ABSTRACT

The arrival of Massive Open Online Courses (MOOCs) has stimulated teachers and universities to change in some ways the teaching methodologies. The success of these massive courses is based on involving students to acquire knowledge and skills in a wider community by learning from others and using active learning practices. MOOC providers also help universities to support the mission of transferring knowledge to society in any kind of area, supporting lifelong learning and adopting some kind of internationalization strategy. This is an ongoing trend where 17 of top 30 universities in the world’s adopted MOOC courses. Open learning is a strategic and valuable trend in knowledge society. Opportunities appear in the Anglo and Latin American market, while problems associated with the high drop-out rate, the sustainability, and the feasibility of skill certification should be addressed. In this paper we analyze the properties of a MOOC as a learning community by taking data from a pilot of three MOOC courses performed at AbiertaUGR, the MOOC platform of the University of Granada.

Keywords: Brand Communities, Learning Platforms, Massive Open Online Courses, Open Educational Resources, Virtual Learning Communities

INTRODUCTION

Massive Online Open Courses (MOOC) is gaining popularity in Higher Education due to the ability to create online contents for wider student communities. This is a new way to adapt informal learning in universities using nontraditional models, engaging people in OER (Open Educational Resources), applying gamification models and participatory game-driven mechanism (badges, peer review, community reputation, etc.). In this way, MOOCs are both social and informal learning environments. This model has been conducted through inter-institutional platform of courses such as Coursera (2011), EdX (2012) and Udacity (2012) for...
English speakers, and also for Spanish speakers communities in MiriadaX (2013), UNEDComa (Read, T, 2013) and AbiertaUGR (2013).

The engagement of HEIs (High Educational Institution) on creating MOOC course means additional added values such as creating a true open learning community. At a first glance, the platform is a good opportunity for institutions to organize courses and related contents and tools to create a wider open online community. There are two different alternatives for creating massive courses: (a) xMOOC that focuses on content or (b) cMOOC which are connectionist courses more oriented to social and user-centric knowledge experiences. Although both approaches are different alternatives for course management, they have a underlying online community within. This proposal as stated (Gea, M., 2013) arises from educational institutions to find new opportunities through online training and learning as a mission of knowledge transfer to society (Gea, M., 2011). This role to be played in fact, translated into reality through two very different ways: creating its own platform and carry on administrative processes, or joining in a consortium of institutions that relay in the use of a private managed or external platform (Montes, R., 2013b).

MOOCs have been a trending topic in education during 2012 (the year of the MOOCs) (Unesco, 2012) as Figure 1 explains. Currently, as the novelty start to fade and MOOCs exit the peak of the hype cycle, we start to see where they are really going. According to different points of view we can distinguish different trends inside the MOOCs movement itself:

![Figure 1. The MOOC hype cycle](http://www.moocologist.com/wp-content/uploads/2013/02/MOOC_HypeCycle_12111.png)

**THE MOOC HYPE CYCLE – Nov 2012**

- **Characteristics of PEAK of INFLATED EXPECTATIONS:**
  - Thousands of courses available for free, some for credit
  - Virality of experience enables participants to overlook deficiencies
  - Rush to accredit &/or many courses
  - Efficacy of courses under review
  - Common wisdom: higher ed institutions must be a part of MOOCs or risk perish
  - Traditional institutions attacked on price, approach, etc – difficult for them to be heard above the noise

**Catalysts for DISILLUSIONMENT #1:**
- Everyone has used MOOCs... novelty wears off
- Students begin to avoid massive online courses due to one or more poor experiences
- Mainstream institutions are fully on board, but begin new offensive
- Entrance requirements (admissions) imposed on some courses
- Fees imposed for some classes

**Catalysts for DISILLUSIONMENT #2:**
- Early bad news: efficacy is not high
- Accreditation of MOOCs proceeds cautiously
- Costs registrations drop (in part because of so many courses, in part because of dissatisfaction)
- Admissions tightened in order to improve quality of course participation
- Fees for MOOCs escalate as companies struggle to find sustainable business model

**KEY**

- **Hi Ed events**
- **Hi Ed & economic milestones**
- **Technology event**
- **Internet milestone**

Copyright © 2014, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.
1. **Business:** According to Forbes (2013) the MOOC market has exploded. Leading initiatives like Coursera or EdX are getting more and more funding from prestigious universities. The certification market is also moving fast: the “Direct to Profile” beta program recently announced by LinkedIn could be a first important step in giving real value to the MOOCs learning experience. This means that MOOCs are appealing not only for Higher Education Institutions but also for the professional training marketplace. Interest around MOOCs is increasing fast also in Europe: a recent stakeholder meeting in Lausanne (Dillenbourg, P., 2013), summarise the most important European initiatives;

2. **Platform/tools:** The number of platforms providers and tools are also increasing (Edutechnica, 2013) as some institutions find increasingly expensive and time consuming to manage their own platform. Tools for learning analytic start to appear and to be used on the massive amount of data generated by MOOCs courses;

3. **Learners:** Even if the low completion rate is still one of the MOOCs weakest points, the number of professional interested in earning credentials and skills is huge. Initiatives like the afore mentioned LinkedIn beta program can only increase the trust and the value of MOOCs certification for individuals;

4. **Employers:** Most MOOCs platforms start to offer their platform to companies for their own educational needs. Among the most recent initiatives, there is the partnership between Bank of America and Khan Academy or the openSAP MOOC platform. Yahoo also decided to sponsors employees to earn Verified Certificates on Coursera;

5. **Pedagogy:** Even if the pedagogical world has still mixed feelings about the whole MOOC experience, at least MOOCs can be seen as a powerful trigger for a new pedagogical model.

---

**CONSIDERATIONS IN THE CREATION OF A MOOC**

La Formación en abierto de la Universidad de Granada (AbiertaUGR) is a good example of a case study to better understand the relevance of involving universities to create their own MOOC strategies. AbiertaUGR has run as a MOOC pilot with three courses related to ICT during the first semester of 2013. Later on in this paper we give an overview of the platform, the results obtained and its future use. According to the experience gain in the pilot, the following subsections describe the main issues that a HEI should address to offer MOOC course.

**Issue 1: Platform Scenarios**

To put in practice MOOC in a Higher Education Institution two alternatives has been identified: working as a single university or becoming part of a consortium of universities with similar goals, resources, and enhancing interoperability to offer a MOOC by using its own resources to develop a common MOOC platform. The scenario shown in Figure 2 has some advantages and disadvantages. The stronger positive outcome of a website created and managed by universities is that it may reflect the image and the institutional values properly. Since universities use marketing tools to promote a specific brand image which is essentially based on values like social recognition, contribution to society and social relevance issues, we may consider these elements as a brand and therefore manage it in the same way. We cannot declare that the cost of raising a MOOC platform is related to the disadvantages.

Among the platforms that are created and managed by the universities themselves we can list: EDX, OpenHPI, iMOOC, AbiertaUGR, UNEDComa and UPVx. The way that MOOC has disrupted the landscape of online learning and even traditional HEI offer has created a niche around the MOOC offer. In this second scenario external organisations (not the univer-
sity) develop the platform to deliver courses designed and created by teachers from different universities in the world. The site is managed and run by people outside the universities and are involved in a company with profit purposes. Thus the universities put their knowledge into the hands of outsiders to let them generate and manage the profit. The resulting learning communities are clustered around a private company which will have its own brand, principles and values which transmitted to the members of the community. This scenario is described in Figure 3. A variant of the scenario will consider courses created by the same company that manages the platform and therefore they do not have any relationship with the university. This variant is the most common form that exists today when it comes to providing MOOC.

This model is currently more widespread due to the easy to use and maintain of an external platform. The second advantage comes from the existence of a specialized channel of distribution able to gained lot of users. Some examples of this scenario are: Coursera, Udacity, FutureLearn, Inversity, MOOC ITyPA, MiriadaX.

In both models a brand community is generated. In the first case is created around the image of a university and in the other case, the community is grouped around an intermediary company that is responsible for carrying the knowledge of great universities to people. Thus MOOC technology it is suitable for creating lifelong-learning communities, but also to improve the institution branding (its reputation) with the course offer.

Content providers or teachers may also in some cases generate brand communities around themselves. This phenomenon occurs in special cases where these people through their reputation in a given field of study attract other individuals interested in the knowledge and values this person could cover or simply is attracted by the fame him/her generates. This always happened in the university but at different scale since classes were limited to a certain number of students, however the arrival of
MOOCs creates the possibility that the number of people who attend to a particular teacher’s class grow fast. On top of this, the high level of interaction promoted by this type of courses could lead to the creation of a community that just revolves around the teacher.

In summary, there are three levels of brand communities in a MOOC as it is shown in Figure 4. First, we have the community that starts around a specific course, second it is the one which constitutes around the teacher or the course creator which is at more general level, and finally the most important of the three, that is the generated around platform itself.

**Issue 2: Branding through a Captive Virtual Community**

The term captive community here used reflecting that members of a community are drawn to the values and products offered by it. This creates bounds and links between the user, the platform and the knowledge generated on it. When talking about positives aspects it comes true that the same hold for a captive virtual community whether the MOOC platform is created by universities (See Figure 5) or if it is a private platform (See Figure 6). The sole difference at this point is the entity that is going to take advantage of them.

Figures 4 and 5 show how the organisation responsible for the MOOC platform is benefiting from consumers through two main aspects. On one hand the payment of fee for certification which at first is the main form of return on investment, while on the other hand we have the recognition or prestige as a brand that can generate, thanks to the captive community. Additional ways of returns are listed:

1. **Augmenting the demand for both courses and users:** This can be seen as a force of attraction for new users. The more people using the platform more likely that through spread the word, many other people acknowledge it and get registered;

2. **Constant advertising at no cost by using social media:** Because these platforms are equipped with mechanisms that enable

**Figure 4. Three brand communities are present in a MOOC platform**
media sharing of the content, having a great mass of satisfied members implies a constant advertising through social media;

3. **Improvement of relations with third parties:** Increasing the level of reputation can be a showcase in finding new private entities or educational institutions, to enhance the consortium which creates the courses. It might also be the possibility that some companies are interested in the user community as potential candidates for a job and, therefore, decided to partner with the platform in order to get a link and information of potential candidates;

4. **Big source of data:** Thousand of information about the interaction, preferences and behaviours of the community that could be used to undertake improvement in the functionality of the platform and the services offered. In general, this sample data could be used in any analysis conducted by big data services;

5. **Offering premium services:** The basis of MOOC is open access to courses for free, but it provides the opportunity to offer additional services to improve the student experience in many ways under some fee. Among the services that could be offered, there are the possibility of obtaining different levels of accreditation, the possibility of having personal tutors, to access different models of assessments, and even consulting recommended courses and the best route to do them;

---

Copyright © 2014, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.
6. **Promotes the enrichment of the platform:** This section refers to the amount of user-generated content, since one of the great virtues of this type of course is that knowledge comes not only from the teacher or course creator but largely comes from the users. Thus a community of a large size and will be a generation committed large knowledge leading to an enrichment of the courses offered on the platform as well as the experiences of the users.

Considering the source of benefits of having a community attracted and committed to the platform will be necessary to manage in the best way possible so that users continue to generate the added value necessary for the continued growth and operation of the platform.

**Issue 3: MOOC as a Virtual Community**

The use of virtual communities in a wide variety of fields has achieved great benefit. According to Cabero (2006a) and Cabero (2006b), there are mainly five items that show the advantage of virtual communities over non-virtual. These are:

1. The synchronism and asynchronism possibilities that allow the network. It provides high flexibility of communication between members;
2. The ability to review the history of communication performed. Others could benefit from the knowledge generated in the process to facilitate, for instance, the review of decisions making activities;
3. Facilitates communication between people of different geographical areas, and allow dissemination of information fast. It relates with Ubiquitous Learning: learn at everywhere and in every moment (Zapata, 2012);
4. It can be a source of new customers. Since the community is grouped around a particular brand or product, users are constantly exposed to publicity or the possibility of having publicity, offers, promotions, etc.

Being part of the community presupposes a certain bond or positive attraction to the brand so community members should be treated as potential customers. Furthermore, community users can be considered a sales force helping attracting new potential customers to it by personal invitation;

5. Unlimited interactivity. Since computers, mobile devices or smartphones are capable of supporting complex processes of interaction among participants. Communication could happen at any particular site or location. No need of special requirements but a network connection and a device to connect.

Teachers and learners have evolved in their practices with a staggering increase in the occurrence of these virtual communities. Growth is also largely produced by the interest of organizations or brands in having such communities as they pose a great source of generating added values and competitive advantages. Flavian and Guinaliu (2003) highlight that the benefits would include:

1. **Creation and development of the brand:** Virtual communities allow companies to communicate effectively with both customers and people interested in the brand, thus promoting the creation of brand awareness, customer loyalty and improving the image of the products of the organization;
2. **Development of relational marketing strategies:** These kinds of communities pose an exceptional environment to strengthen relationship with customers. The benefits come from harnessing the close relations that exist between the users of the community, as well as them with the organization, for the implementation of successful relational marketing strategies;
3. **Net savings in marketing costs:** Despite the cost and time required for the development of a community, it can generate long-term savings from marketing campaigns savings given the constant communication
with members of the community. It can also help the organization when conducting market research by using the members of the community to beta-test the idea. That gives a first impression on how the market reacts to the strategy of the organization and any modification of it;

4. **Source of direct revenue**: The company that manages the community might authorize other companies to conduct advertising campaigns in the community. This agreement would allow to charge a stipulated fee, provided the permission of the user of the community. It could allow also to offer premium services related with the community in exchange for a fee;

5. **More effective development and launch of new products**: The community will generate ideas for new products or modifications to existing ones, by itself. At the same time, the virtual community could serve as a sample or tested for testing new products or new advertising campaigns. These processes would be perceived as positive by the community users, who would be at the same time the expected early adopters of these products;

6. **Increase in the costs of switching providers**: At some point in the virtual community the bound between users and the organization providing the community is too strong. For the user, the possibility of finding alternative communities similar to the current offer is very small. The cost of switching providers is too high. This is the reason why the establishment of a virtual community can be a barrier to entry for competitors.

   It is a fact that virtual communities are positive for users who are part of them and more especially in the case of virtual learning communities where the user or learner is the one that benefit most of the existence of that community. The bibliography is extensive when it comes to analyze the benefits of virtual learning communities. Meanwhile, exploring the potential benefits for an institution adopting the use of a MOOC platform is an issue less referenced in research due to the novelty of this practice. Nonetheless the European project OERtest results and piloting experience is (OERtest consortium, 2012; Montes, R. 2013a) is offered as a guidelines for high educational institutions who may adopt open learning.

### Issue 4: Building a Virtual Learning Community

The relevance of teachers in a learning experience range from content creator, tutoring, content curator and community moderator at the same time. Concerning the characteristic of a brand community, a MOOC platform provide the two strategies mentioned in (Flavian, C.; Guinalíu, M., 2003) as defining. On the one hand it do offer community support since this item provides the proper operation of the platform itself, and on the other hand the organization becomes a member of the community which in this particular case is via the course facilitators. Authors also suggest that “it is desirable to develop a series of actions that ensure the proper operation of the community”, and these are the following:

1. **Analyze member’s needs**: Know what learning topics are in more demand to cover them;

2. **Encourage self-management**: Promote the creation of content by individuals in the community for the purpose of platform enrichment. Thus, the platform should provide a personal space (blog, e-portfolio, wall, etc.) and the way of make relations between members;

3. **Minimise control**: Within pre-defined basic set of rules for operation in the platform, do not control how individuals relate themselves whether type of community we have;

4. **Use the most appropriate technological structure**: Provide easy to use tools that simplify the learning and the relationships between the different members;
5. **Specialised roles:** Around MOOC communities we could find several specific roles. These are teachers, content creators, moderators, facilitators or content curator, students and it may arise different other roles within group activities;

6. **Strengthen the monitoring of the community:** Promote different ways of cohesion and relationships among members in order to create a strong and sustainable community;

7. **Measure the success of the community:** Assess the success of the platform through various indicators. It can be measured through the content generated, such as the number of comments on a resource, the number of visits to the platform or many other indicators. We could also determine the level of satisfaction through surveys asking the level of pleasure with the different aspects of the platform. It is recommended to include open question through which detect proposals or complaints from users.

The management of virtual communities is an activity that must be constant over time and should be noted by the members. In many online activities you could feel alone and especially in a learning context special care should be taken in the integration of users’ opinion and suggestions. Answer to their questions should be handled in a short time. Moderators and facilitators also have to take care that the community is kept in constant development and to meet established standards. In addition to these types of courses it would be advisable to have users regularly informed of developments in the curriculum and on the platform enhancements, for example new offer of courses of interest.

**Issue 5: Legal Implications of Learning Resources**

The added value of Open Education Resources (OER) and shared knowledge philosophy is obtained through learning communities, that increase the know-how and skills of people involved. Nevertheless is important to take into account that the relationship teacher-student may be mediated with different legal issues regarding privacy, authoring, etc. In most Commonwealth countries the national copyright legislation determines that the copyright is all rights reserved for teaching materials developed in the course enrolled. Therefore teaching materials released as OER under an open content license in the absence of an institutional policy or contractual agreement is been done illegally because the author did not have the rights to license openly. The authors of the resources are probably best positioned to know what legal and technical conditions are most suitable for disseminating and/or sustaining their efforts.

OER may be delivered with different types of shareable policies: it allows anyone to access, use, modify and share the material. There are a range of Open Licenses for content but the most commonly used are the Creative Commons (CC) licenses (http://creativecommons.org). These licenses are defined in a basis of four specific conditions:

1. **Attribution (BY):** Asks to always acknowledge the author of the work;
2. **Share Alike (SA):** Asks to share in the same way to others;
3. **Non Commercial (NC):** Permission of profit;
4. **No derivative work (ND):** Permission of modification.

With the combination of the four conditions we get a total of 16 licences that range inside the spectrum from “All rights reserved” to “No rights reserved”. It is important to know the legal implications of using a resource with a specified licence behind. For example it is better to use identi.ca (http://www.identica.co.uk/) for microblogging if we are going to link/mirror the post to other sites because the
default license of the notes you post on identi.ca are licensed under a CC-BY license. The use of your ideas without acknowledge your name would be illegal.

In addition, quality on learning resources are related with compatibility with standards. According to Ehlers and Pawlowski (2006), “… standards are often misunderstood, especially in the education community. However, the intention of standardization is not, as often assumed, to reduce and unify the didactic or technological options, but to standardize their description. The goal is to attain a greater transparency for all users of learning technologies (learners, teachers, etc.) and a greater interoperability and improve reusability”. In this context we should take into account the following sub-criteria:

1. Accessibility and usability of the learning resources (compliance with the guidelines of the W3C consortium, etc.);
2. Compatibility with the common e-learning standards i.e. SCORM, IMS, etc.;
3. Interoperability across operating systems and e-learning platforms: Learning Management System (LMS), Content Management System (LCMS).

A CASE STUDY: ABIERTAUGR

The University of Granada (UGR) through the Virtual Learning Centre (http://cevug.ugr.es) started a pilot experience on MOOC in the first fall of 2013 with the interest of more than 3,000 students. Within six months of development, we came out with our own MOOC platform and the course materials covering more than 75 hours of student workload. Our pilot experience was centred on ICT competences, offering three courses in Spanish named: Identidades Digitales (Digital Identity), Aprendizaje Ubicuo (Ubiquitous Learning), Licencias Creative Commons (Creative Commons Licenses). The platform included a meta-course for all users called Cafeteria (Cantina) to provide to the students a common place for introducing themselves, make contact, etc. It was also a place to download platform tutorials, access to problem solving forums and to internal mailbox for suggestions to the organizers.

The idea of start a MOOC offer was strongly considered at first of year 2013, by setting our objectives and start working in them. Table 1 list them by following the ideas described in previous sections. In the subsequent sections, we comment some indicators that relates to the fulfillment of these objectives.

The Learning Community of AbiertaUGR

To strength the branding benefit of our institution we chose to create a captive virtual learning community and deliver our own MOOC platform. The platform was an adaptation of the Elgg library (http://www.elgg.org) which provides a large list of features to create a social network. These features include blogging, file repositories for users and communities, podcast support and multimedia embed, micro-tagging and tag cloud, customizable user profile, full RSS support, RSS aggregator, membership management, wikis and blogs documents, possibility of having friends and list of friends, content importation, publish to external blogs, access control list, multilingual, branding/customisation, OpenID and Friend of a Friend (FOAF) lists. Every feature comes from a live community of developers given that it is an open source software. In fact, we also contributed with the development of our own set of features for customization and massive operations. We implemented many modules to turn the social network into an online learning platform, mainly to support the concept of courses, course planning, course collaborative conclusions, and automatic generated certifications. In Figure 7 we show the index page of AbiertaUGR (http://abierta.ugr.es) in where the community (with pictures or avatars that dynamically change) is a focus of interest.
Table 1. Objectives of the AbiertaUGR project. Some of them were covered in the pilot experience.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Pilot</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create MOOC courses as a complement of traditional offer with international projection.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Run in our own platform creating a brand around UGR.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Collect analytic data to analyse usage and be responsible to new in trends in education.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Build a community with strong social capabilities and interconnection between users.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Set roles for teachers, content curators, students.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Learn through a community of users. Content enriched by the virtual learning community.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Analyse user demand and satisfaction.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Test the framework for open recognition and credentialization of learning based on OER.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Offer different types of credential, some of them associated to a fee.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Offer specialises learning services to the community.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Design the structure of a MOOC course, and the tools and methodologies to plan new MOOC courses. Assistance to teacher creator of MOOC courses.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Figure 7. The community is one of the key elements in AbiertaUGR
A measure to consider is the amount of user-generated content, which is understood as the number of interactions and information exchanges that took place on the platform. We include here also social media content as resources that could be shared in other social networks. The platform set a tool named the five-start that enables community to vote or rate every resource created by the teacher or by the students.

Table 2 details in numbers how the learning materials created by the teacher were expanded by the community. Inside the platform there was 34,395 public comments shared between the different sections and resources along these three courses. User generated content has also been linked with external social communities, been the most famous Facebook and Twitter. These numbers represent an activity in average of 26.75 written comments/like per student. This give us an idea that the students are not simply passive actors or content consumers but content generator.

There are another valuable data that could have deeply analyzed to characterize the information that the community generate a part of the course, such as the number of post in their personal blog, the number of friends and FOAF connections, or the size of their internal message system (sent and inbox folders). To achieve this objective some data mining techniques (Romero, 2013) are of interest for future work, as the positive aspect is that we own the data that is needed for these techniques. Nevertheless, we found that without private data an analysis of the activity could be performed.

For instance, an user of AbiertaUGR used the tag #abiertaugr in Twitter to analyze the impact of the three courses (Corral, 2013). We consider the previous considerations as indicators of the existence of an alive Virtual Learning Community around the courses. It is not enough to claim the possibility of having a captive virtual community around the teachers or the platform.

**ANALYSIS OF DEMAND AND SATISFACTION**

We conducted several surveys to cover this issue. Cronologically, we performed a survey after the completion of each course to measure satisfaction with the platform, the courses and the teacher. Later, in a research study, we addressed the full target of students of University of Granada (not only users of AbiertaUGR) to foresee their future needs.

To measure AbiertaUGR users’ general satisfaction we run several anonymous surveys on each course. The sampling error (which indicates the degree of uncertainty in that the selected sample is not representative) are of 5.59% for the first course, 6.30% in the second course, and 9.41% in the third course. In average we got a confidence level of 95% with these surveys. The questionnaire covered several aspects, such as the academic team performance, the correctness of course designers, facilitators and technical staff, the general satisfaction with AbiertaUGR in terms of course materials, timing, and the ease of use of the platform.

<table>
<thead>
<tr>
<th>Course 1</th>
<th>Comments to a resource</th>
<th>Like it</th>
<th>Facebook Like it</th>
<th>Shared in Twitter</th>
<th>Shared in other social media</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11947</td>
<td>2549</td>
<td>721</td>
<td>110</td>
<td>444</td>
</tr>
<tr>
<td>Course 2</td>
<td>12327</td>
<td>3781</td>
<td>1775</td>
<td>105</td>
<td>276</td>
</tr>
<tr>
<td>Course 3</td>
<td>10121</td>
<td>1659</td>
<td>7083</td>
<td>67</td>
<td>161</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34395</strong></td>
<td><strong>7989</strong></td>
<td><strong>9579</strong></td>
<td><strong>282</strong></td>
<td><strong>881</strong></td>
</tr>
</tbody>
</table>

Table 2. User-generated content is enabled through comments and like it inside the platform and in other social networks.
average we got good marks with 7.88 over 10 on satisfaction with the platform question and 8.26 over 10 on course satisfaction question. It is shown in Figure 8.

Figures 9 and 10 shows the profile of the users attending the courses. We collected information about their occupation (students and professionals as the most common), the gender (female gender is predominant over male), average age (around 20-30 years old) and country. Taking all, we could conclude that students of our University were a great target sample. That is why we conducted a separate study with them.

Figure 8. Opinion (in a 0-10 scale) of the community members regarding the platform and the courses offered

![Community Assessment](image)

Figure 9. Occupation of the users per course and per category

![Users Profile](image)
The online survey was done during a non-teaching period (August 2013) with outstanding total answers of 1126 records. The survey included thirty-three closed and open questions and due to its extension here we going to comment just a subset of them. After a set of question to characterize the sample population (age, gender, studies), closed questions were valued according to a 5-point Likert scale, where 1 represents “None”, and 5 indicates “Very high”. This scale was used to the question concerning the general interest in MOOC (whether they have experience in a MOOC or not). A look into Figure 11 quickly reveals that the majority of answers points to the existence of a truly interest in massive open learning courses.

The possibility of having a certification after the completion of a course is a desirable option. For that reason we asked how desirable this feature in a MOOC platform was. In Figure 12 it is represented with more than the 60% of the answers, the fourth value in the scale corresponding to Interested.

Our courses covered digital competences, but we were interested in identifying which kind of other courses could be best to offer. For example a high school student who wants to continue his/her studies in college may be interested in preparatory accessing courses. Similarly, a professional with years of expertise in some area may want Continuing Professional Development (CPD) courses. The sample population of our survey may not cover well this question given that the 76.6% lies in the range of ages from 20 to 35 and might not been representative, notwithstanding their answers are shown in Figure 13. The most desired courses are those in which companies participate ac-
tively whether they design the course or even create it. It is considered desirable to match the obtained learning skills with what professional sector demands.

By using some open questions (unbounded and free writing) we collect some remarkable comments. Most people believed that the main drawback of MOOC courses are massiveness and thus an impersonal experience. Access to tutoring it seen as complicated, getting a sense of being alone. Another disadvantage of MOOC is the need of Internet access, and the technical problems that platforms are suffering mainly because of the bandwidth access. Since MOOC

Figure 11. It is becoming more common to know a MOOC or to want to participate in one

Figure 12. People are interested in certification and recognition of credits
is an initiative born in USA most of the courses available today are generally in English which pose a difficulty for people who do not have a high level in that language. However one of the strengths of this type of courses is the collective process of learning. People recall as positive having the help of other users just like themselves, facing the same content, activities and the same path of learning.

People with participation in MOOC commented as drawbacks the structure of the MOOC, for example regarding completion dates or the content format. Generally students are not full time students, they are working with few free time and it is easy not to follow strictly the proposed schedule. They may sense that they are failing when do not fit on the proposed schedule. The major drawback for MOOC courses is concerning quality in assessment. The users don’t see possible to obtain a proper track of their experiences in a environment of million of students. Therefore, the massiveness of this type of online learning impose some assessment methods which are not completely accurate at the moment. Also, people asked about the certifications reflect negatively because they feel that it do not reflect the work performed.

**CREDENTIALS, RECOGNITION AND SUSTAINABILITY**

The courses in AbiertaUGR were offered free and worldwide, including a certification of accomplishment for those students who were active and participate in the activities proposed in the course. Emission of credential with a fee is the main form of profit that it is foreseen as key factor in the sustainability of a MOOC platform (Montes, Gea, & Haywood, 2013). Nevertheless, in this pilot credential were offered at no cost to the students. Moreover, for those students coming from inside the University of Granada additional benefit were offered. Those students who passed the three courses were awarded with credit recognition in their studies by using an internal figure of Cultural Activities courses. In this sense, we tested the proposal OERtest project framework by having the OER Traditional scenario (Montes, 2012; OERtest Consortium, 2012; Montes, 2013a).

In the URL http://www.katyjordan.com/ MOOCproject.html it is found a collection of data about MOOC courses and some of their indicators. It reveals that low completion rates are very common. Nevertheless, having
a huge number of users, even with low fee for certification it is prove plausible as a source of revenue for MOOC providers. In the case of AbiertaUGR piloting experience, we got a total of 3,051 requests to course registration. Later some of them never logged in or generated any minimal interaction in the platform. Thus a total of 1986 real users participated in one or more of the courses offered between April and June of 2013. The total amount of people who have achieved one or more certificates during the pilot project was 843. This implies that our completion rate (related to the total enrolled) is 27.63%, but the real numbers in relation to active users give us a completion rate of 42.83% which is highly positive. Considering an hypothetical fee of 10€ per certificate, the incoming gained from the pilot would have been 8453€. A deep analysis of the cost of running this experience, which is out of the scope of this work, would determine the sustainability of having our own platform and MOOC offer.

CONCLUSION

This paper analyses the changes caused by massive open online courses in Higher education Institutions, covering some emerging areas that are of interest to universities that are adopting this model of learning. To put in practice a MOOC offer one first step is to reflect on the added values that are created around a captive virtual community and thus, the election of the platform. This means to use tools and resources of external consortium/company versus to use the own resources of the University/Consortium of Universities. This election may be affected by two collateral result of these courses: the creation of a lifelong learning community and the branding (reputation) obtained by the MOOC. We consider an open area the definition of a sustainable MOOC framework model, and some work is been done in this direction although in a theoretical way (OERtest Consortium, 2012). We have presented the case study of AbiertaUGR, a piloting MOOC model for Spanish speaking public, to support the ideas presented in the OERtest project, which was coordinated by the University of Granada.

After the completion of the experience, it is time to revisit the initial objectives to find out where to go in the future, adapt and run corrective actions. Main ideas are:

1. We keep thinking that the best option is to have our own platform to gain in visibility (branding), innovation and adaptation to future trends. Notwithstanding we are considering to have some of our MOOC courses (current and future courses) offered in other privative platforms to increase the visibility and to exchange ideas with other MOOC designers;
2. We chose a platform with strong social capabilities but less learning support. For instance, we could not use specific user roles (teacher, content curator, students, ...). To search for new functionality is a mandatory action;
3. It is important to support the financing of this non-traditional course offering. Thus it is important to add progressively services with low fee, but with huge potential if demand comes from massive users;
4. The MOOC offer should include general interest courses (mathematics, economics, ICT, etc.) to address a wide audience. Must importantly it is desirable to find very specific theme for a MOOC which creates opportunity of advantage and differentiation with other universities or MOOC offer.

In general, the experience of AbiertaUGR was challenging and posed some technological and human dares, although the analysis of the surveys and all the usage data collected during the period of the pilot show that we got an active Virtual Learning Community and people were close enough to the schedule to successfully end the course and request to certification. Students coming from the University of Granada were awarded with credits in their studies at no cost
at all, so they benefited the most from this experience, although not solely: AbiertaUGR has
gave us the tool to teach our teachers interested
create a MOOC course, what are the best
practices to do. Future work will be oriented
to increase the number of courses.

REFERENCES

Cabero, J. (2006a). Comunidades virtuales para el
aprendizaje. Su utilización en la enseñanza. Revista
electrónica de tecnología educativa. Edutech journal,
hdl.handle.net/11162/5820


YOCOMU/analisis-hashtag-abiertaugr

YOCOMU/analisis-hashtag-abiertaugr-curso-aprendizaje-ubicuo


Dillenbourg, P. (2013, June 6-7). European MOOC
stackholders meeting. Lausanne, EPFL. Retrieved
December 5, 2013, from https://documents.epfl.ch/
groups/mn/me/mooc-summit/www/documents/meet-
ing/TourEurope.pdf

Edutechica. (2013). Mapa interactivo de creci-
miento MOOC mundial. Retrieved December 5, 2013,
from http://edutechica.com/moocmap/

EdX. (2012). Retrieved December 5, 2013, from
http://www.edx.org/

book on quality and standardisation in e-learning.
Springer.


http://www.forbes.com/sites/joshbersin/2013/11/30/
the-mooc-marketplace-takes-off/

Collective intelligence and online learning communities.
In Proceedings of the International Conference
on Information Society. Technical Co-Sponsored by


Turning out a social community into an e-Learning

Montes, R., Gea, M., & Haywood, J. (2013). Recono-

OERtest Consortium. (2012). Open learning recogni-
tion: Taking open educational resources a step
Rosana Montes holds a Ph.D. degree in Computer Science from the University of Granada in the field of Computer Graphics and Realistic Image Synthesis, though some of her research had been involved with eLearning and virtual 3D worlds. She teaches at the School of Informatics and Telecommunications Engineering, and also in the Faculty of Economics & Business of the University of Granada. Courses are related with web design, web 2.0, integrated software development environments and mobile applications. She has participated in several international projects founded by the European Commission & the EACEA with the Erasmus Mundus Programme and the Lifelong Learning Programme such as Hextlearn - Higher Education exploring ICT use for Lifelong Learning, Mobi-Blog - the European Weblog Platform for Mobile Students, Movinter - Enhancing Virtual Mobility to foster institutional cooperation and internationalisation of curricula, Wishes and she also coordinated the project OERtest: Testing the Feasibility of OER-Course Certification. In the Virtual Learning Center of her university she played an active part in the designed and implementation of AbiertaUGR the MOOC platform of the University of Granada and its courses. She coordinates the teacher training programmes at UGR, including the Specialisation Itineraries Collaboration Tools in the Web 2.0 and Digital Production in Mac OS X Environment.

Miguel Gea is associate professor in the University of Granada (Software Engineering Department). He has a PhD degree in Computer Science. His main research activities has been focus on Human Computer Interaction and eLearning. Currently, he is the head of the eLearning Centre of University of Granada (http://cevug.ugr.es), he had member of the board of European foundation for Quality on eLearning (EFQUEL). He has taken part of European Projects of the Lifelong Learning programme and he was coordinator of Movinter (Enhancing Virtual Mobility to foster institutional cooperation and internationalisation of curricula, agreement 2008 – 2449) and Mobiblog (The European Weblog platform for Mobile Students, 134390-LLP-1-2007). He has also impulsed MOOC technology at University of Granada, with several publications about methodologies based on open learning communities.
Roberto Bergaz Hernández graduated in Business Administration at the University of Salamanca in 2012. Recently, he has got a master’s degree in Information Technologies and Business Processes (2014) by the University of Granada where he wrote his dissertation called: “MOOCs and Online Communities in Corporate Environments: Feasibility Study and Business Models”. He worked in bank services area and, nowadays, he works as IT consultant for UNIT4 Business Software Company.

Belén Rojas Medina, Master in New Technologies and Education (Universitat Oberta de Catalunya, 1500h. 2008) and Degree in Spanish Philology, Granada University (1999). At present she is working as technical pedagogical designer in the Virtual Learning Center of Granada University. She designs training activities and teaching resources. On-line and in classroom, she teaches courses on ICT skills for university teachers. As administrator she manages different e-learning platforms and social learning communities (Moodle, Elgg, Ning and other social networks). Since 2010 she participates in several European e-learning projects: movinter (virtual mobility), hextlearn (ICT for lifelong learning in higher education), and oertest (Provision and recognition of Open Educational Resources). She has experiences in MOOC’s development; analysis, content organization and set up, dinamization and post evaluation phase and also results dissemination (AbiertaUGR initiative, at CEVUG).