Building Blended Learning Experience Around MOOC: a pilot study

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Introduction

Blended learning describes learning that mixes various event-based activities, including face-to-face classrooms, live e-learning, and self-paced learning (Valiathan, 2002). The strengths of blended learning has been well documented. However, blended course design is often time-intensive. Free available online content, e.g. MOOC present a new option for the blended course design (Bruff, 2013). This pilot study describes the use of MOOC in the redesign of existing campus-based course.

Blended learning design with MOOC

There exist different blended learning model in literature (e.g. Singh, 2003; Valiathan, 2002). In this pilot study, a blended learning model has been developed for the redesign of a campus-based course by using MOOC (see Figure1.). The pedagogical design of this model emphasizes students' ability to self-regulate their own learning process in an online environment. Accordingly, during MOOC learning no F2F lectures are planned in advance to address the MOOC content.

This blended learning model is the combination of a face-to-face (F2F) campus-based course, a MOOC and the learning management system on campus (LMS). The MOOC component is added to the already existing campus-based course and the digital learning platform. This model consists of two parallel learning processes: traditional F2F lecture-based learning process and MOOC-supported supplementary online learning. No changes were made to the traditional F2F on-campus learning process during the redesign process except for the grading scale for the F2F exam. During online learning students followed a MOOC provided by another institution. In order to allow their MOOC learning activities to be evaluated for their final grades in the campus-based course, students were asked to complete and upload required MOOC-related coursework to the LMS on campus.
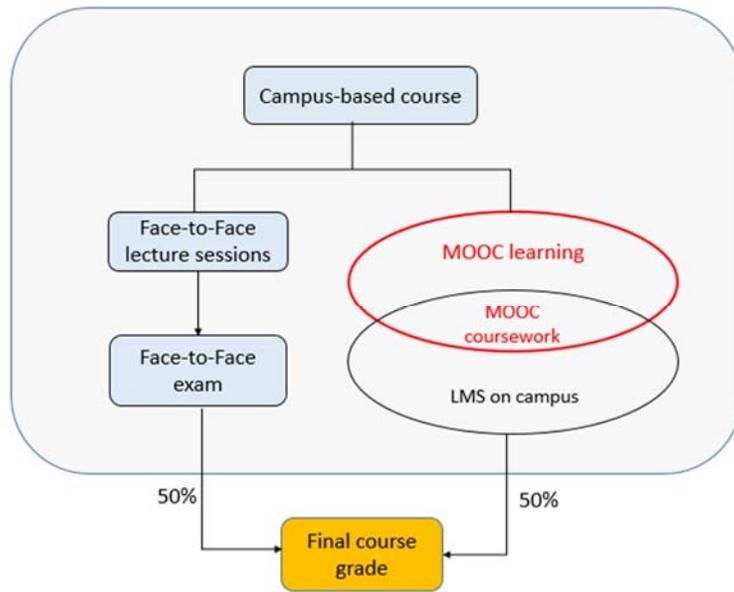
Figure 1. MOOC-supported supplementary blended learning model

Research questions

This pilot study takes a semi-exploratory approach to the following questions, since there is relatively little research on how externally developed online courses, e.g. MOOC, can be used in a blended learning design for campus-based courses and what the outcomes will be.

1. How did students perceive the use of MOOC to support a campus-based course in the blended learning model?
2. What was their overall satisfaction with the MOOC-supported blended learning experience?

Method

Instructional context and participants

The setting for the present pilot study was a master-level course offered at the Department of Educational Sciences at a Flemish university. The MOOC selected for the campus-based course was Teaching Adult Learners, offered at the platform of Opend2Study by Australian Open University. The MOOC run for 4 weeks. In this pilot study, students were asked to join the instructional session between October 20 and November 16, 2014. Data were collected from 22 students who registered from the campus-based course and followed the MOOC. There was only one male student and the rest were all female. At the end of the semester, students filled out one online questionnaire, an 18-item Blended Learning Experience Questionnaire.

Instrument

Blended learning creates a challenge for evaluation of the quality of students' learning experience as it often involves both F2F and online environment. Ginns and Ellis (2007) suggested a useful way of approach this issue by focusing on keys factors in the online environment that affect students' experience of how online learning support their F2F learning including good e-teaching, good e-resources, appropriate workload and sufficient interaction opportunities. Guided by Ginns and Ellis' research, an 21-item Blended Learning Experience Questionnaire was developed. The first 18 questions ask about different aspects of the blended learning experience by using a 5-likert scale and the last 3 open-ended questions seek information about students' opinions about the most and least effective aspects of the blended learning design as well as their suggestions.

Results

Student responses to the Blended Learning Experience Questionnaire

The first 18 Likert-scale items about students' perceptions of different aspects of blended learning fall into 6 groups. Items 1 to 4 identify students' perceptions about the quality of MOOC. The results suggest students were positive about the quality of MOOC selected for the campus-based course in terms of content appropriateness, level of difficulty and quality of the MOOC and they agreed that the MOOC teacher was effective.

Item 5 to 7 focus on the value of the online MOOC to the campus-based course. Students were positive about the value of the online MOOC. They agreed that the online MOOC stimulated their interest in the campus-based course and contributed to their understanding of the campus-based course by exposing them to different perspectives of the topics discussed during F2F lectures sessions.

Item 8 to 10 focus on the design aspect of blended learning with MOOC. Respondents were quite positive about the MOOC workload required of them and the amount time allowed for them to complete the MOOC and coursework. Although students were also positive about the guidelines published on the digital learning platform about how to conduct MOOC learning and upload coursework, some students wrote in the open-ended questions part that the guidelines should be published as early as possible. Students were also satisfied with the weight of MOOC learning in the final grade.

Item 11 to 14 focus on the quality of human interaction in the blended learning model. Students were dissatisfied with the insufficient opportunity to interact with their fellow classmates. Although the MOOC has an online discussion forum, half of the students did

not use it at all. They preferred to interact with other students on campus instead of talking to other online course participants.

Item 15 to 17 focus on the necessity of scaffolding MOOC during F2F lecture sessions on campus. Students found it was quite necessary to receive feedback from the campus instructor on their uploaded course. This coincided with the students' comments on the question about the least effective aspects of the blended learning. They expected feedback from the campus instructor to check their understanding of the online MOOC. They also found it was necessary to discuss the MOOC during F2F lecture sessions. But they didn't express a strong intention to read other students coursework uploaded.

Item 18 taps the overall satisfaction with the blended learning design with MOOC. Students were positive about their blended learning experience with MOOC.

Students' answers to the last 3 open-ended question center on two common themes: feedback from the campus instructor about their uploaded MOOC-related coursework and F2F lecture session devoted to discussion of MOOC content.

Limitations of the study

The major limitation is the number of participants is rather small and another limitation is that the overwhelming majority of the participants are female.

Reference

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