The Targeted Open Online Course (TOOC) Model

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In an era of increasingly hyped Massive Open Online Courses (MOOCs) that seem to evoke feelings of both promise and peril for higher education, many institutions are struggling to find their niche among top-tier Ivy League schools offering courses to thousands of participants for free. While the effectiveness of MOOCs in terms of learning outcomes and student persistence is still unclear (see Daniel, 2012; Kirschner, 2012; and Jordan, 2013), one benefit of the trend are the innovative adaptations that smaller-sized, regional institutions have begun testing as alternative in-roads into the MOOC era. The Targeted Open Online Course (TOOC) model allowed one mid-sized regional institution to leverage existing area partnerships/relationships with stakeholders to offer an online course for professional development and even actual graduate course credit. The following paper presents a comprehensive description of the TOOC model, including the administrative, enrollment, marketing, student support, development, and pedagogical considerations of planning and implementation. Additional data regarding persistence rates, affective gains, and recruitment outcomes will be shared.

Keywords: *higher education, MOOCs, connectivism, large-enrollment online courses, enrollment marketing/recruiting*

INTRODUCTION

The pervasiveness of recent media attention for Massively Open Online Courses (MOOCs) in higher education has created a sense of urgency for institutions to offer online courses to massive numbers of participants, nobly for the sake of expanding access of coursework to those who might not otherwise have it. While MOOCs have become a popular buzzword in higher education, much of the discussion includes thinly disguised promotional material by commercial interests (Daniel, 2012), and despite the millions of participants enrolled in MOOCs in 2012, there were only 26 related peer reviewed academic publications, most of which were devoted to studying the concept of MOOCs, and few examining educational theory, pedagogic approaches, and learning outcomes (Liyanagunawardena, Adams, & Williams, 2013). While the effectiveness of MOOCs in terms of learning outcomes and student persistence is still unclear (see Daniel, 2012; Kirschner, 2012; and Jordan, 2013), one benefit of the trend are the innovative adaptations that smaller-sized, regional institutions have begun testing as alternative in-roads into the MOOC era.

This article describes the structure and processes used to develop a Targeted Open Online Course (TOOC) that blended attributes of a MOOC with the best pedagogical practices of a traditional online course to impact participants surrounding a mid-sized regional institution in Texas. This paper discusses the planning and administrative/logistical considerations for implementing the TOOC course, as well as a discussion of the instructional strategies employed to ensure academic rigor and student engagement. Finally, data regarding persistence rates, impact, participant satisfaction, and recruitment outcomes will be shared.

THE TOOC MODEL DEVELOPMENT FRAMEWORK

In the summer of 2013, a mid-sized, regional university in Texas announced its first Targeted Open Online Course (TOOC). The TOOC model is an adapted version of the increasingly hyped MOOC model that allowed the University's College of Education to leverage existing partnerships to offer free coursework (in this case, for graduate credit and CPE credits) to area educators. The graduate course, *Principles of Instructional Design & Technology* was offered July 8 to August 8, 2013, and was designed and taught by a tenure-track assistant professor of educational technology with

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the assistance of six graduate team leads. The free online course was advertised to *59 Effective Schools Project* (ESP) schools in north central Texas and could be taken for Continuing Professional Education (CPE) credit and/or graduate credit at the university. The ESP is one of the nation's largest and longest-running school-improvement ventures that links university faculty with campus leadership from over 50 Texas schools in an ongoing effort to enhance school effectiveness. During the registration period, from April 1st to June 21st, 162 area educators registered to take the free class.

A primary goal of the pilot TOOC project was to extend the college's reach to area ESP schools by offering professional development in a high-need subject area (i.e. educational technology) and in a format that was accessible for teachers and school leaders. The five-week, summer online format was selected with K-12 educators in mind, and was also the ideal time to foster personal learning communities among participants that could be sustained even after the course concluded. It is hoped that successful participants will help to raise the institution's profile as a respected source of information regarding best practices in education by referring their colleagues to professional development and graduate education offerings in the future.

Another primary goal of the pilot was to positively impact area educators (and thus their students) while testing the new TOOC model of delivery. A key learning outcome of the course was to arm participants with critical knowledge and skills for designing and implementing online learning objects, tools, and activities to engage and empower learners. The large number of students provided fertile research conditions for testing the impact made on participant's National Educational Technology Standards for Teachers (NETS-T) self-efficacy.

Lastly, the pilot allowed our institution to test a new model of delivery in terms of the online course being open to students not actually enrolled at the university and being offered completely free for graduate degree and/or for CPE credit.

Planning and Administrative Considerations

Planning for logistical considerations began in early spring of 2013, and meetings included stakeholders from the College of Graduate Studies, the College of Education, Enrollment Management/Registrar, and the Center for Instructional Innovation. Issues considered included the registration process, transcription, CPE credit processes, marketing/promotion, learning management system selection, technical support, team lead selection, and recruitment strategies.

Registration, transcription and CPE credit. Initial meetings involved gaining buy-in from administrators and support departments, and because of the full support of the Provost and deans to test the model, conversations quickly moved towards logistical considerations. It was determined that participants need not apply to the university to register for the course. Rather, a web-based form in Qualtrics was used for tracking registration data. The registrar's office and graduate dean agreed to a process to retroactively apply graduate credit for successful course completers who also met COGS admission requirements. It was also determined that successful participants would have one year to apply to the university and receive credit for the course towards their graduate degree, and the COGS would maintain completion records for all participants. Another area for consideration was the granting of CPE credits to successful participants. Because the College of Education is an official CPE provider in the state of Texas, 45 CPE credits could be granted for the three-hour graduate course. This required a separate record-keeping process by COE staff, and participants were sent documentation of the CPE credits upon successful completion of the course.

Marketing/promotion. In March of 2013, marketing materials that included both print and web-based messages were sent to a targeted population of K-12 educators from our ESP schools. Customized e-mail campaigns and flyers were sent to administrators at each of the schools, as well as individual teachers who had attended previous ESP professional development workshops. The marketing messages emphasized the free online graduate course, CPE credit opportunity, and critical nature of the subject matter.

LMS selection and support. Because registrants would not have university-based user credentials, it was determined that the course should be delivered in Blackboard® CourseSites, a free platform for delivering online content that functionally mirrors our own institutional platform, Blackboard® Learn. The benefits of selecting this platform, as opposed to other free learning management systems, was our ability to create the course in a familiar platform,

i.e. one that the instructor and technical support staff was comfortable with, and one that students would recognize later if they decided to obtain their graduate degree.

Team lead selection. Another area of planning was related to maintaining academic rigor and engagement in the large enrollment online course. Six graduate students, each of whom had already successfully completed the course and were near the end of their program in Instructional Design & Technology, were selected to serve as team leads. Each team lead was responsible for engaging and interacting with 20-25 students in the course, and their experience counted as their program capstone requirement.

Recruitment strategies. Finally, a recruiting plan was created that involved surveying participants to determine their areas of interest and customizing post-course communications/marketing materials designed to encourage them to apply the course towards their graduate degree. In addition, each successful participant received a personalized email from both the graduate and education deans encouraging them to continue their studies and providing them with links to the online application, COE graduate program websites, and scholarship opportunities.

Instructional Strategies

Despite the novel nature of the model and the large number of students enrolled, the academic rigor of the graduate course was not compromised in the TOOC thanks to the use of team leads and instructional strategies that encouraged engagement and participation. Strategies informed by Siemens' (2005) and Downes' (2005) connectivist views of learning were developed for engagement/outreach, interaction/feedback, and content delivery/assessment in the course, and are outlined below:

Engagement/outreach strategies. As noted before, participants were divided into six teams, each with "21st century skill" names inspired by the content of the course, including The Innovators, The Collaborators, The Connectors, The Knowledge Seekers, The Creators, and Team Ignite. Each week, the instructor posted kudos to the most active team, and a friendly competition ensued with members actively encouraging each other and their team.

Participants had the option to receive personalized announcements/updates via text message, and this medium was used to announce the opening of the course, communicate one-on-one with students, and encourage students to persist. Of the 162 registrants, 153 (94%) opted to receive text messages.

Mail merge functionality was used to send customized email messages to students. For example, Bb CourseSites allowed the instructor to run a report of users who had not logged-in by the third class day. Using that data, a mail merge was sent to those users encouraging them to log-in and participate in the course.

A twitter class hashtag was created to allow the instructor to communicate with the class as a whole. Students were also required to use Twitter as a communication mechanism (see below), and there were 668 tweets archived throughout the duration of the five-week course.

Interaction/feedback strategies. Students were required to communicate and collaborate at four levels each week during the course:

1. To communicate at the class level, students were required to share insights and resources via Twitter using the class hashtag. Students went above the minimum requirement of one tweet per week, often starting conversations with others and posting multiple times.
2. Students were required to collaborate at the team level in a designated Google+ Community. Each week, they received a discussion prompt, and could share their responses using text, video, and pictures. These learning communities have remained open for participants since the course ended, and several participants continue to post resources and ask questions about implementing technology tools.
3. Students were put into smaller groups of 3-5, and were required to collaboratively contribute to a Google Document to post key points and related resources from the week's learning material.
4. Finally, students interacted one-on-one with their team lead and the course instructor via their reflection entries in a shared Google Document. This allowed for personalized feedback and commenting.

Another unique form of interaction was the weekly live broadcasts via Google Hangouts. Participants could log-in to the course at a designated time to watch the instructor and team leads field questions using the backchannel TodaysMeet.com. The video was archived for playback for those participants who were not able to view it live.

Feedback was provided to every participant within five days of completion via detailed rubrics for each deliverable. Team leads were responsible for scoring the rubrics and the course instructor provided comments on each Google Document and in each Google+ community.

Content delivery and assessment strategies. Content was created in interactive SoftChalk lessons that included text, demonstration video, embedded polls, and assessments. Because much of the course involved using educational technology tools, step-by-step demonstration and how-to guides were created.

Students were required to complete six deliverables each week for assessment, including their team discussion, class tweet, key point Google Doc contribution, technology "experiment," weekly quiz, and reflection entry.

Participants

Active participants consisted of 122 educators representing 36 schools in North Central Texas. The group was made up of 12% (n = 14) males and 88% (n = 108) females, ranging in age from 22 to 68 years old, and included 77 K-12 teachers, 15 K-12 administrators/support staff, 16 university faculty/support staff, nine graduate students, and five that didn't disclose their status. The ethnic profile of the group included 98 (84%) Anglo/non-Hispanic participants, nine (8%) Hispanic participants, six (5%) African American participants, two (2%) Asian participants, and two (2%) American Indian participants.

Of the 122 participants, 77 (63%) identified themselves as K-12 teachers with varied years of experience. Teachers with more than five years of experience represented 53.2% (n = 41) while teachers with, at most, five years represented 46.8% (n = 36) of the 77 teacher participants. Forty-seven percent (n = 36) taught at the elementary level while 51% (n = 39) taught at the secondary level. Thirty percent (n = 29) identified their school as urban, and 62% (n = 48) identified their school as rural.

RESULTS

Persistence Rates

Of the initial 162 registrants, 122 actively logged-in and participated in the course. Ninety-seven (97) of those participants successfully completed all of the course requirements with a grade of C or better, yielding a persistence to completion rate of 80%.

Impact of Content

A pre- and post-course administration of the Educator Technology Self-Efficacy Survey (Gentry & Baker, 2013) was used to determine the impact of the content on participants' self-efficacy toward technology integration. The instrument is comprised of 50 positively and negatively worded items corresponding to the International Society for Technology in Education (ISTE) NETS-T standards, and Gentry and Baker (2013) reported a high level of internal consistency evidenced with a Cronbach's alpha of .96. The positive and recoded negative items were summed for each respondent, yielding a range from low to high (50-250). A higher score represents a higher self-efficacy towards the blending of best practices and technology. Descriptive statistics were used to compare pre and post ETS-ES scores. A paired-samples t-test was used to determine whether there was a statistically significant mean difference between the pre and post-scores for TOOC participants. A Shapiro-Wilk test was utilized to determine if normality could be assumed. Cohen's d was used to analyze the size of the effect (.2 small, ,5 medium, and .8 large).

The mean scores and corresponding standard deviations for pre and post ETS-ES scores were 172.39 (30.537) and 194.38 (27.296), respectively. A mean difference and standard deviation between pre and post ETS-ES scores was 21.989 (23.527), an overall average gain of 21 points from pre to post ETS-ES scores. The assumption of normality was not violated, as assessed by Shapiro-Wilk test (p = .147). Participants' post ETS-ES scores in technology self-efficacy significantly increased when compared to ETS-ES pre-scores (95% CI, 17.11670 to 26.86156), $t(91) = 8.964$, $p < .0005$.

Thus, 93% of the variance in ETS-ES scores was attributed to the class experience (d = .93).

Participant Satisfaction and Initial Recruitment Outcomes

Results of the end-of-course evaluation indicated that 81% of participants would participate in another TOOC if offered, and 80% would refer a colleague or friend to the university for future professional development and/or graduate work.

Initial recruitment outcomes are positive, with 18 new graduate students starting in the summer and fall semesters in the Instructional Design & Technology program as a result of the TOOC, or a 157% increase over prior enrollments in the same semesters. Seventeen (17) participants have expressed interest in starting in the spring of 2014 semester, and all successful completers will have until the summer of 2014 to use the TOOC for free graduate credit.

CONCLUSION

This article describes the structure and processes used to develop a Targeted Open Online Course (TOOC) that blended attributes of the MOOC model with the best practices of a traditional online course. Initial results have shown that the TOOC model could be advantageous for regional institutions that may lack the resources and exposure to offer a MOOC, but would like to make an impact and increase their exposure by targeting smaller populations of interest (e.g. educators, businesses, health care professionals, etc.). Furthermore, smaller enrollments in TOOCs ensure more rigorous assessment and validation of identity and allow instructors to leverage the best pedagogical practices of traditional online courses to maintain higher persistence rates. Finally, while the business model for MOOCs remains unclear (see Freeman, 2013; Raths, 2013; and Rivard, 2013), TOOCs afford institutions the ability to let students "try out" a college class and use successful completion as a springboard for pursuing their degree.

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