Learning About E-Planning: The Results of a Massive Open Online Course Experiment

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ABSTRACT

TechniCity (Technology and Cities) offered in May, 2013 was the first city planning Massive Open Online Course (MOOC). More than 21,000 students registered for the course, which was composed of video lectures, projects, assignments, peer evaluation, and on-line discussion over a four week period. This MOOC experimented with using field based learning, combined with extensive student engagement. The objective was to extend the type of learning environment typically found in city planning classes and similar to what is being done in several other disciplines. This article describes the first stage of research, describing course structure and providing initial findings on both course and student outcomes. Compared to students enrolling in traditional, for-credit classes, students in this MOOC reported a range of backgrounds, motivations, and expectations. The data collected also provide insights on student course activity including completion. This information obtained from the class can be used to improve future course offerings. This article documents a pedagogical approach that is still very new and lacking a significant base of literature and comparative studies. The article conclude by suggesting a variety of topics for further research.

Keywords: Cities, Massive Open Online Course (MOOC), Technology, Urban Planning

INTRODUCTION

Massive Open Online Courses (MOOCs) provide the opportunity to access a wide variety of subjects, ranging from those of popular interest to specialized graduate level topics (Beavon et al., 2013). In 2012, Coursera was launched as a MOOC platform with Ohio State University joining as a partner institution in September, 2012 (Evans, 2012). As an early adopter embracing educational innovation, “Ohio State is experimenting with the Coursera model to see how we can most effectively use this technology to enhance our approach to education. Our primary goal with Coursera, as with every teaching and learning initiative, is

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to promote an exceptional student experience. We think Coursera has the potential to do just that”, stated Wayne Carlson, vice provost for undergraduate education (Ohio State University, 2012). Of a few platforms including Udacity, edX, iTunes U, Coursera was best suited for TechniCity to explore how effectively a field project and extensive discussion-focused course like TechniCity could translate into a MOOC environment.

TechniCity was jointly designed and offered by Ohio State University and Virginia Tech. By the time the course launched there were 21,579 total students enrolled. This included a section of for-credit students taking the course at Ohio State University, along with students taking the course for non-credit through Coursera. Along with describing course structure this article shares the results of initial data generated from the course. These data are from all enrolled students, including information from within the Coursera platform on course participation rates and student survey results. This allows for an understanding of who chose to take TechniCity, how they used the course, who completed the course, and why students did not complete the course. While a huge amount of data was collected, it was quite challenging to aggregate it into a form for analysis. As will be discussed, there were several course activities that generated data as separate activities (e.g., student surveys) that proved difficult to match with an enormous amount of student click-through data. This provides both a challenge and an opportunity for student analytics on a large scale. The scale of MOOCs lend themselves to learning analytics and “big data” analyses that in themselves are creating fields of inquiry.

THE ORIGINS OF TECHNICITY

TechniCity originated as a result of a discussion on distance learning at the Association of Collegiate Schools of Planning (ACSP) Annual Conference in the Fall of 2012 held in Cincinnati, Ohio. Faculty at universities from across the United States expressed interest in continuing the dialogue to see how planning courses could fit the MOOC model which was relatively new and gaining attention. The Ohio State University was offering seed support to launch pilot MOOCs across the university. Virginia Tech, while not a member of a MOOC consortium decided to partner with Ohio State University on this course offering. The course was inspired by two similar courses taught at the upper undergraduate level at Ohio State University and the graduate level at Virginia Tech - an elective course for city planning students at both universities. Two faculty members and an instructional technologist were joined by two doctoral students who worked together to design the class projects, assignments, lectures, discussion topics, organize the course, and facilitate the students’ participation. Additionally, they were supported by teaching assistants who helped track student activity during the four week course.

The course was scheduled during Ohio State University’s “Maymester”, a four-week academic term between the Spring and Summer semester. This means that the course was compressed significantly compared to typical MOOCs that average 10-12 weeks in length and traditional semester length courses averaging 15-16 weeks. As discussed later, the short duration and intensiveness of the course proved to be the biggest challenges for students in the class.

LITERATURE REVIEW

Students are increasingly making decisions about where, when, how and what they learn by selecting technologies to support their learning (Mackness et al., 2010). In 2008, a new term entered our collective vocabulary, the Massive Open Online Course (MOOC) (Fini, 2009). The idea was that MOOCs provide a platform for building and managing learning networks that allow students to freely access and engage courses remotely with a global cohort of students. As new technologies create the possibility for learners to gain knowledge in different ways and at a different pace, there
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