

**MOOC: A NEW PLATFORM IN LIBRARY AND INFORMATION SCIENCE DOMAIN****DR. ANNA KAUSHIK**Deputy Librarian, University of Kota, Kota – (Rajasthan)  
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**Abstract:** Massive Open Online Course (MOOC) has become a hot topic in present scenario and is spreading rapidly in all disciplines. This study defines concept of MOOC, arguments regarding involvement of library and information science professionals in MOOC environment, steps needed in creation of a MOOC and to determine parameters for evaluating a MOOC. This study may be useful in terms of Massive Open Online Course (MOOCs) know-how and potential in library and information science domain.

**Key words:** Massive Open Online Course (MOOC), Library and information science professionals, Online learning.

**Introduction**

Online learning is becoming very popular nowadays and spreading over in all type education systems rapidly due to emergence of diverse Internet technologies and platforms. Massive Open Online Course (MOOC) emerged as one of the prominent platform in online learning domain and is gaining popularity in all disciplines including library and information science domain in a short period of span and also provides depth impact on online education systems and online pedagogies. Genesis of Massive Open Online Course (MOOC) was tracked back in 2008 year when Stephen Downes (2011) and George Siemens (2005) offered “Connectivism and Connective Knowledge/ 2008 (CCK8)” a for- credit course which made available at the University of Manitoba, Canada. This course reached the boundaries of connectivism with Siemens and Downes (2011) used a wide range of platforms such as blogs, forums, wikis, face book etc. and got the registration of over 2200 participants and allowed the participants to participate at large level but offered interconnected learner community and personal learning environment independently. Dave Cormier, University of Prince Edward Island and Bryan Alexander, National Institute of Technology in Liberal Education, coined the term “Massive Open Online Course (MOOC)”, McAuley et al.<sup>1</sup> added. Though MOOC was considered as a disruptive technology earlier days, but, enough popularity gained by MOOC in the year of 2012 in which “New York Times” declared 2012 as the year of MOOC (Pappano<sup>2</sup>) and MOOCs players such as Coursera, Udacity, Edx etc. established new benchmarks in online learning environments in various disciplines including library and information science. Therefore, libraries, library and information science education and library and information science professionals are not only started to get familiar with MOOC but also participating in variant

MOOCs available in library and information science domain. On the other hand, LIS professionals are assisting the MOOCs developers in resolving the various problems related to MOOCs and exploring different possibilities to get engaged within MOOC environment and also encouraging other library and information science professionals to participate in MOOC movement at a large level.

### **What is MOOC**

MOOC stand for Massive Open Online Course in which “Massive” expresses large scale participation of participants, “Open” denotes such courses are open for all without any restrictions, “Online” such courses available on only online mode on Internet or no face to face attendance or interactions is required for such courses, and last word “Course” depicts about structures of courses offered online to the participants or the concept of a pedagogically designed to online learning.

Massive Open Online Courses (MOOCs) are consisting of variety of online reading materials and resources. MOOC is very different online learning model from traditional or online classes wherein limited numbers of students, face-to-face interactions with age attached in particular geographical location in a university /college/institute are essential components. MOOCs offer online courses to unlimited users who resided in various locations or different geographical areas with requirements of no addresses, no age bar and almost no cost too. But, it is mandatory for every user who wishes to participate in MOOCs must have a personal computer and internet connection with his/her.

Wikipedia<sup>3</sup> defined the MOOC as a massive open online course is an online course aimed at unlimited participation and open access via the web. In addition to traditional course materials such as filmed lectures, readings, and problem sets, many MOOCs provide interactive user forums to support community interactions between students, professors, and teaching assistants (TAs).

Therefore, a Massive Open Online Course (MOOC) may be defined as an online learning model in which anyone who has computer and internet connection can participate virtually in any course without the prerequisites of the traditional education system.

### **Related literature**

Various studies conducted by diverse authors on variant issues related to Massive Open Online Course (MOOC) and library and information science (LIS) domain in which Wu<sup>4</sup> made the detailed discussions on recent development, benefits, weakness and special characteristics of MOOCs. This study also discussed how libraries and librarian can play important roles towards augmenting this hot technology. Prichard<sup>5</sup> discussed the pivotal roles of emerging technologies in OCLC libraries by giving example of emerging technologies and highlights pros and cons of Massive Open Online Courses (MOOCs). Kaushik and Kumar<sup>6</sup> presented periodical literature published on Massive Open Online Courses (MOOCs) and library and information science domain in different library and information science journals and magazines and discovered that most articles published by “Public Service Quarterly” on MOOCs and library theme, 2013 year noted as most productive year and majority of articles published by foreign journals and single authors. Fredrick<sup>7</sup> defined the concept of Massive Open Online Courses (MOOCs)

with the advantages and disadvantages and also explored for possibilities and potential towards implementing MOOCs concept in school libraries and through librarians. Ferguson and Burford<sup>8</sup> presented an emergence and adoption of Massive Open Online Courses (MOOCs) in Australian colleges and universities and MOOC movements taken place towards in different colleges and universities in the context of self-directed learning. Kohn's<sup>9</sup> study focused on the development of massive open online courses (MOOCs) offered by different college and universities. This study is further provided paradigms of establish MOOCs and how libraries can play pivotal roles towards MOOCs through The Association for Library Collections and Technical Services (ALCTS) that offers a series of webinar to address the roles of librarian in the online learning. Fowler and Smith<sup>10</sup> argued issues regarding the roles of librarian to assist and advice to the MOOCs creators to obtain permission to use copyright materials in MOOC environment. Signorelli<sup>11</sup> urged to develop the bridge between MOOC developers and libraries in terms of possible support and collaboration in exploring the MOOCs as well as use of MOOCs by librarians as a platform for professional development. Barnes<sup>12</sup> urged to prepare librarians rigorously for ample contribution towards development and help running different kinds of MOOCs through libraries. This study discussed concept of MOOCs, growth of literature on MOOCs and librarians as well as possible development in copyright issues in future. Ecclestone<sup>13</sup> emphasized to take a MOOC into libraries and use MOOC model to develop the skills for of librarians in respect of implementing and successful running the library services on MOOC platform. Bond and Leibowitz<sup>14</sup> highlighted the MOOC issues towards librarians' participation and opportunities as well as challenges coped for connecting library resources particularly serials in MOOC mode. Williams<sup>15</sup> discussed Massive Open Online Courses (MOOCs) in context of Coursera experience. Stephens and Jones<sup>16</sup> expressed their views regarding extensive use MOOCs in library and information science domain for promoting learning environments and professional development and also discussed the various benefits MOOCs in a diverse way ranging from online learning to large scale professional development. The findings of this study also revealed that the authors' MOOC model was successful and there are significant opportunities available for LIS programs to serve the profession. Wilson and Gruzd<sup>17</sup> presented the MOOCs concepts in details and discuss situations, challenges of Massive Open Online Courses (MOOCs) and also urged to use of MOOCs for developments of library and information science profession. Stephens and Jones<sup>18</sup> expressed the views regarding experience and perceptions of librarians and information professionals after participating in library and information science related Massive Open Online Course (MOOC) and also shared the lessons learned and insights gained by actively participation of LIS MOOCs at massive scale.

### **Objectives of the study**

This study has following objectives:-

- To define the Massive Open Online Course (MOOC) concept.
- To discuss regarding engagement of LIS professionals in MOOC environment.
- To determine the steps required in creation of a MOOC.
- To develop an evaluation criteria for assessing the MOOCs.

### **Should LIS professionals engaged in MOOC environment**

The answer is yes because Massive Open Online Course (MOOC) learning model is spreading over the all disciplines including library and information science field and provides depth impact on online learning environment in every area of subject as well. On the one hand, MOOC is providing great opportunities and challenges before library and information science professionals in which LIS professionals can enhance their technical skills and library and information science practices in best ways by motivating of faculty members to be a part of MOOC, assisting MOOC developers through providing appropriate reading materials and resources for development of MOOCs, and providing exact solutions for various hurdles faced by MOOC developers from creation to successful running MOOCs to their target audience. It is possible for library and information science professionals because LIS professionals are well familiar towards dealing with copyright resources, open education resources available in diverse subjects as well as different technologies and platforms used in different subjects in current scenario whereas other faculty members may be not have same knowledge of different resources pertaining to various disciplines. On the other hand, MOOC is not only providing opportunities to get well familiar with MOOC concept, features, structures and potential usages but also presenting spaces for MOOC movement through which library and information professionals can develop MOOCs on library and information science topics, collection development, organize conferences, workshops, symposiums, debated etc. and also make strategically thinking towards engaging themselves into MOOC environment at massive level. Apart from above, library and information science professionals can develop library and information science forum and network to resolve the problems encountered before MOOC users as well as MOOC developers and worked as a community manager or backhand support to solve the problems which cannot be solved by members of LIS forum and network.

### **Steps needed in creation of MOOCs**

The creation of a MOOC is a complex task than preparation for a conventional online course, and it requires systematic procedure as a industrial project. The following steps may be needed to follow to create a Massive Open Online Course (MOOC):-

#### **Plan for a MOOC**

Proper purpose is a factor to succeed in achieving desired goal. In this context, a MOOC developer should know the clear purpose for preparing a MOOC on particular topic. This purpose may be circulated among team of MOOC creation in proper way so that they can give their inputs in creation of MOOC and achieve the purpose for which a MOOC is developed. It is imperative to suggest that before become a MOOC developer, it should be better to take at least a MOOC first on any interested topic in order to get well familiar with MOOC environment.

**Target audience**

It should be very clear in the mind of a MOOC developer that who are the target audience for the particular Massive Open Online Course (MOOC) and course contents, reading materials, language and presentation of MOOC must be added accordingly to the level of targeted audience.

**Permission from authority**

Before preparing a MOOC through an institution, formal permission should be taken from higher authorities that include financial and administrative sanction, equipments, persons who involved in creation and development of a MOOC with their individual work responsibility and work load must be mentioned as per everyday schedule.

**Decide the MOOC contents**

MOOC developer should be diligent towards deciding and adding contents for a MOOC. For deciding contents of a MOOC, MOOC developer must focus on subject area, objectives and target audiences of a MOOC. The selection of theme for MOOC must have ability to justify its contents adequately or as a whole so as to this MOOC may attract users enough and also helpful in achieving the goals. Besides this, the contents of a MOOC must be free from copyright constraints.

**Type of materials used**

Before developing a MOOC, it should decide that what types of the reading materials are to be used within a MOOC. The reading materials may be a written document by the teachers or videos or proprietary resources of the institution or Open Educational Resources (OER) which are freely available on the Web or may be a combination of variety of respective resource types. While using different resources or reading material within a MOOC, copyright issues of the resources may not be forgotten otherwise. It is also mandatory that resources or reading materials to be used with a MOOC must be fully free from copyright constraints for the convenience of the users.

**Cost of a MOOC**

Cost of a MOOC includes software, hardware, MOOC platform and other equipments be used for developing and successful running a MOOC to the users. Software maybe Photoshop, Learning Management System (LMS), Word processing programs, Illustrator, etc., hardware maybe a quality camera, speakers, and so on and platform maybe on institutions' own infrastructure resources on such as Infrastructure as a Service (IaaS) mode or on Software as a Service (SaaS) mode by using an external

contractor to provide the infrastructure. The cost of a MOOC may be calculated by considering above mentioned items and human resources engaged in successful running a MOOC without any problem.

### **Requirement of human resources and equipments**

Accurate requirement of human resources and equipments in terms of technical persons such as graphical designers, webmasters, instructional designer, integrator, testers, project manager and other technical staff and necessary equipments had better to decide prior to start to develop a MOOC on specific topic. It is also necessary to all persons who involved in creation of a MOOC must be worked with the full coordination throughout the development of MOOC in order to make quality MOOCs.

### **Selection of platform**

For offering MOOC to the users, MOOC developer should chose appropriate platform for a MOOC which may be either Infrastructure as a Service (IaaS) mode on institutions' own infrastructure or Software as a Service (SaaS) mode using an external contractor to provide the infrastructure. It is suggested that instead of choosing paid platform for a MOOC, MOOC developer should look for free platform and established MOOC platform for the MOOC projection.

### **Testing a MOOC**

Prior to mount MOOC for public use, it is highly suggested that technical quality, objectives, design, layout, voice, presentation, accessibility and so on must be fully reviewed or checked by testers. It is very necessary to ensure to the testers that no line of defectiveness occurred within MOOC than only a MOOC is to be opened for public use.

### **Propaganda of a MOOC**

A MOOC needs to be announced sufficiently far in advance for communication to be possible and for students to be able to enroll. For incidence, the major consortiums (Coursera, edX, etc.) announce their courses at least three months before the start date and they regularly communicate their forthcoming program. The announcement for a MOOC is accompanied by two documents namely a syllabus of a course which contains the essential points of the course, its duration, the prerequisites to follow the course and any relevant information to enable the learners to make their choices and be fully informed when they enroll and second is- a "teaser" for a MOOC – a short video lasting two to four minutes, where the teachers appear, explaining the interest of the course that they are going to give. Both of above mentioned documents may be made available on their institutional portals or on social media. These documents need to be created with the enough care, because they are of crucial tools to attract an audience as much as possible.

**Evaluation of MOOCs**

The following parameters may be used for evaluating of a Massive open online Course (MOOC):-

**Authority-** From which institution/ organization or professional MOOC is created.

**Coverage** – In what extend a MOOC covered particular topic.

**Length of the MOOC-** What is the length or course duration of a MOOC.

**Currency-** How much a MOOC is updated.

**Platform-** On which platform a MOOC is developed.

**Openness Course** – Whether a MOOC required registration for participation or not.

**Provision of certificate** – Whether MOOC developer provides a certificate after accomplished the course.

**Type of materials present** - Which types of reading materials and multimedia is used within a MOOC.

**Language support-** In how many language a MOOC is available.

**Nature of the course-** Whether MOOC is on general topic or on subject specific topic.

**Number of users-** How many users have been taken or registered in this MOOC.

**Comments/ feedback about a MOOC-** What is the comments / feedback about a MOOC.

**Apps supported-** Whether a MOOC is support mobile apps or not.

**Some MOOCs in library and information science domain**

Apart from some key players of Massive Open Online Courses (MOOCs) platforms such as Udacity, Coursera and Edx , different MOOCs took place in the area of library and information science domain in which few important MOOCs mentioned below:-

- Well popular Massive Open Online Courses (MOOCs) namely “The Hyperlinked Library” created by Michael Stephens and Kyle Jones by the School of Information at San José State University for Library and Information Science professionals to create a social and networked

professional development environment.  
(<https://ischool.sjsu.edu/programs/moocs/hyperlinked-library-mooc> ).

- OCLC organized a conference on MOOCs and Libraries: Massive Opportunity or Overwhelming Challenge? which provided worthy research studies on MOOCs and libraries aspects. (<http://www.oclc.org/research/events/2013/03-18.html>).
- The British Library and University of Nottingham are jointly offering MOOCs through Future learn platform and engaging other UK's universities (<http://www.bl.uk/press-releases/2015/february/propaganda-mooc>).
- In July- August, 2013, a course on “New Librarianship” was offered by iSchool, Syracuse University (<http://ischool.syr.edu/landing-pages/admissions/new-librarianship-open-online-course> ).
- Penn State University library supports MOOCs developers who want to create MOOCs in different topics on Coursera platform by providing guidelines and other necessary instructions and reading materials that may be used fairly with MOOCs (<https://www.libraries.psu.edu/psul/researchguides/MOOC.html>).
- Jeffrey Pomerantz from North Carolina University, Chapel Hill developed a MOOC namely “Metadata” on Coursera platform in September, 2013 (<https://www.mooc-list.com/course/metadata-organizing-and-discovering-information-coursera?static=true> ).
- In February, 2014 Wendy Newman from University of Toronto created a MOOC on “Library Advocacy Unshushed: Values, Evidence, Action” on Edx platform (<https://www.edx.org/course/library-advocacy-unshushed-university-torontox-la101x> ).
- University of Toronto offered a MOOC namely “Library Advocacy Unshushed” in January, 2015 and also reoffering same MOOC entitled “Library Advocacy Unshushed: Values, Evidence, Action” (<http://www.ischool.utoronto.ca/content/successful-mooc-library-advocacy-reoffered-0>) in February, 2015.
- Department of Library and Information Science at Indiana University-Purdue University Indianapolis (INDIANAPOLIS) launched a massive open online course especially for public libraries on April 6, 2015. (<http://news.iupui.edu/releases/2015/04/mooc-library-and-information-science.shtml>).

- Guilford Free library provides information about how to enroll in a Massive Open Online Course (MOOC)  
<http://www.guilfordfreelibrary.org/technology-class-5-massive-open-online-courses-moocs/20369/>
- Association of College and Research Libraries (ACRL) (a division of American Library Association (ALA)) developed through a discussion group named as “The Library Support for Massive Open Online Courses (MOOCs) Discussion Group” by the ACRL Board of Directors in 2013 ALA Annual Conference to share information and ideas about how libraries can support MOOCs movement by provisions with creating different MOOCs in their campuses. (<http://www.ala.org/acrl/aboutacrl/directoryofleadership/discussiongroups/acr-dgmoocs>).
- The Association for Library Collections and Technical Services (ALCTS) (a publication of American Library Association) offered Webinar on “Libraries and MOOCs” in 2013 (<http://www.ala.org/alctsnews/items/moocs> ).

## Conclusion

Despite of disruptive nature, Massive Open Online Course (MOOC) established a new paradigm in online learning in every discipline including library and information science and offering great opportunities as well as challenges for library and information science professionals in which they can explore possibilities to develop a network through which Massive Open Online Course (MOOC) may be used different ways extensively. This technology is also fascinating other library and information science professionals who were yet not engaged with MOOC environment. Apart from this, MOOC offers spaces for library and information professionals to work not only according to their library and information science practices but also provide space to assist the other professionals who are engaged in MOOC development and associated with diverse disciplines except library and information science professionals. This technology also provide platform for LIS professionals for become familiar with MOOC concept, structure and other aspects and to develop their skills towards understanding of MOOC as a whole so that LIS professionals can play worthy roles and proved significance of LIS profession and be a part of MOOCs creation and development at large level.

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