DEVELOPING THE 1ST MOOC OF UNIVERSITY OF PORTO: CHALLENGES AND STRATEGIES

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ABSTRACT

This article is a case study on how the educational technologies unit of the Digital University describes the experience of thinking, creating multimedia contents and training teachers regarding the development of the first MOOC of University of Porto (U.Porto).

Upon describing this experience, we focus on the most relevant topics such as how the university regards MOOCs, our previous experiences and on our role as facilitators and producers of the first MOOC.of the university. This experience challenged us to define newer and better strategies regarding content production. We ended this first experience valuing AV professionals when recording educational videos in order to have good quality in final products, which was afterwards confirmed by the MOOC participants when replying the final satisfaction questionnaire.

KEYWORDS

MOOC; education; pedagogy; multimedia; educational video

1. INTRODUCTION – THE UNIVERSITY OF PORTO

The University of Porto (U.Porto) is a benchmark institution for Higher Education and Scientific Research in Portugal and one of the top 200 European Universities according to the most relevant international ranking systems (U.Porto website).

The growing investment that the University has done in the modernization of pedagogical paradigms and informal education is also achieved by encouraging teachers in the development of MOOCs.

Being this the first MOOC of the University of Porto, it has increased the importance of being able to establish itself as an example that can be taken by other teachers who are developing this type of courses. (Azevedo, 2014)

At U.Porto the unit for educational technologies, has the mission of promoting and supporting the usage of a vast array of technologies in learning and education on "b" and "e-learning" contexts. We help both academics and support staff, regardless their area of knowledge. Each member of the team helps teachers to put into practice their ideas into an online learning journey, guiding them through the design, development and delivery stages of an online course. This unit exists since 1998 and now is evolving with new challenges specially those centered in the use of video material in distance learning courses. It is important to point out that U.Porto is a traditional face-to-face university with no intention of being a distance/online university. This involvement is seen as a challenge for the academic staff and an opportunity to explore new T&L paradigms.

When developing a MOOC, the educational technologies team plays a key role, acting as an interface between the platform that hosted the course and staff. On top of that we also help with the recording, production and editing of all the videos, providing also advice and information about various aspects of creating a MOOC. All of this work is free of charge for the academic staff.

2. STATE OF THE ART

Right before engaging on this MOOC initiative, at U.Porto we actively worked to get involved with the biggest players in this industry, learning by sharing ideas and methods. Following this idea, in November 2014 we hosted at U.Porto the HOME (Higher education Online: MOOCs the European way) conference "Mapping the European MOOC Territory".

This event gathered many of the HEI that produce MOOCs and a statement was drafted "on how European institutions, governments and the European commission should react on the opportunities and threats of MOOCs" (EADTU, 2015). The Porto Declaration on European MOOCs (Porto Declaration) was signed and paved the way to ensure that European MOOCs keep following the upward movement they have been on: "MOOCS have continued to attract considerable media coverage as governments and universities respond to the open and online education movement. MOOCs are, at this moment, seen as a disruptive force and an important driver for change—for both better and worse.

The growth of MOOCs has helped to make institutions, governments and societies at large more aware of the possibilities of open and online education." (EADTU, 2015).

Another landmark was the Seminar "Criando um curso MOOC - da ideia ao ensino" - Creating a MOOC course - from the idea to teaching" promoted by ET unit with keynote speakers from the Universitat Autònoma de Barcelona. The turnaround was very interesting and we could feel a shy, but existing buzz around this subject at U.Porto.

From some empirical standpoint, teachers still feel uneasy with MOOCs and how to implement them. In Portugal, many of the so called MOOCs are still following a structure more commonly used on online distance courses. The focus is still not on video production like many of the examples we can see from reference institutions.

This lead to the development of U.Porto's vision for MOOCs, where video quality and a strong multimedia production play vital roles. One of the first items addressed was the necessity of implementing guidelines to support staff on every aspect of thinking, creating and producing a MOOC.

3. GUIDELINES FOR MOOCS

We defined several guidelines for the MOOCs implementation. All these guidelines were created and analyzed by a multidisciplinary team of teachers, technical and pedagogical specialists, that worked together, and created a positive engagement in the organization regarding this new learning experience.

These resources were made available at the elearning website (https://elearning.up.pt/mooc/recursos/) and had information on "How to get started", but also resources about the pedagogical model for MOOCs, an excel spreadsheet for content planning and some recommendations for video pre-production.

All of these guidelines were always followed by a close watch and guidance from our team.

4. U.PORTO FIRST MOOC

4.1 MOOC Framework – Financed Project

Entitled "Climate changes in the school media" (https://miriadax.net/web/as-alteracoes-climaticas-nos-media-escolares), the first MOOC of University of Porto is dedicated to the topic of climate changes and the usage of digital media in the classroom, as a way of engaging students to learn more about this topic.

The target audience of this course was primarily consisted of primary and secondary school teachers in the fields of science, to those responsible for school's media and to anyone interested in this topic.

At the moment, climate changes are a global issue, but schools are failing in teaching the theme to participants. This MOOC intends to innovate in this field, by providing teachers with a set of strategies and soft skills they can use in the classroom setting to convey, through the media, information on climate changes such as what is happening in the climate and its causes, impacts and possible solutions. All of this would be

achieved by using a more familiar language, some skilled teachers would learn upon learning how the media works.

This MOOC was an output of a bigger project, Clima@EduMedia (http://climaedumedia-en.weebly.com/), developed by the Faculty of Arts of the University of Porto under the Programme "AdaPT - Portugal Adapting to Climate Changes" and financed by the EEA Grants.

4.2 Summary of the MOOC: Topic, Content and Target Audience

Climate changes are a recurrent subject on the media. To make a critical interpretation of the information submitted it's necessary to understand the basics of the climate system (such as weather, climate or greenhouse gas effect). The advantages of using media such as writing news, infographics, audio and video, to teach climate changes are explored in this MOOC.

The course is divided into five modules taking place during five weeks. Each week trainees are given specific tasks to complete, for example: view the two videos of the module; analyze the proposed teaching strategies for classroom and complete a self-assessment.

Additionally, participants have the opportunity to engage in discussion forums, analyze the support manuals, for a further view on the topics covered by the videos; and have access to a references section, which allows participants to explore the subjects according to their interest.

Given that the target audience of this MOOC is composed almost entirely of full-time workers and the subject was related to the use of new technologies in education, this MOOC became a flagship for U.Porto to explore massive and global education scenarios, supported by good quality audiovisual content. For this, a fairly known TV journalist was hired to present all the contents that have been previously scientifically validated. The iterative process of creating the videos started with writing the scripts. Soon after the scripts were adapted to a more appealing video language that made full use of the journalist's expressiveness, video and motion graphics. The goal was to create interesting as well as scientifically correct videos. The journalist was key to make the videos appealing and the video production easier and more cost effective. His previous experience working with this subjects made him very at ease with the process and his inputs regarding how to convey information the best way possible were always regarded and validated by the teachers responsible. MOOC.

4.3 MOOC: Facts And Figures

The MOOC had 723 people enrolled, in which 90% were Portuguese and the remainder from Brazil, Spain and other portuguese speaking countries - PALOP. Of this number, about 549 (75.9%) started the course and 311 (43%) have completed it, which shows a higher rate of completion than average in MOOCs.

Most of the participants were teachers (80%), which showed great interest in the MOOCs pedagogy and also in the educational resources available on the course (videos, support manuals and educational strategies proposals).
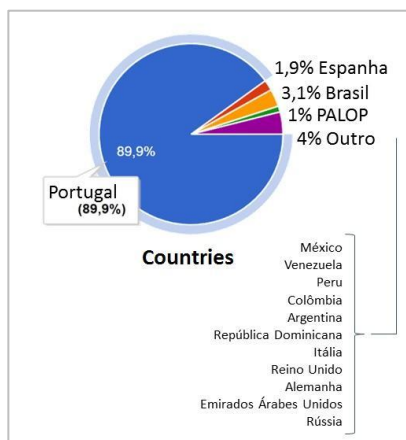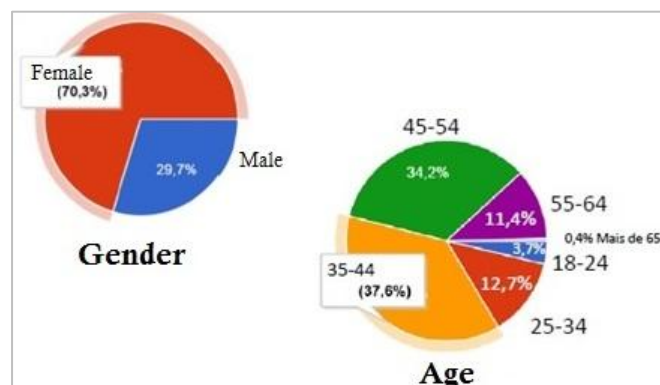

Figure 1. MOOC community: countries
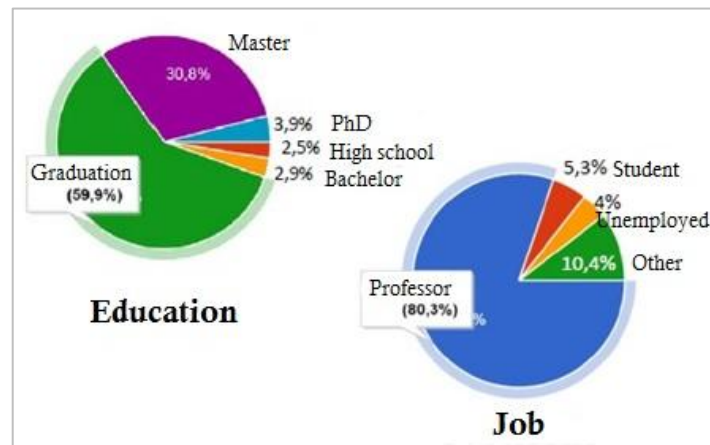

Figure 2. MOOC community: gender and age

Figure 3. MOOC community: education and occupation

The MOOC started on 5 October 2015 with an introductory week, called "Presentation module".

During the first week, "the participants were asked to give some elements of their profile, such as their geographic origin and their scientific and professional background, among others to check to which point the actual audience fitted the expected one. During this week they could get familiar with MOOCs rules, platform's tools and basic vocabulary." (Soares-Frazão, F. et al, 2005).

4.4 MiríadaX Platform

The chosen platform to offer the MOOC was MiriadaX (http://www.miriadax.net), promoted by Telefónica - a company specialized in offering integral solutions of online learning and training for education - and Universia, the largest network of Spanish and Portuguese speaking universities whose purpose is to foster diffusion of open knowledge in the ibero-american higher education space (MiríadaX website).

The platform is widely spread in the ibero-american community and has 3 years old, 2 million of registered users, 64 universities represented and 1469 professors enrolled. Currently the MiríadaX community have 338 courses with about 600,000 peer review activities.

These figures put MiríadaX on the 5th place in the ranking of MOOC platforms most commonly used in worldwide. (ICEF Monitor, 2015)

5. CONCLUSIONS AND FUTURE WORK

The University of Porto first MOOC attracted a large number of participants and the tutor's interventions on the course were focused on how to create an effective learning community, mainly by encouraging the use of these tools and strategies in classrooms.

Participants highlighted as crucial for their registration and continuity in the MOOC the following items: interest in the topic, considered innovative by combining climate changes and media; quality of the resources presented; flexibility allowed - online course without synchronous moments; opportunity to interact with a large number of people with similar interests, allowing for the exchange of experiences and ideas.

As we know, from other experiences, the innovative conception behind this MOOC and "the process of its creation has offered to all team an invaluable opportunity to reflect about the way MOOCs offer some answers to the challenges of the European higher education system today." (Prades, G. et al, 2005).

With the development of this first MOOCs it became clear that group dynamic is very important for the design, development and execution of a MOOC. A multidisciplinary team was assigned to create and develop this course and its success is the direct result of everybody's inputs. Producing high quality audiovisual content, after this experience, is even more important than before. We used every facility at our disposal such as the University's TV production studio and their sound and video technician. For the voiceover parts we used an experienced voiceover artist. Every step we took was to make sure that both audio and video could

be the best at the time of production. Our team, despite being small, managed to overcome some of the technical challenges faced during the production. The pedagogical support was also determinant for the success of this MOOC. Summing up, the team used over 400 hours to produce this course.

This first experience leads us to believe that the University of Porto's policies on MOOCs could also be improved upon and we will be actively working on this topic. Currently we have in production two more MOOC courses and there are some others being developed as projects.

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