# Fra sperimentazione e policy istituzionale

# L'esperienza di innovazione della didattica in Emma e Federica



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OpenAccess Week . Università del Piemonte Orientale 23 Ottobre 2015





Emma: www.europeanmoocs.eu

### OER Scenario

- Huge efforts to open up knowledge and make OER available to everyone
- No empirical evidence from the world of learning about how these resources have been actually used
- The OER scenario has been for years fundamentally weak

....at least so far

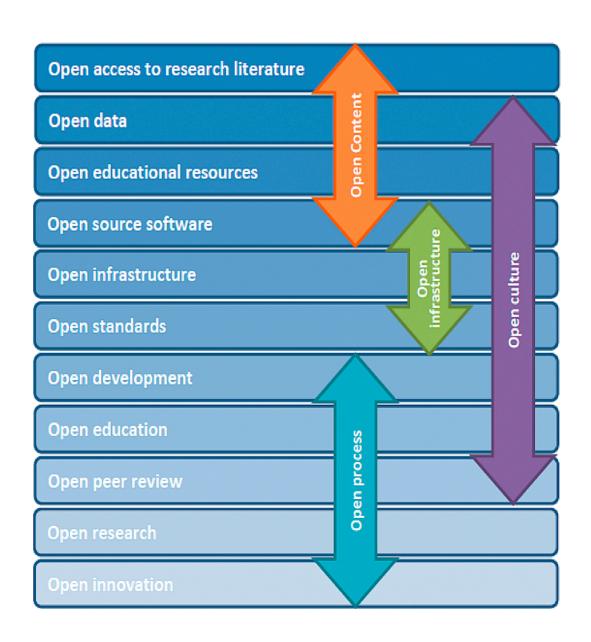
## OER: factors of weakness

- lack of a political commitment to OER
- absence of a real incentive system
- lack of strategic plan at institutional level
- no business model
- underestimation of organisational aspects
- ideological approach to OER

Academic Authorities **DID NOT** consider OER as a **priority** where investments were concerned

# The Open Movement played a crucial role

Today
Openness
is
synonymous
of Innovation



# The educational process takes momentum

### Causes:

Development of **broadband** 

Low-cost high technology products

Expansion of the digital content market

Where students learn becomes less important than how Effects:

The deep web is progressively emerging to the surface

Learning resources are avalable everywhere in the web

Search engines, contempy fors an Media are

used as educational tous

# rati al for Oer

OER implies a complex idea of an integrated media and information ecosystem that is created when ICTs are developed as part of knowledge transfer

We need to explore more deeply the relationship between communities of practice, learning styles and use of cultural and organisational resources.

This ecosystem need to be designed as a seamless environment for access to, and use, open content

We need to think more critically the interaction between OER and that educational context they belong to.

The creation of educational repositories is not an end in itself.



# What we were looking for!

### Opportunity to:

- revise educational policies
- inquire on new learning styles
- innovate teaching methods
- improve transparency and quality
- increase cultural offer visibility
- foster awareness of OA at any level

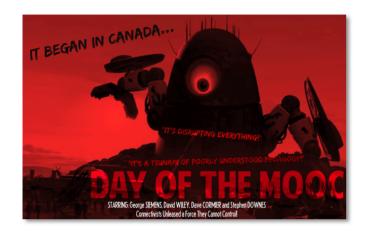
# One definition, different statements

MOOCs are a new way of delivering open access online courses that can be scaled up to reach potentially limitless numbers of users, crossing geographical confines to offer quality learning content to the global market.

Born in the 2008, the phenomenon reached the popularity in the 2012, while new heights are achieved during 2013



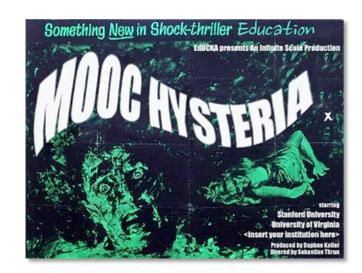
# The future of the University



### A disruptive innovation







**A Revolution** 

Words that place the Moocs "in the midst of a hype cycle" (Coates 2013, Yang 2013) and warn against the risks of its overstatement (Dillenbourgh 2013).

# MOOC: The 21st century teaching

Academic institutions as exploring MOOCs to understand:

- how learning and teaching environments are changing,
- what are the outcomes of such a novelty for different countries and publics,
- to what extent the Moocs revolution can represent both a unique opportunity to open up education and/or a new business model.

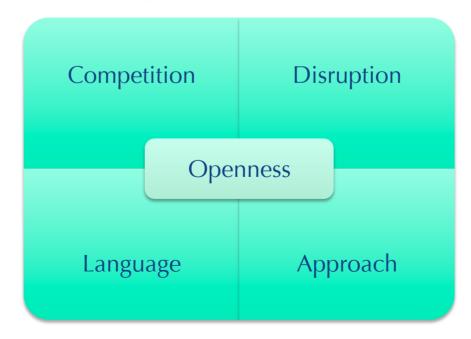
Born to help universities and academic institutions to innovate pedagogical models, MOOCs are developing along different routes.



## Lost in translation: the debate on MOOCs

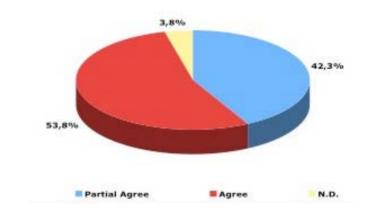
The debate is structured around five key areas:

- the "openness" of MOOC
- MOOC disruptive potential
- the MOOC business model and his impact on public universities
- the diversity of teaching approaches



# A spectrum of Openness

- Content accessibility
- Content costless
- Content open source
- Course flexibility
- System inclusiveness
- Experimental approach
- Market openness
- Social roles change



Agreement with definition of openness

# A growing movement

A shorter version of this article first appeared on **EdSurge**.

At TechCrunch Disrupt this year, Coursera Co-Founder Daphne Koller claimed that 2014 is the year MOOCs will come of age. It is definitely the case that an ecosystem developed around MOOCs now:

400+ universities. 2400+ courses.

16-18 million students.

hundreds of people employed full-time, thousands of people involved in the creation of MOOCs, many millions in funding, and, importantly, millions in revenue. The big three (Coursera, Udacity, edX) employ more than a hundred people each, while

Source: Class Central

# Growth of MOOCs 2015

The cumulative number of MOOCs didn't break 100 until the end of 2012. But by the end of 2013 that number had grown to over 800. And today the number of registered MOOC students added in 2015 is nearly equal to the last three years combined.

### Growth of MOOCs

Since the first blockbuster MOOCs debuted, in 2011, the cumulative number of courses started or scheduled has reached nearly 4,000.

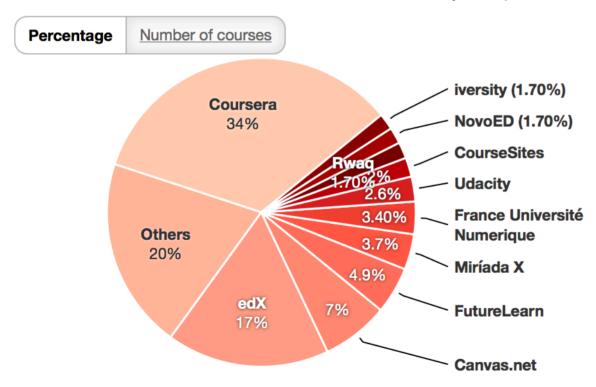


# MOOC per Provider

Coursera and edX, two of the biggest MOOC providers, dominate the market. Coursera offers 34 percent of MOOCs, the report says, and edX comes in second, at 17 percent. After that, Canvas.net gets 7 percent.

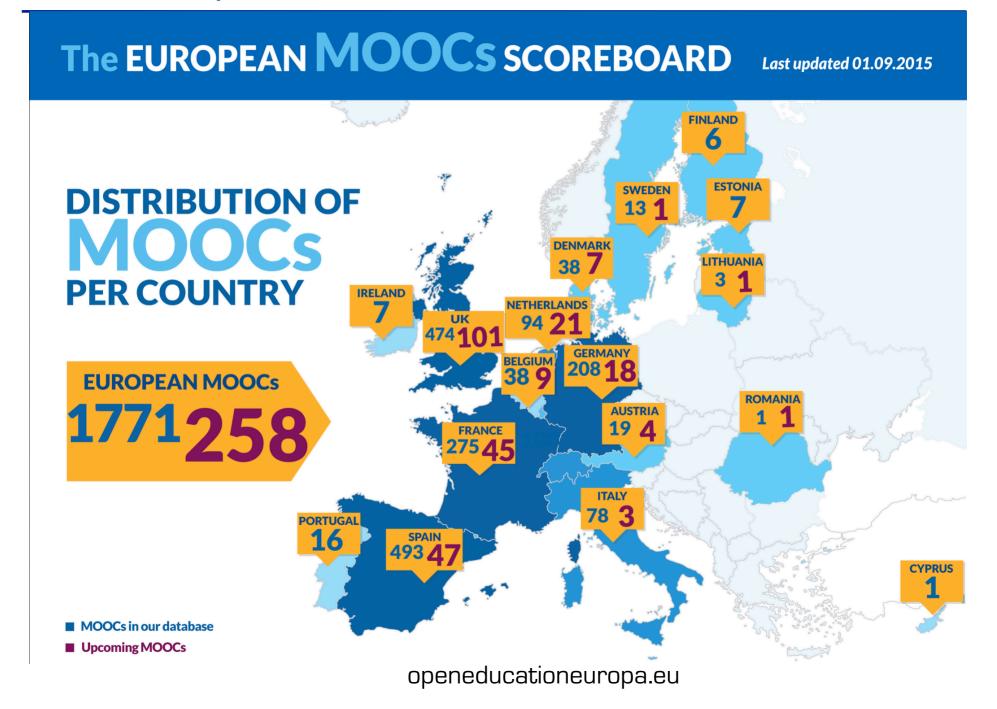
### Course Distribution by Provider

Coursera, with over 1,000 courses, offers more courses than any other provider.



Source: Class Central Get the data

# The European MOOC market



## The value of MOOC market

# Politica*online*.it

BLOG SULLE CULTURE POLITICHE DIGITALI

# To Mooc or not to Moocs? una crescita esponenziale

▶ Rosanna De Rosa ■ Election Day(S), 12 giugno 2015

Commenti: o. Letture: 1404.

Un'indagine di Visiongain stima il mercato globale dei MOOC in crescita da 0.9 milardi di dollari del 2014 a 14.2 miliardi nel 2020. Con un tasso annuo di crescita (sempre stimato) dell'81,3% per i prossimi cinque anni. Di questo business sono ancora in pochi ad essersene accorti, soprattutto in Italia dove la questione MOOC è considerata correlata unicamente alla dimensione istituzionale dell'università, al suo tradizionale modello di business basato su "clienti" noti e spesso fidelizzati: gli studenti. Nella migliore delle ipotesi, si sta valutando di sperimentare il blended learning, una forma di offerta di apprendimento misto online/offline, nell'ambito però dell'assetto tradizionale.

# Three Policy paradigms emerge

Economic: where openness means freeing up the education market and removing some of the traditional obstacles, creating new job and business opportunities.

**Democratic**: where openness is interpreted as a way of democratizing access to higher education, exerting cultural soft power in parts of the world where there is less protection for human rights.

**European**: The Europeanisation issue is intend in terms of providing a response to a **USA-led model of education**. This is why branding and marketing are key issues, as these define the power of platforms like Coursera, Edx, Udacity, because leading brands gain the top positions in online learning rankings as well. This scenario seems to hinge on the Europe vs platform debate; i.e. for or against the adoption of protectionist policies.



# europeanmoocs.eu



# What Emma stands for?

A MOOCs Platform?

A Learning Management System?

A MOOCs Aggregator?

NO

Emma is

an Exciting Multilingual Learning Experience





# ... the Emma objectives?

### The Project Coordinator



What we offer?

- Providing multilingual access to European Moocs
- Ensuring advanced services to newcomers
- Creating a pan-European brand

### The Partners



- MOOCs Expertise and knowledge
- Monitoring Services, Tracking and Learning Analytics
  - ☐ Translation / transcription Services
  - Mosting and Communication services



Emma is a research-based project aiming at exploring the new frontier

Emma supports diversity in pedagogical approaches

Emma promotes cross-cultural learning

Emma offers personalization of learning-paths

Emma supports your learning

**Corporate initiatives** 

**Universities** 

EMMA is open to:

**NGOs** 

### **Cultural institutions**









## MOOCS FEATURES

Translation, VirtualClassroom, Conversation



# Multiple languagesA

#### Corso

Pedagogia Generale e Sociale: la ricerca e la pratica pedagogica dal dopoguerra ad oggi 🜣

PANORAMICA DEL CORSO



Il corso di pedagogia generale si propone di fornire agli studenti la capacità di acquisire le categorie basilari del sapere pedagogico – inteso come scienza dei modelli, delle teorie e delle pratiche educative nei contesti della formazione continua, attraverso l'acquisizione di elementi di conoscenza relativi ai problemi ed ai temi di maggior rilevanza all'interno della ricerca in Pedagogia generale e sociale dal dopoguerra ad oggi. Il corso verterà sulla pedagogia come ambito di ricerca empirica e critico/teoretica, oltre che sui oggetti della ricerca pedagogica quali la formazione come processo continuo, l'educazione come pratica sociale di crescita ed emancipazione, l'agire educativo, le pratiche dell'educazione.

Italian,
French,
Spanish,
Catalan,
Portuguese,
Estonian,
Dutch

#### Corso

General and Social Pedagogy. Research and practice in Pedagogy from postwar to the present day



ChooseA

PANORAMICA DEL CORSO



The course in general pedagogy aims to equip students with the skills to understand the basic categories of pedagogy knowledge understood as the science of educational models, theories and practices in the context of lifelong learning, through the acquisition of elements of knowledge relating to the problems and issues of greatest relevance to research in general and social pedagogy from the post-war years to the present day. The course will focus on pedagogy as a field of empirical and critical/theoretical research, and on objects of pedagogical research such as education as a continuous process, education as a social practice towards growth and emancipation, educational agencies and educational practices.

TranslateA

TranscribeA

English as a linguistic bridge



# Translation comparative evaluationA

Three comparative evaluation measures:

- Bilingual Evaluation Understudy (BLEU)
- Real Time (RTF) required to review automatic translations from video transcriptions
- Words per minute (WPM) when reviewing the translation of documents

Emma translation service is better than Google!

Language pairs	EMMA – BLEU	Google - BLEU	RTF (30)	WPM (7)
Dutch → English	41.6	33.4	12.2	15.5
English → Spanish	42.5	39.0	17.8	-
Italian → English	46.9	27.9	17.2	25.2
Portuguese → English	47.6	45.4	5.8	-
Spanish → English	28.2	27.6	8.9	19.3

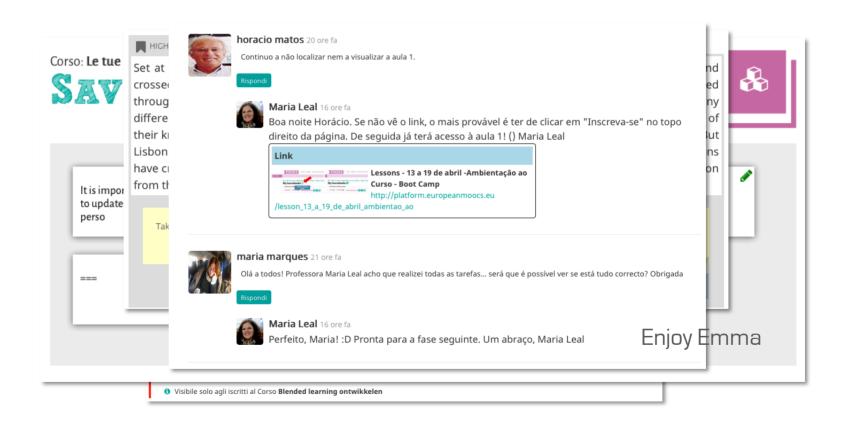


## **Emma Interactive features**

Personal Blog Virtual classroom

Annotation System

Coursebook





# Learning Data and Feedback Loop

### **Learning Analytics**

### Survey

### Learning interactions:

- Page visits
- Interactive activities
- Assessment

### **Learning profile:**

- Enrolled enrolled and accessed materials five times
- Observer accessed materials more than five times
- **Contributor** interacted with the content

### Students profiling

- Registration form
- Entry form

### **Expectations**

• Expectations questionnaire

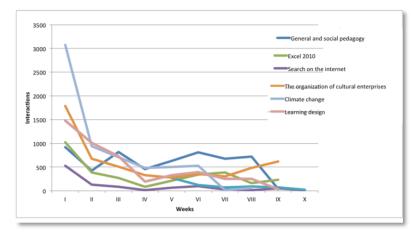
### **Evaluation**

Evaluation questionnaire



# Learning data and Use Profile

### **Learning interactions**



### **Teacher Dashboard**



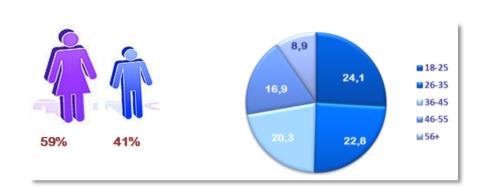
Course:	Course name			<b>\$</b>			
Туре:	Login - logout activity						
Start:	Week 1 - Sep 01 2014 - Sep 07 2014 \$						
End:	-			<b>‡</b>			
	12am	6am	12pm		6pm		
Mon							
Tue							
Wed	0000						
Thu Fri							
Sat			12pm - 1pm				
Sun	0000						
			Logins for 4 students Logouts for 23 studer	nt			
	Sessions overview						



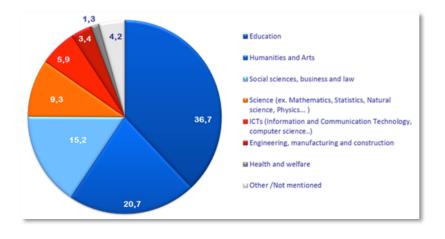
# Learning data and User Profiles

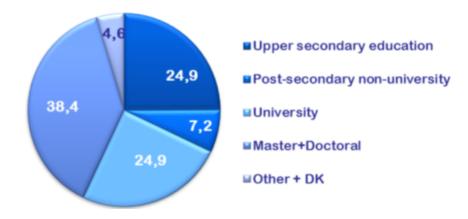






### Education













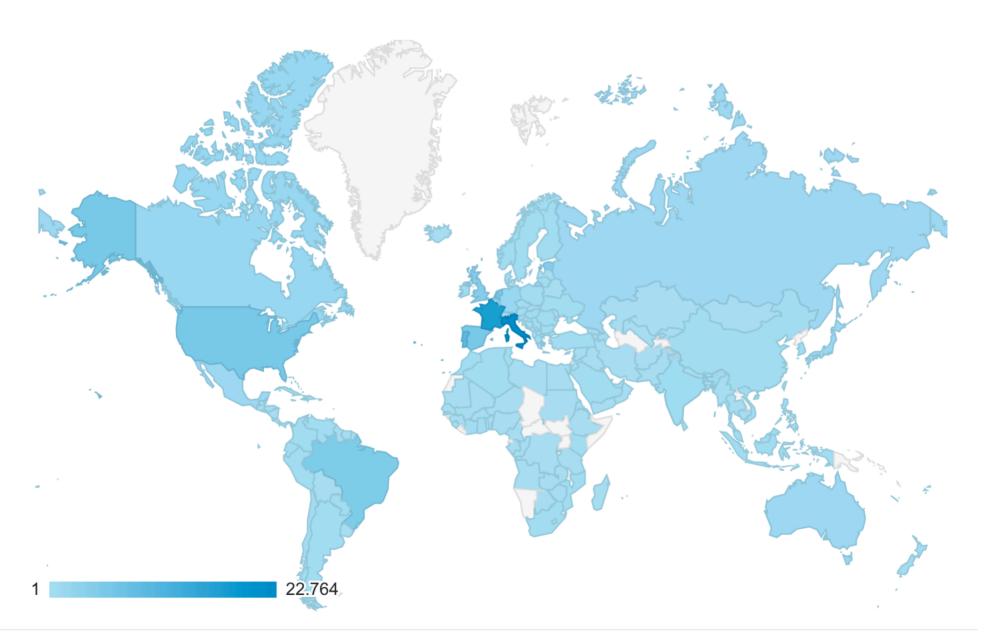
# Thanks to Italian CINECA, the Jtel-Emma Summer school 2015 edition got its own badge!

Open Badges is a new online standard to recognize and verify learning.

A digital badge is an online representation of a skill you've earned. Open Badges allows you to verify your skills, interests and achievements through credible organizations. Display your badges wherever you want them on the web, and share them for employment, education or lifelong learning.

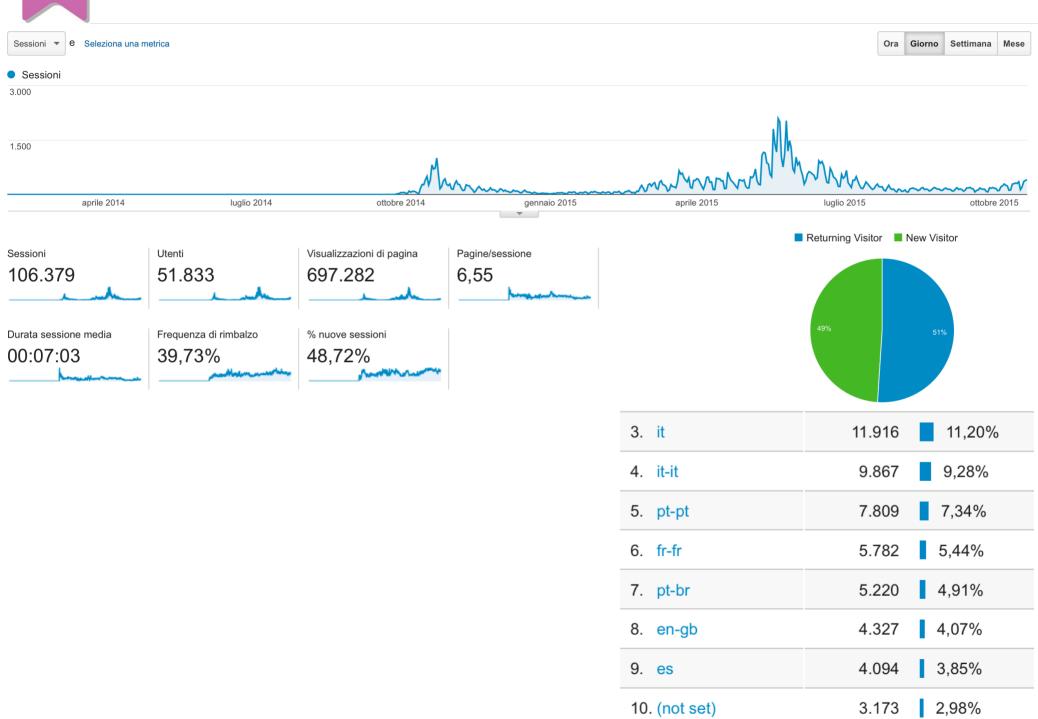


### **Emma: World Users**





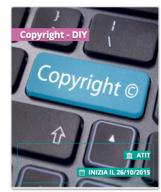
### **Emma: Users Analitics**







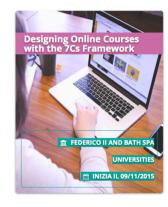




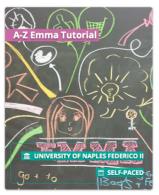




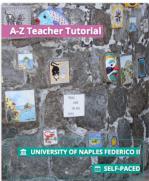












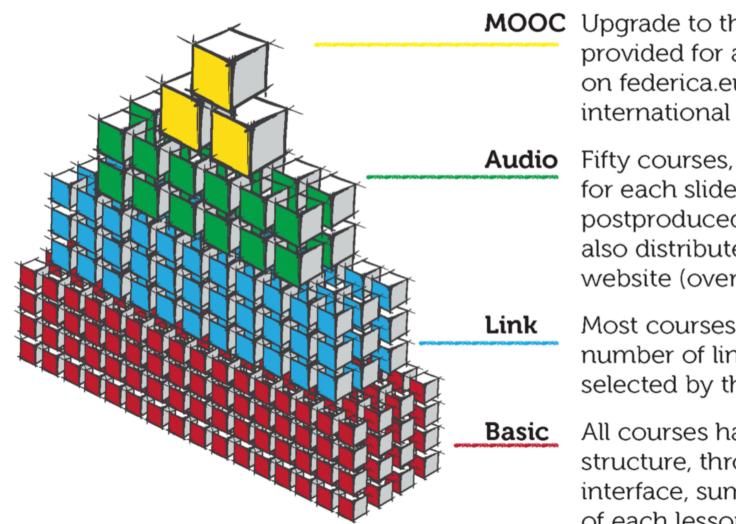
Your MOOC Signpost in Europe





# Federica goes MOOC

# Federica's Building Blocks



MOOC Upgrade to the MOOC format is provided for a selection of courses on federica.eu, along with brand new international entries.

Fifty courses, with audio comments for each slide, have been postproduced into podcasts, and are also distributed through the iTunes U website (over a million downloads)

Most courses also present a wide number of links to online sources selected by the teacher

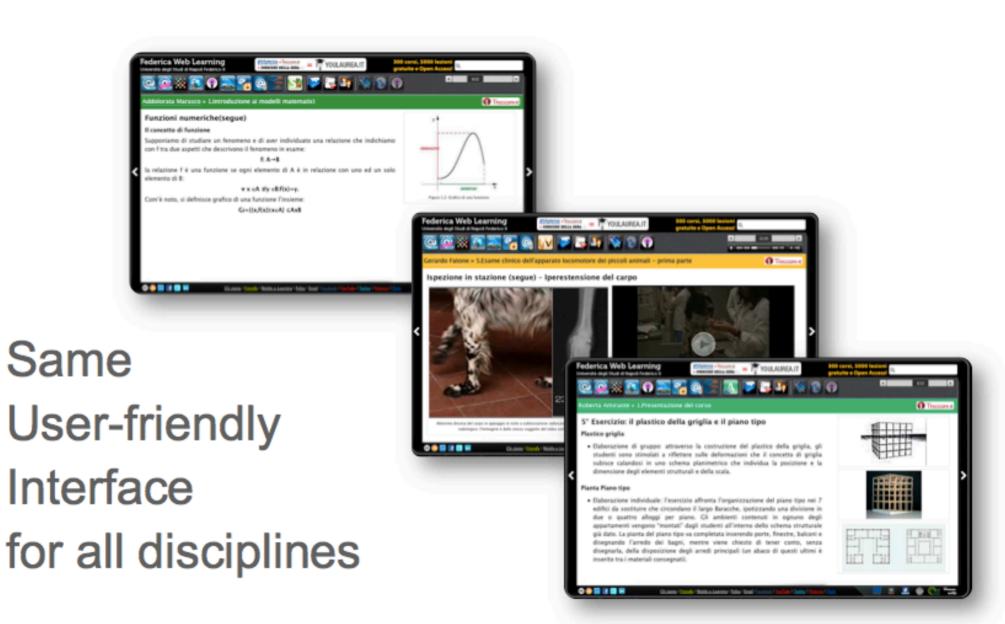
All courses have a basic textual structure, through a user friendly interface, summarizing the content of each lesson

## Federica vision

# Web-learning



### **Federica vision**









#### Scienza Politica, Gianfranco Pasquino

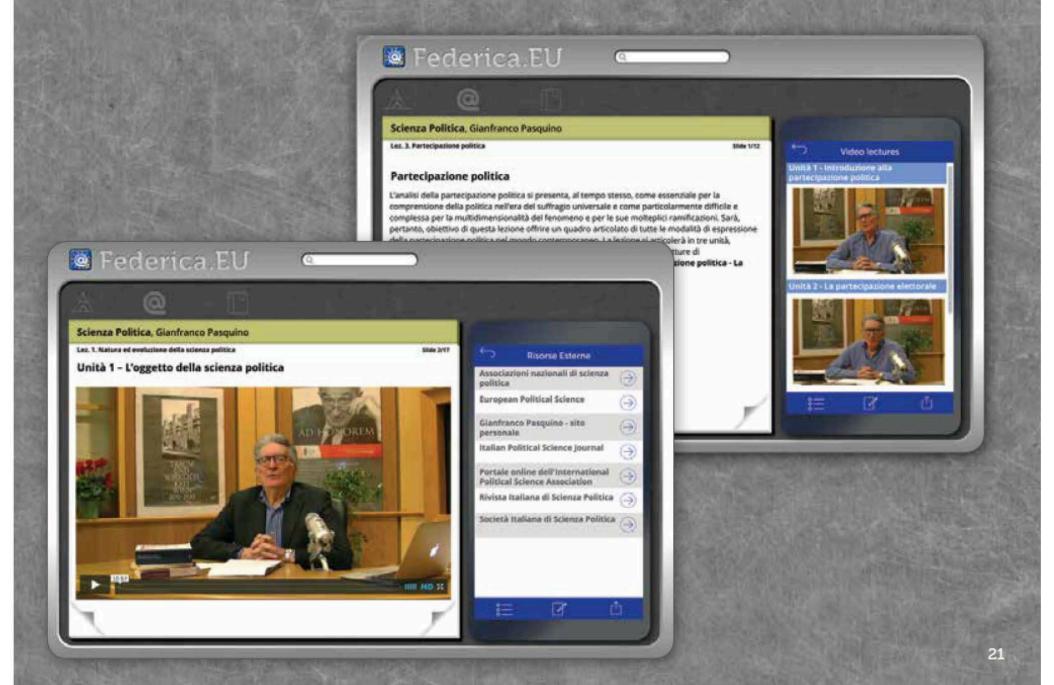
Il corso di scienza politica ha come obiettivo fondamentale quello di offrire agli studenti gli strumenti essenziali per comprendere e analizzare la politica e le istituzioni. È un compito svolto da tempo immemorabile, il che rende utile e spesso indispensabile la conoscenza dei classici, ma che si ripete sempre con novità poiché la politica cambia. La scienza politica dispone di una solida base di conoscenze sui partiti, sui parlamenti, sui governi, sulla partecipazione politica, sulle democrazie, sui regimi autoritari e totalitari. Queste conoscenze possono essere utilizzate al meglio facendo ricorso al metodo comparato nelle sue varie potenzialità e applicazioni. In particolare, si analizzeranno vantaggi e svantaggi delle forme di governo parlamentari, semipresidenziali e presidenziali. Non è affatto vero che più o meno tutti i sistemi politici si equivalgono. È vero, invece, che un sistema politico è il prodotto complesso di un rapporto fra le sue istituzioni, il suo sistema elettorale e il suo sistema dei partiti e, pertanto, che esistono, e possono essere costruiti, sistemi politici migliori di altri.



- 4. Gruppi e movimenti
- 5. Elezioni e sistemi elettorali
- 6. Partiti e sistemi partitici
- 7. Parlamenti e rappresentanza
- 8. I governi
- 9. Le politiche pubbliche
- 10. I regimi non democratici
- 11. I regimi democratici
- 12. L'Unione Europea











Seproh in Federic







Search in Federica







YOU











Search in Federica







Laboratorio di Programmazione Marco Lapegna

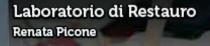








Anteprima del corso









Durata: 8 settimane



Anteprima del corso

Physics of Galaxies Massimo Capaccioli









Anteprima del corso





Search in Federica







Radiologia veterinaria e Medicina nucleare Leonardo Meomartino



0-0 Primavera 2015





Anteprima del corso









Anteprima del corso

Semelotica chirurgica veterinaria Gerardo Fatone







Anteprima del corso







## **IPSA** goes MO@C!

#### A joint venture with Federica Web-learning®

IPSA has decided to enter the MOOC environment, with a pilot sample of introductory courses on key PS topics.

Courses will be framed with the multicultural blend which is at the core of IPSA vision.

Authored by some of the outstanding academics which have been part of the IPSA community, IPSAMOOC will be a unique contribution to students of politics worldwide, providing open access to a highly qualified Political science core curriculum.



MOOCs (Massi ve Open Online Courses) are a recent development in distant education within the open educational resources (OER) movement.



Since 2011 there has been a huge increase in MOOCs, led by the elite American universities grouped to form aggregate providers. Offer as well as demand has been growing at an exponential rate.

IPSAMOOC will be developed in partnership with Federica Web-learning, a project of the University of Naples Federico II co-funded by the EU.

Through an innovative, user-friendly format, rich with text and online references, Federica offers the student a more comprehensive understanding of the lecture's argument. The courses can be accessed on a PC, by smartphones and tablets, or downloaded as a Podcast.

The new set of IPSAMOOC courses will be available through IPSAPortal, in the new section IPSAMOOC, and on the Federica platform.







# Changing the social role of HEIs

The most striking thing to emerge is the awareness that new business models will radically change the social role of HE institutions:

« (...) as providers of knowledge and innovation and as contributors to development, HEIs have to rethink their societal responsibilities in their local, national and regional context, including the responsibility to build capacity in emerging economies and developing countries of the world»

[European Higher Education in the World, Brussels, 11 June 2013 COM(2013) 499 final].

Learning is already ubiquitous, what about teaching?