MOOCs for Teachers: eBooks, Digital Storytelling and EXPO2015¹

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Abstract

In school year 2013-14, HOC-LAB at Politecnico di Milano was one of the first Italian institutions to design and deploy MOOCs. Two MOOCs were offered, aimed at teachers: "eBooks and Digital

Publishing" and "Digital Storytelling at School". In both cases, efforts were spent to carefully design the educational experience, to provide learners with good quality content and to support them during the course; issues like professional video-editing, on the other hand, were purposely neglected: costs were thus kept low. The MOOCs gathered a remarkable number of participants (on the whole, almost 2,500) and gave vent to fairly positive results. In this paper, we present the design of the two MOOCs and the evaluation data. The main lesson learned is that a low-cost approach that puts the quality of the content and of the pedagogical implementation at center-stage can be very effective.

Keywords: MOOCs, eBooks, Digital Storytelling, EXPO2015

Introduction

In school year 2013-14, HOC-LAB (Politecnico di Milano) was one of the first Italian institutions to design and deploy MOOCs. "eBooks and Digital Publishing" was the first, followed by "Digital Storytelling (from now: DST) at School". Both were aimed at teachers on the job, of all school levels.

The choice was to keep production values to the minimum, in the belief that a strong instructional design and pedagogy as well as the so-to-speak "intrinsic" quality of the content would be more important. The budget was thus steered towards experts' involvement rather than, for example, professional editing of videos and other resources. The evaluation data, gathered through online questionnaires, seem to prove this choice right: first of all, completion rate is very high, above international standards; second, satisfaction is good, especially as regards the content and course's structure; third, teachers seem to have undergone a positive change of attitude towards the courses' subjects.

State of the Art

MOOCs have only recently appeared on the scene (having gained momentum in 2012, the "year of the

MOOCs"), but like most of the things in which technology is involved, they are evolving at a very fast pace. The first MOOCs began as a hybrid between Open Educational Resources and online courses and were mostly focused on knowledge transmission (Gaebel, 2013; Liyanagunawardena et alii, 2013; Various Authors, 2013; Ghislandi, 2013). Over these few years, MOOCs have started to differentiate into kinds. The so-called cMOOCs (connectivist MOOCs) are based on cooperation among participants, who are expected to share knowledge and resources, give feedback and support to peers, etc. (Crowley, 2013; Reeves, 2013). xMOOCs, on the other hand, are more focused on knowledge transmission, through video lectures, quizzes, discussion, peer assessment. In a sense, they are more

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passive with respect to cMOOCs. As Siemens (2012) point out, "cMOOCs focus on knowledge

creation and generation whereas xMOOCs focus on knowledge duplication." A third kind of MOOC is the pMOOC, (project-based MOOC), focusing on knowledge production through a constructivist approach.

In this paper we present two case studies, a cMOOC and an xMOOC, paving the way towards two MOOCs on the EXPO2015 themes, about to be deployed.

Case-studies

The "eBooks and Digital Publishing" and "DST at School" MOOCs are both characterized by low-cost production on one side and careful instructional design on the other, building on top of over 10 years of experience in designing and delivering online courses for teachers (http://www.dol.polimi.it). The choice was to invest on the creation of high quality content rather than on professional packaging.

The goal of both MOOCs was to provide teachers (of all school levels) with theoretical and practical tools to introduce two topics currently widely discussed into their standard school activities. The

"eBooks and Digital Publishing" MOOC focused on different types and formats of eBooks and eReaders, on the new ways of reading and writing facilitated by them and on strategies for adopting (basic level) or designing and implementing (expert level) eBooks. The DST at School MOOC presented the state of the art on DST for education and introduced the steps for multimedia story-creation within a class, discussing the related pedagogical issues (organization and benefits).

In both cases, the materials (videos, documents, tutorials) were organized into a structure of 6 phases, spanning 8 weeks. Being the MOOCs asynchronous, students were free to follow the suggested educational path at their own pace.

Both MOOCs were disseminated among the HOC-LAB alumni community, through the local branches of the Italian ministry of education and through social networks (HOC-LAB Facebook page and Twitter account). Since numbers of enrollment were very high, it is apparent that word of mouth played a major role too.

The eBooks MOOC was mainly a cMOOC, where participants were encouraged to cooperate (through the forum), while the DST MOOC was an xMOOC, mainly focused on passing of knowledge. This

latter though included a wiki (a "pMOOC" component), where students were invited to contribute with reviews of tools for DST. In both cases, the community was poorly sketched, without a definition of roles, rules for posting, tutors: this led to a quite messy development.

Results

Due to lack of space, only the main data of the MOOCs will be presented (a report is available). Let us begin with the numbers of the eBooks MOOC.

- 1) 1802 teachers enrolled
- 2) 1293 (71,7% of the teachers enrolled "participants") made access to the platform
- 3) 309 (23,8% of the participants) delivered the final project
- 4) 188 (14,5% of the participants) successfully completed the final self-assessment quiz

The fact that almost 15% of the participants got to the end of the course is a remarkable results, since most MOOCs have completion rates lower than 13% (Jordan, 2013).

Most of the participants (44%) were from high-school and – quite surprisingly – most were also aged: 63,7% were over 46.

The questionnaire on the results, filled in by 423 teachers, shows a general satisfaction. On a scale from 1 to 5, contents were considered interesting and stimulating (3,68). The structure of the course was the second most appreciated aspect (3,56). More important, teachers agreed that what they had learnt could be fruitfully embedded into their activity in the classroom (3,45).

Eventually, 91,6% of participants declared that they would recommend the course to colleagues. The numbers of the MOOC on DST are lower, but the completion rate is again very high:

- 1) 630 teachers enrolled
- 2) 508 (80,6% of the teachers enrolled the "participants") made access to the platform
- 3) 147 (28,9% of the participants) delivered the final project
- 4) 168 (33% of the participants) successfully completed the final self-assessment quiz

Data on participants' profile are consistent with respect to the previous MOOC: secondary high-school is the most represented school level (35,5%); most participants are quite aged: 69,3% are over 46. The results show a good impact: 63,8% of the teachers acknowledge the usefulness of DST in

education and a surprising 97,5% declare that they will actually implement a DST activity in their class. One last note: participation to the wiki (about DST Tools) was very high (over 300 posts), much higher with respect to all other forum's threads.

Conclusions

The main lesson learned is that the quality of the content matters more than the quality of the container: the high completion rate, the data on satisfaction and change of attitude show that a low-cost approach, where most of the effort is put into the instructional design and the content rather than in the production value, can give vent to a meaningful experience. In the current scenario, in which small/medium institutions around the world are starting to wonder whether to become MOOCs

providers, the message that "yes, you can", even if your resources are not comparable to those of

Stanford or MIT, is, in our opinion, a good news, in line with the MOOCs' inherent philosophy of

"democratization" (Koller, 2012). It is not only a matter of allowing everyone to access resources but also a matter of *empowering everyone to share their own resources*.

The second lesson is that the community is a crucial component, but needs a careful design, since the boundaries between formal and informal education are unclear: some teachers complained about the absence of a tutor (in spite of the fact that they had been told so from the start) while some others mistook their peers for tutors (and thanked them).

The third lesson is that pMOOC activities, like the wiki in the DST MOOC, are a powerful means to involve participants and sparkle cooperation.

Capitalizing on this experience, two new MOOCs have been designed and will be deployed, starting in October 2014 (www.policulturaexpo.it/corsi-online-mooc/). The occasion is the EXPO2015 international exposition, for which HOC-LAB is in charge of the School Project, at national and international level. One MOOC will be about "Education and the EXPO themes". Again, the focus is

on the quality of content rather than on the production value of videos: a number of interviews' transcripts to experts, reinforced by educational guidelines created with the support of a team of teachers. The other will be a pMOOC, to support the teachers who will create a digital storytelling about the EXPO themes. This MOOC will implement a many-to-many communication system, providing participants with an organized place where issues and problems are shared and possibly solved. In order to keep the thread of discussions more focused, in both cases a staff of trained teachers, alumni of our online courses on technology-enhanced teaching, will support the communities.

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