
Creating a MOOC Blueprint

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Abstract

The growth of Massive Open Online Courses (MOOCs) has been nothing but phenomenal. This paper highlights a research proposal which aims to create a blueprint for educational institutions that wish to create their own MOOCs. Initially some definitions of MOOCs are offered along with background information on their adoption and implementation. The main focus of the paper is on the research proposal and how it intends to create a MOOC blueprint.

1 Introduction

Massive Open Online Courses (MOOCs) are challenging and changing the educational landscape throughout the world. This paper focuses on a nascent research study that intends to create a blueprint for universities that wish to construct their own MOOCs. After a brief overview of the rise of MOOCs and their current status, the research procedure is elucidated.

2 Background

The past two decades have seen remarkable growth in the Internet and social media. Increasingly 'digital natives' (those who have grown up with digital technology and can use it) are taking modern technology for granted without considering its impact on society in such areas as education (Prensky, 2001).

The emergence of MOOCs has created a tectonic shift in contemporary

education. 2012 was proclaimed as 'the year of the MOOC' and the hype that has followed their expansion has been nothing short of remarkable (and at times hysteric). For the uninitiated, Haber (2014, p. 47) has a succinct précis of what a MOOC is:

For anyone who has taken a massive online class from one of the major MOOC providers, the answer to the question of what constitutes a MOOC might seem obvious; the same lectures, reading and homework assignments, assessments, and discussions you would find in a traditional college class, albeit delivered in a digital format to thousands rather than live to dozens.

Useful though Haber's précis is, it does not describe the structure, complexity and incredible scope of the student base of some courses which have in excess of 100,000 students. Rovai and Baker (2014, p. 32) add more depth to a working understanding of MOOCs: "A MOOC is a massive, online educational community organized as a scalable course with the potential for massive enrollments ... It is also invitational. No one who desires to participate is excluded. Individuals participate in a MOOC according to their individual needs and wishes."

Although Japan is considered by many to be one of the leading countries as far as technological advancement is concerned, its educational infrastructure is failing to adapt to the needs of digital natives. Online learning, which allows students to study according to their own needs and timetables, has been marginalized in Japan. The University of the Air (*Hoso Daigaku*) offers numerous online courses but these are seen by many as being outside the scope of 'normal' university education.

Waseda and Keio are two Japanese universities that have created their own online learning platforms which give their students access to online material (Keio, 2015; Waseda DLC, 2015). Kyoto University offers a handful of courses on the edX platform and Tokyo University offers courses on the Coursera platform (Coursera, 2015; edX, 2015). When compared with the seemingly unstoppable growth of MOOCs abroad Japanese online course provision is almost negligible. Prestigious universities such as Stanford University are offering courses through the Coursera platform, Harvard University and MIT are the catalysts behind the edX platform, and the FutureLearn platform is backed by 20 top universities in the UK (FutureLearn 2015). These three main platforms offer free online courses

to anyone throughout the world. There are also options to receive an official certificate after completing a course for a nominal fee. The courses have rich content which make use of the latest technology.

Students thrive on online access and the provision of online courses where they can study what and when they like is highly motivating. MOOCs may provide one answer to their needs. Previous studies on the provision of online material for students have demonstrated the appeal of such supplemental support (Cripps, 2012). However, it is a fact that educational fads come and go and MOOC detractors point to the relative infancy of MOOCs and MOOC pedagogy. While recognizing that MOOCs are in their embryonic stage, it would be foolhardy to simply dismiss their impressive exponential growth as merely a ‘fad’. Major academic institutions are investing millions of dollars in both technology and the academic infrastructure to support MOOCs.

3 Creating a blueprint

The growth of MOOCs has been rapid and this has arguably resulted in haphazard development. In 2014 a research proposal (Cripps & O’Connell, 2014) was drawn up to investigate the current state of MOOCs and submitted to the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT). The object of the proposal was to help facilitate the construction of a MOOC template for institutes of higher education in Japan. In April 2015 the research project was awarded a Grant-in-Aid ‘Challenge’ grant. Below we shall briefly outline the intended chronology of the project.

In the first stage of this research project, which commenced in April 2015, both researchers started conducting a comprehensive analysis of the existing literature on online course provision, online learning, and MOOCs. Preliminary data on MOOCs is currently being collected through interviews with academics in Japan and overseas. Additionally, early in 2016, opinions will also be canvassed through online questionnaires. At this stage the content material and pedagogical infrastructure of existing MOOCs in Japan and overseas will be catalogued and analyzed. Key MOOC platforms for analysis at this stage are likely to be; Coursera, edX, FutureLearn and Udacity (Udacity, 2015). Respected academics that are involved in the creation of online material and the running of online

courses and MOOCs will be interviewed. Specifically, selected academics at Harvard University, Stanford University, Oxford University and Southampton University will be interviewed about the creation of online material for MOOCs. All data will be analyzed using a multi-method approach and use will be made of an NVivo software package for data analysis. The researchers have already enrolled in free online courses to both experience and analyze the courses first-hand. Preliminary findings will be presented at both domestic (JALT & JACET) and international conferences (TESOL & IAFOR).

The second stage of this research project (slated for April 2016) will widen the scope of the study. One group of students ($n=20$) at Nanzan University will be recruited to take part in MOOCs using the Coursera and edX platforms respectively. Data on the students' online experiences will be collected by both researchers through face-to-face interviews, and online questionnaires. The students will also be asked to keep a 'MOOC diary' in which they will write when they study online, their opinions on the efficacy of the courses, and the material housed on the MOOC platforms that they are using. In addition to individual feedback, focus groups will be held before, during, and after the courses have been completed. NVivo software will be used to facilitate the transcription process and to help collate and highlight key themes from the data. The research design will replicate a pilot study conducted in 2014 (see Cripps, 2014a; 2014b).

The third stage of this research project will widen the scope of the study further. An additional group of students ($n=20$) at Nanzan University will be recruited to take part in online courses using the FutureLearn and Udacity platforms respectively. At this stage the same research process as stage two above will be followed. By analyzing the four major MOOC platforms a balanced comparison of their efficacy can be made.

The fourth stage of this research project will focus on an in-depth analysis of the researchers' findings on the courses, such as course construction and material design. The researchers will examine students' experiences with the four MOOC platforms. These findings will be complemented by a post-course analysis of the students' comments.

Throughout the research project data from key MOOC figures in Japan and abroad will be collected through online quantitative and qualitative questionnaires. This data will be supplemented by in-depth face-to-face interviews with key

academics who will be asked about the possibility of establishing cooperative, inter-institutional MOOCs in Japan. The intention of the researchers is to hold a forum on MOOCs and the future of online learning in Japan. Key figures will be invited to Japan to discuss these issues. The findings of the forum will be transcribed and published as an academic publication. Preliminary findings will be presented at domestic (JALT & JACET) and international conferences (EuroCALL & IATEFL). Papers will also be published in domestic and international journals.

The researchers intend to construct a model for the creation of MOOCs for universities in Japan. This model will provide step-by-step guidance for universities on how to set up a MOOC. It is hoped this model will also aid the establishment of inter-institutional MOOCs in the future. Through a detailed analysis of existing MOOCs, and by analyzing students' experiences with MOOCs, it is expected that this research project will provide meaningful data that will facilitate the creation of a MOOC model. Interviews with key figures from the MOOC field and the holding of a MOOC forum will add to the collective body of knowledge on MOOCs. The establishment of inter-institutional MOOCs may lead to the strengthening of linguistic and cultural understanding between people in Japan and those abroad.

In the short period since the MOOC research project began in April 2015 the number of MOOCs has increased significantly and more universities are becoming involved. In September 2015, Princeton University announced that it was joining the edX platform and other universities are set to follow suit (Fahs, 2015, para. 1). In an informal discussion with Kumiko Aoi, an expert on distance learning and MOOCs, Aoi agreed that this expansion will continue (Cripps & Aoi, 2015). However, in her laudable comprehensive summary of the extent of online learning in Japan Aoi (2015) points out that the number of MOOCs currently being offered in Japan through the JMOOC platform (and others) is negligible when compared with those offered by the main platforms. Currently MOOCs in Japan are only offered by a handful of universities and they are often designed and established by interested individuals rather than faculties.

A further caveat to be taken into account is that, apart from administrative and institutional considerations, the efficacy of MOOCs themselves has yet to be proved. In a small research study (Cripps, 2014a; 2014b) a group of Nanzan University students investigated different MOOC platforms as part of a teaching

with technology course. The study showed that although the students were generally in favour of MOOCs, many commented that they were surprised at the small number of Japanese MOOCs in existence. Additionally, the majority of students expressed a preference for face-to-face learning rather than online learning or through MOOCs. It would appear that the traditional form of delivery is preferable.

4 Predicted research outcomes

Little research on MOOCs and their efficacy has been conducted in Japan. Of course many academics are aware of their impact, but the dearth of MOOCs and MOOC research in Japan represents a pressing need to investigate the MOOC phenomenon and provide a framework for institutions in Japan that want to create their own MOOCs. Interviewing key MOOC figures and inviting them to take part in the MOOC forum will raise the profile of MOOCs in Japan and lead to a better understanding of the field. Additionally, through the forum and interviews, the researchers will develop a framework for the establishment of inter-institutional MOOCs in Japan. The intended outcomes of the research are as follows:

1. Investigating students' views on MOOCs and academic papers arising from the results.
2. Holding a MOOC forum to discuss and raise awareness of the potential of MOOCs in Japan.
3. Creating a MOOC model for academic institutions that plan to create their own MOOCs.
4. Establishing inter-institutional cooperation that will lead to the creation of co-created MOOCs.

5 Conclusion

This paper has outlined a proposal to map the design of MOOCs with a view to helping academics and universities create their own. MOOCs represent the cutting-edge of the current educational terrain and as such warrant further

investigation. The research study laid out in this paper will lead to a clearer understanding of how MOOCs, and the material they house, are created. Currently no in-depth research has been conducted on the efficacy of MOOCs save Cripps' (2014a; 2014b) pilot study. Through consultation with experts in the MOOC field, the research team will create a model for the development of effective MOOCs in Japan.

MOOCs are too important to be ignored by academics and academic funding bodies in Japan. If research is to be meaningful it must take place as new challenges arise, not several years later once the momentum has been lost. The Japanese government is pushing to internationalize educational institutions and should examine the impact of MOOCs carefully as they embody the globalization of education. Whether or not MOOCs will be regarded as 'disruptive technology' (Christensen, Horn & Johnson, 2008) in the future remains to be seen. What is certain, however, is that MOOCs will provide fuel for academics in the years to come.

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