



Massive Open Online Courses in Academic Library Information Science Education and Its Challenges

Nagarjuna Pitty^{a,*}, R. Madana Mohana^b

^a Indian Institute of Science, Bangalore, INDIA

^b Department of Computer Science and Engineering, Bharat Institute of Engineering and Technology, Hyderabad, Telangana-501510, INDIA

* Corresponding author:

E-mail address: nagarjuna@iisc.ac.in (Nagarjuna Pitty).

ABSTRACT

Over the past half-decade MOOC's are very much popular and not possible to ignored in academic librarian's at information science education. The librarians' involvement in open access software's are essential to realize the democratizing of higher learning institutions. This paper describes the concept and development of MOOC and also highlights the structure and features. The paper explains the challenges and roles of academic librarians in providing the best services to the MOOC environment. The challenges of academic librarians in the implementation of MOOC are obtaining copyright clearance, a possibility in providing instruction in information science education literacy to MOOC community and promoting Open Educational Resources (OER) to MOOC. This research article will be explaining and discuss the future of MOOC and its implementation in India.

Keywords:

Massive Open Online Courses (MOOCs)
Academic Libraries
Information Science Education
Democratizing higher education
Online learning
Distance education

1. Introduction

In 2012, MOOC has become a new buzzword in the educational sector. The New York Times called 2012 as "The Year of the MOOC" [14]. MOOC stands for Massive Open Online Courses, which has the following features (Table 1):

Table 1. MOOC features

Massive	registration or participation is unlimited
Open	participation is free and for all
Online	courses are delivered entirely online
Course	courses are often developed by top educators or are based on a module of a successful academic programme.

The concept and enthusiasm for MOOC is relatively new especially in this part of the world. The first MOOC was created at the University of Manitoba in 2008 (Mackness, 2010). MOOC, however, becomes widely known in 2011 when an open online course in Artificial Intelligence (AI) taught by two Stanford professors attracted over 160,000 students from more than 190 countries [11].

2. MOOC Structure and Features

MOOC offers anyone to understand courses from any academician without any required course prerequisite. These courses presented stipulated period of duration and follow a set of syllabus. As the courses are free and open to all, the number of takers is usually at most engaged thousands of students. Also dropout rates are maximum. At most MOOC have completion rates single digit of percent. That percentage, however, represents maximum number of students than maximum no of professors would teach in person in a lifetime [15].

In order to ensure all courses are implemented in a well-organised manner, MOOC needs platforms or providers. Among major MOOC providers are for-profit and the non-profit establishments such as Udacity, EdX, Edemy, Khan Academy and Coursera. Coursera, with its inception in April 2012, has partnered 62 elite institutions and “registered 2.8 million students”. Coursera offers over 300 courses, in a wide range of subjects including humanities, human science and science & technology [5].

Participants or students in MOOC have to follow alongside of the course over a set length of time. The teaching process includes the use of recorded web lectures, online reading list, weekly homework problems, and final exams. Students may complete as little or as much of the courses as they wish and at their own pace [12]. MOOCs are at this moment still offer a course-one-by-course basis. However, a growing demand for recognition and transferable credits, San Jose State

University (2013), for example, is collaborating with Udacity to offer several online courses for credit. American Council on Education’s College Credit Recommendation Service (ACE CREDIT) recently, in February 2013, completed an evaluation of five courses offered through Course and recommended all of them for college credit [9].

3. Librarians Involvement in MOOC

There are many potential roles that librarians can be involved in MOOC. The MOOC creates unique challenges and its opportunities for academic libraries [17]. However, as it is important to recall that this MOOC concept is very useful at an infant stage, the research on librarians’ roles are very limited. The roles of librarians in MOOC, obviously, are not comparable and significant with the traditional courses and higher education environment. Among the roles and challenges to ensure this MOOC become effective, are obtaining clearing copyrighted content, promoting open content and Open Educational Resources (OER) to MOOC community, and teaching information literacy skills.

4. Clearing Copyrighted Content

Obtaining copyright clearance is most critical and important challenge for librarians in MOOC environment. Copyright clearance is about seeking permission, licensing negotiation, and fair use determination [13]. Librarians must ensure that all instructional materials such as online lectures, learning modules, and quizzes are cleared from copyright issue. All materials to assign as readings also must be cleared from copyright issue. This may be not an issue for traditional class environment. However, in MOOC environment, the use of copyrighted materials in a MOOC does not fall neatly within the descriptions of fair use exemptions [2]. Although the universities are non-profit organisations, the platforms

and providers such as Udacity and Coursera themselves are for-profit organisations. Hence, allowing uses of materials in a traditional class might constitute an infringement in it.

Recently, in April 2014, Copyright Clearance Center, Inc. (CCC), a global licensing and content solutions organization, has launched a MOOC Content Licensing Solution. Its partnership with leading course materials providers, CCC's solution provides copyright-cleared course content to participants enrolled in a MOOC, relieving the faculties or academicians of the burden of securing permissions and distributing content [3]. This is one many directions for librarians to obtain and retrieve copyright-cleared course content and references for MOOC environment.

Librarians in MOOCs environment also have to locate alternative sources such as from open sources materials, creative commons materials and other free sources for academicians to develop courses, modules and assigned readings. They must take full advantage of widely available Open Educational Resources (OER) to locate any information resource which may appropriate for the courses. The bottom line is that librarians very much careful to review the proper and legal use of each and every resource used in a MOOC to make sure there is not a license agreement violation or copyright infringement [6].

5. The Promotion of Open Educational Resources (OER)

The difficulties in obtaining copyright clearance have led many institutions to shift their academic resources to open or public domain content. Librarians should promote academicians whom involved in MOOC to obtain their sources from the open content domain. The value of OER can be promoted in many ways. The idea is probably a face-to-face conversation between librarian and subject experts [2].

Convincing academicians to publish their academic writings is another task for

librarians in MOOC environment. This effort, however, is not very difficult as MOOC itself is an 'Open Content' in nature. Most of the video lecture recordings, readings, quizzes and discussions are available for free or under an Open Access (OA) license such as the ones promulgated by Creative Commons. University of California (UCI), for instance, recently announced that its entire undergraduate chemistry curriculum is available on YouTube and its Open CourseWare website. The University offers 15 video courses (22 hours per course) covering the entire UCI undergraduate chemistry major [12].

Skills that librarians possess such as evaluating, organising and selecting information resources are essential in the order appropriate OER can be selected as sources and readings materials in MOOC. Librarians should be able to advise and recommend academicians the best OER for particular courses in MOOC. According to Kleymeer, Kleinman, and Hanss (2010) "...librarians have relevant skills, including outreach and education, curriculum development, and instructional support, which could benefit OER programs." The authors also added that library infrastructure and assets such as search and discovery capabilities, copyright expertise, data storage, metadata and indexing, institutional repositories and preservation could potentially benefit university OER initiatives.

6. Teaching Information Literacy Skills

Besides to helping their institutions properly use resources, librarians should be also involved in a teaching and promote information literacy skills to students taking MOOCs [11]. One module of search techniques, for example, may be included in pre-recorded lecture in the course. A subject-based screencast or a YouTube video on plagiarism and citation can be also used in supporting MOOC students in their courses. Mahraj (2012) [11] also

suggested that librarians can teach MOOC students by scanning student blog posts to find where students are having problems evaluating sources and then providing comments to the posts. This effort, indeed, could take an extraordinary amount of time and work. Mahraja also suggested that more efficient ways to reach MOOC students could be modeling appropriate citation, providing information-literacy skills self-assessment tools, and creating online information literacy tutorials.

The concept of an embedded librarian may also be applied to this new learning environment. Embedded librarian typically participates in online discussions, respond to student post (in the forum), offer classroom-type instruction using web-conferencing, and even troubleshoot problems using desktop sharing software [8].

7. Other Roles

There are other roles that libraries and librarians can be involved in MOOC environment. Among them including offering a MOOC focused on librarianship. The University at Albany's University Libraries and the Center for Distance Learning at SUNY Empire State College (ESC) have collaborated to offer a new Massive Open Online Course, 'Metaliteracy MOOC'. 'Metaliteracy' is the reinvention of information literacy for open learning and social media environments (University at Albany State University, 2013). MOOC for librarianship also may provide an opportunity for librarians or those related to information management 'to brush up on their skills to get hired, promoted, or just do their jobs better' [15].

Besides academic libraries, public library also must play their roles in MOOC environment. Public libraries can become a host institution for local MOOC students to gather and learn. Other roles are supporting the production of MOOC content and learning materials and preserving MOOC content.

8. MOOC in India

In India, on November 2013, INFLIBNET center has become the first center providing MOOC. The course was conducted and also attracted some total students 1500 approximately from our countries with 53 on-campus students. Following this successful course and workshops, the INFLIBNET center has launched the second MOOC titled Advanced Training Programme on ICT Applications for Libraries scheduled to be held at INFLIBNET Centre, Gandhinagar, Gujarat from 10th-30th November 2014. The two courses are using OpenLearning.com as the platform to deliver the MOOC.

9. The Future

As mentioned in earlier part of the paper, there is a strong and growing demand towards offering for-credit MOOC by institutions. Hence, in next few years, there will be more MOOC to be credited. Secondly, in future, MOOC will be accepted as universities' existing on-campus curriculum. MOOC will be used to enhance traditional teaching methods with the introduction of MOOC blended learning. Thirdly, there will be more corporate institutions to joint in the MOOC movement. In May 2013, the Georgia Institute of Technology announced that American Telephone & Telegraph Company (AT&T) has contributed funds to enable them to launch a professional online master's degree in computer science via the MOOC platform Udacity (Young, 2013). There will be in person examination for the course. The cost for this course will be a lot cheaper than the traditional full-time course.

As MOOC evolve towards for-credit, curriculum-embedded offerings and participation of corporate sector, the roles and requirement for the services of the librarians are set to increase [7].

10. Conclusion

MOOCs are a new concept and changing the concept from traditional classroom to visual online classroom. Besides that, researchers need to be done to determine the effectiveness and benefits of MOOC to the society. Various issues such as sustainability of MOOC, determining the best instructional designs and teaching pedagogy, quality and completion rate, assessment and credit must be experimented and evaluated thoroughly to achieve the best impact of MOOC. Academic librarians need to be prepared for direct involvement in supporting their institutions in implementing MOOC. They should start to develop a deeper understanding of MOOC in their institutions. Collaborative effort and actions among librarians must be taken to understand this world wide movement in education. MOOC definitely will be one of the tools in democratising education to the society.

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