Chapter 15
MOOC and Blended Learning Models:
Analysis From a Stakeholders' Perspective

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ABSTRACT

Interest is growing in educational designs that blend MOOCs with on-campus teaching and researchers are seeking to incorporate the spirit of a MOOC into a hybrid model. This article reports on the current experience of a higher education institution embarking on blended learning models. The aim of this article is to present a case study and to discuss the strategic approach to integrating a MOOC at undergraduate level. The evaluation strategy of this experience uses surveys and focus groups to interpret the results and the perspective of the various stakeholders. The analysis synthesizes the opinion of the main stakeholders – the institution, the students and the academic staff – and shows that in addition to improving the financial viability of MOOCs, blended learning models improve the quality of students' education, strengthen students' academic performance, and encourage academic staff to constantly innovate their teaching and learning process.

INTRODUCTION

In 2014, researchers started to explore how digital learning influences campus learning (Kovanović, Joksimović, Gašević, Siemens & Hatala, 2015; Selwyn & Bulfin, 2014). In parallel, Harvard University began studying the possibility of incorporating MOOCs (Massive Open Online Courses) into its classroom activities. This blended form of learning combines the advantages of technology and autonomous learning with those of face-to-face interaction (Yousef, Chatti & Schroeder, 2014). Although "the key attribute of MOOCs is their scalability" (Clarke, 2013, p. 404) – i.e. once they have been developed a global audience can be reached – the reverse is also true: once developed, they can also be administered

to smaller audiences via curricular subjects. This is the case of Academic and Career Guidance, a pioneering subject in the integration of MOOCs at undergraduate level, which was taught at the School of Engineering of a higher education institution in Spain during the 2015-16 academic year.

Academic and Career Guidance has two important characteristics: the large number of students enrolled (it can be taken by undergraduate students on any engineering degree); and the profile of the students enrolled (62.8% are admitted through the PAU while 29.1% are admitted through FP2, MP3[1], CFGS[2] or equivalent. Profile is critical because it conditions both student performance and student dropout rate. Besides the learning objectives and the competences to be acquired, both these variables were behind the decision to introduce the blended learning model (b-MOOC). In formal education, where high dropout rates are unacceptable, there has been increasing interest in educational designs that blend MOOCs with either on-campus teaching or synchronous online teaching and learning environments (Gašević, Kovanović, Jokosimovic & Siemens, 2014; Holotescu, Grosseck, Cretu & Naaji, 2014; Israel, 2015). In our case, blended learning is possible because it combines a group of enrolled students on campus with global participants (Ronkowitz & Ronkowitz, 2015) and lectures share a common platform with a MOOC. The MOOC was inspired by the philosophy of connectivism (Rodriguez, 2012), and based on interactive media (primarily videos, tweet chats and online text) with the emphasis on learning through peers and knowledge sharing. This article is the first stage in the analysis of the results of this experience.

Using a systematic approach, we have divided our analysis –and the structure of this article – into three sections: the institution, the students, and the professors. Our results show that in addition to improving the financial viability of MOOCs through synergies created with the traditional classroom, blended learning models improve the quality of students' education, strengthen students' academic performance, and encourage professors to constantly innovate their teaching and learning process and improve efficiency. This article also points out some future research opportunities that could help in the development of b-MOOC environments to be implemented in higher education settings.

Analysis From the Institutional Perspective

In the words of Baker, Bujak and De Millo (2012) "effective institutions are those that proactively explore innovative and effective approaches to restructure the delivery of 'content' in conjunction with institutional change" (p. 330). These approaches include blended learning models and a deep understanding of the benefits and the consequences of implementing technological solutions designed to complement traditional pedagogy. Moreover, innovative change needs to improve current practice, be compatible with existing values and generate observable results (Rogers, 2003). At the same time, institutions need to develop teachers' digital literacy and train them to design and deliver blended courses (Mirriahi, Alonzo, McIntyre, Kligyte & Fox, 2015). And this has a cost in terms of economic resources and teaching staff time.

Taking all the above into account we use Jansen and Schuwer's approach (2014) to analyze the institutional perspective, identify the driving forces for change and determine how the b-MOOC fits into the overall strategy of the University. The Institution's Master Plan, approved by the University Senate in 2004, contains guidelines on models for virtual education, teaching methods, evaluation, and core competences. The Master Plan states that "academic organization must be implemented in a way that ensures that the results proposed in each training plan are achieved and that academic quality is guaranteed through strategies such as the virtual education model, reviews of the map of competences and teaching and evaluation methods" (Master plan for the restructuring of undergraduate, master and

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