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OpenCases: A Catalogue of Mini Cases on Open Education in Europe

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Abstract

This catalogue contains 50 mini cases that highlight the practices of universities and educational institutions around open education in Europe.

It showcases the different strategies followed by institutions that are embracing the open education movement and opening up their content, research, recognition mechanisms and teaching practices. The catalogue provides a 'taster' of what is being done and can be done in open education in the EU, prompting the reader to look further into the initiatives that raise their interest.

Table of Contents

Preface	3
Free of charge [or for a small fee] online courses	4
Leuphana University	2
Bavarian Virtual University [Virtuelle Hochschule Bayern]	5
Open Courseware	Ε
KU Leuven	Ε
TU Delft	7
TU Darmstadt	8
University of Valencia	9
UNIVERSIA OCW	10
MOOC platforms	11
The European Multiple MOOC Aggregator (EMMA)	11
FutureLearn	12
MiriadaX	13
MOOIN, Fachhochschule Lübeck University	14
iM00X	15
iversity	16
OCEAN	17
MOOC collaboration	18
Eurotech Universities Alliance	18
OpenupEd	19
MOOCs at the institutional level	20
Universidad Carlos III de Madrid	20
Universidade Aberta de Portugal	21
Università degli Studi Guglielmo Marconi	22
UNINETTUNO	23
(Università Telematica Internazionale)	23
University of Copenhagen	24
University of Coventry	25
Computer Science Department Open Courses, University of Helsinki	26
Lund University	27
Open University (Open Universiteit)	28
University of Potsdam	29
Swiss Federal Institute of Technology Lausanne (EPFL)	30
University of Tartu	31
Universidad Politécnica de Madrid	32
Trinity College	33

Platforms and repositories for Open Educational Resources (OER)	34
Open AGH e-textbooks, AGH University	34
OpenLearn, The Open University	35
Canal-U, Centre National de la Documentation Pédagogique	36
OER Wales	37
Open Sverige, Karlstad University	38
PodCampus	39
VideoLectures.net	40
Wikiwijs Textbooks Square	41
Institutional initiatives for open access publishing	42
Electronic library, Brno University of Technology (BUT)	42
Modern Languages Open (MLO), Liverpool University Press	43
Open Access & ePrints Soton, University of Southampton	44
National initiatives for open access publishing	45
The Austrian Science Fund (FWF)	45
Open Archives	46
RCAAP- Portugal Open Access Science Repository	47
REAL – Repository of the Academy's Library, Hungarian Academy of Sciences (MTA)	48
UK Data Service	49
Open Journal System	50
UK Open Access Implementation Group	51
International initiative for open research data	52
OpenAire	52
New technologies for open education	53
EduFeedr, Tallinn University	53

Preface

The OpenCases mini catalogue is an outcome of the study: <u>OpenCases: case studies on openness in higher education institutions</u>. OpenCases was carried out by the <u>ICT for Learning and Skills team</u> of JRC IPTS in collaboration with researchers of the <u>Department of Education</u>, University of Bath, UK. They investigated current institutional strategies for opening up education on the basis of expert interviews and in-depth analysis of selected institutional cases.

This OpenCases catalogue of mini cases was a spin-off of the desk research done to identify relevant case studies for full analysis in the OpenCases study. The idea was to bring together a set of 50 mini cases that illustrate a variety of ways in which higher education institutions and other players in education from different Member States of the European Union have been doing open education. The catalogue presents both well-known and less-known cases of open education practices. It was designed to support the OpenCases study and is not an exhaustive catalogue of initiatives; instead it provides an indication of what is out there in terms of open education to be explored.

OpenCases is part of a broader research project (OpenEdu) JRC IPTS is conducting on behalf of DG EAC which explores the drivers and barriers for universities to open up education [OpenEdu Project]. It has been designed to support the Opening Up Education Communication (European Commission, 2013).

Besides in-house research, OpenEdu is running 5 studies in collaboration with external partners:

- <u>Moocknowledge</u>: a survey on MOOC learners (ongoing).
- OpenCred: desk research and case studies on recognition of non-formal learning via MOOCs (to be published Autumn 2015).
- *OpenSurvey*: a representative survey of higher education institutions in 5 European countries to enquire about their openness strategies (to be published Autumn 2015).
- OpenCases: case studies on openness in higher education (to be published Autumn 2015).
- BMOpen: case studies on business models for open education (ongoing).

Each of these studies aims to provide essential data to build an evidence-based picture of the trends of open education in European Member States, and also to show what it would take to push the field forward.

Yves Punie Project Leader, ICT for Learning and Skills

Andreia Inamorato dos Santos OpenCases Study Leader

Free of charge [or for a small fee] online courses

Case n∘1	
Name of the institution	Leuphana University
Name of the initiative	Leuphana Digital School
Country of origin	Germany
Country of origin Type	Germany Free online courses

Background: Leuphana University is as small German university which bundles all its online learning activities into one institution called Leuphana Digital School. This school offers independent Mentored Open Online Courses, which are designed for a diverse and global audience. Leuphana Digital School also includes blended learning in its approach.

Description of the practice: Unlike the traditional massive open online courses, Leuphana Digital School limits enrolment in its courses in order to provide a more personalised experience for all course participants. An important part of its approach is the training of staff who work as tutors and mentors. Tutors are the first contact point for participants whenever they have a question or encounter a problem. Mentors support the teams by providing feedback on drafts, supplying additional teaching materials, and evaluating final submissions. Another feature is the recognition of credits. While the course itself is free, those who wish to obtain a certificate must pay a fee of €20 (Euros).

Leuphana Digital School also provides a service for corporate environments in the form of its Corporate Mentored Online Courses, which are designed for and in cooperation with international organizations. Leuphana Digital School's corporate study programme includes advanced training courses for corporate environments which lead to academic qualifications for participating employees, and use specially tailored practical and theoretical content.

Audience: Mostly regional and national.

Recognition of learning achievements: Formal credits valid in the European Credit Transfer System (ECTS). After the successful completion of a course with Leuphana Digital School, participants are eligible for a university certificate worth 5 credit points (ECTS) that may be transferred to a degree programme.

Information on funding and business model: Not fully conclusive from the information on the webpage.

Case n°2	
Name of the institution	Bavarian Virtual University [Virtuelle Hochschule Bayern]
Name of the initiative	N/A
Country of origin	Germany
Туре	Online courses (free or for a small fee)
URL	http://www.vhb.org/en/homepage/

Background: Bavarian Virtual University (BVU) is a network of universities and universities of applied sciences set up in 2000 by the nine universities and the 17 universities of applied sciences of the Free State of Bavaria, one of the 16 German Länders.

Description of the practice: All higher education institutions in the federal state of Bavaria joined this network and their staff members are invited to offer free online courses to any student registered at any of the institutions within the network. The BVU provides online courses with an equivalent of two to six credits valid in the European Credit Transfer System (ECTS), which the member universities can integrate into their courses of study. This helps its member universities to enlarge and enrich their programmes and it helps the students to organize their studies more flexibly. Course materials are made available via an online platform, along with a tutoring service and assessment. The intensity of the support provided depends on the course offered. For example, problem-oriented individualised learning based on case studies requires less tutorial support than an online seminar in which individual topics are completed successively by students and students work together in small groups with tutorial support. The vast majority of courses currently offered are in German in a very broad range of academic subjects.

Audience: predominantly national (students from the member universities)

Recognition of learning achievements: Formal credits valid in the European Credit Transfer System (ECTS). Students can get graded certificates which are recognised at any of the participating higher education institutions

Information on funding and business model¹: Between 2000 and 2011 a total of €35.3 million (Euros) was spent on the BVU and its courses, including the tuition of the students (external students can take the courses paying a fee of €35 (Euros) per weekly teaching hour). Part of this financing came from the ordinary Bavarian state budget, and part from special programmes of the Free State of Bavaria and from German Federal resources. The BVU is able to utilize the infrastructure of the member universities. Furthermore, the member universities contribute one Euro per student per semester to the BVU's budget.

¹ Mini case based on the information available on the website.

Open Courseware

Case n°3	
Name of the institution	KU Leuven
Name of the initiative	OCW KU Leuven
Country of origin	Belgium
Туре	Open Courseware
URL	http://ocw.kuleuven.be/courses

Background: KU Leuven is the oldest university in Belgium. It provides course materials openly for several courses in English, and some course in Dutch under the umbrella of the European Open Courseware Project. KU Leuven states that the aim of this activity is to increase student mobility by offering the possibility of taking courses abroad without moving physically.

Description of the practice: In the process of opening up the education it offers, KU Leuven chose a few courses as pilots to be opened up to the global audience. These were selected from more than 8000 existing blackboard courses at KU Leuven. Most courses offered as open courseware (OCW) offer basic introductory insights into a certain topic and target a broad audience. These courses have a specific setup which allows students in OCW to follow a course by themselves without tutoring. Some courses offer an evaluation in the form of self-evaluation tests. All open educational resources used in the OCW KU Leuven website are provided under a Creative Commons License CC-BY-SA-NC, which states that it is allowed to use and share them. However, it is not possible to use them for derivative work, nor can they be used in a commercial context.

Audience: International

Recognition of learning achievements: Not offered unless the students are registered students of the KU Leuven.

Information on funding and business model²: Taking an Open Course offered at the KU Leuven is free, which means there is no tuition fee, and students do not have to register. No specific funding model information is provided.

² Mini case based on the information available on the website.

Case n°4	
Name of the institution	TU Delft
Name of the initiative	TU Delft Opencourseware
Country of origin	The Netherlands
Туре	Open Courseware and MOOCs
URL	http://ocw.tudelft.nl/
	https://www.edx.org/school/delftx

Background: TU Delft is the largest and oldest technological university in the Netherlands. It set up its open courseware (OCW) initiative to make educational materials (recorded lectures, slides, assignments, tests and answers) freely available on the Internet in 2007. It contains around 150 courses.

Description of the practice: OCW is available to Delft's own students in regular Bachelor's and Master's programmes (the effort to curate OCW materials was recently enhanced for this purpose). It offers a way to improve their academic results, particularly in subjects with high failure rates helping to explain complex concepts in different ways, for instance. But OCW can also be used by other users, without the need to register. No tutor interaction is provided, and there is no certificate associated with the use of the courses. Since 2010, it has been possible to download lectures and other videos via iTunes. Although MOOCs have received a lot of attention lately, Delft's OCW website is still very much used and its community of users is growing. In the last quarter of 2014, it had on average almost 1,300 visitors per day (30% from the Netherlands and 70% from abroad). The site has had over one million visitors since 2007. In 2012, the University together with other Universities (Notre Dame, UC Irvine, and 20MM Foundation), also started piloting "OpenStudy" groups, in which people from around the world can work together to study OCW. It is possible to earn OpenStudy informal badges based on evidence of activity within a group. Since 2013 the University has started to provide MOOCs, where teaching is offered (DelftX). TUDelft also makes available materials for high-school pupils and their teachers, such as entrance tests for mathematics or the Chemistry Curriculum.

Audience: International

Recognition of learning achievements: Informal, badges

Information on funding and business model³: Not conclusive from the website.

³ Mini case based on the information available on the website.

Case n°5	
Name of the institution	TU Darmstadt
Name of the initiative	OpenLearnWare
Country of origin	Germany
Туре	Open Courseware
URL	https://openlearnware.tu-darmstadt.de/

Background: TU Darmstadt is a multidisciplinary university in the German federal state of Hessen. The university developed a web-portal, OpenLearnWare, which contains selected lectures and course materials from the Technical University in Darmstadt.

Description of the practice: The portal offers course materials including videos and written materials free of charge and under Creative Commons licences. All TU Darmstadt teachers are encouraged to submit their course materials for review and publication on the web portal after legal clearance.

Audience: International

Recognition of learning achievements: N/A

Information on funding and business model⁴: The portal is financed via institutional resources of the TU Darmstadt.

8

⁴ Mini case based on the information available on the website.

Case n∘6	
Name of the institution	University of Valencia
Name of the initiative	OCW UV
Country of origin	Spain
Туре	Open Courseware
URL	http://ocw.uv.es/

Background: The University of Valencia's Open Courseware is a platform which includes class materials from subject courses offered at the University. It started to operate in 2008.

Description of the practice: The platform used for the open courseware at the University of Valencia is EduCommons, which is used by most of the universities that are members of the Open Education Consortium. By offering course materials openly, the University of Valencia caters for its existing students who wish use the OCW in addition to classroom materials and also for self-learning students from other universities, prospective students and teaching staff from other universities. Currently, the University of Valencia offers materials from more than 60 courses predominantly in Spanish.

Audience: International

Recognition of learning achievements: N/A

Information on funding and business model⁵: Developed as an institutional initiative. Details on funding not provided on the website. EduCommons platforms used for their Open Courseware are funded by the William and Flora Hewlett Foundation.

⁵ Mini case based on the information available on the website.

Case n∘7	
Name of the institution	UNIVERSIA OCW
Name of the initiative	N/A
Country of origin	Spain
Туре	Open Courseware
URL	http://ocw.universia.net/en/

Background: Universia started in 2000 as an internet initiative in the higher education sector. It was promoted by a group of Spanish universities with the support of the Spanish University Rectors' Board (CRUE), the Spanish National Research Council (CSIC) and sponsored by the Santander Group. It is coordinated by the Foundation Universia and its open courseware (OCW) is licensed under Creative Commons.

Description of practice: The network is composed of 11,000 Universities located in 15 countries: Andorra, Argentina, Brazil, Chile, Colombia, Spain, Mexico, Panama, Paraguay, Peru, Portugal, Puerto Rico, Dominican Republic, Uruguay and Venezuela. The initiative has 12 websites, one for each country, and another global site which offers information and contents from across the network. Through its membership, the Universia network reaches out to 10.1 million students, 8 million users and 850,000 university teachers. The materials published in the Universia OCW website must be subject to a Creative Commons license.

Audience: International

Information on funding and business model⁶: The Universia OCW is managed by the Foundation Universia, financed by member universities and the Santander Group.

⁶ Mini case based on the information available on the website.

MOOC platforms

Case n∘8	
Name of the institution	The European Multiple MOOC Aggregator (EMMA)
Name of the initiative	N/A
Country of origin	EU
Туре	M00Cs Platform
URL	http://www.europeanmoocs.eu/

Background: The European Multiple MOOC Aggregator (EMMA) is a 30-month pilot action supported by the European Commission. It aims to showcase excellence in innovative teaching methodologies and learning approaches through the large-scale piloting of MOOCs on different subjects. EMMA aims to provide a system for the delivery of MOOCs in multiple languages from different European universities. It also aims to help preserve Europe's rich cultural, educational and linguistic heritage and to promote real cross-cultural and multi-lingual learning.

Description of the practice: It is envisaged that the pilot platform will operate in two project stages, first by making available a significant number of existing courses from project partners and/or MOOCs providers and then by bringing on board a second tier of universities keen to experiment with MOOCs. Pilots are planned to run in 7 countries, with a total of 16 MOOCs and at least 60,000 users. Courses will be offered in the language of each country, and in English, and the pilot will trial an embryo form of multi-lingual translation by offering courses in Italian and Spanish as well. Advances in learning analytics will feature in the analysis and evaluation work and a series of innovative approaches will be assessed to make the piloted service sustainable in the medium to long term.

Audience: International

Recognition of learning achievements: Not specified.

Information on funding and business model⁷: Initiative is financed by the European Commission and by institutions' resources.

⁷ Mini case based on the information available on the website.

Case n∘9	
Name of the institution	FutureLearn
Name of the initiative	N/A
Country of origin	United Kingdom
Туре	MOOC platform
URL	https://www.futurelearn.com/

Background: FutureLearn is a consortium-based MOOC provider headquartered in the UK. It is formed by universities from Europe, Africa and the Middle East partnering with world-known UK institutions (British Council, British Library and British Museum) and the UK government. It is led by a non-profit company owned by the UK's Open University, and has been set up as the British response to large US MOOC providers, particularly Coursera, EdX and Udacity. It has high-level political support from the UK Government.

Description of the practice: The consortium offers an academically diverse selection of courses from universities and cultural institutions from around the world. These courses last several weeks and they offer not only OER but also discussion fora, quizzes, tests, assignments and tutorial support. Testing is available in several testing centres (but not for all courses). Participants can obtain participation and attainment certificates from the universities which deliver the courses. The consortium is working on recognition procedures as recognition is currently not quaranteed.

Audience: International

Recognition of learning achievements: Not clear. FutureLearn university partners offer students Statements of Participation for a fee of £29 (British Pounds) and Statements of Attainment by exams for some courses. However, the consortium states that they do not imply the award of credit points, nor do they confer a university qualification.

Information on funding and business model⁸: Whilst FutureLearn courses are free to learners, the platform maintenance and the production of courses are covered by the consortium partners. The Open University provided the initial investment for the platform. The Consortium states that their ultimate goal is to be self-sustaining in the future and it has introduced a variety of paid-for services that provide additional benefits to learners (fees for statements of participation as well examination fees in some courses).

 $^{^{\}rm 8}$ $\,$ Mini case based on the information available on the website.

Case n∘10	
Name of the institution	MiriadaX
Name of the initiative	N/A
Country of origin	Spain
Туре	MOOC Platform
URL	https://www.miriadax.net/

Background: MiriadaX is a MOOC platform which was rolled out in Spain, Portugal and Latin America. It is the leading MOOC provider for the Spanish speaking world and has expanded its reach beyond Europe into the wider Latin American market where increasing broadband availability is driving demand for online education.

Description of the practice: Launched in 2013, MiríadaX has already hosted 153 courses in Spanish and Portuguese, partnered with 33 universities mostly from Spain but also from various Latin American countries. It has a community of around 990 teachers and reaches more than half million participants.

Audience: International

Recognition of learning achievements: Information not conclusive on the website.

Information on funding and business model⁹: The platform was created with an initial investment of $\in 4$ million (Euros) from Telefónica Learning Services and Banco Santander's university partner network, Universia.

⁹ Mini case based on the information available on the website.

Case n∘11	
Name of the institution	MOOIN, Fachhochschule Lübeck University
Name of the initiative	MOOIN
Country of origin	Germany
Туре	MOOC Platform
URL	https://mooin.oncampus.de/

Background: Mooin is the open learning platform at the Fachhochschule Lübeck University, which offers MOOCs and other open video materials. MOOIN stands for "Massive Open Online International Network". It was developed by the FH Lübeck and its e-learning subsidiary on campus. It is an open source platform.

Description of the practice: Fachhochschule Lübeck University plans to develop and offer within its MOOIN platform twelve experimental MOOCs in various teaching and learning formats and thematic orientations in order to gain experience and expertise in running and developing MOOCs.

Audience: National

Recognition of learning achievements: Not specified.

Information on funding and business model¹⁰: Development of MOOIN is supported by €450,000 (Euros) grant from the German federal state of Schleswig-Holstein's Structural and Excellency Funds.

¹⁰ Mini case based on the information available on the website.

Case n∘12	
Name of the institution	iMOOX
Name of the initiative	N/A
Country of origin	Austria
Туре	MOOC platform
URL	http://imoox.at/wbtmaster/startseite/about.html

Background: In December 2013, the first and only MOOC platform (iMooX) in Austria was founded by the Karl-Franzens-University Graz and the Graz University of Technology. It offers MOOCs on various topics, which are available to all interested people free of charge.

Description of the practice: A characteristic feature of the iMOOX platform is that it offers MOOCs free of charge. Also, all course materials have Creative Commons licenses and can be reused for teaching purposes.

Audience: National

Recognition of learning achievements: Informal. iMOOX and universities which provide MOOCs over this platform issue statements of participation upon request and after participants have completed at least 75% of the course requirements. These certificates do not legally guarantee recognition at the universities in Austria.

Information on funding and business model¹¹: Development of the iMOOX platform was financed by a project of the State of Styria's Future Fund. It lasted from October 2013 till February 2015.

¹¹ Mini case based on the information available on the website.

Case n∘13	
Name of the institution	iversity
Name of the initiative	N/A
Country of origin	Germany
Туре	MOOC platform
URL	https://iversity.org/en/

Background: iversity.org is a privately-funded European online education platform, which has its registered office in Berlin, Germany. Some of the courses were winners of the MOOC Production Fellowship held in early 2013. It officially launched its MOOC platform online in October 2013 and as of February 2015, it has a user base of 600,000 online learners, enrolled in 63 courses offered by 41 partner universities.

Description of the practice: Since October 2013, iversity has specialised in providing MOOCs. Courses are free of charge and open for anyone to enrol and participate. Many of them are conducted in English or German, but also currently offered in other languages like Russian and Spanish. Iversity cooperates with individual professors and different European universities which are mostly German. Together with the Stifterverband für die Deutsche Wissenschaft (association of German foundations which fund scientific research), iversity launched "The MOOC Production Fellowship" as a competition for online courses. A jury chose 10 of the best MOOC concepts out of more than 250 entries. The winners were each awarded €25,000 (Euros) for the production of their courses.

Audience: International

Recognition of learning achievements: Credits valid for the European Credit Transfer System in the majority of courses. Iversity also issues certificates of attendance.

Information on funding and business model¹²: Since January 2014, online learners have been able to take the first paid-for final exams on campus, through which iversity earned its first revenues. iversity also generates revenue through the sale of certificates, which online learners receive after successfully completing courses. In addition to this, iversity has raised so far more than €5 million (Euros) in venture capital through revenue and through private investors (T-Venture, bmp media investors, BFB Frühphasenfonds, Masoud Kamali, Westtech Ventures, CRALS, Peter Zühlsdorf and Kontor B45).

 $^{^{\}rm 12}$ $\,$ Mini case based on the information available on the website.

Case n∘14	
Name of the institution (s)	École normale supérieure, École Normale Supérieure de Lyon, Ecole Polytechnique Federal Polytechnic School of Lausanne, the University of Leuven and Campus2 de Montréal.
Name of the initiative	OCEAN
Country of origin	France
Туре	MOOC Platform
URL	http://www.ocean-flots.org/

Background: OCEAN is a MOOC information platform, jointly run by French, Swiss, Belgian and Canadian higher institutions which offer MOOCs in French: École normale supérieure, École Normale Supérieure de Lyon, Ecole Polytechnique Federal Polytechnic School of Lausanne, the University of Leuven and Campus2 de Montréal.

Description of the practice: OCEAN is not a hosting platform like edX, Coursera, etc. This portal provides a list of quality-reviewed French MOOCs hosted by other platforms. French-speaking higher institutions submit their MOOCS to the OCEAN portal in order to give them unique visibility across the international Francophonie world. OCEAN does not prescribe the platform in which MOOCS should be offered. This portal is advertised as a quality label in the world of MOOCs and does not offer financing for MOOC development. It functions as a scientific journal, with an editorial policy and selection / validation carried out by a scientific editorial board. As in international scientific journals, submission to this portal is open to the entire community. The editorial committee in charge of the review (anonymous and independent) processes offers from all academic disciplines. MOOC providers are asked to submit their MOOCS for review.

Audience: International, French speaking world **Recognition of learning achievements:** N/A.

Information on funding and business model¹³: Information not provided.

¹³ Mini case based on the information available on the website.

MOOC collaboration

Case n∘15	
Name of the institution (s)	Technical University of Denmark, Eindhoven University of Technology, Federal Technical University École Lausanne (EPFL) and the Technical University of Munich
Name of the initiative	Eurotech Universities Alliance
Country of origin	EU
Туре	MOOC collaboration
URL	http://eurotech-universities.eu/education/#moocs

Background: The EuroTech Universities Alliance is a strategic partnership of four leading European universities of science and technology. This partnership is based on cooperation in research, education and innovation.

Description of the practice: Universities in the EuroTech University Alliance currently offer more than 20 MOOCS in English, German and French. The EuroTech Universities claim to have been forerunners in producing the first Massive Open Online Courses (MOOCs) in their respective countries. MOOCs offered by these universities use either the Coursera platform or the edX platform (e.g. Technical University of Munich). There are no formal entry requirements and MOOCs are free of charge. They are composed of video sequences supplemented by scripts and other learning tools, including interactive elements. Within MOOCs, participants communicate through social networks and fora. The Alliance also offers a forum for exchange of best practices and integration of recent developments in digital education at national and European levels. According to the information available on the initiative's website, the EuroTech Universities are also working towards building a MOOC-based continuous education programme. This has both online and onsite parts and will create an educational offer based on the complementary strengths of the partner universities. The alliance states that it aims to position EuroTech MOOCs as a European label of excellence.

Audience: International

Recognition of learning achievements: There is no University Alliance policy on this issue.

Information on funding and business model 14: The MOOCS are funded via institutional resources which in all four institutions mainly come from public sources.

¹⁴ Mini case based on the information available on the website.

Case n∘16	
Name of the institution (s)	EADTU
Name of the initiative	OpenupEd
Country of origin	EU
Туре	MOOCs collaboration
URL	http://www.openuped.eu/

Background: The OpenupEd initiative is a non-profit partnership for MOOCs set up by the European Association of Distance Teaching Universities (EADTU) and supported by the European Commission. This initiative works as the central node of a network of decentralized MOOC providers that are committed to a common philosophy of openness. OpenupEd focuses on increasing the visibility and guaranteeing the quality of the courses under its umbrella. Additionally, some common services are offered to its members.

Description of the practice: OpenupEd members must be institutions with the capacity to define a broad strategy around open education and to recognize MOOCs as part of the formal educational system. Participants can be awarded credits valid for the European Credit Transfer System (ECTS). Therefore, members have to be institutions which are part of the formal Higher Education system of their own country. The member institutions pay an annual fee of 2,500 euros.

Every university member of OpenupEd is free to choose what platform to use. Additionally, all content and data (including its analytics) are generated and curated at a member level. This decentralized model is expected to foster the diversity of pedagogical approaches, software and languages.

Audience: International

Recognition of learning achievements: Offering formal ECTS credits is recommended practice for the members of the consortium, but the final decision remains with the individual institutions.

Information on funding and business model: Mixed funds: membership and public funding

MOOCs at the institutional level

Case n∘17	
Name of the institution	Universidad Carlos III de Madrid
Name of the initiative	UC3Mx
Country of origin	Spain
	MOOCs
Туре	(but also open courseware and open access to research publications)
URL	https://www.edx.org/school/uc3mx

Background: Carlos III University of Madrid (UC3M) is a young institution (it was established by an Act of the Spanish Parliament in 1989). From its outset, it was intended to be a relatively small, innovative, public university, providing teaching of the highest quality and focused primarily on research.

Description of the practice: UC3M started its involvement in open education with Open Courseware in 2006, when it reached Spain under the auspices of the initiative Universia. UC3M currently offers 209 courses in the fields of Engineering, Humanities and Law and Social Sciences and has won several awards of excellence, for the quality of its OCW courses from Universia and the Open Courseware Consortium. In 2007, UC3M launched another initiative that indirectly favours open education - the E-Archivo (http://e-archivo.uc3m.es/), the university's Open Archive. It aims to collect, store and preserve in digital format intellectual production resulting from academic and research activities of the university community, and to offer open access to these works. In 2013 the first UC3M MOOCs were launched on the MiriadaX platform. Then in 2014, UC3M joined the MIT-Harvard's EdX and initially launched four MOOCs. Currently, all the university's open education initiatives (Open Courseware, MiriadaX, Khan Academy Zero Courses, YouTube Edu, iTunes U) are gathered on the "UC3M Digital" web site.

Audience: International

Recognition of learning achievements: Not conclusive from the information provided on the website

Information on funding and business model¹⁵: Not available on the website

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 $^{^{\}rm 15}$ $\,$ Mini case based on the information available on the website.

Case n∘18	
Name of the institution	Universidade Aberta de Portugal
Name of the initiative	iMOOC, ECO project
Country of origin	Portugal
Туре	MOOCs
URL	http://eco.imooc.uab.pt/elgg/

Background: The Open University (UAB) is the only solely distance learning public higher education institution in Portugal and it was founded in 1988. Among other activities, the Open University offers online courses usually to undergraduates and postgraduates and also MOOCs, using a specific platform called iMOOCs

Description of the practice: Universidade Aberta teamed up with a group of other distance learning institutions in Europe and the European Association of Distance Teaching Universities (EADTU) with support from the European Commission to create a European approach to MOOCs under the ECO project (http://ecolearning.eu/). However, Universidade Aberta took a further step and developed a specific pedagogical model for massive online open courses. MOOCs offered by Universidade Aberta follow a unique pedagogical model, designed around four main pillars: learner-centeredness, flexibility, interaction and digital inclusion. The pedagogical approach follows a situated learning approach and a socio-constructivist perspective. MOOCs in this pedagogical model are labeled iMOOCs, with their focus on individual responsibility, interaction, interpersonal relationships, innovation and inclusion. The iMOOC is directed at the adult population and they are open but require registration. Learning is demonstrated by creating artefacts (texts, videos, presentations, concept maps, etc.), published online and with free online access. The courses include a learning guide, detailed guidelines for the activities, proposed resources (video and / or audio) and weekly feedback. The assessment method is mostly formative. The ECO iMOOC course has facilitators who gather relevant information in order to monitor and improve the process, monitor social networks, provide weekly summaries, etc.

Audience: International.

Recognition of learning achievements: Informal and formal. Most participants receive a certificate of completion. In addition, the Universidade Aberta offers them formal recognition in terms of credits compliant with the European Credit Transfer System (ECTS), which are allocated following a review by a teacher or tutor. This review consists of the checking of two (or more) course assignments and the e-portfolio.

Information on funding and business model ¹⁶: Project funded by the European Commission.

¹⁶ Mini case based on the information available on the website.

Case n∘19	
Name of the institution	Università degli Studi Guglielmo Marconi
Name of the initiative	N/A
Country of origin	Italy
Туре	Open online courses
URL	http://mooc.unimarconi.it/index.php/corsi

Background: Università degli Studi Guglielmo Marconi is the first Open University in Italy, and was recognized by the Ministry of Education in March 2004. The university, which has its headquarters in Rome, coordinates a network of decentralized campuses in the different regional offices. The learning offer provided by the Marconi University includes 30 different undergraduate courses, more than 70 masters' degrees, PhDs, specialization courses, higher education and international study programmes.

Description of the practice: Open online courses allow access free of charge to learning materials and course contents, however prior registration is required. Students interested in MOOCS can take a maximum of two MOOC courses per year but cannot participate in two MOOCs at the same time. All those who complete the course successfully can receive, upon request and fee payment, a certificate of attendance.

Audience: National

Recognition of learning achievements: Formal via certificates. The Certificate of Attendance for MOOCs is not a recognized qualification and does not involve the allocation of credits. However students can opt for a special assessment procedure and obtain a Certificate of Credit (ACS) useful exclusively within the University Guglielmo Marconi for enrollment in a bachelor or master's course degree offered by the same university.

Information on funding and business model¹⁷: Not fully conclusive. The University charges for the Certificates of Attendance (50 Euros) and for the Certificates of Credit.

¹⁷ Mini case based on the information available on the website..

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Case n∘20	
Name of the institution	UNINETTUNO
	(Università Telematica Internazionale)
Name of the initiative	UNINETUNNO OpenupED
Country of origin	Italy
Туре	MOOCs
URL	http://www.uninettunouniversity.net/en/informazioni.aspx

Background: Università Telematica Internazionale (UNINETTUNO) based in Italy and established in 2005, is a public distance teaching and learning university. UNINETTUNO was created from NETTUNO, a consortium of 43 Italian and foreign public universities, and was established to further the success of the Med Net U – Mediterranean Network of Universities project which has 31 partners from 11 Mediterranean countries.

Description of the practice: The platform delivers courses in several languages and in various faculties including engineering, philosophy, conservation of cultural heritage, law, economics, psychology and communication sciences. Teaching and learning is carried out in 3 languages: Italian, English and Arabic. Almost all regular distance courses and programmes offered by the UNINETTUNO are available also as MOOCs as part of the OpenupEd¹⁸ partnership. Students have access to digitised and indexed on-demand video lectures, usable on PCs and on smart phones and tablets, including links to more-in-depth study materials (books and articles, practice work, slides, bibliographical references, lists of websites). Students can also use a collaborative discussion environment, a thematic forum which enables them to exchange views with their colleagues.

Audience: International

Recognition of learning achievements: Formal credits valid in the European Credit Transfer System (ECTS). Learners who enjoyed the MOOCs experience are given the option to transform these courses into credits by enrolling in the corresponding UNINETTUNO university course (involves fee). Thus, they can be included in a class and have the support of a tutor who will guide them during the course. Students' activities in MOOCS are recorded and depending on their course participation, they can take exams and receive credits valid in the ECTS.

Information on funding and business model¹⁹: UNINETTUNO originates from the international success of Med NetU (Mediterranean Network of Universities) Project. It was funded by the European Commission in the framework of the EUMEDIS Programme, and aimed to establish a Euro-Mediterranean Distance University. Currently, UNINETTUNO, as a distance university, finances its regular courses by charging tuition fees.

OpenupEd is an open, non-profit partnership offering MOOCs http://www.openuped.eu/

¹⁹ Mini case based on the information available on the website.

Case n∘21	
Name of the institution	University of Copenhagen
Name of the initiative	N/A
Country of origin	Denmark
Туре	MOOCs
URL	http://moocs.ku.dk/

Background: The University of Copenhagen is the oldest University in Denmark and one of the largest in the Nordic countries. It can be characterised as a research-intensive university. It offers several MOOCS over the Coursera platform in diverse disciplinary fields. In addition, the departments of the University of Copenhagen produce and offer open courses independently. Some major players in the production of these courses are the IT Learning Centre at the Faculty of Science, ITMEDIA at the Faculty of Humanities, and Centre for Online and Blended Learning at the Faculty of Health and Medical Sciences.

Description of the practice: The University of Copenhagen states that its primary reason for starting the MOOC initiative is its belief that MOOCs, with their use of new technologies, will ultimately lead to better quality more interesting education, not just for the numerous MOOC participants but also for the students enrolled at the University of Copenhagen. The University of Copenhagen's approach to MOOCS is to integrate MOOCs with on-campus courses in order to provide students with an opportunity to be part of a truly global classroom, arguing that thus students gain access to an international professional network and develop a global outlook on career opportunities. The University of Copenhagen's MOOCs are offered mostly in English.

Audience: International and national

Recognition of learning achievements: The University of Copenhagen does not offer credits that are valid in the European Credit Transfer System (ECTS) for completion of a MOOC. Course participants who complete a MOOC by doing all the assignments receive a Statement of Accomplishment or Verified Certificate. These documents are issued electronically by Coursera. Some credit-bearing courses require students from the University of Copenhagen to participate in a MOOC as part of their UCPH studies. In these cases, the students receive credits from the European Credit Transfer System for the campus-based course, which is a part of their own programme curricula.

Case n∘22	
Name of the institution	University of Coventry
Name of the initiative	Phonar/Picbod
Country of origin	United Kingdom
Туре	MOOC
URL	http://cuphotography.org/open-learning/open-classes/

Background: The Department of Photography at the University of Coventry offers two open courses which run in parallel to the regular third year bachelors' programme course. One of them - Phonar - [fo-'när] is a free and open undergraduate photography class. The second course, Picbod, is about photographing the body and is run as a second year BA programme module.

Description of the practice: In Phonar, framework lectures, seminars and workshops take place at Coventry University each week according to the regular class schedule. Versions of these are shared online via the Phonar website. Both in-class and online participants have a series of weekly tasks which are set over the course of the class. These are designed to build on each other although any can be taken up singly at any time. Participants are encouraged to share positive, constructive peer-feedback and support through the various environments (twitter, forum, Flickr, vimeo etc). Phonar teachers however do not guarantee everyone individual feedback though course leaders do look at all students' work and try to engage with them as often as possible. Online participants can also book an individual tutorial with course leaders.

Audience: International. The courses state that previous students range from undergraduates and postgraduate photography students to hobbyists and practicing professionals.

Recognition of learning achievements: The courses do not offer any form of formal credit. There is no information on whether statements of participation and attendance are issued

Information on funding and business model²⁰: The MOOCs run in parallel to the regular course at the University of Coventry and are funded through institutional resources. No specific information about course development cost is provided. However, optional online individual tutorials related to the course contents are offered for a fee (£20 for 20min).

²⁰ Mini case based on the information available on the website.

Case n∘23	
Name of the institution	Computer Science Department Open Courses, University of Helsinki
Name of the initiative	UniHel MOOCs
Country of origin	Finland
Туре	MOOCs
URL	http://mooc.fi/english.html

Background: The University of Helsinki has an open learning programme that has been developed by its Computer Science Department. The Department offers several MOOCs covering aspects of computer programming and software development, including fundamental topics (e.g. object-oriented programming) and instruction in specialised computer languages (e.g. Clojure).

Description of the practice: This approach to open learning, used at the Computer Science Department of the University of Helsinki, is unique for several reasons. First, it is one of the few examples of open learning at the departmental rather than the university level. Second, the courses have been developed using the department's own software, rather than an existing MOOC platform, and they are offered through its own website. Third, the open learning approach is tied to the Department's research programme, which focuses on agile (i.e. flexible) approaches to pedagogic development. Fourth, the approach is unique in that it offers some courses in English, others in Finnish, and some in both. Finally, the approach is unique in that open learning resources are tied to open source software: computer code for courses is uploaded on popular sites for sharing and collaborating on open source software (e.g. github.com and sourceforge.com). This enables users to easily access software associated with the course, propose modifications, or "fork" the project (i.e. create a derivative work, with links to the original). The open source repositories are quite active, with over 400 contributions (i.e. uploaded code/files) and seven "forks" (derivatives).

Audience: National and international

Recognition of learning achievements: Not conclusive from the information on the website.

Information on funding and business model²¹: Not conclusive from the information provided on the website.

Mini case based on the information avail-

²¹ Mini case based on the information available on the website.

Case n∘24	
Name of the institution	Lund University
Name of the initiative	N/A
Country of origin	Sweden
Туре	MOOCs
URL	http://www.lunduniversity.lu.se/international-admissions/distance-learning-moocs/moocs

Background: Lund University is one of the oldest and most prestigious research-intensive universities in Sweden and also in the world. It has 42,000 students and 7,680 employees who are based on campuses in Lund, Malmö and Helsingborg.

Description of the practice: In 2015, Lund University started offering three MOOCs - online courses that are open to all using the Coursera platform for MOOCs. The Lund University MOOCs are open to anyone with an interest, regardless of previous experience. The courses are free of charge and are taught in English.

Audience: International

Recognition of learning achievements: Learners can receive a certificate upon completion of a course. However, they cannot include a MOOC as a part of a degree or receive university credits for it.

Information on funding and business model²²: Not conclusive based on the information provided on the website.

²² Mini case based on the information available on the website.

Case n∘25	
Name of the institution	Open University (Open Universiteit)
Name of the initiative	N/A
Country of origin	The Netherlands
Туре	MOOCs
URL	https://www.ou.nl/

Background: The Open University of the Netherlands was already offering free online courses in the OpenER project in 2006. This practice continues and currently this Open University offers several MOOCs mostly in Dutch but also in English. The Open Universiteit is also a member of the EMMA project, an EU-funded platform which gathers together companies and universities from 8 European countries and gives access to MOOCs in different languages supported by automatic transcription.

Description of the practice: One of the courses offered by the Open Universiteit World Institute is an English MOOC on the development of blended learning. During this MOOC, participants analyzed several examples of blended learning. Participants can also get started on the additional task of designing a course in the effective and attractive use of internet technology. Participation in this course is free. If, however, participants want a certificate, they have to choose the paid certificate version (49.95 euros).

Audiences: National (courses mostly in Dutch)

Recognition of learning achievements: Informal, certificates.

Information on funding and business model²³: Open Universiteit is a public university and it is funded in similar way to all other public institutions in The Netherlands.

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²³ Mini case based on the information available on the website.

Case n°26	
Name of the institution	University of Potsdam
Name of the initiative	OpenHPI
Country of origin	Germany
Туре	MOOCs
URL	https://open.hpi.de/

Background: MOOCs platform of the Hasso-Plattner-Institut (HPI) for IT Systems Engineering at the University of Potsdam. OpenHPI courses are targeted at different audiences. Some of their courses address a general audience and introduce the foundations of information technology, e.g., the design and structure of the Internet and the World Wide Web, the structure and operation of database systems or security in information technology. Other courses target ICT professionals who wish to keep up with the very latest innovations in computer science research, e.g., In-Memory Data Management, the Semantic Web, or Multicore and Cloud Computing. Courses are conducted in German and English.

Description of the practice: OpenHPI courses match the curriculum at HPI, one of Germany's highest ranking computer science institutes. On the basis of instructional videos, interactive self-tests and practical exercises, participants receive knowledge on topics in IT technology. OpenHPI courses are conducted entirely online. All material can be accessed from any device that is Internet accessible. OpenHPI courses are free of charge and there are no prerequisites of any kind for participation. These courses enable individual participants to join in a virtual learning community with other participants free of charge. Discussion forums and virtual learning groups encourage a stimulating exchange of questions and collaborative learning of the subject.

Audience: International, HE students, professionals and all others who are personally interested in IT topics. OpenHPI also invites high school students to take part in their courses.

Recognition of learning achievements: Certificates. OpenHPI collects the homework and final exam results. After successfully completing all of the course requirements, a record of achievement becomes available on the participant's profile page on OpenHPI. The performance evaluation in the record of achievement is based on the exams and test results. The record of achievement is signed by the professor teaching the course attended.

Information on funding and business model: Not conclusive from the webpage. Initiative probably financed via institutional resources.

Case n∘27	
Name of the institution	Swiss Federal Institute of Technology Lausanne (EPFL)
Name of the initiative	N/A
Country of origin	Switzerland
Туре	MOOCs
URL	www.epfl.ch

Background: École polytechnique fédérale de Lausanne (EPFL, English: Swiss Federal Institute of Technology in Lausanne) is one of the two Swiss Federal Institutes of Technology and a pioneer institution in MOOCs initiatives in Europe. It joined Coursera in July 2012 and EdX in February 2013.

Description of the practice: EPFL claims that its first MOOC in 2012 was a huge success, and it currently offers more than 20 MOOCS, mostly in French in a wide range of disciplines. The institutional importance of MOOCs is evident from the numerous specialised staff (more than 10 staff members) employed at EPFL in charge of MOOC development and promotion. EPFL opened the Center for Digital Education on 1 April 2013 with a view to consolidating its competence and know-how in MOOCs-related matters and developing MOOC technologies and practices.

Audience: International

Recognition of learning achievements: Certificates over Coursera platform.

Information on funding and business model²⁴: MOOCs development is financed through institutional resources of EPFL which is a state-financed higher education institution.

²⁴ Mini case based on the information available on the website.

Case n∘28	
Name of the institution	University of Tartu
Name of the initiative	N/A
Country of origin	Estonia
Туре	MOOCs
URL	http://www.ut.ee/en/current-students/moocs

Background: The University of Tartu is Estonia's oldest university and a leading centre of research and training.

Description of the practice: The University of Tartu, at the time of this desk research, offered MOOCs on energy policies, analytical chemistry and programming in various subjects. Some of them, for example "Estimation of Measurement Uncertainty in Chemical Analyses" achieve a very high completion rate (52%). Some MOOCs are offered in English and some in Estonian. The required study-hours in the MOOCs are equivalent to 1 credit valid in the European Credit Transfer System (ECTS), which corresponds to 26 hours of learner work. MOOCs are fully web-based and participants who successfully complete the courses get certificates from the University of Tartu. The University of Tartu states that MOOCs aim to give various target groups access to university studies, diversify and introduce the opportunity of studying at the University, promote the University abroad and improve the quality of university studies and support the everyday learning process.

Audience: National

Recognition of learning achievements: Formal, by means of certificates and credits valid in the European Credit Transfer System (ECTS). The completed courses can be taken into account for the completion of degree programmes if the learner's higher education institution has a matching course in terms of learning outcomes.

Information on funding and business model²⁵: Not conclusive from the information available on the website.

²⁵ Mini case based on the information available on the website.

Case n∘29	
Name of the institution	Universidad Politécnica de Madrid Technical University of Madrid
Name of the initiative	N/A
Country of origin	Spain
Туре	MOOC
URL	http://www.upm.es/internacional/UPM

Background: The Technical University of Madrid (UPM) was founded in 1971 through the integration of existing older technical institutes and schools. Under the cooperation agreement signed with the Virtual Campus of the University of Zaragoza in 2013, the Polytechnic University of Madrid launched the Office of Tele-Education (GATE) which provides among other services a platform for MOOCs called iMOOC (Intelligent MOOC).

Description of the practice: Authors of iMOOC claim that unlike other MOOCs platforms, the new platform customizes or adapts the learning process context to the profile and options of each student, who can choose between different educational pathways. Its features are designed for GATE and the Virtual Campus of Zaragoza. During 2014, the platform offered courses in Spanish and English, among them courses on educational innovation, social networks applied to teaching and 'Software' free and open knowledge.

Audience: National

Recognition of learning achievements: Not conclusive from the website.

Information on funding and business model²⁶: Not conclusive from the information of the web page.

²⁶ Mini case based on the information available on the website.

Case n∘30	
Name of the institution	Trinity College
Name of the initiative	N/A
Country of origin	Ireland
Туре	MOOC
URL	https://www.tcd.ie/

Background: The first MOOC was offered in Ireland by Trinity College, Ireland's oldest university in 2014. It was on "Irish Lives in War and Revolution 1912-1923" and had more than 18,000 participants. Reruns are planned for 2015.

Description of the practice: This free, online 6-week course was offered on the FutureLearn platform and invited learners to explore the lives of the men, women and children who lived through war and revolution and the social changes that made modern Ireland. In doing so, the course looked beyond the famous names and focused instead on more personal questions such as: How do people experience war and revolution? How does political change, violence, total war, affect life in its most basic ways? In addition, participants were given the opportunity to engage with a variety of original sources: textual, visual and aural as well as contradictory viewpoints in order to learn about the contested nature of all history, and the challenges facing historians.

Audience: International

Recognition of learning achievements: Learners who studied this course had the opportunity to purchase a Statement of Participation on the FutureLearn platform. As with all courses offered via FutureLearn, these statements do not imply formal recognition of credits by participating universities.

Information on funding and business model²⁷: The development of this MOOC was financed by Trinity College's institutional resources.

²⁷ Mini case based on the information available on the website.

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Platforms and repositories for Open Educational Resources (OER)

Case n°31	
Name of the institution	Open AGH e-textbooks, AGH University (Akademia Górniczo-Hutnicza)
Name of the initiative	Open AGH e-textbooks
Country of origin	Poland
Туре	OER Repository and Open E-books
URL	http://epodreczniki.open.agh.edu.pl/etextbooks.php

Background: AGH (Akademia Górniczo-Hutnicza) University of Science and Technology in Krakow has been developing open educational resources in the STEM disciplines since 2010. The university developed Open AGH, the first Open Educational Resources Repository in the country at the university level. Open AGH e-books is a continuation of this work. The aim of the project is to develop open e-textbooks and an academic platform for publishing and sharing. E-books are prepared by staff in accordance with the syllabus used at the AGH which ensures their alignment with the University's educational offer.

Description of the practice: The first pilot e-textbooks in physics and mathematics for engineers include all the materials of the two subjects taught in all departments of AGH (syllabi cover all the departments in these subjects). The second phase of this successful project was initiated in 2013. The aim was to create digital textbooks and a content management system for developing, publishing and sharing STEM OER within the community. Academics, students, teachers and pupils have been able to access, use and re-use open e-textbooks since October 2014 to support their learning and teaching in STEM subjects. Open AGH e-textbooks are available under Creative Commons Attribution - Share alike 3.0 Poland license. They can be adapted for the local context (language, learning/teaching needs, culture etc.), updated, improved and brought back to the OER community. These e-textbooks are accessible without registration or log in.

Audience: National

Recognition of learning achievements: N/A

Information on funding and business model²⁸: Open AGH is funded by the University's institutional budget.

²⁸ Mini case based on the information available on the website.

Case n∘32	
Name of the institution	OpenLearn, The Open University
Name of the initiative	OpenLearn
Country of origin	United Kingdom
Туре	Open Courseware, free online courses
URL	http://www.open.edu/openlearn/free-courses

Background: In 2006, with funding from the Hewlett Foundation, the Open University carried out a substantial open content pilot – the OpenLearn platform to test out the impact of making materials freely available on the internet.

Description of the practice: OpenLearn gives access to over 600 free online courses from the Open University. These courses cover a full range of subject areas from introductory to postgraduate level. All of this content is available for reuse by learners and teachers under an open license. Enrolling in any of the free courses provides an activity record in the user's profile page which can be used for certification purposes. A review of OpenLearn discovered that it enabled regional and enquiry staff to undertake new and successful forms of information provision, advice and guidance, outreach and also widened participation. The platform played a part in the recruitment of formal students and helped attract substantial international attention for the university. The OpenLearn initiative also placed the Open University at the forefront of open education and web-based learning in Europe.

Audience: International

Recognition of learning achievements: Informal, badges.

Case n∘33	
Name of the institution	Canal-U, Centre National de la Documentation Pédagogique
Name of the initiative	Canal-U
Country of origin	France
Туре	OER repository
URL	http://www.canal-u.tv/

Background: Canal-U is a higher education digital video library. It is the reference site for mostly French audio-visual higher education resources. The project, initiated by the Ministry of Higher Education and Research, involves 88 institutions and is coordinated by the Higher Education Centre for Multimedia Resources and Information (CERIMES).

Description of the practice: Canal-U is an openly available platform in which teachers and students can find programmes enriched with educational materials, approved by scientific boards of French digital universities. It has over 3 million visitors per year and offers 10 000 resources of which one third are conference videos. Resources are free of charge, accessible without identification and have no licence. Some videos are also available for download in video or audio format. A new proposal from Canal U supports the creation of MOOCs by offering the use of Canal U channels to institutions to broadcast their videos.

Audience: International

Recognition of learning achievements: N/A.

Information on funding and business model²⁹: The creation of the initial platform was financed by the Ministry of Higher Education and Research.

²⁹ Mini case based on the information available on the website.

Case n°34	
Name of the institution	N/A
Name of the initiative	OER Wales
Country of origin	United Kingdom
Туре	Regional OER platform
URL	http://www.oerwales.ac.uk/

Background: Open Education Resources Wales is a Welsh national project which was initiated in September 2013 and brings together Welsh higher education institutions. The OER Wales initiative and project aims to: establish a showcase open educational resources portal, establish a network of open education practice champions, promote open education practice across the higher education sector in Wales, and launch an all-Wales MOOC (Short Massive Open Online Course) to help students survive their first few weeks at the University.

Description of the practice: The showcase OER portal was launched to present the best examples of open educational resources across the Higher Education Sector in Wales. The project has developed and launched a pilot version of the all-Wales_Student Survival Guide sMOOC (Short Massive Open Online Course) to help students survive their first few weeks at the University. This short course is free and open to anyone hoping to attend university for the first time. The course is available both in English and Welsh. Course participants are also able to undertake training to enable them to act as course facilitators / mentors for future participants. A second short pilot took place in February 2015, and the intention is to offer the course for wider delivery in August 2015. A key strength of the initiative is that it is collaborative and anchored in the national Welsh strategy for open education. The initiative fosters efficiency and cooperation rather than individual institutional approaches.

Audience: Mostly regional

Recognition of learning achievements: Informal, open digital badges for participating in the course and completing it. Not fully developed as the MOOCs is only in the pilot stage. Course participants will not receive credits for undertaking the course.

Information on funding and business model³⁰: Not possible to conclude from the webpage.

Mini case based on the information available on the website.

Case n∘35	
Name of the institution	Open Sverige, Karlstad University
Name of the initiative	Open Sverige
Country of origin	Sweden
Туре	OER repository
URL	http://oersverige.se/about-the-project/

Background: The Open Sverige project is run by a partnership of universities through ITHU (Swedish network for IT in higher education) and the teacher network Dela! The project coordinator is Karlstad University.

Description of the practice: In Sweden, there is a growing interest in open publication and the sharing of educational resources but the pace of development is claimed to be slow. The Open Sverige project recognises the needs of teachers in all educational sectors for support and guidance to be able to use OER pedagogically and with a focus on quality. The aim of this project is to stimulate an open discussion about collaboration in infrastructural questions regarding open online knowledge sharing. A network of ten universities, led by Karlstad University, provides a series of open webinars on the use and production of open educational resources. A virtual platform for Swedish OER initiatives and resources will also be developed within this project. The project will focus on how OER affects teacher trainers and decision makers. The national project covers various levels of education and aims primarily to improve teaching and develop special pedagogies related to the use of OER.

Audience: National, all levels of education

Recognition of learning achievements: N/A

Information on funding and business model³¹: The project is financed by .SE (Internet Infrastructure Foundation).

³¹ Mini case based on the information available on the website.

Case n∘36	
Name of the institution	Multimedia Kontor Hamburg
Name of the initiative	PodCampus
Country of origin	Germany
Туре	OER Repository - podcasts
URL	http://www.podcampus.de/channels

Background: PodCampus is a podcasting platform with lectures from universities and research institutes in Germany, Austria and Switzerland. The service is run by Multimedia Kontor Hamburg, a joint service company which belongs to all six public universities in Hamburg: Universität Hamburg, Hochschule für Angewandte Wissenschaften Hamburg, Technische Universität Hamburg-Harburg, Hochschule für bildende Künste, Hochschule für Musik und Theater Hamburg and the HafenCity Universität Hamburg.

Description of the practice: Lectures and interesting single events are recorded and released as audio and video files. Producers are universities, research and educational institutions from all over Germany, Austria and Switzerland. Topics range from introductory courses in various subjects on presentation and communication techniques of scientific problems, through to snowboard video podcasts. Podcampus provides the "showcase of science" posts, which are also of interest to a wider audience outside the universities. University lecturers, departments, and research and educational institutions can all adjust seminars or lectures on Podcampus. On Podcampus content can be searched both thematically and geographically and by other selection criteria. All podcasts have creative commons licenses.

Audience: International

Recognition of learning achievements: N/A

Information on funding and business model³²: Not conclusive from the website.

Mini case based on the information available on the website.

Case n∘37	
Name of the institution	Jozef Stefan Institute
Name of the initiative	VideoLectures.net
Country of origin	Slovenia
Туре	OER Repository
URL	<u>www.videolectures.net</u>

Background: Slovenia has been running many open education initiatives at all levels of education for several years. VideoLectures.Net is one of the largest higher education OER projects in Slovenia and has been a driver for innovation in open education. The VideoLectures portal was developed and is run by the Center for Knowledge Transfer, within the Slovenian leading research institution – the Jozef Stefan Institute.

Description of practice: VideoLectures portal is an award-winning, free and open access educational video lectures repository. The lectures are given by distinguished scholars and scientists at the most important and prominent scientific events like conferences, summer schools, workshops and science promotional events from many science fields. The portal aims to promote science, exchange ideas and foster knowledge sharing by providing high quality didactic contents not only to the scientific community but also to the general public. All lectures, accompanying documents, information and links are systematically selected and classified through the editorial process which also takes into account users' comments. The intellectual property of the videos is owned by the speaker of each particular video. The speakers give VideoLectures.Net permission to video record their presentations for educational purposes and authorization to distribute the presentations in various media. The videos can be removed, edited or distributed on the presenters' request. The content on VideoLectures.Net is released under the Creative Commons BY-NC-ND license.

Audience: International

Recognition of learning achievements: N/A

Information on funding and business model³³: Not conclusive from the information on the website.

Mini case based on the information available on the website.

Case n∘38	
Name of the institution	Dutch Ministry of Education
Name of the initiative	Wikiwijs Textbooks Square
Country of origin	The Netherlands
Туре	OER Repository
URL	http://www.wikiwijsleermiddelenplein.nl/

Background: Wikiwijs Textbooks Square is the result of merging two teaching material platforms, namely Wikiwijs and Textbooks Square. It is an open educational resources (OER) platform for teachers launched by the Dutch Ministry of Education to 'stimulate development and use of OER', 'improve access to both open and 'closed' digital learning materials', 'support teachers in creating their own learning materials and professionalization path', and to 'increase teacher involvement in development and use of OER.'

Description of the practice: Wikiwijs Textbooks Square focuses on all levels of education, from primary to higher education. All content in the platform is available under a CC licence. The platform offers a mix of open and closed educational materials, information on teaching methods and professional development materials on the use and application of teaching resources.

Audience: National

Recognition of learning achievements: N/A

Information on funding and business model³⁴: The platform is financed by the Dutch Ministry of Education

³⁴ Mini case based on the information available on the website.

Institutional initiatives for open access publishing

Case n∘39	
Name of the institution	Electronic library, Brno University of Technology (BUT)
Name of the initiative	N/A
Country of origin	Czech Republic
Туре	Institutional repository for open research
URL	http://www.vutbr.cz/en/libraries/openaccess/rectors-degree- 21-2013-pdf-p84774

Background: In December 2013, Brno University of Technology (BUT) signed the Berlin Declaration and publicly declared its support to the Open Access Movement. The University funded the Central Library project in order to create an open access repository at the BUT and it is one of the pioneers in this area in the Czech Republic.

Description of the practice: The BUT repository runs on the DSpace open source platform which is used by more than 1,000 institutions around the world, mainly high schools and universities, as a repository for their scientific production. In the Czech Republic, BUT uses this system along with other major Czech universities. DSpace allows the creation, administration and long-term preservation of digital collections and is very simply and clearly presented through a web interface. There is also full-text indexing and retrieval of documents and the opportunity to insert digital objects in bulk, including descriptive files. This is widely used when creating collections of theses and dissertations, which constitute the first and essential collection of the BUT Digital Library. The Central Library at BUT has also established two funds, which focus on supporting publishing in gold open access journals. The Library covers the publication fee in open access journals for BUT staff and students.

Audience: National

Recognition of learning achievements: N/A

Information on funding and business model³⁵: Development of the BUT repository was financed through the University Development Fund of the BUT.

³⁵ Mini case based on the information available on the website.

Case n°40	
Name of the institution	Modern Languages Open (MLO), Liverpool University Press
Name of the initiative	Modern Languages Open (MLO)
Country of origin	United Kingdom
Туре	Open access journal
URL	http://www.modernlanguagesopen.org/

Background: MLO is an example of a peer-reviewed platform for the open access publication of research from across the field of modern language studies. It is published by the Liverpool University Press, one of the world's leading publishers in the modern languages, in partnership with the University of Liverpool's Library.

Description of the practice: MLO functions as a Gold Open Access journal and focuses on Interdisciplinary research across modern languages and other fields. MLO materials have CC-BY or CC-BY-NC licenses. The journal has a peer review process and a rapid turnaround from submission to publication.

Audience: International

Recognition of learning achievements: N/A

Information on funding and business model³⁶: MLO articles are open access immediately upon publication (Gold), i.e. the author is charged a publication fee (APC) when the article is accepted. The normal publication fee is £250/\$350 for each published article. This fee may be waived for authors who do not have the means to cover it, after the article is accepted.

³⁶ Mini case based on the information available on the website.

Case n°41	
Name of the institution	Open Access & ePrints Soton, University of Southampton
Name of the initiative	ePrints Soton
Country of origin	United Kingdom
Туре	Institutional repository for open research
URL	http://library.soton.ac.uk/openaccess

Background: The University of Southampton is a pioneer in the area of open access to research products in the UK and has created its open access e-repository called ePrints Soton. In 2006, the University made it a requirement that all research be recorded in ePrints Soton and since 2008, all PhD and MPhil theses have also been deposited there.

Description of the practice: ePrints collects electronic copies of any research output (journal articles, book chapters, conference papers, theses, data and other types of research publications, including multimedia). They may include unpublished manuscripts and papers. The full text of many of these items is freely available for use in accordance with copyright and end-user permissions. The University of Southampton has a strict policy on open access and requires that its entire staff deposit bibliographic information for all research outputs in the ePrints Soton research repository, so there is a comprehensive institutional record of research activity. The University also requires that post-prints of journal and conference articles are deposited, and made open access where this is permitted by the publisher, to maximise the visibility and impact of research, since the importance of research visibility and impact are increasingly emphasised in the UK by the research councils.

Audience: International

Recognition of learning achievements: N/A

Information on funding and business model³⁷: The ePrints repository is financed through institutional resources of the University of Southampton.

Mini case based on the information available on the website.

National initiatives for open access publishing

Case n°42	
Name of the institution	The Austrian Science Fund (FWF)
Name of the initiative	N/A
Country of origin	Austria
Туре	National repository and policy on open access research
URL	http://www.fwf.ac.at/

Background: The Austrian Science Fund (FWF) is Austria's central national funding organization for basic research. It has signed the *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities*.

Description of the practice: The FWF requires all project leaders and project staff members funded by FWF to make their peer-reviewed research results freely available on the Internet and helps them to do so. The FWF covers a maximum of EUR 2,500.00 per publication in addition to the regular research project budgets. In the case of Hybrid Open Access journals, the FWF covers a maximum amount of EUR 1,500.00 per publication in addition to the project budget. If the fees are higher, authors may consider an alternative venue, or use the budget of an ongoing FWF project or other resources (e.g. cost-sharing with co-authors) to cover the differences. Additional costs for publications in subscription journals which are not related to Open Access (e.g. page charges, colour figures, submission fees) are no longer eligible for funding. FWF asks that its grantees, whenever legally and ethically possible, make all research data and similar materials which are collected and/or analysed using FWF funds, openly accessible. Data underlying the published research results should either be openly accessible immediately or - if not used in publications - up to two years after the project is finished. The FWF also requests that open access activities are indicated in the final report to them. Compliance with FWF's Open Access Policy has to be demonstrated by providing a permanent address where the full text of the publication can be accessed, read and downloaded.

Audience: National

Recognition of learning achievements: N/A

Information on funding and business model³⁸: FWF is financed by the Austrian State.

³⁸ Mini case based on the information available on the website.

Case nº43	
Name of the institution	Greek National Documentation Centre (EKT)
Name of the initiative	Open Archives
Country of origin	Greece
Туре	Repository for open access research
URL	http://openarchives.gr/

Background: Open Archives is the largest web portal which provides a single point of access to Greek scientific and cultural digital content of high quality. The service is maintained and continuously improved by the Greek National Documentation Centre (EKT). EKT is mandated by law to help collect, organize, preserve and make research widely accessible and cultural output and heritage of Greece.

Description of the practice: The Open Archives portal harvests metadata of collections in Greece that are open access compatible or have creative commons licenses. Content providers are libraries, archives, museums, academic and research institutions from Greece and Cyprus. Through openarchives.gr, users can search for academic dissertations, research articles, books, music scores, maps, etc., among topics that span the arts, humanities, sciences and medicine disciplines. The portal provides a user-friendly, single point of access to digitized contents deriving from authoritative sources for various research, school and leisure projects. Users may search for content, and also browse by types of content providers, lists of content providers and categories of content. For content providers, the portal offers a unique way of showcasing their important digitized collections, increasing their visibility, and reaching new audiences.

Audience: National

Recognition of learning achievements: N/A

Information on funding and business model³⁹: The portal is financed by state funding and EU projects.

³⁹ Mini case based on the information available on the website.

Case n∘44	
Name of the institution	FCCN- Fundação para a Computação Científica nacional (FCCN)
Name of the initiative	RCAAP – Repositório Científico de Acesso Aberto de Portugal
	RCAAP- Portugal Open Access Science Repository
Country of origin	Portugal
Туре	Repository for open access research
URL	www.rcaap.pt

Background: The RCAAP was a result of the cooperation between the Portuguese agency UMIC (Knowledge Society Agency) with FCCN (National Foundation for Scientific Computation) and University of Minho (Universidade do Minho), which in 2008 laid the foundations for a project which aimed to build a national aggregator for hosting Portuguese research repositories. The project started in July 2008.

Description of practice: The RCAAP constitutes a single entry point for searching, discovery and recall of thousands of scientific and scholarly publications, namely journal articles, conference papers, thesis and dissertations, distributed by several Portuguese repositories. Most of the material in the repositories is open access.

Audience: National

Recognition of learning achievements: N/A

Information on funding and business model⁴⁰: Not conclusive from the website.

⁴⁰ Mini case based on the information available on the website.

Case n°45	
Name of the institution	REAL — Repository of the Academy's Library, Hungarian Academy of Sciences (MTA)
Name of the initiative	REAL – Repository of the Academy's Library
Country of origin	Hungary
Туре	National repository for open research
URL	http://real.mtak.hu/

Background: The Repository of the Library of the Hungarian Academy of Sciences (MTA) contains full-text publications of research projects funded by the MTA and/or OTKA (National Research, Development and Innovation Office), which is the largest public national funder of scientific research in Hungary.

Description of the practice: Since January 2013, all researchers and employees at the MTA - including researchers at the subsidized research units and those researchers funded by the Hungarian National Research, Development and Innovation Office are required to make their scientific publications Open Access. Open Access can be achieved by either self-archiving in institutional or discipline-based repositories, or by publishing in Open Access journals or in hybrid journals offering paid Open Access.

The default research open access repository in Hungary is the REAL (of the Library of the Hungarian Academy of Science) but discipline-based repositories can be used wherever available (e.g. arXiv, PubMed, etc.). The URLs of the Open Access versions of publications have to be entered into the Hungarian National Scientific Bibliography (MTMT) database. The archiving system allows for embargo periods – if required by the publisher. Corrected manuscripts (final versions accepted by the journals after peer review) could be also archived. If the publisher does not accept any form of Open Access, publications should be archived in REAL, choosing the closed access option. For articles, the option visible to "registered users only" is sometimes applied, while the whole book should be visible to the "repository staff only", if the publisher does not allow Open Access deposit.

Funders of the research (MTA and OTKA) allow the use of available research grants for covering the costs of Open Access (processing charges or OA fees levied by hybrid journals).

Audience: National

Recognition of learning achievements: N/A

Information on funding and business model⁴¹: The Repository is funded by the Hungarian Academy of Science.

⁴¹ Mini case based on the information available on the website.

Case n∘46	
Name of the institution	UK Data Service
Name of the initiative	N/A
Country of origin	United Kingdom
Туре	National repository for open research data
URL	http://ukdataservice.ac.uk/

Background: The UK Data Service is a comprehensive resource funded by the Economic and Social Research Council in the UK created to support researchers, teachers and policymakers who depend on high-quality social and economic data. It is one of the first data archives of this kind in Europe and represents a single point of access to a wide range of secondary data including large-scale government surveys, international macrodata, business microdata, qualitative studies and census data from 1971 to 2011. It is crucial resource, which allows for openness of research practice in higher education in the UK.

Description of the practice: UK Data Service functions as service for researchers and other data users. Beside its data archiving function, it also provides extensive support, training and guidance to meet the needs of data users, owners and creators. UK Data Service promotes data sharing to encourage the reuse of data, and provides expertise in developing best practice for research data management. All documentation and resources are freely available. UK data service provides access to over 6,000 computer-readable datasets suitable for research and teaching purposes covering a range of different disciplines. The archive stores qualitative and quantitative data, multimedia files and non-digital material. Data come from official agencies - mainly central government, international statistical agencies, individual academics with research grants, market research agencies, historical sources, other data archives worldwide. Researchers funded by the research councils in the UK are mandated to deposit their data in the UK Data Service.

Audience: National

Recognition of learning achievements: N/A

Information on funding and business model⁴²: The UK Data Service is funded by the ESRC with contributions from the University of Essex and the University of Manchester.

⁴² Mini case based on the information available on the website.

Case n∘47	
Name of the institution (s)	Free University Berlin, University Konstanz and University Heidelberg
Name of the initiative	Open Journal System
Country of origin	Germany
Туре	Software for open journals
URL	http://www.ojs-de.net/

Background: The Open Journal System is a joint project, implemented by the Free University Berlin, University Konstanz and University Heidelberg, following the initiative of the German Research Community, the leading German national funder of research activities.

Description of the practice: The Open Journal Systems (OJS) allows the online publication of periodicals, journal management and differentiated organization of the editorial process at all levels. The aim of the OJS-de.net project is to facilitate the electronic publication of scientific journals at German universities on the basis of open access principles. Open Journal Systems (OJS) is basically open software for management and publishing of scientific journals. As open source software, OJS is being developed and adapted continuously by various institutions and individuals, the code is freely available and the programme can be used free of charge. OJS is in German and the software supports every step of the publishing process of scientific journals: from submission, assessment, publication and subsequent indexing. The number of installed and actively used OJS journals at the end of 2013 was over 7,000 worldwide and more than 330,000 published articles. In the German-speaking world, there were more than 200 OJS installations by the end of 2014.

Audience: International and national

Recognition of learning achievements: N/A

Information on funding and business model⁴³: The project is funded by the Deutsche Forschungsgemeinschaft (DFG) within the programme Scientific Library Services and Information Systems (LIS) and carried out by three project partners. The project will run for 2 years from 2014 to 2016.

⁴³ Mini case based on the information available on the website.

Case n°48	
Name of the institution	N/A
Name of the initiative	UK Open Access Implementation Group
Country of origin	United Kingdom
Туре	National open access coordination platform
URL	http://open-access.org.uk/

Background: The UK Open Access Implementation Group is a network of UK higher education institutions, research councils and other higher education stakeholders in the UK. It aims to add value to the work of the member organisations by increasing the rate at which the outputs from UK research are available on open access terms.

Description of the practice: The collaboration group approach is an interesting governance example which aims to improve, both strategically and practically, open access to research results. Its stated goals and activities are to: 1) Develop a compelling and realistic strategy for the implementation of Open Access in the UK, in the context of the wider 'open' environment, and to support the UK's evolution as a knowledge economy and the role of universities as organisations offering public value within that; 2) Ensure that this strategy reflects the various priorities of universities and others, including research excellence, the support of innovation, and student satisfaction; 3) Support, where appropriate, the development of policies that increase the take-up of Open Access. This may include collecting evidence to inform such policies; 4) Share information about the plans and activities of member organisations and others, and coordinate these as far as possible to support the take-up of Open Access; 5) Identify what can be done for/by each of a range of stakeholder groups to promote the take-up of Open Access and, where possible and appropriate, specify and support work to help them do it; 6) Act as a steering group for these coordinated interventions, where they are undertaken; 7) Provide accurate information about Open Access and the relevant work of its members to the sector and more widely.

Audience: National

Recognition of learning achievements: N/A

Information on funding and business model⁴⁴: It is a national working group/platform, so member stakeholders finance their own participation.

⁴⁴ Mini case based on the information available on the website.

International initiative for open research data

Case n°49	
Name of the institution	N/A
Name of the initiative	OpenAire
Country of origin	EU
Туре	Open research data repository
URL	https://www.openaire.eu/

Background: OpenAire is an Open Research Data Pilot, funded by the EU in Horizon 2020 consisting of 50 partners from all over the European Union. It aims to improve and maximise access to and re-use of research data generated by Framework Programme projects. It will be monitored with a view to developing the European Commission's policy on open research data in future Framework Programmes.

Description of the practice: The data repository includes data which are needed to validate results presented in scientific publications but also other data, including associated metadata, as specified by the data management plan of each research project. Projects participating in this pilot platform are required to deposit their research data and as far as possible, take measures to enable third parties to access, mine, exploit, reproduce and disseminate it. Projects are also required to provide information about tools and instruments at the disposal of the beneficiaries and necessary for validating the results, for instance specialised software or software code. Projects may opt out of the Pilot on Open Research Data in Horizon 2020 in several cases, including the need to protect results, to preserve confidentiality, for security reasons or to comply with rules on protection of personal data.

Audience: International

Recognition of learning achievements: N/A

Information on funding and business model⁴⁵: EU-funded platform in the Horizon 2020 programme.

 $^{^{\}rm 45}$ Mini case based on the information available on the website.

New technologies for open education

Case n∘50	
Name of the institution	EduFeedr, Tallinn University
Name of the initiative	EduFeedr
Country of origin	Estonia
Туре	New technologies for open education
URL	http://www.edufeedr.net/pg/edufeedr/faq

Background: EduFeedr is an online environment for managing and following open online courses that take place in blogs. EduFeedr provides tools for managing learning activities and visualizing learner progress. Currently it has been used in more than 40 open online courses in 5 countries. EduFeedr was designed and developed in the Centre for Educational Technology at the Tallinn University.

Description of the practice: EduFeedr software is specifically designed for following and supporting student activities in blog-based courses with a large number of participants in which it becomes a challenge to follow all the course discussions. EduFeedr is designed so that only facilitator needs a user account in the system to set up the course. Anybody can view the aggregated blog posts and comments without logging in. EduFeedr currently supports only blogs that run on Blogger or WordPress. A unique feature of EduFeedr consists of the social network diagrams that show connections between the participants. Technically EduFeedr is built as a plug-in for Elgg social networking engine. EduFeedr's source code is available under the GNU General Public License.

Audience: International, MOOC developers

Recognition of learning achievements: N/A

Information on funding and business model⁴⁶: No exact details provided on the website.

⁴⁶ Mini case based on the information available on the website..

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