Universidad Carlos III de Madrid
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The MOOC Canvas

A tool to describe and design MOOCs

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The MOOC Canvas

Massive Open Online Courses (MOOCs) are a growing trend that has disrupted Higher Education through initiatives such as Coursera, edX, Udacity or MiríadaX. Many teachers are starting to offer MOOCs in different areas and disciplines. However, designing and implementing a MOOC is not an easy task since, besides taking into account the pedagogical aspects of the MOOC, teachers must face logistical and technological aspects that are specific of this type of courses. The MOOC Canvas is a framework designed to alleviate this complexity. The MOOC Canvas allows to easily describe MOOCs, supporting their design, and also serves as a tool for promoting discussions between the different stakeholders involved in the creation of a MOOC.

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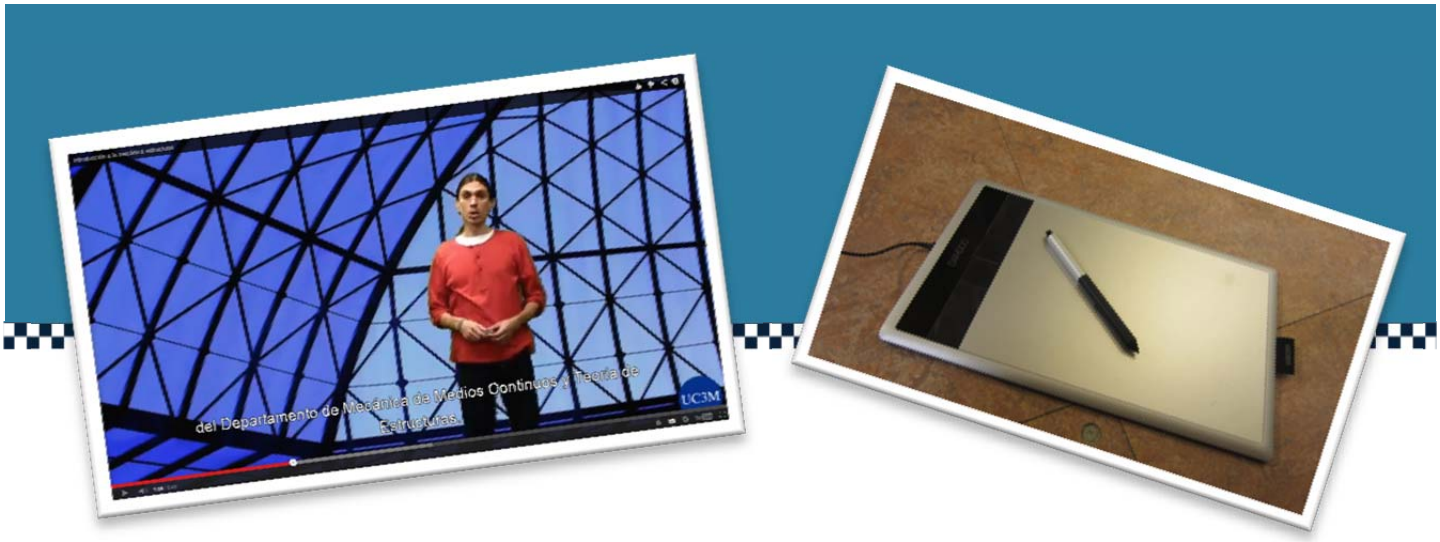
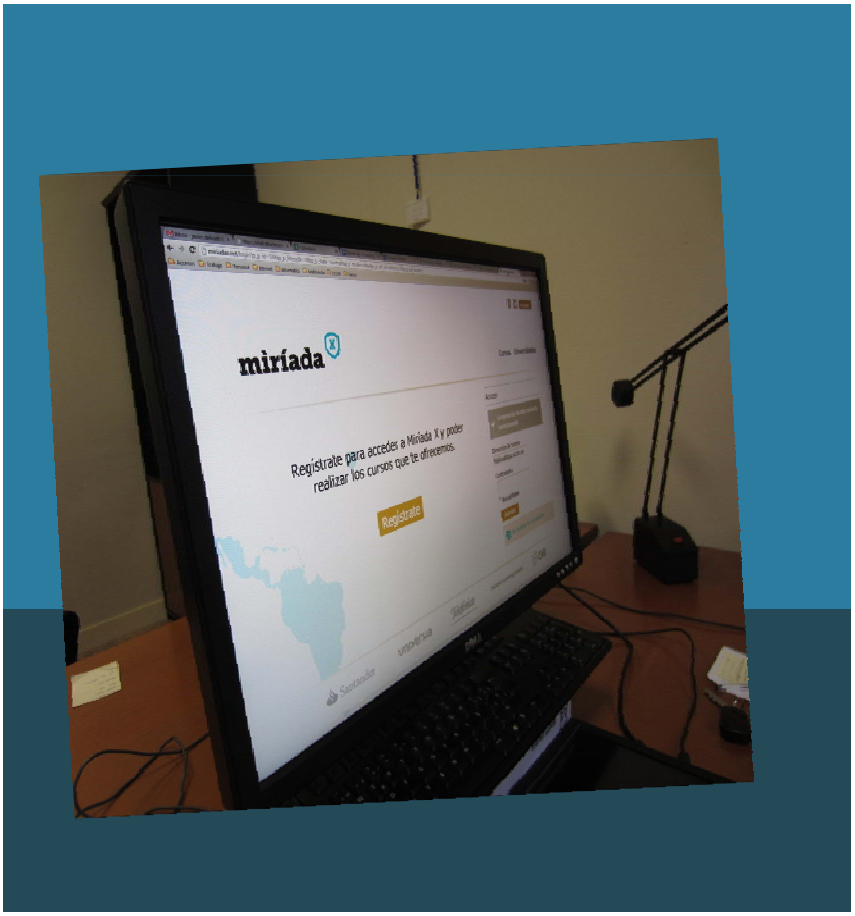




What is it?

The MOOC Canvas is a conceptual framework to facilitate educators the description and design of MOOCs.

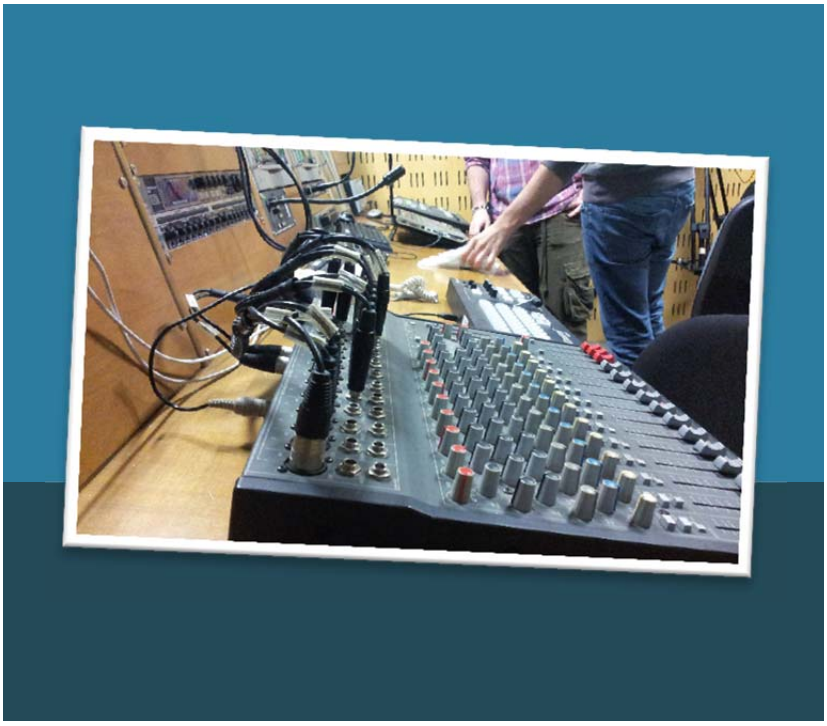
The MOOC Canvas is implemented through a simple graphical representation, which includes 11 interrelated issues of logistical, technological and pedagogical nature.

Concrete questions lead reflection and discussion about each of the 11 items in the MOOC Canvas.

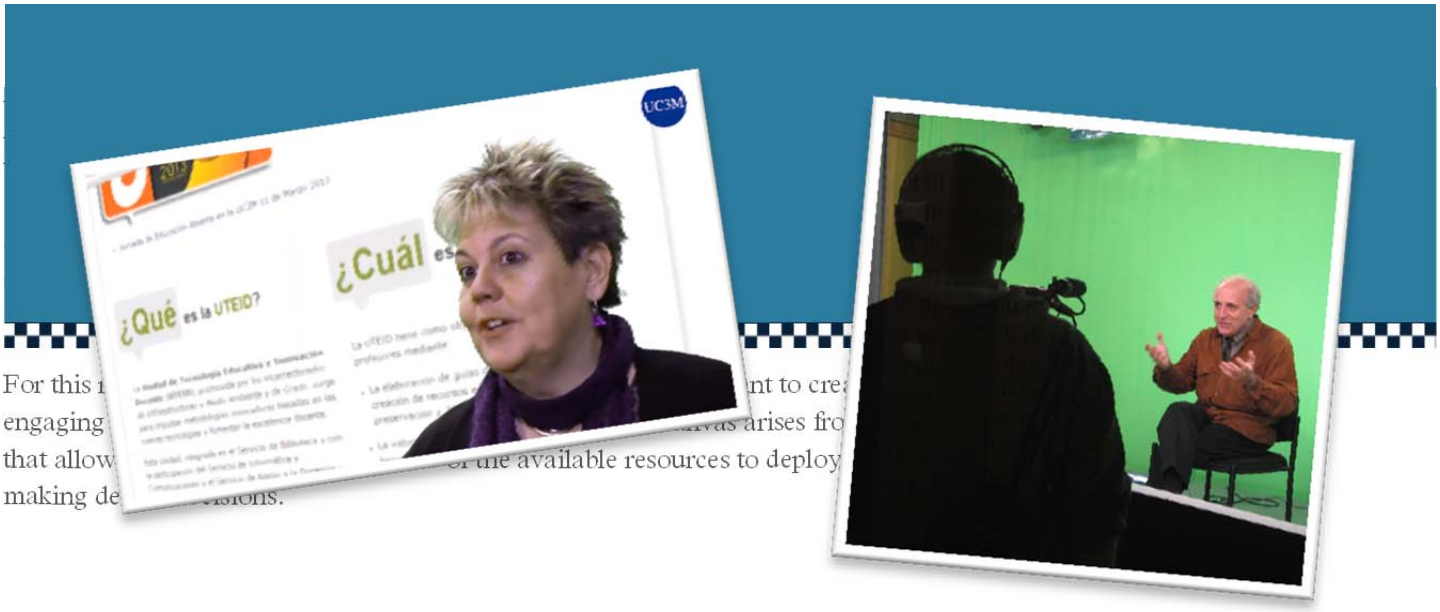
Who targets it?

The MOOC Canvas targets any educator who wants to teach/design a MOOC. In addition, the MOOC Canvas is particularly suitable for teachers with no experience running MOOCs, who need to design their course from scratch.

The MOOC Canvas also serves as a communication tool between technical and administrative staff and the teaching staff, since it allows indicating the available resources, and is adaptable to different platforms.



> “The MOOC Canvas is particularly suitable for teachers with no experience running MOOCs, who need to design their course from scratch.”



Why is it necessary?

Designing a MOOC is a very expensive task that demands a great effort from the teaching staff. Available studies conclude that creating a six-week MOOC may require more than 100 hours of work before starting the course, plus another 10 hours per week on upkeep while running it. The Open University UK estimated the cost of producing a MOOC in 20,000-25,000€, including, in addition to equipment, the time dedicated by all stakeholders (teachers, technicians, audiovisual staff, administrative staff, etc.).

For this reason it is necessary to plan carefully the MOOC you want to create and avoid engaging in MOOCs that are too ambitious. The MOOC Canvas arises from this need as a tool that allows teachers to get an overview of the available resources to deploy the MOOC before making design decisions.

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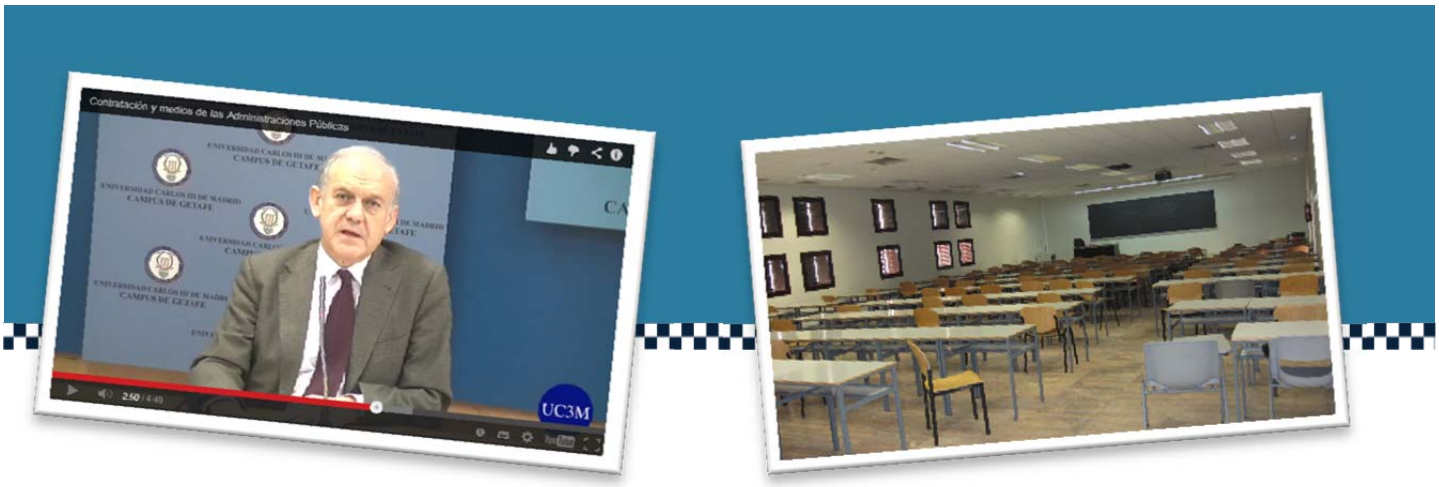


The MOOC Canvas

The MOOC Canvas is implemented on a canvas that contains 11 interrelated issues that invite teachers to reflect on the MOOC they want to propose, by means of a set of given questions. The issues in the MOOC Canvas are grouped into two categories: **available resources** and **design decisions**.

Available resources refer to those key resources that teachers have at their disposal at the time of designing the MOOC. These resources should be agreed at the institutional level, since the teacher may not be aware of some of them (e.g. the features offered by the platform in which the MOOC is deployed). These resources do not address financial, and economic resources since those can be exchanged for any of the remaining available resources.

1. *Human resources*
2. *Intellectual resources*
3. *Equipment*
4. *Platform*

Once the available resources are filled in, teachers should discuss the design decisions around the MOOC. This design decissions are dependent on each other and are affected by the available resources.

5. *General description*
6. *Target learners*
7. *Pedagogical Approaches*
8. *Objectives and competences*
9. *Learning contents*
10. *Assessment activities*
11. *Complementary technologies*

The MOOC Canvas should be completed from left to right and from top to bottom, although once discussed the contents of each of the issues for the first time, they may evolve until an agreement among teachers is reached.

MOOC Canvas

Design by:
Date:
Version:

1. Human

1.1 What human resources (number of people available and dedication in hours...) do you have for launching the MOOC?
1.2 Do you have the possibility of hiring someone to help you in the operation of the MOOC?

2. Intellectual

2.1 What intellectual resources (learning materials, OERs, pictures, videos...) do you have for launching the MOOC?
2.2 Do you have the possibility of paying for additional intellectual resources?

3. Equipment

3.1 What hardware resources (recording studios, cameras...) do you have for preparing the contents?
3.2 What software resources (licenses for video recording and editing softwares..) do you have for preparing the contents?
3.3 Do you have the possibility of buying/hiring additional hardware or software resources?

4. Platform

4.1 Regarding learning contents: What type of formats (multimedia, text, ...) are supported in your platform?

4.2 Regarding assessment activities: What type of assessment activities (multiple choice, peer review...) are supported in your platform ?

4.3 Do you have any social tool available in your platform?

Available resources

5. General Description

5.1 What is the name of your MOOC?
5.2 What is the duration (in weeks) of your MOOC?
5.3 What is the field/area of your MOOC?

6. Target Learners

6.1 What countries do learners come from?
6.2 What is the literacy of the learners?
6.3 What professional sectors do learners belong to?
6.4 What is the motivation of learners to join the course?

7. Pedagogical Approaches

7.1 What pedagogical approach/es are you going to use to design your course (knowledge dissemination, connectivism, project-based learning, case-based learning, collaborative learning, active learning...)?

8. Objectives and Competences

8.1 What are the learning objectives of this course?
8.2 What are the competencies that learners should acquire during the course?

9. Learning Contents

9.1 How are you going to structure learning contents?
9.2 What formats are you going to employ for learning contents (videos, pdfs, ppts., e-books...)?
9.3 Does your platform allow these structure and formats?

10. Assessment Activities

10.1 What formative assessment activities are you going to include?
10.2 What summative assessment activities are you going to include?
10.3 Does your platform allow these assessment activities?

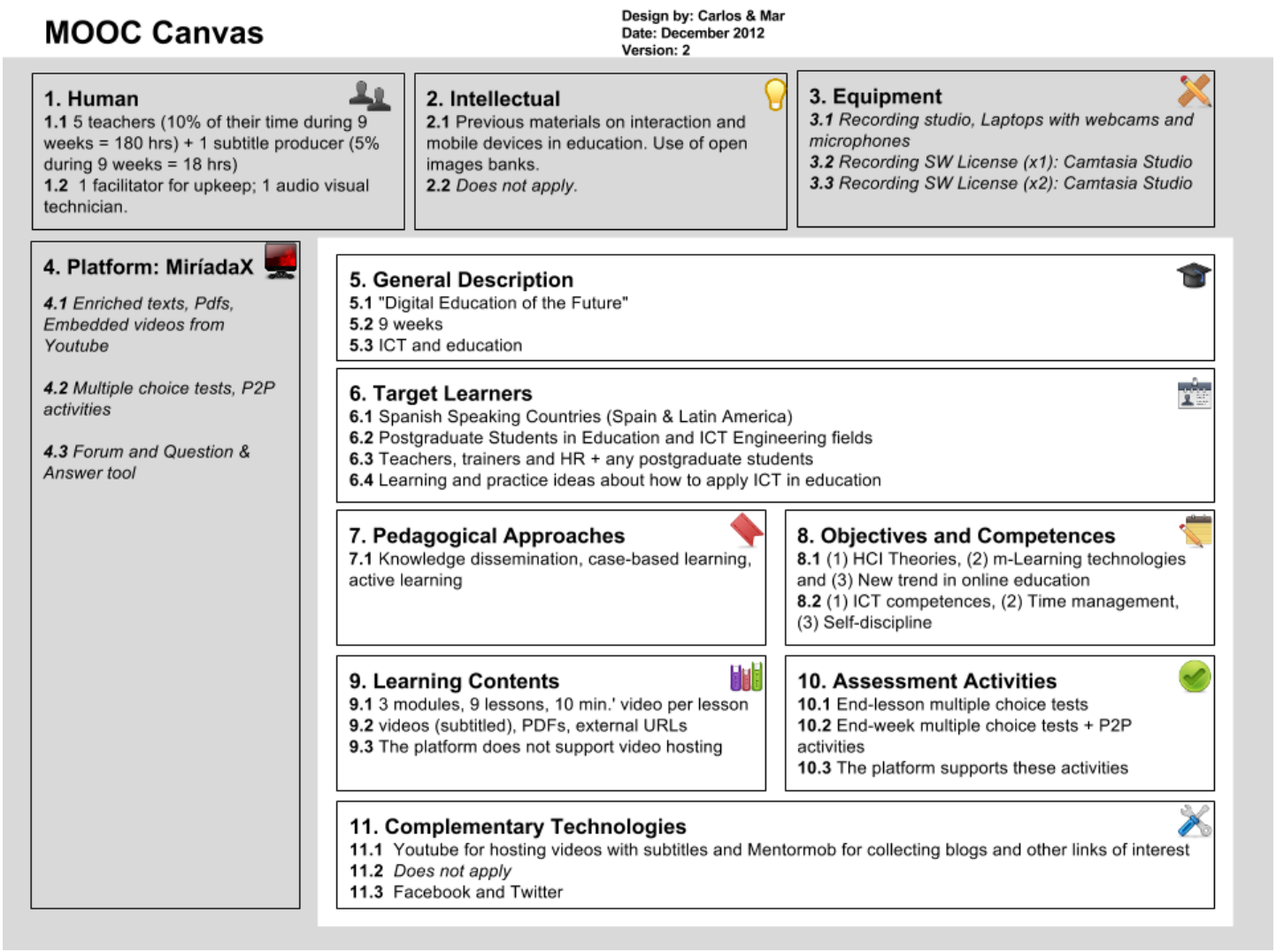
11. Complementary Technologies

11.1 Are you going to use complementary technologies for delivering learning contents (Youtube, Flickr...)?
11.2 Are you going to use complementary technologies for the assessment activities (Hot Potatoes...)?
11.3 Are you going to use complementary technologies for promoting communication and discussion among learners (Facebook, Twitter...)?

Design decisions

Example of use

Below there is an example of use, presenting the final design of the MOOC "Digital Education of the Future" taught by the Department of Telematics Engineering and the Department of Humanities at the University Carlos III of Madrid, and deployed in the platform MiríadaX



About us

Carlos Alario-Hoyos

Carlos is a postdoctoral researcher and teaching assistant in the Department of Telematics Engineering at the Universidad Carlos III de Madrid with the fellowship Alianza 4 Universidades. He received M.S. and PhD degrees in Information and Communication Technologies from the Universidad of Valladolid, Spain, in 2007 and 2012 respectively. His main research interests include MOOCs, interoperability, and the design and development of software tools that facilitate the design and enactment of collaborative learning situations.

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Carlos Delgado-Kloos

Carlos is full Professor of Telematics Engineering at Universidad Carlos III de Madrid. At this university, he is also Vice-Chancellor for Infrastructures and Environment. His interests lie in technology-enhanced learning. He has been, and is presently involved, in many projects with European or Spanish funding. He has published over 200 articles in national and international conferences and journals. He has also written a book and co-edited another six.