



# The European Commission's science and knowledge service



Joint Research Centre



## Casos de educación abierta que pueden cambiar tu forma de enseñar y de aprender

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@aisantos  
DG JRC IPTS

[ec.europa.eu/jrc/en/open-education](http://ec.europa.eu/jrc/en/open-education)

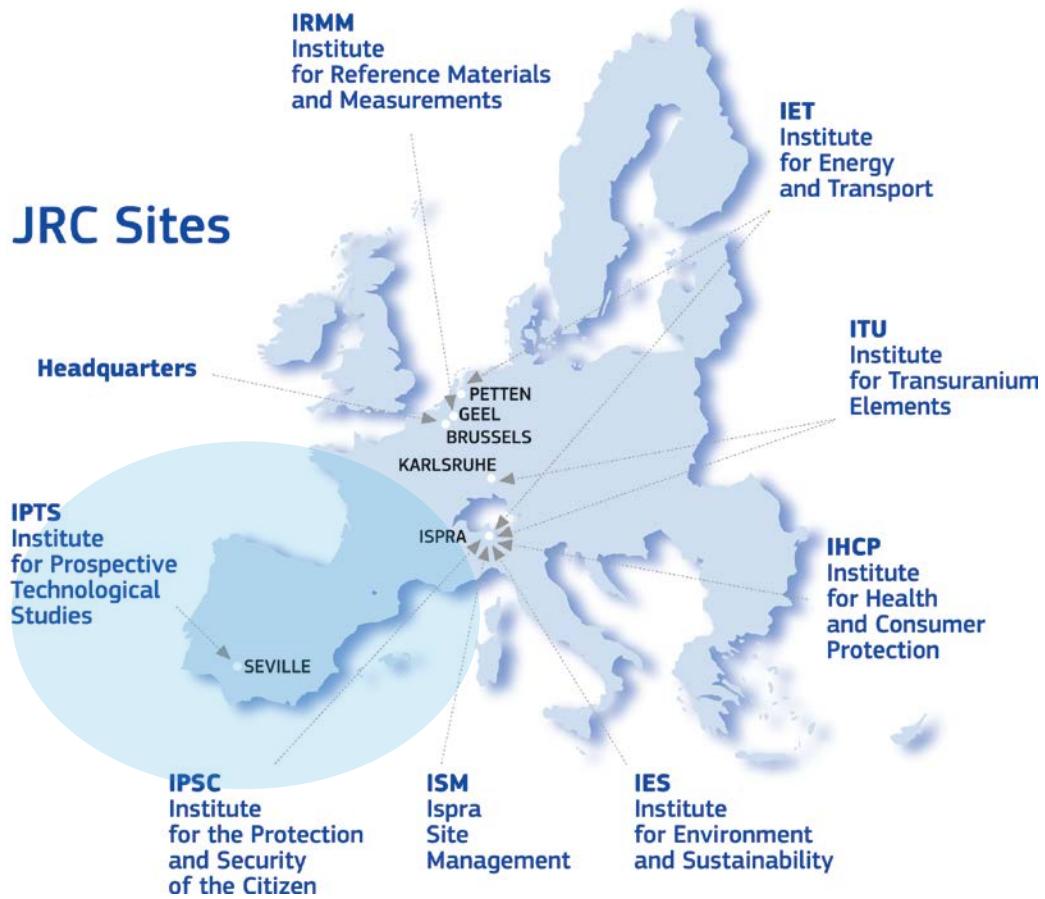
UNIR Masterclass, Cátedra Telefónica, 24<sup>th</sup> May 2016



## JOINT RESEARCH CENTRE

*Institute for Prospective Technological Studies*

## JRC Sites



The JRC is the in-house scientific service of the European Commission. It provides the scientific advice and technical know-how to support EU policies

## ICT for Learning and Skills Team - IPTS



Main clients: DG EAC & DG EMPL



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Open Education

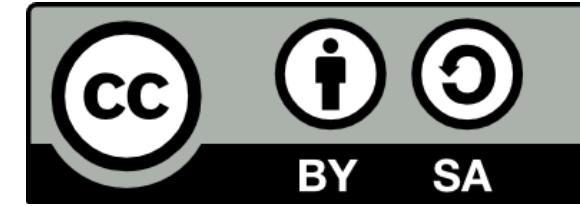
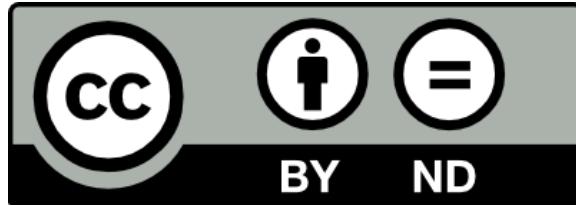
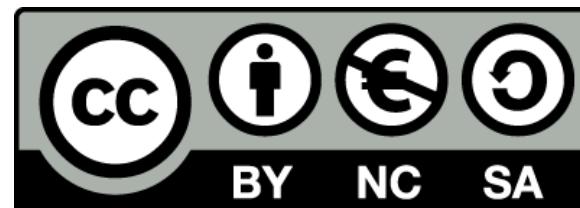
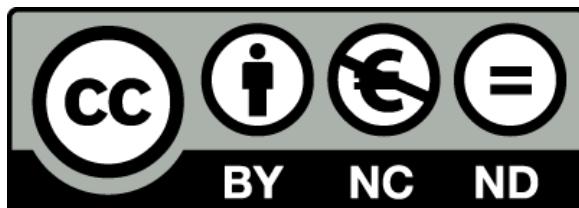
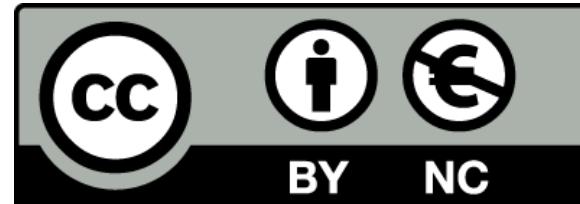
OpenEdu  
Framework

OpenCases  
Examples

What is new?

# Recursos educativos abiertos (OER/REA)

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# Open Education



## What is open education?

A mode of carrying out education, often using digital technologies, aiming to widen access and participation to everyone by removing barriers and making learning accessible, abundant, and customisable for all. 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, and connects the two.

Source: JRC IPTS Report: Opening up Education: a support framework for higher education institutions.  
(forthcoming, 2016 )



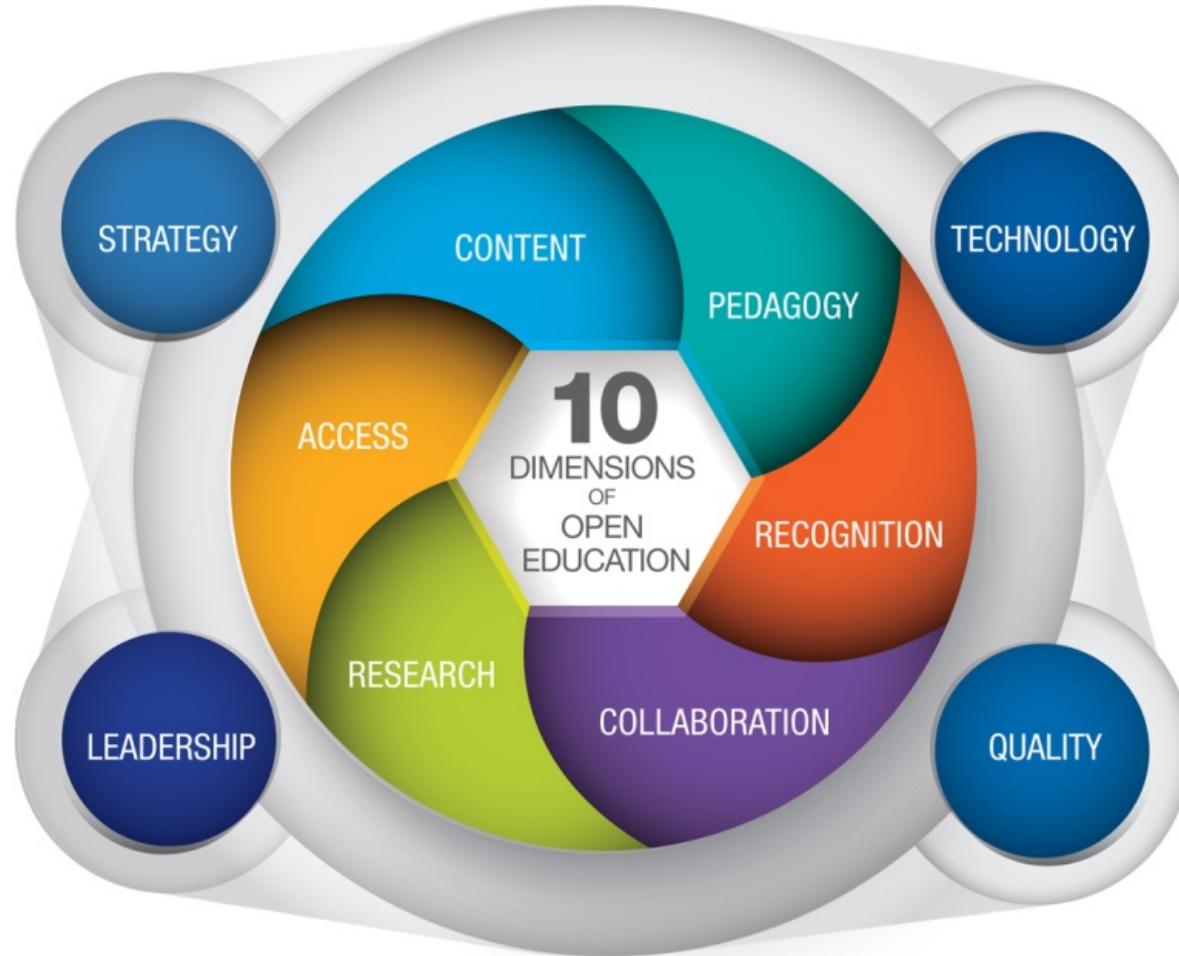
## ¿Qué es educación abierta?

En el marco del estudio OpenEdu, se considera educación abierta como un modo de implementar la educación, a través de las tecnologías digitales, cuyo objetivo es extender el acceso y la participación de todos. La educación abierta ofrece múltiples formas de enseñanza y aprendizaje , construyendo y compartiendo conocimiento, así como una variedad de vías de acceso tanto a la educación formal como a la no formal, tendiendo puentes entre ellas.



# OpenEdu Framework

# Opening up education framework



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

# What does the framework look like?

## Dimensions:

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

**4 transversal:** strategy, leadership, technology, quality

For each dimension of open education, the framework brings:

- ✓ *Dimension definition*
- ✓ *Rationale*
- ✓ *Components*
- ✓ *descriptors*

Opening up education strategic planning template

# Why is a framework important?

The framework provides a guide to think through critical questions and challenges conventional wisdom. No framework provides definitive answers. The answers come through the insights generated by the process of engaging with the framework.

# Forthcoming report

## Opening up Education

*A Support Framework for  
Higher Education  
Institutions*

Andreia Inamorato dos Santos  
Yves Punie  
Jonatan Castaño Muñoz

2016

3



# OpenCases

# Tool: OpenEdu Framework



## OpenEdu Project

**OpenCases**

9 case studies

**OpenCred**

4 case studies

**OpenSurvey**

5 countries

**Moocknowledge**

survey of learners

**in-house  
research**

**90+ stakeholders consulted**

**Final  
Report**

**OpenEdu Framework**

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

# OpenCases: 9 case studies

- ETH Zurich
- France Université Numérique (FUN)
- OERu (open operations example)
- TU DELFT (open research example)
- Universidad Carlos III de Madrid (open teaching example)
- AGH
- Virtual University of Bavaria
- OpenupEd
- ALISON

# Open education activities

## Open teaching:

The activities are varied but MOOCs tend to be the focus.  
Take-up is still limited due to lack of knowledge and incentives to focus mostly on research publications.

## Open research:

Mostly based on the use of open access repositories (open access research). Less commonly found are open data repositories and the production of open software for research.

## Open operations:

This is the less known part of open education. Open management, open information about their operations, etc. **Transparency concept**.

# Carlos III de Madrid – open teaching

- open education in Spanish and English
- started with opencourseware in 2006-2007
- present in MiriadaX, YouTubeEdu y iTunesU
- digital.uc3m.es

**Involvement with open education is recognised  
'teaching merit' (academic and financial implications)**  
**Reduced regular teaching hours and salary supplements**



UC3M

UC3M

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About

## Divulgación Científica

Vídeos sobre noticias de divulgación científica realizados por la Oficina de Información Científica del Servicio de Comunicación Institucional de la Universidad



[¿Cuál es el origen de la rivalidad entre el Atlético de Madrid y el...](#)

by UC3M  
8 views • 6 hours ago



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## Uploads



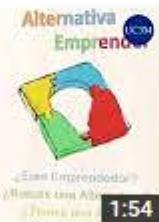
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30 views • 2 weeks ago

Usted está aquí: Inicio &gt; Cursos

## Categorías

\* Asignaturas Básicas de Física, Matemáticas y Química: Cursos Cero

Biblioteconomía y Documentación

Ciencia e Ingeniería de Materiales

Derecho Eclesiástico del Estado

Derecho Privado

Derecho Procesal

Derecho Público

Derecho Social

Economía

Economía de la Empresa

Estadística

Filosofía del Derecho

Física

Historia del Derecho

Humanidades

Ingeniería de Organización

## Cursos

RSS Feeds

## Categorías

- \* [Asignaturas Básicas de Física, Matemáticas y Química: Cursos Cero](#)
- [Biblioteconomía y Documentación](#)
- [Ciencia e Ingeniería de Materiales](#)
- [Derecho Eclesiástico del Estado](#)
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- [Economía de la Empresa](#)
- [Estadística](#)
- [Filosofía del Derecho](#)
- [Física](#)
- [Historia del Derecho](#)
- [Humanidades](#)
- [Ingeniería de Organización](#)
- [Ingeniería de Sistemas y Automática](#)
- [Ingeniería Eléctrica](#)
- [Ingeniería Informática](#)
- [Ingeniería Mecánica](#)
- [Ingeniería Química](#)
- [Ingeniería Telemática](#)
- [Ingeniería Térmica y de Fluidos](#)
- [Matemáticas](#)
- [Mecánica de Medios Continuos y Teoría de Estructuras](#)
- [Periodismo y Comunicación Audiovisual](#)
- [Química Física](#)
- [Tecnología Electrónica](#)
- [Teoría de la Señal y Comunicaciones](#)
- [Ver Cursos Archivados](#)

\* Asignaturas Básicas de Física, Matemáticas y Química: Cursos Cero

Matemática introductory para el Grado en Ingeniería Informática, 2011



Free online courses from Universidad Carlos III de Madrid

Universidad Carlos III de Madrid (UC3M) is an innovative public university committed to the improvement of society through teaching of the highest quality and cutting-edge research in line with stringent international guidelines. UC3M has three degree-granting Schools, in addition to a School of Graduate Studies and a Doctoral School.

Established in 1989, UC3M develops its activities in four campuses and enrolls about 18.000 students in undergraduate and postgraduate studies.

 See more

## Universidad Carlos III de Madrid MOOCs

Browse free online courses in a variety of subjects. Universidad Carlos III de Madrid courses found below can be audited or students can choose to receive a verified certificate for a small fee. Select a course to learn more.



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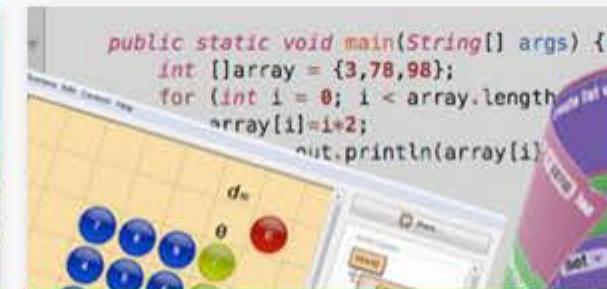
UC3Mx  
HGA.2.1x

Deciphering Secrets: Unlocking the Manuscripts of Medieval Burgos (Spain)

Starting Soon

Starts: June 14, 2016

21



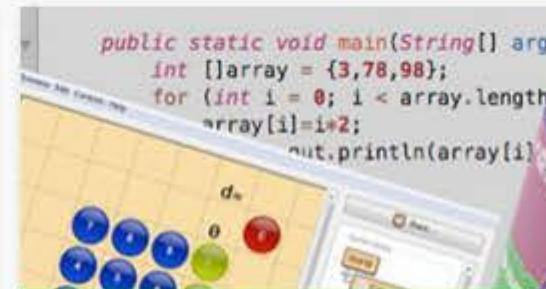
**VERIFIED** 

UC3Mx  
IT.1.1x

Introduction to Programming with Java Part 1: Starting to Code with Java

Current

Self Paced



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UC3Mx  
IT.1.2x

Introduction to Programming with Java Part 2: Writing Good Code

Current

Starts: April 26, 2016



European Commission

# TU Delft – open research

Numerous initiatives on open research:  
**institutional research repository**, theses,  
publications and data sets.

**3TU datacentrum**: centre that focuses on open  
data (access to data and support and advice on data  
management)

**Open source software production**: visualisation  
of data and modeling of 3D projects



# TU Delft Library

[Borrowing](#)
[Support](#)
[Visitor info](#)
[Collections](#)


 Search in collection

 Info about services

## Collections

[TU Delft Library](#) > [Collections](#) > [3TU.Datacentrum](#)

## 3TU.Datacentrum

*3TU.Datacentrum increases the visibility, findability and citability of research results.*

Researchers can turn to [3TU.Datacentrum](#) for advice and support on data management at any stage in the research process, and offers them:

- permanent access to research data
- support in preparing a data management plan
- options to manage, share and document data during the research
- long-term storage facility for scientific and academic research data
- options for linking publications to underlying data
- improved search visibility and citing for research data

3TU.Datacentrum is an initiative of the three technical universities in the Netherlands (Delft, Eindhoven, Twente).

## Data management plans (DMP)

Research funders are increasingly asking for a brief description of the [plans for data management](#) in the research proposal. Team 3TU.Datacentrum offers advice in meeting these conditions.

3TU.Datacentrum

# OERu: open operations

- Open philanthropy principle
- Information available on the web, participatory-decision making
- OERu engages in open planning consultations
- See WikiEducator: news about OERu and activities
- Things to do list available on the web

TU Delft Library: 3TU.Datac... X WE OERu (Open planning pag... X +

http://wikieducator.org/OERu/Home



WikiEducator  
free elearning content

Page Discussion

Join our [Wiki](#)

# OERu (Open planning pages)

< OERu

## OERu

Towards more affordable education for all students worldwide

[Home](#) | [Quicklinks](#) | [About](#) | [Logic model](#) | [People](#) | [Planning](#) | [Communications](#) | [Meetings](#) | [Resources](#) | [Me](#)

[Official Website](#) | [5 Things you should know about the OERu network plan](#) | [Founding anchor partner statement](#)

### Who we are

The OERu is a virtual collaboration of [like-minded institutions](#) committed to creating flexible pathways for OER learners to gain formal academic credit.

The OERu aims to provide free learning opportunities to all students worldwide using OER learning materials with pathways to gain credible qualifications from recognised education institutions. It is based on the community service and outreach mission to develop a parallel learning universe to augment and add value to traditional delivery systems in post-secondary education. Through the community service mission of participating institutions we will open pathways for OER learners to earn formal academic credit and pay





## JRC SCIENCE FOR POLICY REPORT

### How are Higher Education Institutions Dealing with Openness?

*A Survey of Practices,  
Beliefs, and Strategies in  
Five European Countries*

Jonatan Castaño Muñoz, Yves Punie, Andreia Inamorato dos Santos, Marija Mitic and Rita Morais

2016

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EUR 27750 EN

## JRC SCIENCE FOR POLICY REPORT

### 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, Graeme Conole, Bernard Nkuyubwatsi, Yves Punie

2016

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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



Report EUR 27244 EN

4



# What is new?s

# What is new?

- Courses and research data available online to all
- A way to 'see through' academic institutions
- University courses 'taster' for learners
- Increasing possibility to get recognition of your open learning
- Reinforced teacher training and new teaching practices



# Thank you and stay in touch!



JRC Science Hub:

[ec.europa.eu/jrc/en/open-education](http://ec.europa.eu/jrc/en/open-education)



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YouTube:

[JRC Audiovisuals](https://www.youtube.com/JRC_Audiovisuals)