MASSIVE OPEN ONLINE COURSE (MOOC) IN INDIA: WITH SPECIAL REFERENCE TO LIBRARY AND INFORMATION SCIENCE

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Massive Open Online Courses (MOOCs) are free online courses available for anyone to enroll. They have emerged as a useful platform for teaching and learning. MOOCs are gaining popularity as they are being used in more than 190 countries across the world. MOOCS are available in all disciplines. This article provides an overview of MOOCs and describes its development in the field of Library & Information Science (LIS). LIS professionals and school of LIS can explore possibilities and work together in order to assist, resolve problems and in developing MOOCs in different topics including LIS-related topics and build libraries image and prove their significance in this digital era. Library professionals who are yet not familiar or engaged with MOOCs concept, can get a taste of the MOOC and develop their skills towards understanding of MOOCs as a whole, so that they can play significant roles and be a part of MOOCs creation and development and able to support MOOC movement at a much larger level.

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INTRODUCTION

The advent of World Wide Web (WWW) and information and communication technologies have brought in tremendous change in the learning processes of the users. First, it was distance education which brought in changes in the delivery model of higher education by making it possible for learners to learn without formally attending the classes using course material delivered at their home. Thereafter, e-learning came into existence. Now, due to emergence of internet and web 2.0 the online learning becomes very popular and spreads over rapidly in online education systems, online courses and distance learning. The year 2012 saw a new model of delivery of higher education from the worlds prestigious universities, known as 'Massive Open Online Courses' (MOOC)., which has emerged as one of the interesting platforms that has been gaining popularity in all disciplines in a short period of span, but also provides depth impact on online education systems [1].

It is difficult for any library school to provide the kind of education and training on all segments of librarianship especially in developing countries due to shortage of teachers, funds, availability of library resources and infrastructure. MOOC may play a very important role in the delivery of LIS education and training for the students as well as Librarians.

MEANING OF MASSIVE OPEN ONLINE COURSE (MOOC)

A Massive Open Online Course (MOOC) is a web-based platform which provides unlimited number of students worldwide with a chance of distance education with the help of best institutes in the world. 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) [2] in 2008. It gained momentum in 2012 as a popular learning tool. MOOC stands for massive open online course in which 'Massive' refers to large-scale participation of users, 'Open' defines courses that are open for all which may be open access, open syllabi, self-directed and open content learning environments, 'Online' shows to make these courses available in online mode through internet and 'Course' denotes the structures of courses offered online to the participants or the concept of a pedagogically designed to online learning [3].

A 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 [4]. MOOC is a very different online learning model from traditional or online classes wherein limited number of students, in a particular geographical location in a university/college/institute are provided face-to-face interactions. MOOCs offer online courses by providing different variety of reading materials such as resources, assignments, exercises to unlimited users without any distinction of caste, creed, location, age, sex etc.

In India

With a view to providing access to the best quality learning resources across the country, the project SWAYAM has been started recently. SWAYAM stands for "Study Webs of Active Learning for Young Aspiring Minds". It is a MOOC platform launched by the Ministry of Human Resource Development (MHRD), government of India, to bind online and offline education together. It started with an expectation of launching 2,000 courses, to make it largest course catalogue, among all provided so far. For SWAYAM an independent platform has been developed. Learners across the country can get their credit for MOOC courses offered on SWAYAM. They can get their credits transferred and recognized at the parent institution.

Currently, SWAYAM offers the courses for school, certificate, diploma, undergraduate, and post graduate. The responsibility of delivering courses is assigned to six institutes based on their type, such as NCERT and NIOS for offering school education, IGNOU for out of school learners, CEC for under-graduate education, UGC for post-graduate education, NPTEL for engineering, and IIMB for management studies. Also, the content or videos for this program will be available on a platform called e-Acharya that already hosts educational video content created by MHRD. So, SWAYAM is promoting the best use of the resources.
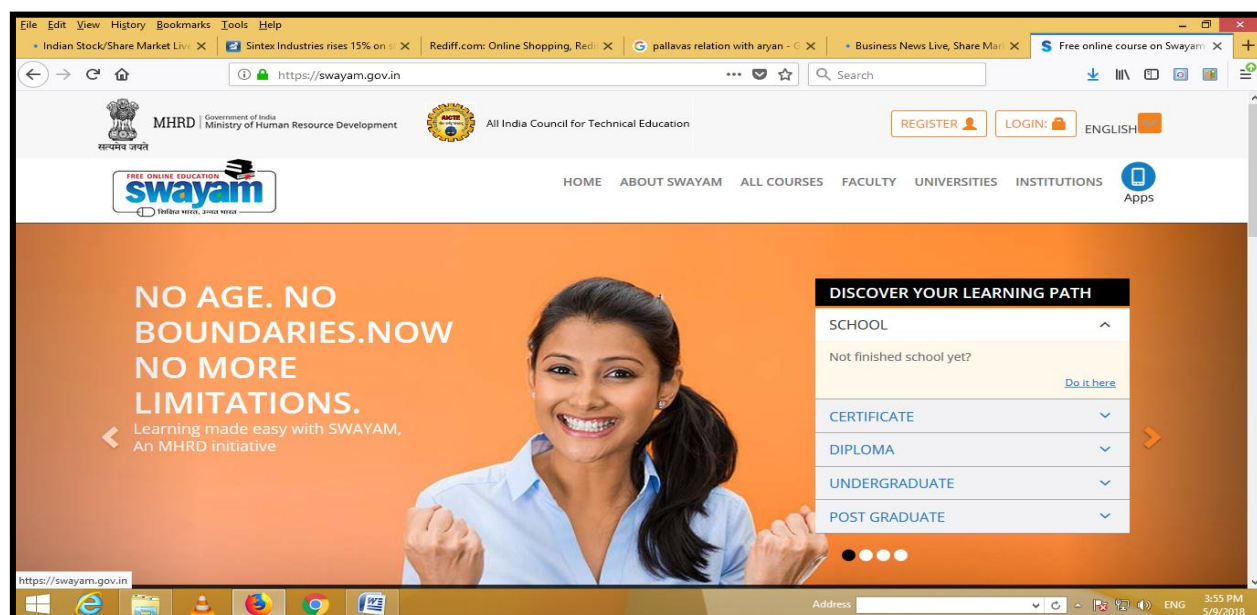

Fig 1: Showing the website page of MOOC [5]

In the first phase, 75 discipline-specific National Resource Centres have been identified which are tasked to prepare online training material with focus on latest developments in the discipline, of curriculum [6].

A varied set of institutions such as, Centres under the Ministry's Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) located in Central Universities, IISc, IUCAA, IITs, IISERs, NITs, State Universities; UGC's Human Resource Development Centres (HRDCs), National Institutes for Technical Teachers Training (NITTTRs), IIITs, Open Universities have been notified as NRCs. These NRCs cover wide ranging disciplines of Social Sciences, Sciences, Engineering and Technology, Design & Manufacturing, Humanities, Language Teaching, Commerce, Management, Education Planning and Administration, Public Policy, Leadership & Governance, Library & Information Science, Astronomy & Astrophysics, Assessment and valuation, Pedagogy and research methods, cutting edge areas of Nano-sciences, etc. Under this initiative, all in-service teachers, irrespective of their subject and seniority will have an enabling opportunity to keep abreast of the latest developments in their disciplines through the technology based online refresher course [7].

IMPORTANCE OF MOOCS IN LIBRARY AND INFORMATION SCIENCE EDUCATION

MOOC may be used in LIS education in the following areas:

Flipped Classrooms

In "the flipped classroom" the core idea is to flip the common instructional approach: With teacher-created videos and interactive lessons, instruction that used to occur in class is now accessed at home, in advance of class. Class becomes the place to work through problems, advance concepts, and engage in collaborative learning [8]. Flipped classrooms is one of the greatest opportunities in the MOOC environment in which students may use some MOOCs as flipped classes and learn their courses of interest from top universities and schools of the world at their leisure time, and teachers of their respective universities and schools provide help in clearing doubts, assist in discussions and in other assignments as well.

Choice Based Learning

MOOC provides various opportunities to learn choice-based courses which may be offered by different schools and universities located indifferent geographical areas. In such situation, users of MOOCs have opportunity to choose their desired MOOC as per their interest as there is no constraint regarding choice of course for any user in MOOC mode and these may be the same as choice-based credit system (CBCS) in higher education in universities in India.

Unlimited Learning

MOOCs support unlimited learning throughout the entire life of the users. By learning through different MOOCs and other MOOC-related activities, users and professionals may create a forum to discuss, share and support each others in MOOC environment. In such a situation, members of such group can create different MOOCs in LIS domain with collaboration of their respective institutions and universities and will be able to run MOOCs through their LIS Schools/institutions as well.

MOOC IN THE LIBRARIES

Libraries may play key roles in following areas in MOOC:

Chance to Promote Information Literacy and Other Topics on MOOC Environment

Libraries have great chance to promote information literacy among users as every user does not have enough information literacy skills and it is mandatory for every user of the MOOC to have good information literacy skill in order to understand the MOOC properly and to achieve their goals. Apart from this, libraries can develop and promote their small tutorials, modules, LIS thematic aspects, special lectures etc. in LIS domain through the MOOCs which can certainly benefit the users with regard to optimum utilization of MOOC [9].

Providing Resources

Libraries can assist the MOOC developers towards gathering and providing worthy Open Education Resources (OER) which may be free from copyright and useful for creating MOOC contents.

Moreover, libraries can suggest the best reading materials and resources to MOOC developers.

Developing a MOOC through Libraries

Libraries can not only assist MOOC developers, but also create at least a MOOC from library, for which staff members of libraries should participate. They have to first understand the concept, structure and other aspects of MOOC, with regard to creation of such a program.

Preservation of MOOC Contents

Another great potential area for libraries is to preserve the different editions/ versions of the contents of MOOCs, because the developers may change or revise its contents from time to time. Libraries, thus, have great opportunities and scope to preserve these contents for future use. MOOC contents preserved by libraries certainly assist MOOC developers, who wish to develop and support MOOCs movement through their institutions and libraries. These preserved contents of MOOCs may become the base for developing MOOCs indifferent disciplines.

Space for MOOC

Libraries can provide space for MOOC activities in which MOOC-related literature, discussions, problems, possible remedies, experiences and other important information can be imparted among MOOC developers, institutions and professionals. Moreover, above mentioned MOOC activities should record and disseminate to those users who could not attend the particular event and also to those professionals who are keenly interested to be a part of MOOC movement.

Showcase for Libraries

By providing enough assistance to MOOC developers in many ways and also by becoming a part of MOOC development and creation, libraries can build their image among users as service provider in this technology prone era.[9] Apart from above, by adopting and developing different courses on LIS domain on MOOC platform, these services may be considered as show-case for any library and this practice is certainly helpful to motivate other libraries and professionals to be a part of MOOC movement.

In Professional Development of LIS Practitioners

Involving in MOOC environment, encourages and helps LIS professionals in continuing learning with the flexibilities of anywhere and anytime online learning without formal education formats; and assists in developing their professional skills and perfection in handling emerging technologies successfully to achieve their targeted goals [10].

Provide Motivational Courses for LIS Professional

Different motivation courses may be created on a MOOC environment to encourage the LIS professionals, which may include awareness of LIS profession, understanding professional ethics and contribution towards playing an important role in the society, fulfilling information needs anywhere and anytime, providing with information literacy in other fields, LIS courses and getting feedback and suggestions for LIS MOOCs and what areas are to be included in library MOOCs, website of MOOCs, Frequently Asked Questions, library guide, self-assessment exercises/tools, best practices, reports on MOOCs and so on.

ADVANTAGES OF MOOC

Some of the main advantages of the MOOCs are listed below:

➢ A large number of students can acquire knowledge sitting in their homes from some of the renowned professors in the world, at the same time connecting with like-minded people globally.

➢ Students can refer to a topic of interest and read/view/hear it, as many times as they wish in whichever Indian language they are comfortable with, as per their convenience.

➢ According to the recent International data Corporation (IDC) reports, India is one of the most flourishing Smartphone markets in the Asia-Pacific. With MOOCs being easily accessible on smart phones, students can pursue these online courses easily.

➢ Students opting for MOOCs need not worry about educational fees, unlike other educational platforms.

➢ Apart from quality education, MOOCs also lay emphasis on quality assessment and certification. These certified courses can be very valuable for students in the long run.

➢ Digital India will encourage large amount of educational content to be accessed easily in gram panchayats across the country. MOOCs are one of the most viable platforms for transforming the educational scenario in the country, especially in semi-urban and rural areas.

CHALLENGES OF MOOC

As regard to the challenges it may be said that MOOC cannot replace the traditional approach of classroom learning but it can be used as an alternative method to bridge the gap between various schools of learning. MOOC has certain limitations which are listed below:

➢ MOOC requires high speed internet connections for accessing the content delivered in their courses. In a developing country like India, Internet and computers are not easily available to everyone, specially in rural India easily and their availability is confined mainly to the urban areas. Limited availability of requisite infrastructure to access MOOCs has confined the extensive spread of MOOCs [11]. India needs to work towards providing high speed Internet access for the country's population at lower cost so that poor people can also take the advantage of MOOC.

➢ Offering the MOOC is a costly affair that includes the cost of infrastructure, platforms, content creation, human resources and many more. In India, the institutions do not have much capital to invest in such event so it is not easy for an individual institution to offer such services. There is need of involvement from some authorities, who can invest in the process to support the education. Even Indian government needs to liberalize conventional regulations and restrictions and encourage public private partnership for creating MOOCs in this country [12].

➢ It is not always certain that all MOOCs provide degrees, certificates and/or diplomas which limits the number of candidates that enroll for these courses as many companies ask for records of the education levels achieved which candidates are unable to provide.

➢ A student's life is confined to one room that has internet access and a laptop or a computer which allows little or no interaction with the outside world.

➢ Since MOOCs are web-based, there is no monitoring of the candidates/students, which carries a risk of plagiarism or cheating.

CONCLUSION

The present Internet era expects librarians to have a multiple skill level including ICT. In developing countries like India, Library schools face problems like shortage of teachers, funds, infrastructure and availability of resources etc. It may be noted that MOOC is not only offering great opportunities, but also proving its significance in LIS domain. It is found from this study that MOOCs are offering various facets in which libraries, LIS professionals and school of LIS can explore possibilities and work together in order to assist, resolve problems and in developing MOOCs in different topics including LIS-related topics and build libraries image and prove their significance in this digital era. It is also suggested to those Library professionals who are yet not familiar or engaged with MOOC concept, structure and other aspects of MOOC, can get a taste of the MOOC and develop their skills towards understanding of MOOC as a whole, so that such Library professionals can play significant roles and be a part of MOOCs creation and development and able to support MOOC movement at a much larger level.

REFERENCES

[1] Pujar, Shamprasad, M & Bansode, Sadanand Y. MOOC and LIS Education: a massive opportunity and challenge. *Annals of library and information studies*. 61, 2014, 74-78

[2] McAuley, A., Stewart, B., Siemens, G. & Cormier, D. The MOOC model for digital practice. *In. SSHRC knowledge synthesis grant on the digital economy*, 2010. http://www.edukwest.com/wpcontent/uploads/2011/07/MOOC_Final.pdf.(Accessed 21 May, 2018).

[3]   http://desarrolloweb.dlsi.ua.es/moocs/what-is-a-mooc (Accessed 21April, 2018).

[4]   Kaushik, Anna. Massive Open Online Course (MOOC) in Library and Information Science Domain. *PEARL-A Journal of Library and Information Science*, 10(2), 2016, 79-86.

[5]   https://swayam.gov.in/

[6]   http://mhrd.gov.in/sites/upload_files/mhrd/files/NRC%20press%20release.pdf (Accessed 05 May, 2018).

[7]   https://lj.libraryjournal.com/2013/05/library-services/massive-open-opportunity-supporting-moocs/# (Accessed 16 May, 2018)

[8]   Tucker Bill. The Flipped classroom: Online instructions at Home free Class time for learning. *Education Next*, Winter, 2012. http://educationnext.org/the-flippedclassroom/ (Accessed 15 May, 2018).

[9]   Signorelli, P. & Hovious, A. *Two takes on how massive open online courses (MOOCs) may affect librarians and library services*, 2014. http://americanlibrariesmagazine.org/2014/05/27/moocs/(Accessed 30April, 2018)

[10]   Singh, Raj Kumar. MOOCs through E-learning: An Indian Initiative. *Indian Journal of Library Information and Society*, 30(1-2), 2017, 74-82.

[11]   Chatterjee, P & Nath, A. Massive open online courses (MOOCs) in education—A case study in Indian context and vision to ubiquitous learning. In *MOOC, Innovation and Technology in Education (MITE), 2014 IEEE International Conference*. 19-20 Dec., 36-41. DOI: 10.1109/MITE.2014.7020237 (Accessed 17April, 2018).

[12]   Garg, D. *Major Challenges in online Higher Educational Environment*, 2017. http://blogs.timesofindia.indiatimes.com/breaking-shackles/major-challenges-in-online higher-educational-environment/ (Accessed 14 May, 2018).