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Agenda

- MOOC or not MOOC?
- The real cost of a MOOC
- © Cost efficiency of teaching: why to invest in a MOOC?
- MOOCs in universities
- Conclusion
- MOOCs providers





MOOCs: the alternative?

- The cost of Higher Education is becoming higher and higher and all countries are looking for new models.
- The European and US models cannot be expanded anymore
- In less developed countries not enough resources are available to build a full HE system



MOOCs: the alternative?

- Three alternatives:
 - Increasing the level of tuition fees and leaving the burden to the students and their families.
 - © Example of England but not accepted anywhere
 - Decreasing the cost of education, which is mainly manpower, i.e. teachers salaries.
 - Increasing the ratio students/teacher



MOOCs: the alternative

- Shortening Higher Education
 - See Tibor Navracsics (Elements in Section of Education, Culture and Sport) declaration
 Brussels, December 14







A digital approach as the solution?

- Increasing the Higher Education efficiency:
 - Decreasing the labor costs
 - Possibility to sell and reuse the courses
 - Possibility to use less qualified teachers
 - Increasing the students/teachers ratio
 - Increasing the « teaching » efficiency
 - Flipped learning approach





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Human resources

MOOC contents:

- Teachers
- Community managers
- MOOC development:
 - Video specialists
 - Web integrator and graphic artist
 - Pedagogic instructor
 - Project manager

A MOOC is a project with many people, which needs a project manager



Workload to build a MOOC

Example: 6-8 weeks course:

- © Course with Math equations, graphics and pictures
- Course being used 3 times
- Three categories of human resources: teachers, academic and technical support



Teachers work

Mission	Course 1	Course 2	Course 3	
Preparation	40	8	8	
Writing docs	90	20	20	
Writing assessments	40	10	10	
Video recording	32	6	6	
Project organization	30	5	5	
Animation	48	48	48	
Total				520 hours

© (1) (S)

Pedagogic support

Mission	Course 1	Course 2	Course 3	
Pedagogic engineer	40	8	8	
Project manager	60	12	12	
Tests	60	12	12	
Total				225 hours



Technical support

Mission	Course 1	Course 2	Course 3	
Video	32	6	6	Recording
Video	180-240	36-50	36-50	Editing
Texts	10	2	2	Formatting
Iconography	35	7	7	Variable
Integration	15	3	3	Platform
Meetings	10	2	2	
Total				480 hours

Pomerol, Epelboin & Thoury MOOCs, Design, Use and Business Models, Wiley 2015

Financial cost

Mission	Course 1	Course 2	Course 3	Total Euros
Teachers	15 000	5 200	5 200	25 400
Pedagogic support	6 000	1 200	1 200	8 400
Technical support	10 000	2 000	2 000	14 000
Salaries ≈				48 000 €

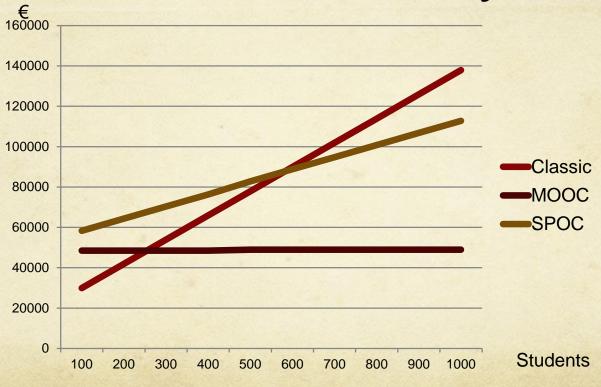
Pomerol, Epelboin & Thoury MOOCs, Design, Use and Business Models, Wiley 2015

Base:

Teachers: 75 k€/y, support teachers: 60 k€/y, tech: 47 k€/y

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Cost efficiency





Digital business models

- A pure MOOC is the less expensive solution:
 - Above 200 300 students versus a classic approach
 - Interaction between teachers and students fully reduced.



Decreasing the cost of teaching

- Using or reusing MOOCs to amortize the cost of development of digital media
- A balance between face-to-face interaction and personal work





Financial facts

- 1 ECTS = 1 MOOC (30 hours of work)
 - One year ≃ 60 MOOCs!
- In universities MOOCs are used as SPOCs:
 - Approach of financial interest if more than 600-700 students are using the course (in 3 years).
 - Never valid for classes < 200 250 students => cost sharing among many universities



Possible Business plans

- Savings
 - Large classes (mainly L1)
 - Sharing costs: federation of universities for smaller classes, mainly Masters or reusing courses developed by others
- Manpower savings are more doubtful in Research universities where academic are not full time teachers.



Possible business plans

- Saving through MOOCs and SPOCs are doubtful in Higher Education, unless universities unite.
- SPOCs must be found elsewhere



Case # 1

EPFL (Switzerland) MOOCs@Africa

- Free access to MOOCs
- © Certification: 30 €/ECTS, full cursus 8-12 ECTS followed by a personal work (6-10 ECTS, 90€/ECTS)
- Exams in a partner center
- Partners: Coursera and edX



Case # 2

Gestion de Projets (Ecole Centrale Lille)

- Free MOOC
- Second part with one or two ECTS by payment (50 150
 €) with different levels of examinations and options
- Various options for continuous education (490-690 €)

http://mooc.gestiondeprojet.pm/



- Decreasing the cost of education cannot justify MOOCs & SPOCs
- © ECTS exchange among universities remains very limited thus aggregating universities to assemble enough universities remains an exception (Ex: the Bavarian Virtual University)



	Objective	MOOC	SPOC	Level	Remark
1	Educational transformation	option	yes	Bachelor Minors	All B levels. Priority larges groups
2	Remediation	option	yes	Bachelor	Failed modules
3	Entrance in university	yes	no	High School	Self evaluation and initiation courses
4	Life long learning	yes	yes	All levels	



	Objective	MOOC	SPOC	Level	Remark
5	Foreign students	yes	option	All levels	
6	Knowledge sharing	yes	option	All levels	Excellence
7	Recruiting students	yes	option	All levels	

Business plans must be justified by a political willingness

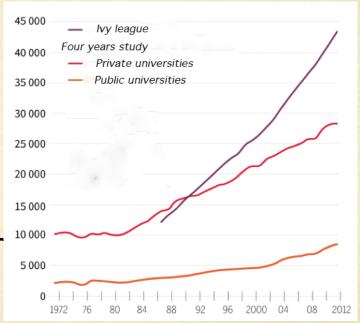
to change the pedagogy and communication Y.Epelboin



MOOCs in US

Tuition fees at an inacceptable level:

- Output to 10 000 \$ in public universities
- 40 000 60 000 \$ ir
 private universities



Le Monde 26/04/2015



Case # 1

Arizona State University (ASU)

- O Universities consortium
- First year through MOOCs for less than 6000\$
- Payment at the end
- Participation of edX



Case # 2

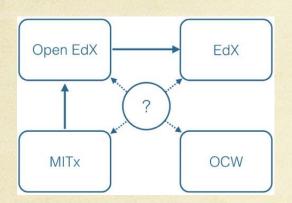
Urbana Champaign university

- eMBA for 20 000\$
 - 1. First, selected Coursera specializations
 - 2. Agreement of curriculum by Urbana
 - 3. Finish as official MBA degree

Pay if success only!



Case # 3 The MIT Model



Free MOOCs can only be a byproduct of SPOCs and blended learning.

First semester of Master Supply chain as MOOC with EdX, second semester on campus.



Case #4: University of Illinois

« An accredited Masters program at an accessible cost

Start by enrolling in any course or Specialization in the sequence, and upgrade to the full accredited program whenever you're ready to apply. At \$600 per credit-hour, the MCS-DS only costs \$19,200 in tuition for the complete 32 credit-hour degree. »

With Coursera
EUNIS 2016 8-10 June 2016



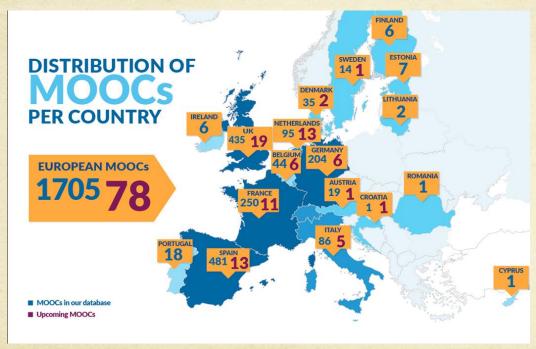
Continuous education

The only field, with distance learning, where teaching is being fully revolutionized.

- Our Use and reuse of the same courses for massive numbers of students
- Optimization of absences for studies
- Possibilities to charge for education

Will the universities participate to this transformation?





http://openeducationeuropa.eu/es/open_education_scoreboard

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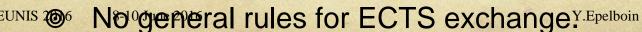
In Europe

- No real models for the « big » providers
 - Futurelearn: charity?
 - FUN: funding by universities and state?
 - MiriadaX: South America Market?
 - O Iversity: ECTS broker?
- © EU in Brussels: only a hub



Europe: continuous education

- Numerous start-ups with models similar to Udacity
 - Revolutionizing the business of continuous education
 - Oriented towards courses directly linked to employment
- Our Universities?
 - Really involved in continuous education?





A possible direction

- Freemium: minimum services for free
- With payment: payment for each additional service
 - © Exercises and assessments (Coursera)
 - Group tutoring
 - Individual tutoring or small groups, videoconferencing...





An emerging business model

- Free access to documents (similar to Coursera) or for a low fee (freemium)
- Different levels of services for increasing fees
 - Quizzes and home work
 - Group tutoring
 - Personal tutoring and video exchanges
- Our Universities?



Searching for a business model

- Not yet established for HE institutions
 - Slow movement to introduce MOOCs in curricula
 - No real thread for universities, at least at Master and Doctorate levels.
- Fast transformation of continuous education
 - A possible source of revenues for HE
 - A big market for a new generation of entrepreneurs





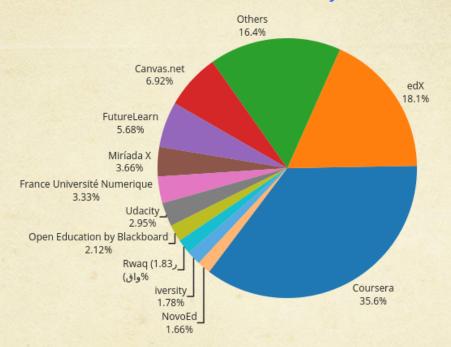


Two providers categories

- MOOCs Editors: act as the editors of books written by authors:
 - © Coursera and EdX in the US
 - Futurelearn, FUN, Iversity in Europe
- MOOCs developers and providers:
 - © Ex: Udacity, Udemy (US), MiriadaX (Spain), OpenClassrooms (France)...



Course Distribution by Providers



Shah D. (2016) https://www.class-central.com/report/moocs-2015-stats/



EUNIS 2016 8-10 June 2016

Coursera

- A partnership with universities
- Blurring the distinction between university grades and free MOOCs
 - © Courses developed by universities
 - © Certificates and bundles payed to Coursera
 - Additional fees to transform courses into grades



Coursera: an evolving BM

- Revenues generated through selling different levels of certifications
- Free access now limited to documents for most MOOCs
- © Certifications between from 10 100 \$
- Specializations 250-500 \$



Udacity BM

- S. Thrun: « No money to make with universities »
- Thought for continuous education
- Courses on demand for companies
- © Courses for self development and employment

