open education

0.1, 0.2, 0.3. sMOOC Step by Step - <http://hub0.ecolearning.eu/course/smooc-step-by-step-3ed/>

This Massive Open Online Course - MOOC - which offers a practical and theoretical approach, is designed to help you experience a booming 21st century learning process as well as help you create your own sMOOC (social MOOC) in a step by step way.

At ECO Project, we will provide you with a space in one of our ECO's platforms to host - for free - the SMOOC you create.

This sMOOC “Step by Step” is conducted in six languages: Spanish, English, French, Italian, Portuguese and German. It has been developed by a multidisciplinary team from a dozen professional institutions and has been built with their own MOOC experience and expertise in the ECO project and in accordance with its specific pedagogical model based on social constructivism.

At the end of this MOOC, participants will be able :

- To identify the main trends in virtual training.
- To recognize the potential that sMOOCs provide as resources for learning at different levels and in different areas and contexts.
- To develop the skills for creating a sMOOC, on a step by step basis: Why and how to do it? How to manage it? How to use technology? How to make it accessible? How to disseminate? And how to evaluate students and use the data?
- To develop the skills to disseminate a sMOOC.
- To use technology to implement a sMOOC, individually and collaboratively.

Content:

- Welcome and Introduction: Why make a MOOC?
- How to build a sMOOC?
- How to design a sMOOC?
- How to support a sMOOC?
- How to make an accessible and popular sMOOC?
- How to evaluate a sMOOC and use data?
- Final Evaluation.
- ECO + OpenMOOC = A platform created to facilitate the search for open educational resources - <https://hub0.ecolearning.eu/>

Courses offered: MOOC for developing MOOCs **0.1. sMOOC Step by Step** - <http://hub0.ecolearning.eu/course/smoooc-step-by-step-3ed> (check above); **0.2. Videos for teaching, learning and communication** - <https://hub2.ecolearning.eu/course/videos-for-teaching-learning-and-communication>, **0.3. FC101 - To Flip Or Not To Flip - Discover the flipped classroom methodology (MOOCs for Teacher Series)** - https://www.pok.polimi.it/courses/course-v1:Polimi+FC101+2016_M3/about

Create your own MOOC - <https://ecolearning.eu/#>

Have you followed one of our MOOCs? Did you enjoy them, the video contents and activities? Why don't you create your own course based on the same methodology? It is easy!

You can integrate your own content or reuse existing ECO MOOC OERs and approaches or integrate any other Open Resources available on the Web; organize them and managing the course following indications in the course 'sMOOC step by step'.

Do you think it is too difficult and/or engaging? No worries! You can also design and experiment your own 'pedagogical project' like an original teaching plan based on flipped classroom approach where the ECO sMOOCs (integrated also by original contents or other OERs) will be used both as contents and as methodological approach in class with your students.

Book your experimentation and you'll be supported in its creation by ECO staff.

Carmen 's Note on peer evaluation on this platform - based on the participation in **sMOOC Step by Step**: peer evaluations could be reviewed by facilitators or at least

(automatically) eliminate the extreme values: is possible some students not to pay attention to this task, not to have enough knowledge or just not to understand the language in which the project was written (in this MOOCs you could use english or spanish, most of the reviews were done by spanish natives).

5. MID-TERM EVALUATION

7.00

Review 1	Wednesday, April 27 2016 8:36 PM	Score: 4/5	View details
Review 2	Wednesday, April 27 2016 11:55 PM	Score: 5/5	View details
Review 3	Monday, May 2 2016 5:33 PM	Score: 4/5	View details
Review 4	Thursday, May 5 2016 8:39 PM	Score: 1/5	View details

You have sent 7 reviews of the 2 mandatory reviews.



1. "Open Lesson": Do-It-Yourself workshop on Open Education - useful for the workshops which will be run in NOVAMOOC, but also for the guides to be published

<http://oerpolicy.eu/open-lesson-do-it-yourself-workshop-materials-on-open-education/> -

http://oerpolicy.eu/wp-content/uploads/2015/06/open-lesson_workshop-scenario.pdf

A solution to "crowdsource trainings and workshops" related to open education, which are "time and resource intensive", published by the team of the "Open Educational Resources Policy in Europe" project (<http://oerpolicy.eu/>).

The "Open Lesson" is based on the scenario created by a group of Polish trainers with experience in teaching about open, teachers and educators, organized in co-operation with the CC School of Open (<http://schoolofopen.p2pu.org/>) ; the scenario was used for 30 workshops in Poland, in March 2015. At the end of 2015, the "Open Lesson" was translated and adapted and went global in the "Open Educational Resources Policy in Europe" project (<http://oerpolicy.eu/>).

Content of the "Open Lesson":

1. Instructions for the person conducting the workshop
2. Idea (introduction)
3. Activity idea - "Cactus"
4. Examples of OER repositories
5. How OER work? (CC licenses and the public domain)
6. Searching for resources
7. Creative Commons Browser
8. Activity idea - comparing results of web search
9. Activity idea - discussion on particular copyright problems
10. Creating and publishing OERs
11. Activity idea - create a new resource
12. Activity idea – resource sharing
13. Questionnaire to be filled before the training.

2. School of Open (<http://schoolofopen.p2pu.org/>) - useful for the workshops which will be run in NOVAMOOC, but also for the guides to be published

School of Open is a platform for CC courses (MOOCs) - facilitated or self paced, workshops and training programs. It provides a guide for the volunteers who want to develop such projects on this platform <https://p2pu.hackpad.com/School-of-Open-Guidelines>: the philosophy is that you can you reuse and build on, you don't have to start from scratch; adapt existing courses/resources to your audience (<http://pad.p2pu.org/p/school-of-open-resources>).

A useful workshop could be Designing collaborative workshops <https://courses.p2pu.org/en/courses/77/designing-collaborative-workshops/>.

The platform could be a *solution* for hosting the workshops run in NOVAMOOC.

3. eMOOCs pre conference MOOC (http://imoox.at/wbtmaster/startseite_en/emooocs2016.html) - hosted by the unique Austrian MOOC platform iMooX, this is a special MOOC having as aim to publish and discuss around the EMOOCs2016 conference (<http://emooocs2016.eu>) presentations from both: research and experience tracks. It includes short videos that demonstrate the main outcomes of the authors' contributions in the fields of Massive Open Online Courses (MOOCs). It is a preMOOC before the conference is happening to enhance the discussions and exchange between the participants.

Similar pre/post conference MOOCs will be organized for the SMART 2016 and eLSE 2017 workshop by the NOVAMOOC team.

4. Storytelling for change (<https://novoed.com/storytelling-change-2016-1>)

Key Learning Outcomes - By the end of this course, you will:

1. Be confident in using stories, especially personal stories, as a part of their communication toolkit
2. Know how to tell stories and use a specific set of storytelling skills so that you connect with the hearts and minds of your audience
3. Have developed, rehearsed, and received feedback on one personal story as a replicable model so that you can build a personal "library" or "back pocket" of stories that can be used in different situations
4. Be able to use a 5-step process to integrate story into presentations for change, work, or many other situations.

5. Transmedia Storytelling (<https://www.futurelearn.com/courses/transmedia-storytelling>)

Learn how to tell compelling stories across multiple platforms, like books, films, games and TV, with this free online course.

6. Learning Online: Learning and Collaborating (<https://www.futurelearn.com/courses/learning-and-collaborating>)

This course is just one of a series about ‘learning online’. You can sign up to the other courses in this series through the Going to University collection - <https://www.futurelearn.com/courses/collections/going-to-university>.

Objectives:

- help you to gain new skills, think critically and learn independently
- encourage online / social learning
- develop collaboration and analytical skills
- embed current research into your online learning.
- Journal of participation
<https://docs.google.com/document/d/1bbA4wjJCbczBMXjRCoWY3xNFK-MMVZWBfMEUpNue-IU/edit?pref=2&pli=1>
- Presentation <https://www.canva.com/design/DABolvE0De8/VZgMhC2Mrv0qQs3Ra-sHtQ/view>

7. OERup! Online Course (<http://oerup2.teachable.com/>)

8. EMMA Workshops (<http://www.slideshare.net/EuMOOCs>)

9. Social Learning for Social Impact - <https://www.edx.org/course/social-learning-social-impact-mcgillx-groocx>

Join the world’s first **GROOC** – a **MOOC for groups** – to collaborate with others globally and create social change.

Our GROOC has a distinct pedagogy: we believe profound learning happens when people share their experiences with each other, ask questions and tell stories. It’s called social learning. There are no right or wrong answers and no tests along the way. Instead, you’ll delve into relevant issues that concern all social initiatives, at any stage of development.

The learning outcomes of this course will be highly personal and will depend on your level of participation in the GROOC community.

That said, our GROOC has been designed to help you:

- Work as a high-functioning team (Co-Creating)
- Learn your way to a prototype (Designing)
- Grow your social impact (Scaling)
- Find resources to help sustain your efforts (Resourcing)
- Discern when and how to measure your impact (Assessing)

Check the GROOC presentations at <https://www.linkedin.com/pulse/when-mooc-became-grooc-we-all-change-makers-ruchika-arora>, <http://www.theglobeandmail.com/report-on-business/careers/business-education/meet-grooc-new-online-course-has-a-group-learning-twist/article26215533/>.

10. MOOCs Network Event: Making a Quality MOOC - <http://www.qaa.ac.uk/newsroom/events/event-resources/moocs-network-event-making-a-quality-mooc>

This meeting of QAA's Massive Open Online Courses (MOOCs) Network focused on 'Making a Quality MOOC'. It explored what the notion of a 'quality MOOC' means to providers and students, as well as to QAA. The programme included updates on QAA work and other projects taking place across the UK. It provided opportunities for discussion, exploring challenges and sharing good practice.

‘QAA MOOCs Network’ Linked In group - <https://www.linkedin.com/groups/8114046/profile> - is designed to facilitate the sharing of experiences, knowledge and good practice for the mutual benefit of its members. It offers opportunities to shape and contribute to QAA's work relating to the quality assurance and enhancement of Massive Open Online Courses (MOOCs) and facilitate liaison between network members.

The official hashtag used during the event was #MOOCsNetwork.

11. European Schoolnet Academy - <http://www.europeanschoolnetacademy.eu/>

The Academy is a platform where you can learn about innovation in the school and classroom through online professional development courses for teachers in primary and secondary schools.

The courses offered on this platform are completely free of charge. They will offer you an introduction to key concepts and ideas that are relevant to developing your practice and will provide you with the opportunity to discuss these ideas and share your experiences with your peers. We hope that by attending these courses and by engaging with your peers you will feel empowered and inspired to try out something new in your practice.

- Innovative Practices for Engaging STEM Teaching
- Future Classroom Scenarios
- Games in Schools
- Competences for 21st Century Schools
- Introducing Technology-Enhanced Teaching
- Developing Digital Skills in your Classroom.

12. Design and Development of Educational Technology - <https://www.edx.org/course/design-development-educational-mitx-11-132x-0>

This project-based course explores educational technologies and the theories underlying their development through interviews with experts in the field.

To be effective, educational technologies must be designed based on what we know about how people learn. Through interviews with experts in the field, this course explores educational technologies, outlines the theories that influence their development, and examines their use.

Participants will both give and receive feedback from others in the class forums as part of this course. To synthesize main ideas, participants will work towards creating a pitch for a new educational technology.

In Unit 1, we will talk about the history of educational technologies and how these technologies have influenced how we learn.

In Unit 2, we will explore what it means to learn something and different approaches to deepen learning.

In Unit 3, we will focus on active learning and take a closer look at simulations that can foster learning.

Unit 4 introduces the idea of collaborative learning and considers communities of practice.

Unit 5 provides an overview of different types of assessment and delves into how technology is changing the field of assessment.

Unit 6 is all about design-based research, a methodology for research and design of educational innovations.

What you'll learn:

- A broad understanding of several prominent educational theories and approaches regarding teaching and learning and examples of how these are manifested in educational technologies
- Different ways technology can be leveraged to foster learning
- How to recognize different types of assessment and how technology is changing the landscape for assessing learning.

13. OER Policy videos - <http://www.openwa.org/about-policy-video/>

The video segments and supporting materials will guide you to:

- Recognize existing OER policies and their implementation strategies.
- Distinguish different types of OER policies.
- Assess the need for OER policy at your institution.
- Formulate an OER policy framework with necessary elements including purpose, definition, procedures, and templates.
- Identify the essential elements for the successful implementation of OER policy.
- Apply for/participate in large-scale federal projects with open licensing requirements.
- Organize and review practical techniques for creating support and collaboration among funders and campus stakeholders for a major OER project.
- Identify and evaluate steps and strategies open initiatives to create a campus policy and practice framework hospitable to future work.
- Develop a flowchart that depicts the step-by-step process of OER adoption guided by a policy framework.

Part of the wonderful project **Open Washington - Open Educational Resources Network** <http://www.openwa.org> with sections with modules on:

- Learn OER
- Find OER
- OER Stories.

14. The Mozilla Learning Network - <https://teach.mozilla.org/>

We believe web literacy is as important as reading, writing and arithmetic. When teaching these three Rs, we rely on centuries of experience. But the Internet has no clear educational roadmap. Mozilla created the **Web Literacy Map, version 2.0** - <https://teach.mozilla.org/web-literacy/> - as a resource to fill this gap and aid educators around the globe who are teaching and learning the Web.

The Map is an interactive, detailed framework that outlines and defines the key web literacy and 21st-century skills needed to realize the Internet's full potential. The Map also provides hands-on activities for teaching and learning these skills.

Check: Introducing Mozilla's Web Literacy Map, Our New Blueprint for Teaching People About the Web - <https://blog.mozilla.org/blog/2016/04/08/introducing-mozillas-web-literacy-map-our-new-blueprint-for-teaching-people-about-the-web/>

Sections of Mozilla Learning Network

a. Teaching Activities - Activities and lesson plans to get you started;

b. Web Literacy - A framework for entry-level web literacy & 21st Century skills. Explore the map by selecting what you want to learn more about, to see definitions and activities.

21st Century Skills: Problem-Solving, Communication, Creativity, Collaboration;

c. Leadership Opportunities - Explore leadership opportunities in the movement towards a free and open Web;

d. Tools - Open source software to teach and learn the Web

These tools are free and open source, and can be used in a variety of ways to teach learners how to read, write, and participate on the Web:

X-Ray Goggles

This code inspector lets you view and remix the code of your favorite web pages.

Thimble

This code editor helps you learn HTML and CSS by creating and remixing Web projects.

Webmaker

Webmaker lets you create, discover and share content in your language on your mobile device;

e. Community - Join a global community of people teaching the Web

Connect with Others

Introduce yourself in the Mozilla Learning Network discussion forum, help test out the latest curriculum modules, or start a new thread about a related issue or challenge you care about.

15. Introducing Project-Based Learning in your Classroom - <http://academy.schooleducationgateway.eu/web/developing-project-based-learning-in-your-classroom>

The first MOOC at Teacher Academy <http://academy.schooleducationgateway.eu>: Join us on this exciting first course on the Teacher Academy and meet like-minded pedagogues, find

useful resources, learn about innovative pedagogy, and earn digital badges and a certificate recognising your work.

The course lasts 5 weeks from Monday, 6th June 2016 to Sunday, 10th July 2016

Target audience

The course is relevant to all teachers, school leaders and other school stakeholders who are interested in the topic of project-based learning. However, the focus of the course is on the practical and pedagogical activities within a classroom environment so the course will be more relevant to practicing teachers.

Topics

The Introducing Project-Based Learning in your Classroom course introduces you to the concept of project-based learning (PBL) and helps you to implement this pedagogical approach in your classroom by providing concrete examples, ideas and tools that can inspire and support you and your students to embark on a PBL learning journey.

We will be exploring three key challenges related to the implementation of PBL: how to get students to collaborate effectively, how to facilitate student-driven activities, and finally how to assess PBL in your classroom.

The course offers an introduction to these topics and provides you with a framework to engage with fellow teachers and other education stakeholders by sharing resources, experiences, ideas, etc. The goal of the course is to develop into a professional learning community discussing PBL even after the course has finished.

You will find a range of resources on the course ranging from classroom videos, lesson plans, interviews, presentations, digital tools and classroom materials to peer-review and self-assessment activities. *The course draws heavily from materials and ideas used in the past on the eTwinning network.*

Introductory clip <https://www.youtube.com/watch?v=w44Cy1uio6s> created with <https://www.powtoon.com/edu-home/>.

Good example for a MOOC announcement:

Subject:	PBL Course - early access to the course introduction
From:	"The Teacher Academy team" <teacher-academy@schooleducationgateway.eu>
Date:	Sun, June 5, 2016 1:17 pm
To:	"Carmen Holotescu"
Priority:	Normal
Options:	View Full Header Print Download this as a file View as plain text

Dear Carmen Holotescu,

Do you want to get an **early peek** at what will be happening on the PBL course on the Teacher Academy? We've just **opened the Course Introduction for browsing** so why not get a head start and use Sunday to get familiar with some key info on how the course works, before we formally launch tomorrow, Monday 6th June? You'll find details on **who everybody else is on the course, course deadlines, the tools we will be using, and much more**. There's lots of info to take in but make sure you look through it carefully as it will help you once you are active on the course.

To access the Course Introduction, go to the PBL course homepage, scroll down and you should see an "Enter" button next to the Course Introduction. Please note that Module 1 will only be accessible from tomorrow, so you won't be able to proceed beyond the Course Introduction.

On another note, some of you reported some issues when trying to log in to the course this weekend. This **issue is now solved** and we apologize for the inconvenience caused.

We'll be in touch again tomorrow.

Until then,

The PBL Course Team

@ The Teacher Academy

16. Ziegenfuss, Donna Harp (2016) "**Closing the Loop: Building Synergy for Learning through a Professional Development MOOC about Flipped Teaching**" Current Issues in Emerging eLearning: Vol. 3: Iss. 1, Article 7.

Available at: <http://scholarworks.umb.edu/ciee/vol3/iss1/7>

This case study describes how a MOOC, funded through an NSF grant, was used to create and assess faculty professional development. The MOOC, designed and developed using a backward design process, guided participants through an online project-based learning experience that integrated learning about the flipped classroom and about how to flip a classroom as the participants designed flipped teaching materials. The course structure involved an introduction to flipped teaching and learning content, experimented with flipped ideas and concepts, and emphasized reflection and sharing of experiences with peers.

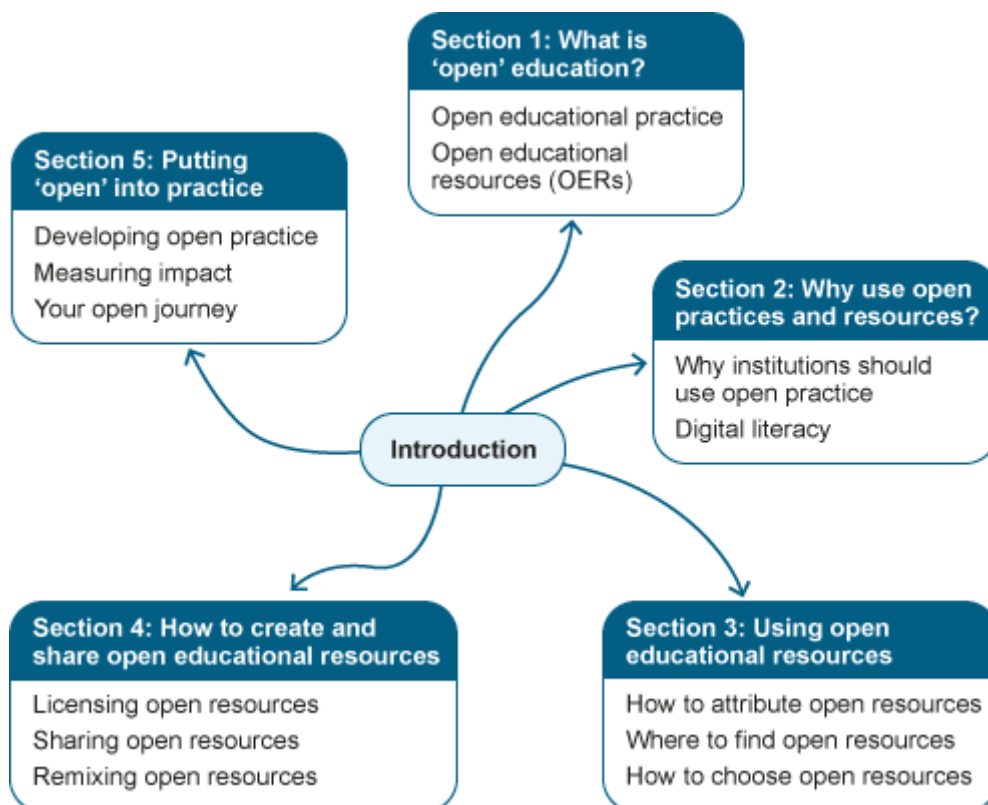
Although mentoring faculty in flipped pedagogical design was the primary MOOC goal, the project also provided insights about assessing the MOOC and the personal learning experiences of MOOC participants. MOOC developers concluded that, depending on the purpose of the MOOC, course designers and instructors may need to rethink what they are assessing, and broaden their perspectives regarding how to assess what is important. Closing the assessment loop and monitoring continuous improvement may be alternative strategies for assessing learning, boosting MOOC effectiveness, and documenting conceptual change.

17. Becoming an open educator -

<http://www.open.edu/openlearnworks/course/view.php?id=2274>

'Becoming an open educator', written collaboratively and produced as part of the Opening Educational Practices in Scotland (OEPS) project - <https://oepscotland.org/> - is aimed at anyone who is curious about how free and open might change our approach to teaching and learning and has been designed for administrators, educators and facilitators in all sectors.

This open course asks you to consider a range of questions. For example, how do I find open resources and what benefits might they bring? Does openness change the relationship to the content I create, the people I create content for, others with whom I share the material, and our own everyday practice and context? And if so, what impact, if any, does openness have on these practices and relationships?



Check also <http://www.cedefop.europa.eu/en/events-and-projects/projects/teachers-and-trainers-professional-development>

18. The digital scholar - Open University - <http://www.open.edu/openlearn/ocw/course/view.php?id=1773>

Presentation at <http://www.open.edu/openlearn/education/the-digital-scholar/content-section-overview>

Welcome to this new free course produced by The Open University. If you enrol and complete the course you can gain a digital badge and a Statement of Participation as a record of your achievement. Digital badges are a new way of demonstrating online that you have gained a skill. Schools, colleges and universities are working with employers and other organisations to develop open badges that help learners gain recognition for their skills, and support employers to identify the right candidate for a job.

Digital scholarship is a shorthand for the intersection of three technology related developments: digital content, networked distribution and open practices. It is when digital, networked and open intersect that transformational practice occurs. In this free course, The digital scholar, you will explore the impact of digital technologies on scholarly practice.

In a video Martin Weller gives an overview of the course content.

The digital scholar is a free course which lasts about 8 weeks, with approximately 3 hours' study time each week. You can work through the course at your own pace, so if you have more time one week there is no problem with pushing on to complete another week's study. You can also take as long as you want to complete it.

Enrolling on the course will give you the opportunity to earn an Open University digital badge. Badges are not accredited by The Open University but they're a great way to demonstrate your interest in the subject and commitment to your career, and to provide evidence of continuing professional development.

Once you're signed in, you can manage your digital badges online from My OpenLearn. In addition you can download and print your OpenLearn Statement of Participation - which also displays your Open University badge.

Learning outcomes

After studying this course you will be able to:

- understand what is meant by the term 'digital scholarship'
- recognise Boyer's scholarship framework
- consider new approaches to research afforded by digital scholarship
- understand how digital, networked technology can influence public engagement
- appreciate the influence of the recent MOOC development.

Topics:

Week1

Introduction and guidance Unit content

Week 1: Entering the digital world Unit content

Week 1 practice quiz

Week2

Week 2: Discovery Unit content

Week 2 practice quiz

Week3

Week 3: Integration and interdisciplinarity Unit content

Week 3 practice quiz

Week4

Week 4: Public engagement and digital scholarship Unit content

Week 4 compulsory badge quiz

Week5

Week 5: Teaching and digital scholarship Unit content

Week 5 practice quiz

Week6

Week 6: Reward and tenure Unit content

Week 6 practice quiz

Week7

Week 7: The downside of digital scholarship Unit content

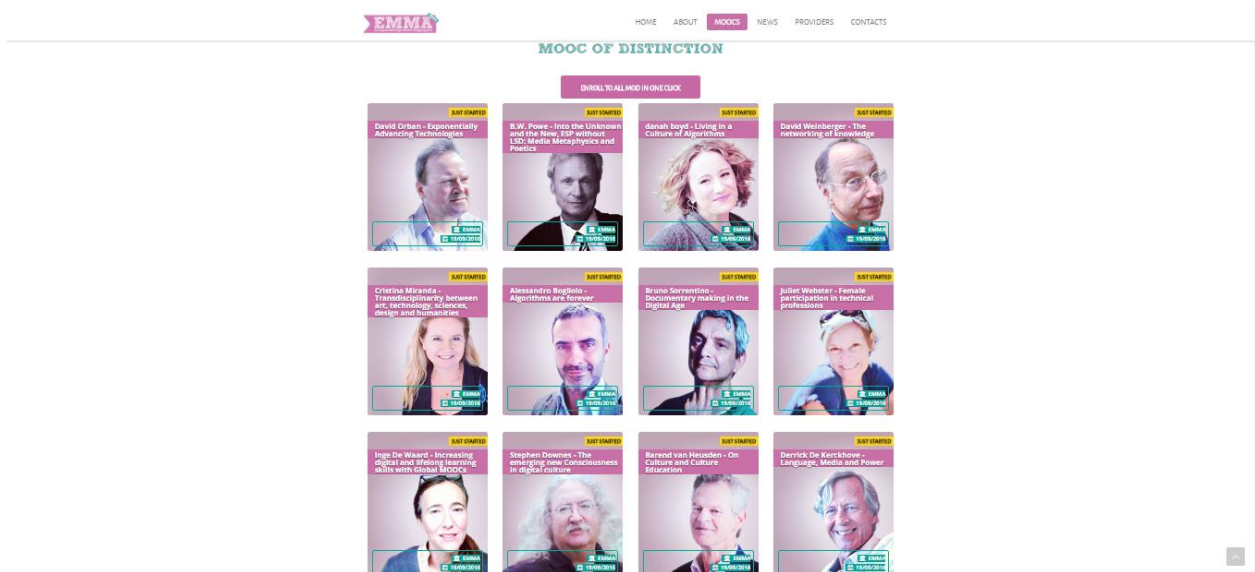
Week 7 practice quiz

Week8

Week 8: Changes Unit content

Week 8 compulsory badge quiz.

19. EMMA MOOCs of Distinction - <https://platform.europeanmoocs.eu/#mod>



20. Networked practitioner: open or closed practice? -

<http://www.open.edu/openlearn/education/educational-technology-and-practice/networked-practitioner-open-or-closed-practice/content-section-0>

Facilitators: Adams, A. (Anne), Weller, M. (Martin), Pegler, C. (Chris); Open University.

This free course, Networked practitioner: open or closed practice?, starts a debate to support the decision-making process around openness and the different preferences we each have.

After studying this course, you should be able to:

- explore assumptions about open practices and conduct research to inform personal initial views on openness
- be sensitive to some of the issues around a closed approach with online privacy and identity
- be aware of online networking and how such activity may develop and be visualised.

21. Collaborative Teaching and Learning, 24 Oct 2016, 5 weeks -
<http://www.europeanschoolnetacademy.eu/web/collaborative-teaching-and-learning>

Being able to collaborate effectively is a valuable 21st-century skill, yet teaching about or through collaboration remains rare in schools because of a lack of understanding of what real collaboration in an educational setting means, and because existing policy conditions do not always enable it to flourish. Practitioners need a dedicated space and time to experiment and better understand what collaborative teaching and learning means in practice. This course is designed to give you that opportunity.

On this course, you will receive advice from experts and peers, as well as concrete suggestions about how to carry out collaborative teaching and learning in your classroom. You will also have access to videos of inspiring practice and other support material. Moreover, you will have the chance to belong to a Europe-wide community of like-minded practitioners, dedicated to working together to make collaborative teaching and learning a reality in the classroom.

This introductory course will help you to better understand:

What is collaborative learning?

How can I carry it out effectively in my classroom?

What tools can I use to assess collaborative learning?

How can I collaborate with fellow teachers to facilitate collaborative learning?

On the course, we will be reflecting, discussing and sharing with each other about these topics. You will find a community of like-minded professionals on the course who can support you in improving your classroom practices. We will be using a variety of online tools and social media to communicate with each other and engage in some peer review activities as part of the course.

Enroll on the course and join the discussion on our social media channels via the Facebook Group and Twitter using #Colab_eu

CO-LAB (<http://colab.eun.org>), the project which this MOOC is a part of, is focused on making collaborative teaching and learning a reality in the classroom. CO-LAB is funded by the European Commission's Erasmus+ Programme under the grant agreement no. 562194.

11. Guides for MOOC design. Quality

Motto:

Alastair Creelman, @alacre - <https://twitter.com/alacre>

I suspect many MOOC learners lack *collaborative literacy*, set in *self-study mindset*.

Not easy to add social element. #emoocs2016

23 Febr, 2016

<https://twitter.com/alacre/status/702078443652038656>

European Commission: Report on Progress in Quality Assurance in Higher Education, 2014 - http://ec.europa.eu/dgs/education_culture/repository/education/policy/higher-education/doc/quality_en.pdf

New modes of delivery, such as blended learning or massive open online courses (MOOCs), have the potential to change how education is delivered. QA frameworks and institutions need flexibility to support institutions in adopting different modes of innovative course delivery, adapting their concepts of quality and developing new indicators to enable these changes. Institutional evaluation should support institutions to plan and allocate resources to developing their new modes, to enhance their attractiveness, develop niche services, or reach learners outside formal education. Some countries – ES, IT, NO – are currently investigating the potential for QA bodies to assess MOOCs.

MOOC Quality Comes Down To This: Effective Course Design (<https://onlinelearninginsights.wordpress.com/2015/12/12/mooc-quality-comes-down-to-this-effective-course-design/>)

A framework for effective course design (and evaluation) for MOOCs is presented.

How to MOOC? – A pedagogical guideline for practitioners - Ebner Martin, Lackner Elke, Kopp Michael
<http://proceedings.elseconference.com/index.php?r=site/index&year=2014&index=papers&vol=13&paper=b1c21dfd460aacdf9d60f691ca83f31> - article Workshop eLSE 2014 , <http://www.slideshare.net/mebner/e-lse-april2014>.

Designing effective MOOCs - Grainne Conole -
<http://www.tandfonline.com/doi/abs/10.1080/09523987.2015.1125989>

Massive open online courses (MOOCs) have expanded significantly in recent years and are challenging traditional educational fee-paying offerings. The advantages of MOOCs are cited as the fact that they are free, that they enable participants to be part of a global community of peers and to have the experience of learning through social media and that they offer the potential for opening up educational and facilitating social inclusion. Nonetheless there are challenges associated with MOOCs. Firstly, most have very high dropout rates. Secondly, there are challenges with approaches to recognition of learning and issues with learner authentication and cheating. Thirdly, there are issues with providing support at scale. This paper argues that effective design of MOOCs is key. It focuses on the description of a 12-dimensional classification schema for describing and designing MOOCs. It then uses the schema to describe five MOOCs, which are respectively based on associative, cognitive, constructivist, situative and connectivist pedagogies. It then describes the 7Cs of Learning Design framework and discusses how it can be used to design MOOCs.

A set of patterns for the structured design of MOOCs

<http://www.tandfonline.com/doi/abs/10.1080/02680513.2015.1100070#.Vp0bu5p96t8>

A design pattern approach, in the form of participatory pattern workshops, has been used to explore the design approaches that experts in the field of online learning have used to develop and deliver Massive Open Online Courses (MOOCs). Over the course of 3 intensive workshops a total of 20 design patterns were developed from shared narratives of successful practice. These patterns describe solutions to problems that are contextualised to six design dimensions: structure; orientation; participation; learning; community and management. The validity of these patterns has been tested against novel design challenges. In this paper, we present the 20 design patterns as a scaffold for both novice and expert developers to build a MOOC and suggest that integrating design patterns into a simple iterative design cycle can provide a powerful course development approach.

Instructional quality of Massive Open Online Courses (MOOCs), 2015
<http://www.sciencedirect.com/science/article/pii/S036013151400178X>

An analysis of instructional design quality of 76 randomly selected Massive Open Online Courses (MOOCs). The quality of MOOCs was determined from first principles of instruction, using a course survey instrument. Two types of MOOCs (xMOOCs and cMOOCs) were analysed and their instructional design quality was assessed and compared. We found that the majority of MOOCs scored poorly on most instructional design principles. However, most MOOCs scored highly on organisation and presentation of course material. The results indicate that although most MOOCs are well-packaged, their instructional design quality is low. We outline implications for practice and ideas for future research.

MOOC Design Pattern Project (<http://www.moocdesign.cde.london.ac.uk/>) - 2014-2015

The goals of the project are to explore, define and articulate the emerging design principles and patterns that underpin the development and delivery of massive open online courses, and to demonstrate them by the application to the design of new MOOCs. The context of the proposal is multidimensional in that it incorporates input from diverse but complimentary perspectives that include designers, deliverers, researchers, learners and tutors who are engaged in MOOCs and Open and Distance Learning more broadly.

Open Learning Design Studio's MOOC (Massive Open Online Course) (<http://www.olds.ac.uk/>) - 10th January to 13th March 2013

This free, open and online course (MOOC) has been designed with further and higher education professionals in mind - lecturers, qualification teams, awarding bodies, learning technologists, library and student support staff and learning and teaching specialists - but may also be of interest to teachers (or teachers to be) in secondary schools or informal/work based learning facilitators, in fact, anyone with an interest in curriculum and learning design.

Learning Design: Conceptualizing a Framework for Teaching and Learning Online - Editor Dalziel, 2016 (https://books.google/books?id=i7E0CwAAQBAJ&source=gbs_slider_cls_metadata_9_mylibrary)

Grainee Conole: The 7 Cs of LD - subchapter *Designing MOOCs* pages 117-145 - <http://www.slideshare.net/GraineeConole/the-7-cs-of-learning-design>.

In Search of Quality: Using Quality Matters to Analyze the Quality of Massive, Open, Online Courses (MOOCs) - <http://www.irrodl.org/index.php/irrodl/article/view/2348/3411>

overview **What should MOOC quality standards look like?** - <http://www.ecampusnews.com/top-news/mooc-quality-standards-716/>.

MOOCs and Quality: A Review of the Recent Literature, Sarah Hayes, July 2015, QAA MOOCs Network - <http://www.qaa.ac.uk/en/Publications/Documents/MOOCs-and-Quality-Literature-Review-15.pdf>

Check **QAA MOOCs Network** - <https://www.linkedin.com/groups/8114046/profile>.

Proposal for a Conceptual Framework for Educators to Describe and Design MOOCs - http://www.jucs.org/ujs/jucs/Journal/Volume%2020/Issue%201/proposal_for_a_conceptual

Alario-Hoyos, C., Pérez-Sanagustín, M., Cormier, D., & Kloos, C. D. (2014). Proposal for a Conceptual Framework for Educators to Describe and Design MOOCs. J. UCS, 20(1), 6-23.

Educators need to face not only pedagogical issues, but also other issues of logistical, technological and financial nature, as well as how these issues relate and constrain each other. Currently, little guidance is available for educators to address the design of MOOCs from

scratch keeping a balance between all these issues. This paper proposes a conceptual framework for supporting educators in the description and design of MOOCs called the MOOC Canvas. The MOOC Canvas defines eleven interrelated issues that are addressed through a set of questions, offering a visual and understandable guidance for educators during the MOOC design process. As a practical usage example, this paper shows how the MOOC Canvas captures the description and design of a real 9-week MOOC.

Check **JUCS** **number** **on** **MOOCs** at http://www.jucs.org/ujs/jucs/Journal/Volume%2020/Issue_20_1/interaction_in_massive_courses/abstract.html.

MOOQ - European Alliance for Quality of Massive Open Online Courses, called MOOCs - <http://mooc-quality.eu/> - started in 2016, to be monitored.

MOOC Quality Project, perspectives on quality of MOOC-based education, 2013 - <http://mooc.efquel.org/>

MOOCs represent the latest stage in the evolution of open educational resources. First was open access to course content, and then access to free online courses. Accredited institutions are now accepting MOOCs as well as free courses and experiential learning as partial credit toward a degree. The next disruptor will likely mark a tipping point: an entirely free online curriculum leading to a degree from an accredited institution. MOOCs are moving from an early entrepreneurial stage into the reality of more and more educational institutions. Gaining participants, visibility and a growing community worldwide in many occasions the question rises to the surface: Are MOOCs the new model of online education for all? Are they fit to democratize education? and above all – what is a good quality MOOC? The MOOC Quality Project, an initiative of the European Foundation for Quality in E-Learning (www.efquel.org), addresses the latter question not by trying to find one answer which fits all, but by trying to stimulate a discourse on the issue of Quality of MOOCs. A series of BlogPosts of worldwide visible experts and entrepreneurs of MOOCs will address the issue from each participant's viewpoint. After each BlogPost we will allow a one week period of time to react and comment on the post made available. At the end of the week the discussion will be shortly summarized and made available to all. - See more at: <http://mooc.efquel.org/the-mooc-quality-project/#sthash.W6hHhTxI.dpuf>.

OpenupEd Quality Label - <http://www.openuped.eu/quality-label>

OpenupEd aims to be a distinct quality brand embracing a wide diversity of (institutional) approaches to open up education via the use of MOOCs. As a consequence, OpenupEd partners agreed to develop a quality label for MOOCs tailored to both e-learning and open education. This label was published in January 2014 - http://www.openuped.eu/images/docs/OpenupEd_quality_label_-_Version1_0.pdf. The associated institutional benchmarking with this label is primarily meant to be applied as an improvement tool, comparing institutional performances with current best practices and leading to measures to raise the quality of its MOOCs and their operation. This process is designed to complement both an institutional course approval process, and ongoing evaluation and monitoring of courses in presentation.

Conditions for partnership - <http://www.openuped.eu/partners/55-become-a-partner>.

Hood, N., Littlejohn, A. (2016). Quality in MOOCs: Surveying the Terrain. COMMONWEALTH OF LEARNING. ISBN 978-1-894975-80-3
<http://oasis.col.org/handle/11599/2352>

The purpose of this review is to identify quality measures and to highlight some of the tensions surrounding notions of quality, as well as the need for new ways of thinking about and approaching quality in MOOCs. It draws on the literature on both MOOCs and quality in education more generally in order to provide a framework for thinking about quality and the different variables and questions that must be considered when conceptualising quality in MOOCs. The review adopts a relativist approach, positioning quality as a measure for a specific purpose. The review draws upon Biggs's (1993) 3P model to explore notions and dimensions of quality in relation to MOOCs — presage, process and product variables — which correspond to an input–environment–output model. The review brings together literature examining how quality should be interpreted and assessed in MOOCs at a more general and theoretical level, as well as empirical research studies that explore how these ideas about quality can be operationalised, including the measures and instruments that can be employed. What emerges from the literature are the complexities involved in interpreting and measuring quality in MOOCs and the importance of both context and perspective to discussions of quality.

Cites *Carmen Holotescu, Gabriela Grosseck, Vladimir-Ioan Cretu, Antoanela Naaji. (2014). Integrating MOOCs in Blended Courses. 10th International Scientific Conference eLearning and Software for Education, Bucharest, Romania, ISSN 2066 - 026X.*

https://www.researchgate.net/publication/260987116_Integrating_MOOCs_in_Blended_Courses

Guidelines for Quality Assurance and Accreditation of MOOCs (august 2016) -
<http://oasis.col.org/handle/11599/2362>

Massive open online courses (MOOCs) have emerged as an educational innovation with the potential to increase access to and improve the quality of education. Different stakeholders in education view MOOCs from different perspectives. However, there are common questions related to the quality of these courses and to the granting of equivalent credits. This document provides a set of guidelines designed to support decision making about the sorts of quality measures that are appropriate in different contexts. These MOOC Quality Guidelines can be used by governments, accreditation agencies, institutions and learners with an interest in developing, running, accrediting or participating in MOOCs, to improve quality assurance (QA) and accreditation.

Guide to open online courses - <http://www.onlinecolleges.net/for-students/open-online-courses-and-moocs/>

A guide for students/teachers searching a quality OC

- Help curious minds find interesting and new topics to explore
- Give teachers access to supplemental instructional tools to enhance their curricula
- Bolster support systems for students seeking help with English proficiency or core subjects.

Evans, B. J., Baker, R. B., & Dee, T. S. (2016). **Persistence Patterns in Massive Open Online Courses (MOOCs)**. *The Journal of Higher Education*, 87(2), 206-242. - https://www.researchgate.net/publication/293479059_Persistence_Patterns_in_Massive_Online_Courses_MOOCs

Using a unique dataset of 44 Massive Open Online Courses (MOOCs), this article examines critical patterns of enrollment, engagement, persistence, and completion among students in online higher education. By leveraging fixed-effects specifications based on over 2.1 million student observations across more than 2,900 lectures, we analyzed engagement, persistence, and completion rates at the student, lecture, and course levels. We found compelling and consistent temporal patterns: across all courses, participation declines rapidly in the first week but subsequently flattens out in later weeks of the course. However, this decay is not entirely uniform. We also found that several student and lecturespecific traits were associated with student persistence and engagement. For example, the sequencing of a lecture within a batch of released videos as well as its title wording were related to student watching. We also saw consistent patterns in how student characteristics are associated with persistence and completion. Students were more likely to complete the course if they completed a pre-course survey or followed a quantitative track (as opposed to qualitative or auditing track) when available. These findings suggest potential course design changes that are likely to increase engagement, persistence, and completion in this important, new educational setting.

Check the presentation of the article at **What makes students stick with a MOOC?** - <http://news.vanderbilt.edu/2016/02/what-makes-students-stick-with-a-mooc/>.

Jemni, M., & Khribi, M. K. (2016). *Open Education: from OERs to MOOCs*. Springer - uploaded at https://drive.google.com/file/d/0B_Hu8z--34eSa0hQbzdPSjlySDQ/view?usp=sharing

- **Quality Frameworks for MOOCs** - Darco Jansen, Jon Rosewell and Karen Kear.

MOOC instructors may need more support for successful courses - http://www.sciencecodex.com/mooc_instructors_may_need_more_support_for_successful_courses-176763

Supporting instructors of massive open online courses -- MOOCs -- may be just as important to the creation of long-term, successful courses as attracting and supporting students, according to a group of researchers.

In a study, researchers interviewed 14 current and former instructors of MOOCs, which use technology such as streaming videos and interactive web pages to deliver course lectures and materials online. Of the 14 instructors, only four indicated they would want to teach MOOCs on a regular basis. Two instructors said they will not teach another MOOC, four were considering a break and four were concerned about the demands of teaching another course.

"Most of the research on how we can make MOOCs successful has focused on the student side -- how do we attract and retain them, for instance -- but now attention is starting to switch to instructors, who make the MOOCs happen," said Saijing Zheng, a doctoral candidate in information sciences and technology, Penn State. "So, it's important to know the motivations of the instructors for teaching in this new format and their experiences and challenges when they teach these MOOCs."

The MOOC Ecosystem, Stephen Downes - <http://www.slideshare.net/Downes/the-mooc-ecoosystem>

Video presentation at <https://www.youtube.com/watch?v=kxstCBbIrUs>

About the power of 10 - worth to listen, watch and study.

Challenges and MOOC strategies in the ECO project by Santiago Fano - <http://www.slideshare.net/EADTU/challenges-and-mooc-strategies-in-the-eco-project-by-santiago-fano>.

OER Policy Development Tool - <http://policy.lumenlearning.com/>
<https://open.bccampus.ca/2016/08/24/announcing-the-oer-policy-development-tool/>

The purpose of the OER Policy Development Tool is to promote the use of OER and scale efforts to full OER programs. It is written primarily for governance officials at public two-year colleges in the U.S. and colleges and universities in Canada. The contents of the policy guide are not intended to be prescriptive; contents are intended to be adapted for use according to a college's culture. The OER Policy Development Tool is organized into three sections including:

- OER Policy Assumptions
- OER Policy Components
- OER Policy Resources

The components of the OER policy section include the following topics that we think decision-makers should consider when developing an institutional OER policy, or when integrating these components into an existing institutional policy:

- OER Purpose
- OER Policy Statement
- Intellectual Property and Licensing OER Content
- OER Procedures and Responsibilities
- OER Training and Professional Development
- OER Course Design
- OER Content Development
- Sharing OER Content
- OER Technical Format
- OER Sustainability (college-wide capacity, funding model, tenure)
- OER Quality Assurance

For each component, we provide an explanation of why the component is needed, sample policy statements, sample resources, and a recommended action checklist.

7 ways to design sticky MOOCs, Donald Clark - <http://donaldclarkplanb.blogspot.ro/2016/02/7-ways-to-design-sticky-moocs.html>

Many of the arguments around course completion in MOOCs are, I have argued, category mistakes, based on a false comparison with traditional HE, semester-long courses. We should not, of course, allow these arguments to distract us from making MOOCs better, in the sense of having more sticking power for participants. This is where things get interesting, as there have been some features of recent MOOCs that have caught my eye as providing higher levels of persistence among learners. The University of Derby ‘Dementia’ MOOC, full title ‘Bridging the Dementia Divide: Supporting People Living with Dementia’ - <http://www.derby.ac.uk/online/mooc/bridging-dementia-divide> - is a case in point.

1. Audience sensitive
2. Make all material available
3. Modular
4. Shorter
5. Structured & unstructured
6. Social not necessary
7. Adult content
8. Badges

Other notes on MOOCs at <http://planblearning.com/articles/moocs/>.

How to Choose the Right Tools for Your Online Course - <https://www.edsurge.com/news/2016-01-10-how-to-choose-the-right-tools-for-your-online-course>

A growing number of schools and nonprofits are building their first online courses. If you’re considering migrating your professional development program, curriculum, or training online, you’ll quickly be asking: “What platform should we use?” With a huge array of choices—Canvas, Oppia and Udemy, just to name a few—on the market, it can be hard to narrow in on the best fit for your budget and learning goals. Many companies make bold statements about their ability to “personalize” instruction or generate rich learning analytics. Which claims should you believe, and which you dismiss as entrepreneurial hype?

The 4 Biggest Myths Of Video Learning - <http://elearningindustry.com/4-biggest-myths-video-learning>

The phenomenal growth of online video learning has opened up a world of potential to Learning and Development professionals. Many businesses are now transforming their content, while others raise concerns around its implementation. Videos are not the panacea, but this article looks to bust some of the myths associated with video in learning.

Myth #1: Video Learning Is Just Passive Learning.

Myth #2: It Takes Too Much Bandwidth.

Myth #3: You Can’t Control The Pace.

Myth #4: It’s Just Too Expensive.

Top 9 Tools For A Free Online Education - MOOCs, OER, Open Content - <http://www.lifehacker.com.au/2016/02/top-10-tools-for-a-free-online-education/>

1. MOOCs - MOOCs are a category unto themselves, but there are plenty of individual MOOC providers and platforms to look to, including the universities themselves, such as Stanford Online and MIT Open Courseware. Popular commercial and non-profit organisations that serve up courses from multiple sources include Academic Earth, edX, Class Central, Udacity, Coursera, Udemy and FutureLearn.
2. SkillShare <https://www.skillshare.com>
3. University of Reddit - <http://ureddit.com>
4. CourseBuffet - <https://www.coursebuffet.com>
5. Alison - <https://alison.com/>
6. Project Gutenberg - <https://www.gutenberg.org/>
7. Khan Academy - <https://www.gutenberg.org/>
8. iTunes U - <https://www.apple.com/support/itunes-u/using/>
9. Open Culture - <http://www.openculture.com>.

A Short Overview of 12 Tools for Creating Flipped Classroom Lessons - <http://www.freotech4teachers.com/2015/12/12-tools-for-creating-flipped-lessons.html>

One of the most frequent requests that I get is for suggestions on developing flipped classroom lessons. The first step is to decide if you want to create your own video lessons from scratch or if you want to develop lessons based on videos that others have produced. In this post we'll look at tools for doing both.

Developing flipped lessons from scratch with your own videos:

1. Knowmia Teach iPad app - <https://itunes.apple.com/us/app/knowmia-teach/id527216211>
2. Educreations - <https://www.educreations.com>
3. free eduClipper iPad app - <https://educlipper.net>
4. PixiClip - <http://www.pixiclip.com/beta>
5. Clarisketch - <https://play.google.com/store/apps/details?id=com.handlix.clarisketch>
6. Screencast-o-matic.com - <http://screencast-o-matic.com;>

Creating flipped lessons from videos produced by others:

1. Vibby - <http://vibby.com>
2. EDpuzzle - <http://edpuzzle.com>
3. Gooru - <http://gooru.org>
4. eduCanon - <http://educanon.com>
5. MoocNote - <http://moocnote.com> - a free tool for adding timestamped comments, questions, and links to video
6. Zaption - <http://zaption.com> - for video based quizzes.

Tools used in PBL MOOC <http://academy.schooleducationgateway.eu/en/web/developing-project-based-learning-in-your-classroom>

PowToon <https://www.powtoon.com/edu-home/> can be used for creating videos - check <https://www.youtube.com/watch?v=w44Cy1uio6s>.

Tools to be used by the participants (check https://docs.google.com/document/d/1d1RjqSwZQ8OkcslpC_ItKu40uN5dGDxzcK9p2E5GeM/edit):

- Learning Designer - <http://learningdesigner.org>; presentation <https://www.youtube.com/watch?v=S0edRboC9vI>
- Wejit - <http://www.mywejit.com/>
- Rubistar - <http://rubistar.4teachers.org/index.php>
- Padlet - <https://padlet.com>; other learning diaries recommended: <https://tackk.com>, Glogster, Dipity and Google Documents
- Mentimeter - <https://www.mentimeter.com>
- Dotstorming - <https://dotstorming.com/>
- Trading card - <https://bighugelabs.com/deck.php>

Do's & Don'ts for MOOCs & SPOCs - Lorri Freifeld - <http://pubs.royle.com/publication/?i=336393&p=22>

Best practices for developing Massive Open Online Courses and Small Private Online Courses.

MOOCs IN A BLENDED LEARNING CONTINUUM

By Dr. Timothy Brannan, Professor, Central Michigan University

Much has been written about Massive Open Online Courses (MOOCs) and how they will affect higher education. However, very little has been explored about how these curricula can be leveraged in a blended learning

environment in corporate training. The "Blended Learning Continuum"—from face-to-face to virtual course delivery—provides a useful tool on how trainers can effectively infuse technology tools, including MOOCs,

into their classroom. This Blended Learning Continuum is a practical guide that allows trainers to better understand their role in addressing integration of technology in the classroom to improve learner achievement.

BLENDED LEARNING CONTINUUM

	Teacher Controls Learning "Sage on the Stage"	Shared Control	Student Control of Learning "Guide on the Side"
	Face-to-Face/Traditional Model		Online/Virtual Model
	Time and Space Constraints	Flexible Time/Space Requirements	Flexible Time/No Space Requirements
	Technology/Online Enhanced	Hybrid/Combination	Virtual/Online (100%)
Student Learning	Traditional Classroom. Work completed on paper or online in class.	Classroom/Online (at-school and out-of-school learning supported). Work done on paper or online.	Online (Home and School—100% Online). Work done online. Could be in a local computer lab.
Teacher Instruction	Classroom and online. May post supplemental lessons online (or on blog/wiki/iTunes/TeacherTube).	Classroom and online. May have face-to-face meetings once or more per week and post lessons online.	Online collaboration tools, discussion forums, e-mail, lessons online. Teacher holds physical and virtual office hours.
Teaching Tools	Teacher directed, traditional lecture/face-to-face. Technology and online tools used (PowerPoint, streaming video, student response systems, interactive whiteboards, online work, student blogging, discussion board).	Teacher guided and computer based. Online tools primarily support face-to-face instruction; tools include a course management system (such as Moodle or Blackboard), paperless assignments, discussion board, e-mail, Skype, and Facetime.	Teacher facilitated and computer based. Online tools for direct instruction such as a course management system (such as Moodle or Blackboard), paperless assignments, discussion board, e-mail, Instant Messaging, Skype, and Facetime.
Content/Curriculum	Paper and Online. Textbook/Teacher Developed/Supplemental/Technology/Online (may use computer-based instruction such as Virtual Field Trips, Webquests, or other online tools).	Paper and Online. Textbook/Teacher Developed/Supplemental Materials/Technology/Online (may use computer-based instruction such as Virtual Field Trips, Webquests, or "Flipped Classroom").	Paper and Online. Textbook/Teacher Developed/Supplemental Materials/Technology/Online (may use computer-based content such as E2020, Plato, Compass Learning, or Connections Academy).
Integration of Massive Open Online Courses	Used primarily as supplemental learning/remediation. Kahn Academy—just-in-time modules.	Used as supplemental or complementary learning. Can introduce/reinforce concepts presented face-to-face.	Infusion of course materials from MOOC with online course content to meet outcomes and objectives.
Educational Support Issues	Professional development necessary to provide teacher with the tools necessary to integrate technology in the "traditional" classroom to improve student achievement.	Professional development needed to convert face-to-face content online. Instructional design key. Learning and content management system implementation and support. Student training/preparedness.	Professional development needed to convert face-to-face content online. Learning and content management system implementation/support. Student training/preparedness—self-motivation.

SOURCE: DR. TIMOTHY BRANNAN, TIM.BRANNAN@CMICH.EDU

26 | SEPTEMBER/OCTOBER 2015 **training**
www.trainingmag.com

Designing MOOCs for professional learners - Allison Littlejohn, Colin Milligan - <http://www.openeducationeuropa.eu/en/article/Design-Patterns-for-Open-Online-Teaching-and-Learning-Design-Paper-42-4> (republished at <http://openeducationstudio.eu/content/do-we-really-know-how-design-mooc-professional-learning>)

MOOCs have the potential to transform professional learning, but require learners to be self-regulated. Most MOOCs are not designed in ways that encourage self-regulated learning. Therefore there is a need for design tools that can guide instructional designers and teachers in designing MOOCs that promote self-regulation. This paper presents *two toolsets* to guide MOOC design. MOOC-SRL (Self-regulated learning) patterns allow the sharing and reuse of MOOC designs that encourage self-regulation. These design patterns demonstrate ways in which courses can take advantage of the knowledge and expertise that professional learners bring to their formal learning experience, and highlight the importance of course design that engages professional learners and meets their individual needs. The MOOC-DTQ (Design Team Questionnaire) is an audit tool that guides instructional designers in pedagogic design decisions made at platform (macro) level as well as at course (micro) level. The tool enables instructional designers to question their design decisions and provides possible interventions that may improve their design. These tools were developed as part of a larger study funded by the Bill and Melinda Gates Foundation MOOC Research Initiative.

MOOCs and Open Educational Resources: A Handbook for Educators - <http://intelligenttelevision.com/research/redefining-open>

MOOCs and Open Educational Resources: A Handbook for Educators is being made available for university faculty, educators, and educational producers involved in producing online courses. The guide is a step-by-step manual to how to produce and distribute educational video content under the freest of licenses, with an emphasis on Creative Commons. It is hoped that some utility may be found in its pages by all kinds of readers, whether one is a staff videographer or a chaired senior faculty member or a freelance video editor, or in any position around and in between.

The structure of the Handbook follows the key stages of video course production, with analysis and support at its core dedicated to methods of keeping video content free through all the stages of course pre-production, production, post-production, and distribution. The Handbook also provides some notes on the history of online course production and Open Courseware (OCW) and some thoughts about the future of educational video.

The Handbook situates educational video production in the context of more than 100 years of moving-image work at universities and beyond. Indeed, the booklet draws on work of educational producers from the early 1900s – works such as Charles Urban, *The Cinematograph in Science, Education, and Matters of State* and the 1920s journal *Visual Education*.

How we produce MOOCs at BU - <http://www.bu.edu/dli/how-we-produce-moocs-at-bu/>.

Making a MOOC at TUM: A Handbook for Instructors and Course Teams - https://www.mz.itsz.tum.de/fileadmin/w00bgq/www/eLearning/pdf/MOOC_Handbook_TUM_20160408.pdf.

MOOC Development Checklist - https://courses.edx.org/c4x/edX/edX101/asset/edX_MOOC_Development_Checklist-ally.pdf.

Differences and Commonalities – A comparative report of video styles and course descriptions on edX, Coursera, Futurelearn and Iversity - Jeanine REUTEMANN

University of Applied Sciences and Arts Northwestern Switzerland,

Institute Aesthetic Practice and Theory, jeanine.reutemann@fhnw.ch - page 383 -

<http://emoocs2016.eu/wp-content/uploads/2016/02/proceedings-emoocs2016.pdf>

This paper reports a comparative overview of MOOC courses from edX, Coursera, Futurelearn and Iversity. The sample covers courses published between September 2014 and January 2015 and the comparison focuses on different video styles as well as course descriptions on the platforms.

Based upon this data set of MOOCs (N=449) this study shows noteworthy facts about the state of MOOC production. Talking head is the most common video style overall on all four MOOC platforms (87%), followed by or in combination with Presentation slides (38%).

The courses on the European platforms Futurelearn and Iversity show a highly significant difference in the amount of work effort per week description compare to the US platforms edX and Coursera. In addition, Futurelearn has the shortest course week duration compare to the other platforms.

Ossiannilsson, E., Williams, K., Camilleri, A. F., & Brown, M. (2015). Quality Models in Online and Open Education around the Globe: State of the Art and Recommendations - <http://eric.ed.gov/?id=ED557055>

Recommendations to Stakeholders:

From the research study, a set of recommendations were formulated, together with proposed actions for

stakeholders. The recommendations are:

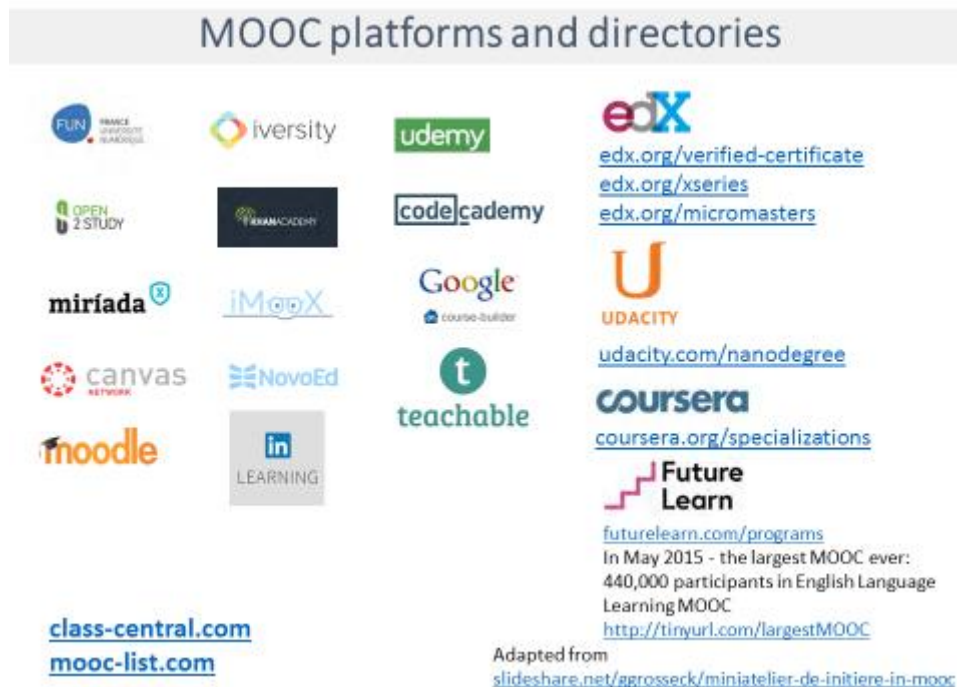
1. Mainstream e-learning quality into traditional institutional quality assurance;
2. Support the contextualisation of quality systems;

3. Support professional development, in particular through documentation of best practice and exchange of information;
4. Communicate and promote general principles;
5. Assist institutions in designing a personalised quality management system;
6. Address unbundling and the emergence of non-traditional educational providers;
7. Address quality issues around credentialisation through qualifications frameworks;
8. Support knowledge transfer from open and distance learning to traditional quality systems;
9. Support quality assurance audits and benchmarking exercises in the field of online, open, flexible, e-learning and distance education;
10. Encourage, facilitate and support research and scholarship in the field of quality; and
11. Encourage, facilitate and support implementing quality assurance related to new modes of teaching.

12. Portals/directories of MOOCs

- MOOC.ca (<http://mooc.ca>)
 - Provided by Stephen Downes (books, newsletter) and George Siemens as a place to host news, information, aggregator for studies/projects related to MOOCs.
- <http://openeducationeuropa.eu> - partner site <http://openeducationstudio.eu/>
- <http://mooc-list.com>
- <https://www.futurelearn.com>
- <http://platform.europeanmoocs.eu>
- <http://class-central.com> - monthly reports, track tools
 - <https://www.class-central.com/report/mooc-tracker/>
 - <https://www.class-central.com/report/follow-button-for-education/>
- <http://www.mooc.ca/providers.htm>
- <https://www.coursetalk.com>
 - <https://www.coursetalk.com/catalog>
 - <https://www.coursetalk.com/course-advisor>
- Learning with MOOCs - <http://www.scoop.it/t/learning-with-moocs>
 - Curated news on MOOCs
- MOOC Lab - <http://www.mooclab.club>
- MOOC Toolbox <http://www.mooclab.club/pages/toolbox>
 - Guides, resources, studies, discussions on MOOCs
- Online Courses Report - <http://www.onlinecourserreport.com/>
 - News, reports, rankings for online courses
- MOOC News and Reviews - <http://moocnewsandreviews.com/>
- European MOOCs. Research and news - <http://www.scoop.it/t/eco-european-moocs>
 - Official Scoop for the ECO Project
- MOOC It - <http://mooc-it.com/>
 - Resources collection curated by a PhD student.

13. Platforms for MOOCs



Vlad Mihaescu's Study on MOOCs Platforms

Structure Proposal - https://drive.google.com/file/d/0B_Hu8z--34eSQk1aYXJweUcxd1E/view?usp=sharing

Carmen Holotescu's review - https://drive.google.com/file/d/0B_Hu8z--34eSSE9VZFdINmZjYkU/view?usp=sharing

PhD Thesis Presentation - <http://www.slideshare.net/vladmihaescu/the-development-and-implementation-of-a-mooc-platform-model-from-a-technical-and-educational-perspective>

ECO Project Analysis of existing MOOC platforms and services - http://project.ecolearning.eu/wp-content/uploads/2016/03/ECO_D2_1_Analysis_of_existing_MOOC_platforms_and_services_vFINAL.pdf

Check other results <http://project.ecolearning.eu/about-eco/results/>

- Coursera
- EdX
- Udacity
- EMMA - <http://platform.europeanmoocs.eu/> - free hosting only till te summer of 2016

- **iMooX** - <http://imoox.at> - a fee should be paid
- **EUN Academy** <http://www.europeanschoolnetacademy.eu/> - check the conditions to host MOOCs here
- **MiriadaX**
- **Eduonix** - <https://www.eduonix.com> - Indian platform, most MOOCs are not free
- **OCEAN, MOOIN**, Fachhochschule Lübeck University - check <https://ec.europa.eu/jrc/en/publication/opencases-catalogue-mini-cases-open-education-europe>
- **Teacher Academy by School Education Gateway** - http://www.schooleducationgateway.eu/en/pub/teacher_academy.htm - PBL MOOC <http://academy.schooleducationgateway.eu/en/web/developing-project-based-learning-in-your-classroom> - 4 weeks started on 6 June 2016, check the active FB group <https://www.facebook.com/groups/projectbasedlearningcourse/>
- **LinkedIn Learning** - <https://www.linkedin.com/learning/> - October 24-30 - access to more than 5000 free online courses (~30 \$ / month otherwise)
 - MOOCs created with Lynda, based on transcribed videos, the interaction between participants and instructors could take part on LinkedIn groups - <https://www.edsurge.com/news/2016-09-22-linkedin-s-new-learning-platform-to-recommend-lynda-courses-for-professionals>.

Free hosting:

- **ECO Portal** - <https://ecolearning.eu/>; ECO + OpenMOOC = A platform created to facilitate the search for open educational resources - <https://hub0.ecolearning.eu/>
Courses offered: MOOC for developing MOOCs **sMOOC Step by Step** - <http://hub0.ecolearning.eu/course/smoooc-step-by-step-3ed> (check above); Videos for teaching, learning and communication - <https://hub2.ecolearning.eu/course/videos-for-teaching-learning-and-communication>, FC101 - To Flip Or Not To Flip - Discover the flipped classroom methodology (MOOCs for Teacher Series) powered by Open EdX - https://www.pok.polimi.it/courses/course-v1:Polimi+FC101+2016_M3/about

Create your own MOOC - <https://ecolearning.eu/#>

Have you followed one of our MOOCs? Did you enjoy them, the video contents and activities? Why don't you create your own course based on the same methodology? It is easy!

You can integrate your own content or reuse existing ECO MOOC OERs and approaches or integrate any other Open Resources available on the Web; organize them and managing the course following indications in the course 'sMOOC step by step'.

Do you think it is too difficult and/or engaging? No worries! You can also design and experiment your own 'pedagogical project' like an original teaching plan based on flipped classroom approach where the ECO sMOOCs (integrated also by original contents or other OERs) will be used both as contents and as methodological approach in class with your students.

Book your experimentation and you'll be supported in its creation by ECO staff.

Free MOOCs could be freely hosted only till the end of May 2016 - <http://project.ecolearning.eu/learn-more/how-to-become-an-e-teacher/>.

- **Iversity** - <https://iversity.org/en/higher-education> (Become a partner)
- **Udemy** - <http://www.udemy.com>
- **Eliademy** - <https://eliademy.com/>
- **Teachable** - <https://teachable.com/> - hosts the OERup! Course
- **Versal** - <https://versal.com/>
- **CourseSites** - <https://www.coursesites.com> - powered by Blackboard - 5 MOOCs free
- **OpenClassrooms** <https://openclassrooms.com/> - Earn degrees recognized by the French state - new MOOCs incubated in CourseLab <https://openclassrooms.com/courses/courselab>
- **Xuetangx** - <http://www.xuetangx.com/>; Chinese MOOC platform in top 5 providers - <https://www.class-central.com/report/xuetangx/>
- **Coursmos** - <https://coursmos.com> - Coursmos is the world's first learning platform that supports micro learning. It hosts several hundreds of micro-courses - online courses that are broken down into smaller, more manageable chunks. These courses are characterized by minutes-long lessons that can be taken while on the move; check *Coursmos Is A Bite-Sized E-learning Platform For The Twitter Generation* - <https://techcrunch.com/tag/coursmos/>
- **MOOC as a Blog** - example <http://www.atletycmooccamp.eu/>

Open Source Platforms:

- **Open EdX** - <https://open.edx.org/>;
 - information <https://open.edx.org/about-open-edx>
 - sites powered with Open EdX <https://github.com/edx/edx-platform/wiki/Sites-powered-by-Open-edX> (in English, French, Spanish, Chinese, Russian, Arabic, Portuguese, Turkish, etc):
 - *edX* - <http://edx.org> - The original, with more than 90 member institutions and 800 courses
 - *Stanford Open edX* - <https://lagunita.stanford.edu> - Stanford's Open edX courses
 - *EducateWorkforce* - <https://educateworkforce.com> - features premium, industry-tested course material that prepares individuals for a career in a technological vocation
 - *Online Open Education* - <https://www.oaed.org> - Architecture education
 - *FUN - France Université Numérique* - <https://www.fun-mooc.fr> - Lancée par le Ministère de l'Enseignement Supérieur et de la Recherche en octobre 2013, cette initiative vise à fédérer les projets des universités et écoles françaises pour leur donner une visibilité internationale
 - *MOOC FranceTv Education* - <http://education.francetv.fr/tag/revisions>
 - *IONISx* - <https://ionisx.com> (inclusive an Executive MBA 100% online)

14. Inventory of Romanian Initiatives related to MOOCs

- **UniCampus** unicampus.ro: Started in April 2014 under the initiative of University Politehnica Timisoara and Association of Technical Universities from Romania (rouni.ro); will offer cMOOCs on a platform based on Moodle - <http://unicampus.ro/courses.php>:

- M-commerce developed in the project <https://www.m-commerce.enterprises/?lang=en>
- OEW 2015, OEW 2016 - around materials of the events lecturers;

- **NOVAMOOC** novamooc.uvt.ro: Development and innovative implementation of MOOCs in Higher Education, West University Timisoara (2015-17);

- **MOOC.ro** mooc.ro: Developed by Moodle.ro, currently offers a MOOC about Moodle courses;

- **UniBuc Virtual** unibuc-virtual.net: Credis, Department of Distance Learning of University of Bucharest, offered 3 MOOCs for Teachers Training on a platform based on Google Apps;

- **University "Vasile Goldis" Arad** will offer MOOCs in partnership with Fédération Européenne des Écoles;

- **University „Babes Bolyai” Cluj Napoca** – eLIADA eliada.ubbcluj.ro/proiect - materials for 4 MOOCs - not hosted on a specific platform, also not piloted/facilitated;

- **MOOCs in Europe** - report EADTU, June 2016 - [http://eadtu.eu/images/publicaties/MOOCs in Europe November 2015.pdf](http://eadtu.eu/images/publicaties/MOOCs_in_Europe_November_2015.pdf), from <http://eadtu.eu/home/publications>

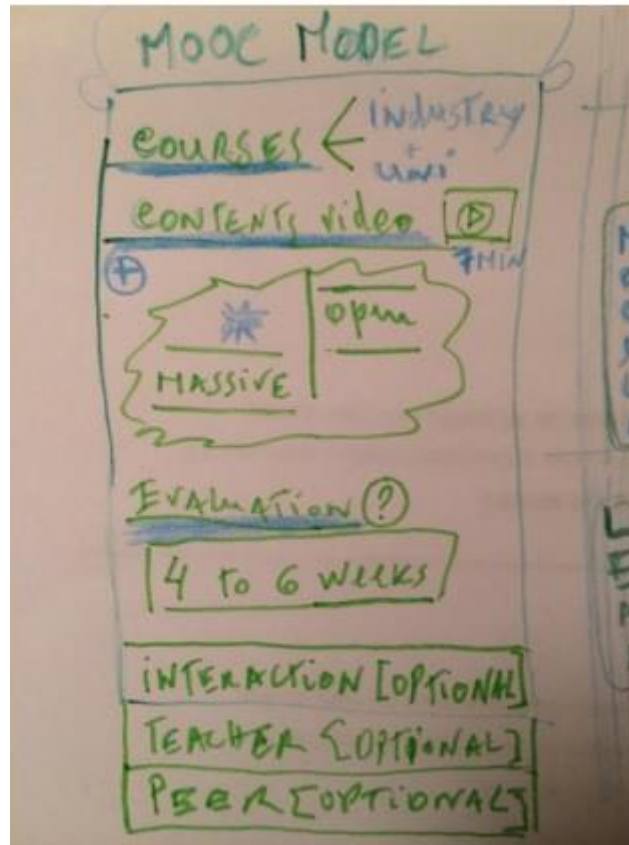
There are 2 chapters about Romania:

- **Methods and Models of MOOCs Integration in Traditional Higher Education** by *Diana Andone* cites the article [https://www.researchgate.net/publication/260987116 Integrating MOOCs in Blended Courses](https://www.researchgate.net/publication/260987116_Integrating_MOOCs_in_Blended_Courses)
- **A summer-day's MOOC** by *Sander Schroevers, Hans Seubring-Vierveyzer*, Part-time Academy, Amsterdam University of Applied Sciences (HvA): Analysing case studies of short-term faculty-led international experiences in Romania, Georgia, and the Netherlands, it reports on the process of trying to internationalise the non-mobile student in Higher Education, and to offer a distance MOOC-situated learning alternative for overseas students partaking in selected STIE programmes. The findings may have practicable implications for those who are involved in considering a similar blend of short-term international experiences programmes with open online courses.

Romanian partner: Facultatea de Business of the Universitatea Babes-Bolyai (in Cluj-Napoca, Romania).

- MOOCs on **Udemy** – **ONG Management**, Association Young Initiative [udemy.com/management-ong](http://www.civic.md/instruiri/31477-comunicat-de-presa-s-a-lansat-primul-curs-online-in-format-mooc-din-romania-dedicat-ong-urilor.html); (description <http://www.civic.md/instruiri/31477-comunicat-de-presa-s-a-lansat-primul-curs-online-in-format-mooc-din-romania-dedicat-ong-urilor.html>)

- **Gheorghe Asachi Technical University of Iași** - MOOC ModelX <https://www.facebook.com/anasilvadias/posts/10206001259210948>



- **Experiments** for integrating MOOCs in blended academic courses can be found at University Politehnica Timisoara (*Web Programming* and *Instructional Technologies* courses), University Ioan Slavici Timisoara (*Multimedia* course);

-**Critical Thinking MOOC** was developed and run in 2014 by Maastricht School of Management Romania on **Iversity** (msmromania.org/content/msmro-produces-first-mooc-eastern-europe);

- **eStudent.ro** – vlogging platform for courses; online courses as quality videos with assessment, without interactions between participants; check the conference in 16 April, 2016, Timisoara, UVT is partner - <http://ctrl-d.ro/editorial/educatie-prin-vlogging-cine-cum-si-de-ce-educatie-in-ctrl/>

Recruitment of experts for MOOC development - oct 2016 - <http://www.raa.ro/recrutare-experti-dezvoltare-modul-emcd-format-mooc/>

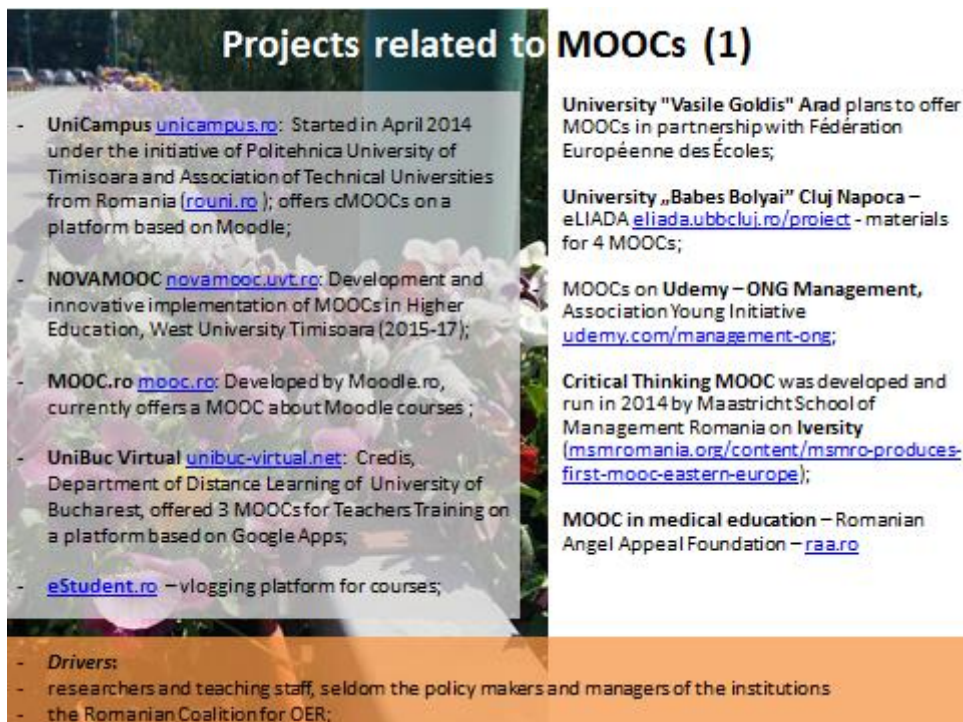
For medical education.

- **Workshops (eLSE) and national conferences** related to opening education organized by the **Romanian Coalition for OER;**

- **Studies, PhD thesis** – search MOOC Romania on [Google Scholar](https://scholar.google.com/).

Check slide 17-18, 21 at

<http://www.slideshare.net/cami13/strategies-for-opening-up-education-in-european-universities>



Projects related to MOOCs (1)

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MOOC in medical education – Romanian Angel Appeal Foundation – raa.ro

Drivers:

- researchers and teaching staff, seldom the policy makers and managers of the institutions
- the Romanian Coalition for OER;

Projects related to MOOCs (2)

- Experiments for integrating MOOCs in blended academic courses at Politehnica University of Timisoara (*Web Programming and Instructional Technologies* courses), University "Ioan Slavici" of Timisoara (*Multimedia and OOP* courses);
- MOOC accreditation at UPT - Digital Marketing - <http://atelieruldigital.iaromania.org/>
- Teacher continuing professional development using MOOCs at University "Ioan Slavici" of Timisoara - participation in MOOCs related to OE, but also to topics of taught courses and research directions;
- MOOCBuddy – the 1st Messenger chatbot for MOOCs - facebook.com/MyMOOCBuddy
- Workshops (eLSE) and national conferences (Open Education, SMART) related to open education organized by the Romanian Coalition for OER; pre-MOOCs with open badges
- Studies, PhD thesis – search MOOC Romania on [GS](https://www.google.com);

- For the next future
- Virtual mobilities through MOOCs
- Pilot for credit transfer system allowing students' participation in MOOCs to count towards their degrees; at this moment for some courses the participation in MOOCs can contribute to the activity mark
- Developing MOOCs together with companies assuring a better integration in the labour market.

- Check also:
 - "Opening Up Education in Romania" scribd.com/doc/264227758/Opening-up-education-in-Romania
 - OER in Romania
 - poerup.referata.com/wiki/Romania

Barriers in the OERs/MOOCs development and adoption

- rigid policies in formal education related to curricular systems and assessment practices;
- the lack of possibility to officially accredit online courses, in spite of an impressive number of projects related to online courses in the last 15 years, and of the policy proposals coming from different organizations. Such courses can only be used in a blended approach in formal education;
- the lack of strategies at national level related to MOOCs in formal and continuing education;
- teachers lack of time and interest to explore, understand, evaluate and use new technologies, OERs and MOOCs in teaching-learning process;
- a reduced number of training programs for adopting open educational practices;
- lack of incentives, official recognition and promotion for teachers implementing open educational practices.



NOVAMOOC

Development and innovative implementation of MOOCs in Higher Education

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