Virtual Learning Communities in Google Plus, Implications, and Sustainability in MOOCs

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ABSTRACT

Two major educational strengths that MOOCs provide are informal learning and harnessing the collective intelligence of the students and the interactions among other users like former students, future students, business professionals, other universities, etc. These features may lead to the emergence of new sustainable in time educational elements wherein knowledge and learning continue enriching once the course finished. At present, one of the main limitations of the MOOC platforms is the lack of social open tools to enhance and take advantage of the collective intelligence generated in the course. This article proposes a new model to allocate informal learning and collective intelligence in MOOCs using external virtual learning communities through social networks, based on Google +. The main aim of this article is to assess the virtual learning community performance and analyze the interactions and the kinds of learning that take place inside the community and over time. A case of study of a MOOC course with Google + community is presented.

KEYWORDS

cMOOC, Collaborative Learning, MOOC, Open Knowledge, Social Networks, Social Platform, Virtual Learning Community, xMOOC

INTRODUCTION

During the last decade, new tools have emerged in the online learning and thus, the traditional teaching models and methods have started to change. Several learning models (ie: informal or non-formal) associated to new training method are now present in the academic and educational sector. One of the main drivers of this transformation is the Massive Online Open Courses (MOOCs) that is an online course aimed at unlimited participation and open access via the web. MOOCs are online educational resources and may be seen as the logical evolution of the Open Course Ware (OCW) to which is added the chance of interaction between teachers and participants, and among participants themselves (peer to peer).

MOOCs offer new opportunities for learning because of their intrinsic characteristics: the massiveness of participants, peer-to-peer interactions, free-of-charge, openness and scalability. These features lead to a large heterogeneity of participants that are often unmanageable and may cause high dropout rates of the courses.

One of the current challenges for this MOOC is to reduce dropout rates by providing customized strategies and resources for the different profiles of participants. The integration of external social...
tools in the training model of the MOOC arises as an opportunity to perform that customization. The incorporation of virtual learning communities (VLC) may provide greater interaction between participants, support and guidance to people with difficulties and may increase collaborative processes between participants (García-Peñalvo, Cruz-Benito, Borrás-Gené and Fidalgo Blanco, 2015).

If the MOOC course has a rigid learning design (same educational level or methodology for all students), it may lead participants to give up even before the course starts. The same applies to learning networks and connectivist activities: an activity may be of interest to a group, but not for others. During these courses the flexibility of the work plans must be sought. The identification of those most active and expert participants that will be defined as group leaders and may become facilitators of the VLC is one of the key factors for the MOOC success.

Two editions of the MOOC course “Application of social network to education: virtual communities (Borras-Gene, 2014) took place on November 2013 and October 2014. This course combined a more traditional MOOC course (xMOOC) with a connectivist type of course (cMOOC) based on the cooperative model proposed by Fidalgo, Sein-echaluce and García-Peñalvo (2013) and on the adaptability between them. This course is the case of study of this paper.

This work explores the elements of the course that have been identified as enriching factors for the virtual learning community. The different kind of learning associated to these factors is also studied. The course is focused on the incorporation and monitoring of virtual communities and external tools in the MOOC, engaging innovative methodologies and resources.

This paper aims to present the design, development and results obtained in this experience, for if, given its success, it may be useful as a reference for the design and development of future MOOC implementations and for opening new research lines, proposes a comprehensive analysis of how social tools are managed and used by the participant of the MOOC. This analysis includes:

- Assessment of the evolution and dynamics of the virtual learning communities throughout time and the perception that participants have of them.
- Analysis of the factors involving the generation of a stable learning community, even after the MOOC finished and the type of learning, the learning results and the knowledge that these factors have generated

THEORETICAL BACKGROUND

Experts from the major and most prestigious Universities of the world are offering training through ubiquitous and free courses, opening up new opportunities for defining new pedagogies (Martin, 2012). In this regard, the main pedagogical principle behind a MOOC proposal should be that participants would be able to create new knowledge in a social and collaborative way, allowing that knowledge may be openly used both to improve the MOOC itself and to give continuity to the MOOC learning community.

Most of the MOOC platforms include social tools like forums to centralize learners’ contributions, discussions and queries or wikis. But these tools are only accessible inside the platform, so there are limitations in the interactions that can be established.

In the Web 2.0 (O’Reilly, 2005), there are several external tools known as Social Network, such as Google+, Twitter or Facebook, that are a suitable environment to effectively build connections and collaboration among learners instead of introducing a pool of them randomly (Khalil & Ebner, 2013; Kop, Fournier & Mak, 2011).
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