

Opening up Education through the use of Digital Technologies:

A support framework for Higher Education Institutions

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JRC-Institute for Prospective Technological Studies

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7 institutes in 6 locations

Joint Research Centre the European Commission's in-house science service IRMM
Institute for Reference
Materials & Measurements.

Headquarters

BRUSSELS
KARLSRUHE

SEVILLE

IET
Institute for Energy
& Transport.

ITU
Institute for
Transuranium
Elements.

IPTS

The Institute for Prospective Technological Studies in Seville evaluates the socio-economic aspects of any issue at stake. It's placed in Seville.

- Policy studies 45%
- Policy intelligence platforms 15%
- Techno-economic bureaux 15%
- Economic Models 25%



ISM (ISPRA)

Ispra Site Managment.

IES

Institute for Environment & Sustainability.

IHPC

Institute for Health & Consumer Protection.

IPSC

Institute for the Protection & Security of the Citizen.

ICT for Learning and Skills (2005 - ...)



What:

- ICT for modernising and innovating E&T in Europe
- 21st century skills for digital economy and society



Why:

Evidence for more effective and relevant E&T in

Competent Competent Teachers

Open HE Institutions

Competent Teachers

Competent Schools

> 80 publications freely downloadable

 Principal clients: DG EAC & DG EMPL

Policy

- 2013 COM on Opening up Education;
 E&T 2020; Digital Agenda; New skills and Jobs; EU Recommendation on Key Competences for LLL,...
- Juncker priorities: DSM Jobs, Growth
 & Investment



Structure



- 1. Problem formulation
- 2. Understanding Open Education
- 3. Beliefs, practices, opportunities and challenges
- 4. Open Education framework
- 5. Final remarks



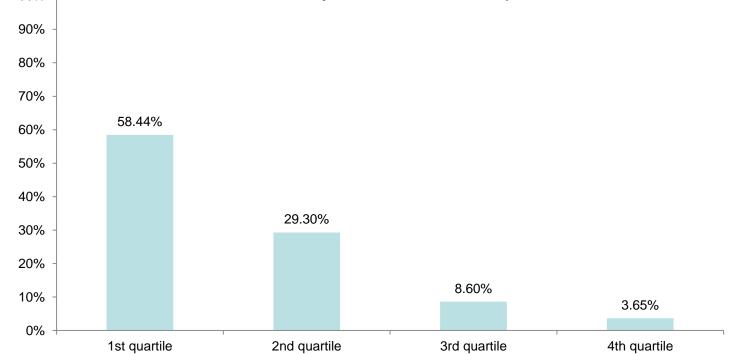
1. Problem formulation





20% of all MOOCs offered in US come from the top 5 universities (Princeton, Harvard, Yale, Columbia and Stanford) (ranking US News & World) (2015).

58‰ of all MOOCs offered by first 25% of top 100 US national universities









- However, it is not only (or not just) about MOOCs
- It is about Opening up Education (OE), modernising and innovating our HE systems in Europe through the use of digital technologies
- There is no shared understanding what OE means (at all levels)
- Most universities do not seem to have an OE strategy
- If there is a strategy, it is usually not embedded within overall institutional strategy
- As a result:
 - Ad-hoc, arbitrary and experimental activities



2. Understanding Open Education



Open education

From Wikipedia, the free encyclopedia

Not to be confused with Open educational resources.

en.wikipedia.org/wiki/**Open_education**

Accessed 14/10/2014

JRC IPTS definition of Open Education



It offers multiple ways of teaching and learning, building and sharing knowledge, as well as a variety of access routes to formal and non-formal education, bridging them.





New priorities for European cooperation in E&T 2020



September 2015

- 1. Relevant and high-quality skills and competences, focusing on learning outcomes, for employability, innovation and active citizenship
- 2. Inclusive education, equality, non-discrimination and promotion of civic competences
- 3. Open and innovative education and training, including by fully embracing the digital era
- 4. Strong support for educators
- 5. Transparency and recognition of skills and qualifications to facilitate learning and labour mobility
- 6. Sustainable investment, performance and efficiency of education and training systems



3. Beliefs, practices, opportunities and challenges



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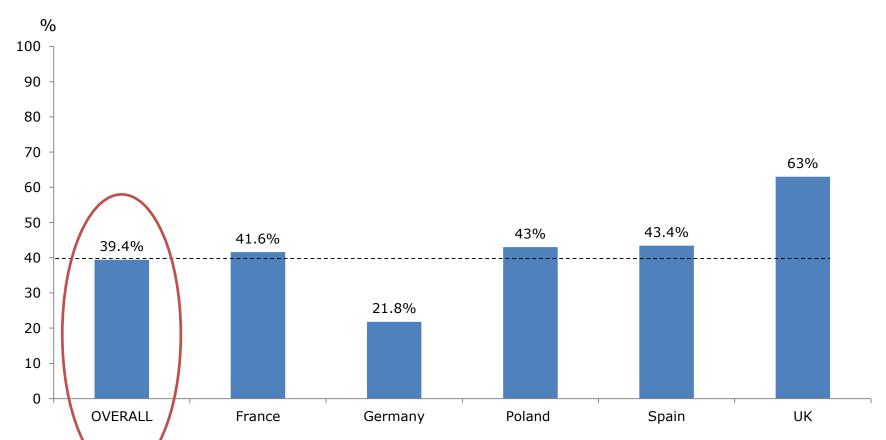
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2016





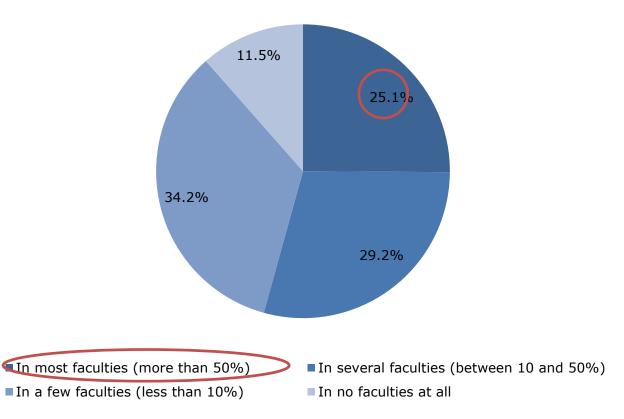
Is Open Education (in any of the different forms) provided within your institution?



Number of valid responses after weighting: 117 (for overall) and 144 (for country comparison) - Data from OpenSurvey study. JRC-IPTS 2015.

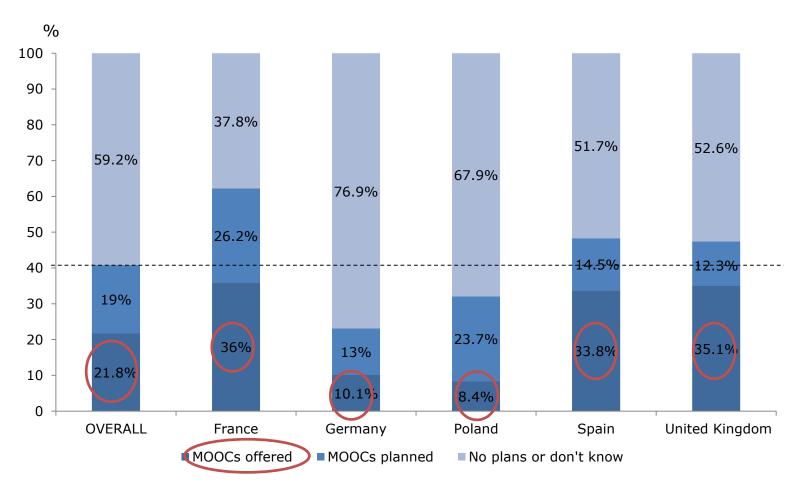


Provision of OE at the level of faculties (or similar units)



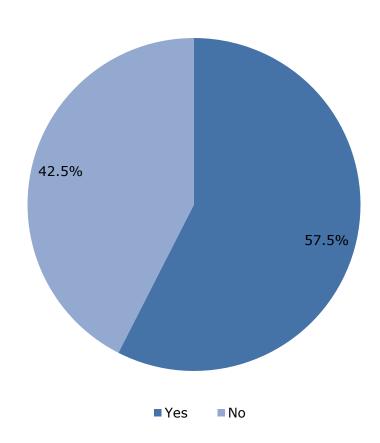


Offer of MOOCs



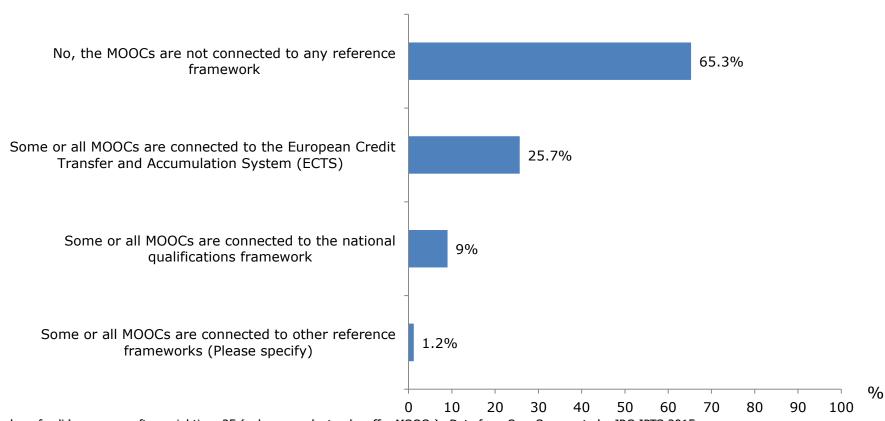


Is offering MOOCs part of your institutions's official educational strategy?





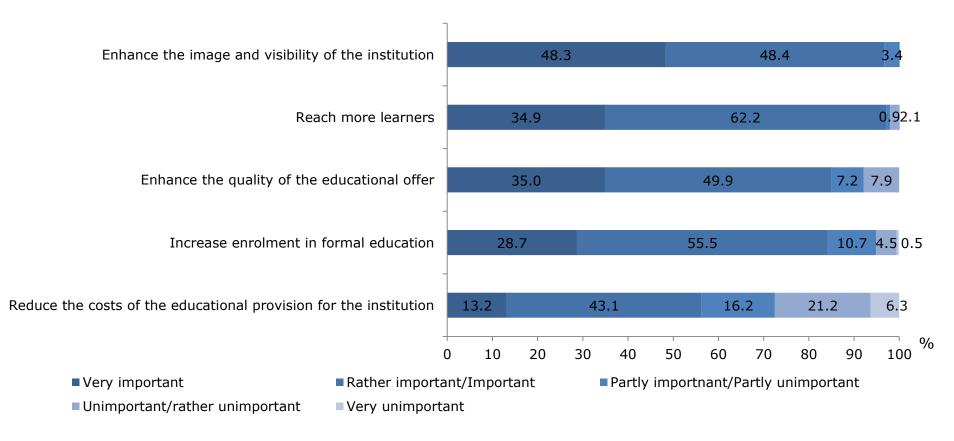
MOOCs and recognition



Number of valid responses after weighting: 25 (only respondents who offer MOOCs) -Data from OpenSurvey study. JRC-IPTS 2015.



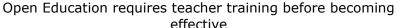
Factors for engaging with Open Education



Number of valid responses after weighting: 43 (Only respondents who provide Open Education)—Data from OpenSurvey study. JRC-IPTS 2015.



Barriers against Open Education



Formal recognition of Open Education is still an unresolved issue at the institutional level

Lecturers are used to traditional pedagogies that don't include Open Education

Open Education requires more financial resources than anticipated

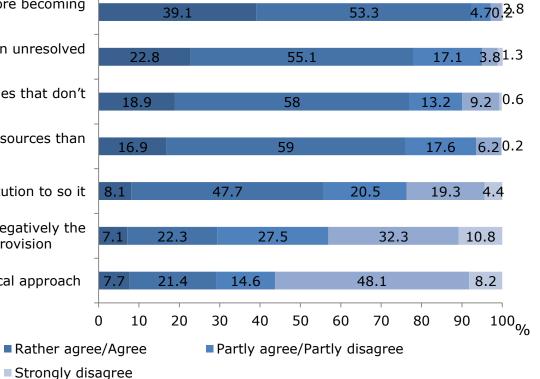
We do not see financial benefit for our institution to so it

There is a risk that Open Education affects negatively the quality of our institution's educational provision

■ Disagree/rather disagree

Open Education is not in line with our pedagogical approach

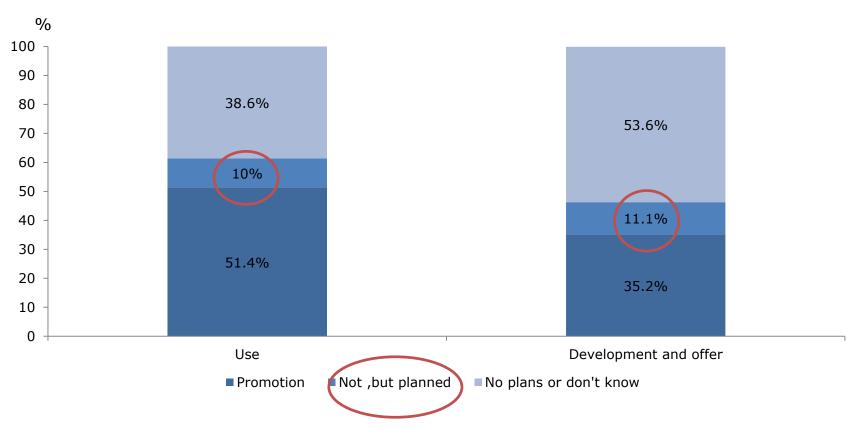
■ Strongly agree



Number of valid responses after weighting: From 108 to 115 depending on the question - Data from OpenSurvey study. JRC-IPTS 2015.



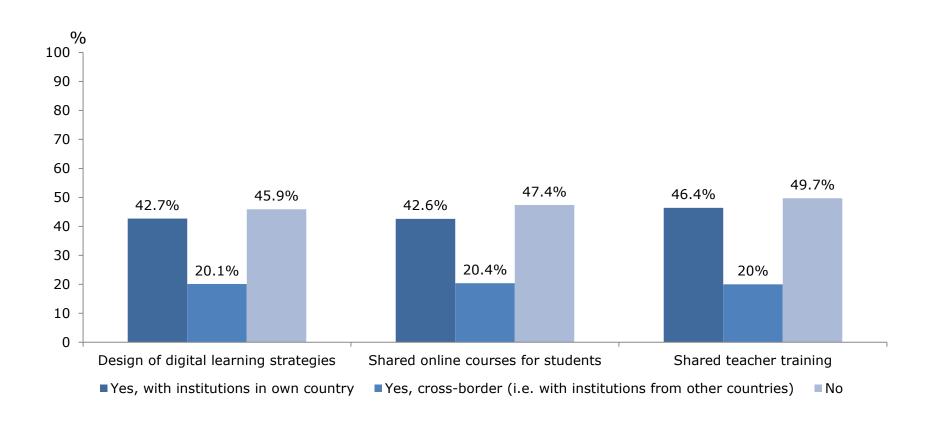
OER: Promoting - Planning - No plans (use & development)



Number of valid responses after weighting: from 108 to 114 depending on the question -Data from OpenSurvey study. JRC-IPTS 2015.

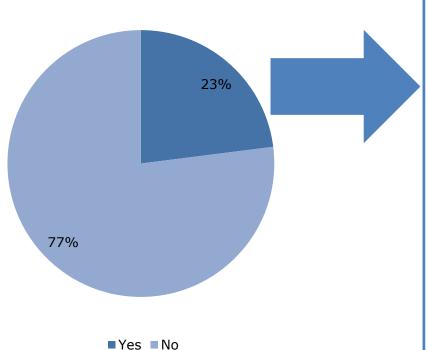


Collaboration of the institution in...





Has the engagement in Open Education produced so far financial benefits for your institution?



- Reach more students is the most common mentioned benefit for institutions.
- Others: marketing, small income directly generated by OE (external fund, freemium..), more quality and retention.

Source: OpenSurvey open auestion



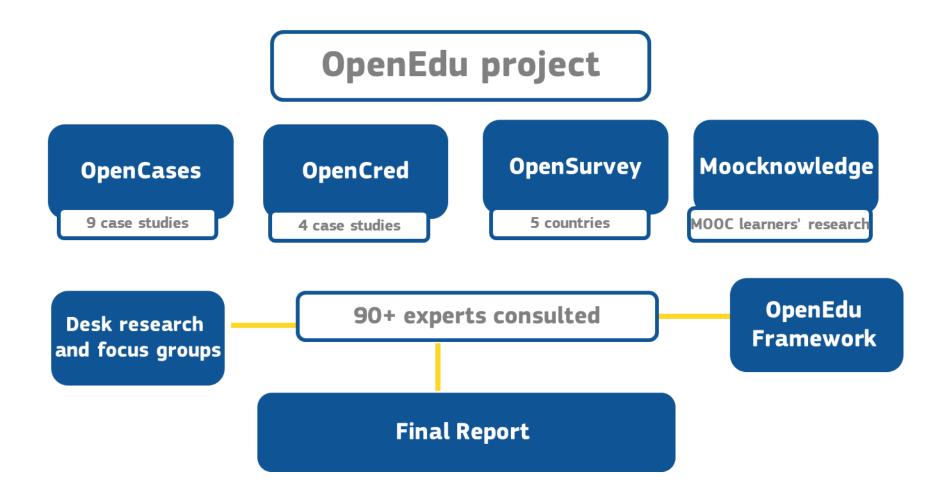
Responses rates and confidence intervals

Data from OpenSurvey study. JRC-IPTS 2015.

Country	Sampling Frame	Contacted	Responses	Response Rate	Effective net sample size (neff)	CI neff
	N	N	N	%	N	o/ ₀
Poland	306	191 (stratified sample)	55	28,8	50	+-13.9
France	294	196 (stratified sample)	22	11,2	19	+-22.5
Germany	361	198 (stratified sample)	25	12,6	17	+-23.8
Spain	157	157	35	22,3	27	+-18.5
UK	147	147	41	27,9	38	+-15.9
Total	1,264	889	178	20,0	117.75	+-9



4. Open Education framework



OpenEdu supports the 2013 Communication 'Opening up Education: Innovative Teaching and Learning for all through New Technologies and Open Educational Resources

JRC-IPTS OpenEdu framework on behalf of DG EAC

The framework was designed to support HEIs in Europe to make strategic decisions on open education.

It defines and describes what OE is, highlighting the specific relevance of each element for HEIs.

It is a hands-on tool created by the OpenEdu Project as a response to the 2013 EC COM on 'Opening up Education'.

What does the framework look like?

Dimensions:

"What" of OE

6 core: access, content, pedagogy, recognition, collaboration, research

"How" of OE

4 transversal: "How strategy, leadership, technology, quality For each dimension of OE, the framework contains:

- **√** Definition
- **√** Rationale
- **√** Components
 - Descriptors

In total, >150 descriptors

+ Opening up education strategic planning template

Opening up education framework



Source: JRC IPTS report (2016, forthcoming):' Opening up education in Europe – a support framework for higher education institutions (OpenEdu)'

Definition

Core dimension: recognition

Rationale

Recognition enables open education learners to make the transition from non-formal to formal education, to complete a programme of tertiary education in a more flexible way, or to get recruited/promoted at the workplace. When submitting their credentials for recognition, learners expect to gain 'validated credits' which will help them to move ahead professionally and in their personal lives.

7 Components:

Assessment | Identity validation | Trust and Transparency | RPL (recognition of prior learning) | Fast Track Recognition | Qualification | Social recognition

	Descriptors
Assessment	
Strategy/Busines s Model	 Paid-for open education assessment (in MOOCs/OCW, free-of-charge online courses etc.) is part of the business plan of the institution.
	□ Free open education assessment is part of the strategy of the institution.
	□ Others. Please specify.
Technology	□ The institution uses biometrics systems to verify the learner's identity during assessments.
	□ The institution uses proctoring services to verify the learner's identity in assessments at a distance
	□ The institution uses technology to verify the identity of the open learner
	□ Others. Please specify
Quality	 The institution has a quality control procedure to verify the design and the undertaking of open education assessments.
	 The institution has a quality control procedure for the open online courses to which it wishes to award credits
Leadership	□ The institution encourages the ECTS mapping of its open education courses.
	□ Others. Please specify.

Fast Track Recog	nition				
Strategy/Busines s Model	 The institution understands Fast Track Recognition for open learning as an important strategy for open education. 				
	□ The institution seeks to develop business models around the fast track recognition of open learning.				
	 The institution seeks to identify institutional partners to collaborate on the recognition of prior learning for open learners. 				
	□ Others. Please specify.				
Technology	 The institution makes use of technology for a first screening of portfolios to indicate their eligibility for open learning recognition. 				
	□ The institution makes use of technology to support fast track recognition of open learning.				
	 The institution makes use of technology to let open learners know that they can apply for recognition of open learning (e.g. social media, institutional website, online marketing tools). 				
	 The institution seeks to develop a strategy to provide transparent and comprehensive online information to both the learners and other institutions in relation to its assessment mechanisms for open learning, certification and recognition 				
	□ The institution uses technology to verify the identity of the open learner				
	□ Others. Please specify.				
Quality	 The institution is committed to developing a speedy and reliable process for fast track open learning recognition. 				
	 The institution has an internal committee, which pre-verifies the reliability of third-party institutions' open learning assessments mechanisms and certification processes in order to establish collaboration on fast track recognition. 				
	 The institution seeks to develop a strategy to provide transparent and comprehensive online information to both the learners and other institutions in relation to its assessment mechanisms for open learning, certification and recognition. 				
	□ Others. Please specify.				
Leadership	 The institution seeks to lead in open education by being at the forefront of open learning fast track recognition. 				
ļ					

 $\ \square$ The institution identifies champions to lead the fast track open learning recognition dossier of the



Currently 175 descriptors (but some overlap)

Access: 34

Content: 39

Pedagogy: 39

Recognition: 53

Collaboration: 10

Research: 0



5. Final remarks



- The framework is about "capacity building" aimed at decision makers in universities, and anyone who can propose practices and policies
- It is a guide to think through critical questions. It does not provide definitive answers. The answers come through the insights generated by the process of engaging with the framework
- It can enhance collaboration and exchange of experiences
- Framework is flexible, allowing for customization and selective use, also adding own strategic elements
- It should evolve over time
- To be published soon (May-June 2016) and looking forward



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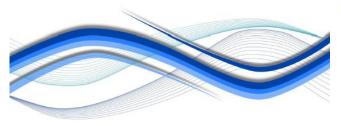
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Validation of Non-formal MOOC-based Learning

An Analysis of Assessment and Recognition Practices in Europe (OpenCred)

Authors: Gabi Witthaus, Andreia Inamorato dos Santos, Mark Childs, Anne-Christin Tannhäuser, Grainne Conole, Bernard Nkuyubwastis, Yves Punie

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JRC SCIENCE AND POLICY REPORT

Analysis of Emerging Reputation and Funding Mechanisms in the Context of Open Science 2.0

Editors: Riina Vuorikari & Yves Punie

Authors: Part 1: Dave Nicholas, Eti Herman, Hamid R. Jamali Part 2: David Osimo, Laia Pujol, Federica Porcu

2015







JRC SCIENTIFIC AND POLICY REPORTS

JRC SCIENCE FOR POLICY REPORT

Promoting Effective Digital-Age Learning

A European Framework for Digitally-Competent Educational Organisations

Panagiotis Kampylis, Yves Punie, Jim Devine

2015

DIGCOMP: A Framework for Developing and Understanding Digital Competence in Europe.

Author: Anusca Ferrari

Editors: Yves Punie and Barbara N. Brečko

2013





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Thank you



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