Library as a Change Agent in Liberation and Deliberation of Higher Education through MOOCs

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[**Abstract:** Massive Open Online Courses [MOOCs] are creating waves in the higher education arena and earning praise for availing world class education to masses. MOOCs are not only impacting the delivery of the courses, but are set to influence the academic support services like libraries in a big way. Interest in the MOOCs crested at the global level, invoked the authors to present their overview especially from the point of view the future role that libraries/librarians can play in this niche domain of higher education.]

Keywords: MOOCs, Libraries, E-learning, Online courses

1. Introduction

Technological developments have enforced tremendous changes in a way that the higher education is delivered and communicated over a period of time. The year 2012 saw a new model of liberation of higher education that too by using the ubiquitous 'Internet', which is poised to create revolution. The last year witnessed many of the world's prestigious universities led by Harvard, MIT, Stanford and Princeton in collaboration with other universities or private organizations started offering free classes on the Internet and people in millions from all over the world enrolling for these courses. This is truly beginning of the new era which will definitely have impetus in the history of Open Education Resources (OER) – a fact much discussed in the last decade by number of apex organizations such as UNESCO. Looking at the scale of penetration, no wonder this was referred as "Massive Open Online Courses" or in short "MOOCs". MOOCs are now creating waves, tides rather tsunami in the higher education arena and earning praise for making available world class education to anyone, who otherwise would not have

access to courses offered by these premier institutes of higher learning. They have been considered as purveyors of higher education by the same time concerns are raised that these may bring in disruption and diminish the quality of on campus education. However, in the scenario of faculty crunch, diminishing budget and increasing online culture, it will be sensible to fortify that MOOCs may redefine the concept of higher education by giving a new learning opportunity for aspiring students, faculty and universities.

The impact of MOOCs may not be seen only in the delivery of courses, but also as to how the support services of higher education system such as computer center and libraries meet the changing needs of teaching faculty and the students who are associated with these courses. Since ages, libraries are in the forefront of higher education to support information needs of faculty, researchers and students. The support is enhanced when universities embraced distance education by reaching out to the students of off-campus distance education. However, in both the cases, support is limited only to the restricted number of students - those having requisite qualifications and who have enrolled for courses by paying fees. In case of MOOCs, this scenario is sea changed, as the enrollment is massive that too from the diverse population group having different levels of education and located at different geographical areas. For libraries, it is even unthinkable to provide any adequate support to such a massive group owing to limitations posed by licensing, constrained staff time, costs associated with content etc. Interestingly recent OCLC (2013) event on 'MOOCs and Libraries' highlighted areas in which libraries can get involved with MOOCs to support the universities, faculty and students. In light of the above and also looking at the global scenario, an attempt has been made in the present paper to give an overview of MOOCs and the manner libraries/librarians can support and take benefit from these courses.

2. What's all the MOOC About?

"Massive Open Online Course (MOOC) is a model for delivering learning content online over the Internet to virtually any person who wish to take the course at no cost with no limit on attendance" (Educause, 2011). In other words, "it is an online platform aiming at large-scale interactive participation and open access via the web. In addition to traditional course materials such as videos, readings, and problem sets, MOOCs provide interactive user forums, quizzes that help build a community for the students, professors, and teaching assistants (TAs)" (Wikipedia, 2013). Typically they do not offer academic credit or charge tuition fees, but are massive in nature.

3. Key Initiatives Offering MOOCs

The roots of MOOCs can be traced back to 2008 to an online course "Connectivism and Connective Knowledge" offered by the University of Manitoba having slightly different learning environment (Educase, 2011). However, the term MOOCs gained momentum in fall of 2011, when Stanford University offered three of its engineering courses viz. Artificial Intelligence, Machine learning and Introduction to databases for free on the Internet. This resulted in massive enrollment to course on 'Artificial Intelligence', which stood at 160000 (Watters, 2013) and led to series of initiatives from renowned faculty members of prestigious universities. Among the many initiatives, following are notable and have taken lead in offering MOOCs in different disciplines.

3.1 Udacity (http://www.udacity.com)

Sebastian Thurn, a computer scientist along with two of his colleagues David Stevens and Michael Sokolsky established Udacity in January 2012 by raising funds through venture capital (Lewin, 2013). Udacity follows a policy of developing its courses in-house, working with education specialists to make the pedagogy as effective as possible. At present it offers 28 courses, majority in Computer science followed by Mathematics, Psychology and Business.

3.2 Coursera (http://www.coursera.org)

Daphne Koller and Andrew Ng, Computer scientists from Stanford established it in April 2012 as for-profit company by raising funds through venture capital (Leber, 2012). The Coursera, instead of developing in-house courses, it shares partnership with big-name universities on revenue sharing model to provide content whereas

it provides hosting and software platform. Today its partnership stands at 87 universities and institutes hailing from all parts of world offering 447 courses in different disciplines. Very recently, in order to provide access to high-quality content and resources to enrolled students free of charge it has piloted a programme with top publishers (Coursera, 2013).

3.3 Edx (http://www.edx.org)

The Edx was initiated in December 2011 by Anant Agrawal as MITx an independent non-profit organization that offers MOOCs from MIT. In May 2012 it became Edx, when Harvard joined this initiative. It has been funded by both MIT and Harvard. At present its consortium consist of 29 top universities from USA, Europe and Asia offering 72 courses in the areas of Computer science, Natural Sciences, Health Sciences and few areas of Business and economics, Philosophy and Humanities. IIT Bombay has recently signed up with Edx to offer some of its courses.

Apart from these, there are many more MOOC platforms are in the offing, to name a few futurelearn (http://www.futurelearn.com), novaed (http://novoed.com), OpenEd (http://www.openuped.eu) etc. Most of these offer only the course completion certificates for successful students, but credits for certain courses is offered at a price.

4. MOOCs and Libraries:

It is too early to predict what would be the role for libraries in MOOCs. The concept is even unheard among the library circles. Yet they are bringing in massive challenges and opportunities. Challenges as perceived by Forest Wright (2013), there are two characters of MOOCs that makes it difficult for libraries to integrate their services. First, the enrollment, which far exceeds that of conventional campus or online degree courses and the Second, in most cases MOOCs are hosted by third party organizations. Further he states that these characters prevent librarians to apply any of the approaches used by them for online courses such as embedding lesson plans, information literacy tutorials, research assignments etc. Also they may pose technical and proprietary issues owing to third

party learning platforms. At this initial stage of MOOCs development, some of the areas, which are identified as next possible steps for libraries in 'MOOCs and Libraries' event organized by OCLC (2013) and further reassessed in OEDB article (2013), have been taken here as base to highlight the role of libraries and librarians in MOOCs including the one suggested by Schwartz (2013). In order to get feel of the MOOC and recognize its impact one may undertake following measures:

4.1 Applying Theory to Practice: Take a Course on MOOC

It would be more pertinent to take a course on MOOC in order to understand the experiences of learning through MOOCs. This will help librarians realize nuances attached with this new medium of online education. The librarians may even consider going through the course material of 'MOOC MOOC' [https://learn.canvas.net/courses/27/] to understand the 'ins' and 'outs' of MOOCs. This could perhaps enable libraries in supporting the people involved with these courses effectively.

4.2 Transition from Usage to Development: Be a part of MOOC Development

Librarians need to engage with the institution or faculty involved in developing MOOCs by honing partnerships to understand the role in the development of courses. It is possible that teams concerned might have overlooked library perspective in MOOCs. Engagement helps faculty to better understand what library can do for the betterment of course and also helps in convincing faculty the importance of scholarly resources for students' learning. With little modifications, they may even share tutorials or guides developed for on campus students to avoid any link to proprietary databases.

4.3 Inter-library Collaborations and Sharing

Collaboration with different types of libraries such as Academic, Public and Special libraries may help librarians to learn from each other's experience in extending support for MOOCs. The same can be accomplished by sharing information through dedicated discussion forum or through other existing professional forums such as LIS-

forum. It may eventually lead to developing a librarians MOOC community to understand each other's problems as well as sharing the success stories in meeting the information needs of faculty and students.

4.4 Freedom from Licensing

This is one of the areas, where in librarians can provide valuable inputs to faculty and university concerned, regarding the various legal as well as copyright issues. Faculty often provides reading lists for courses they offer within the campus, which involves copyrighted content. In case of MOOCs they may tend to provide the similar material taking advantage of 'Fair Use' clause of copyright, which may violate the license agreement, library negotiated with publishers or vendors. Hence, it necessitates libraries to educate their faculty about license and access issues related to proprietary reading materials and encourage them to use open access resources by providing links to such sources. If at all there is a need to use copyrighted content, libraries either need to renegotiate the licensing terms or seek free license for such material from publishers. Free license in most cases may be very unlikely, looking into the massive reach of these courses. At the best to avoid any copyright issues, librarians need to encourage faculty members to provide links to proprietary resources; and it is students, who wish to use material, will have to pay for the license. Also librarians may play the role of mediator in bringing together the faculty or university and the publishers to explore the possibility of extending the course specific text books or journal articles for the use of students on trial or chargeable basis through the MOOC platforms.

4.5 Developing Course Specific Research Guides/Tutorials

The librarians in consultation with faculty members, who are developing MOOCs, can develop course specific research guides or tutorials to assist students in locating the required scholarly materials. It may include all types of library reading materials viz. print, online and offline. It will help students to reach out to the reference material during their course. It may also include links to qualitative subject tutorials or guides already available on the Internet as an additional resource.

4.6 Persuade MOOC Usage

Library being a hub of information resources and services may encourage learners who are undertaking MOOCs by providing them the facilities within the library. Apart from providing access to library resources, they may be given access to computers with internet connection and headphones required to take a MOOC. Public libraries, being the community information centers, are much suited to play this role and encourage enrollment to these courses to people from all walks of life. Libraries may even help these learners in developing local MOOC communities, which play an important role in helping each other as help from instructors is very minimal owing to large enrollment. The library advocacy given irrespective of type of library will go a long way in empowering the youth and information seekers with knowledge.

4.7 Create Library MOOCs

Libraries may even create their own MOOCs in order to inculcate students on effective use of scholarly resources. This they may do to provide information literacy programmes on information retrieval skills, evaluation of sources, plagiarism etc. Such courses will provide library users an introduction to various resources, educate and enable them to make the best use of these during the course of their learning through MOOC platforms.

4.8 Preservation of Content

According to Schwartz (2013), another potential area for libraries, is preservation of content developed for delivery of MOOCs. The faculty concerned with the development of MOOC may revise their courses over a period of time as they learn from their experience. This leads to change in the versions of the courses. At this stage either the faculty or university or companies providing MOOCs might have not thought of preserving these for future use. Librarians working in academic libraries may take a lead in convincing the faculty or university authorities the importance of preserving contents in institutional repository for future use; this will also help in propagating open access movement. However, faculty or university involved with MOOC need to include this in the contract, which

they sign with the companies that provide MOOCs. Libraries may even play a role to preserve student generated content created during a course on MOOC platform.

5. MOOCs augmenting Adult and Continuing Education

The MOOCs can create an opportunity for librarians to undertake their continuing education like in other areas. Some beginning in this direction has already been initiated. A course on 'New Librarianship' (http://ischool.syr.edu/future/grad/newlibopencourse.aspx) from iSchool, Syracuse University was offered in July-August, 2013 and it is available at present for self learning to interested learners. This was followed by the course on 'Hyperlinked Library' (http://slisweb.sjsu.edu/programs/moocs/hyperlinked-library-mooc) initiated by Michael Stephens from SJSU, which commenced from Sept 3, 2013. Another course on 'Metadata' (https://www.coursera.org/course/metadata) through 'Coursera' platform is offered from Sept, 2013 by Jeffrey Pomerantz from North Carolina University, Chapel Hill.

This has certainly brought in cheers, which will help working librarians to brush up their skills to attune themselves to be current in the present Internet era. More may be seen in the coming years, wherein good number of library schools jump in to the bandwagon of MOOCs offering their courses free for all, thus bringing in learning opportunity for librarians. The professionals from developing countries would immensely benefit from such initiatives as quality education and training in many such countries is still a dream.

In spite of their disruptive nature, it is true that MOOCs will bring in an opportunity for librarianship in improving the skills of librarians and in this pretext we agree with Schwartz (2013) that "Technology is an increasing part of librarianship, and the rapidly changing state of the art means that updated training is needed every few years. MOOCs have the potential to make that convenient and cost effective for even the tightest budgets".

6. Conclusion

MOOCs have brought in many opportunities for librarians in supporting higher education. It is likely that they are expected to nurture this in the coming years. Libraries being the disseminator of knowledge have a key role to play in order to support the faculty, students and universities involved with these courses. Librarians need to be prepared to prop up this new breed of education to establish their subsistence for future. Librarians have to play a major role in the MOOCs movement as irrespective of nature of courses; students need support in the utilization of quality scholarly resources. More than ever before, libraries now have a pivotal role in identifying quality resources, licensing copyrighted material and educating clientele in the use of resources. It is a new avenue for libraries to explore and expand their bases, which will eventually result in showcasing their strengths and also help in promoting open access as licensed material is not easy to negotiate for such massive courses. Library professionals will also be benefitted from MOOCs, by enrolling to courses offered in Library and Information Science and Computer Science. After all this is the dream envisioned by the organizations like UNESCO by promoting OER. This in a true sense will fulfill the basic rationale of the Librarianship: Knowledge for all, with no spatial, temporal constraints and free from all the discriminations of race, religion and gender issues.

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