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Massive Open Online Courses (MOOCs): A Transforming Agent of Indian LIS System

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ABSTRACT –

Purpose: The purpose of writing this paper is to explore the role of MOOCs in harnessing the various requirements of library fraternity. It also explores the participation of Indian Universities and Institutions on Edx and Coursera, availability of LIS courses and the percentage of learners who successfully completed the course on Swayam platform.

Methodology: The descriptive methodology was used for the study. The data was collected from the official websites of Coursera, Edx and Swayam. All these three MOOC platform were selected on the basis of popularity. The relevant data was collected and analysed.

Findings: The findings reveal that MOOC courses helps the librarians, faculty members and students to bridge knowledge gaps and develops new skills. Some Indian Institutes are members of the Edx and Coursera. There are various LIS courses available on Swayam. However, the enrolment ratio is much higher than successful completion.

Keywords – Massive open online course (Moocs), LIS professionals, LIS students, LIS educators, LIS education, Professional development, Edx, Coursera, and Swayam.

INTRODUCTION – Technology plays a crucial role in transforming the education .It redesigns the traditional approach of learning and teaching. Now-a-days, online learning becomes very popular. MOOCs are the latest development in the online learning environment and expanding very quickly in all disciplines including LIS domain. It is an abbreviation for 'Massive open online course'. It is an online platform that strengthen with various types of resources, openly available, for the wide variety of individuals, having evaluations and accreditation facilities with none compulsory qualifications. **(Kaushik, A., 2020)**. MOOCs support life-long learning by providing learning opportunities to anyone from anywhere at any time without any discrimination of age, gender, caste and qualification.

MOOC has potential to overcome various obstructions such as geographical barrier, scarcity of educators, lack of skills and expertise, dearth of funds and inadequacy of resources and infrastructure. **(Pujar & Tadasad, 2016; Sharma, R., 2018)**. The rise of MOOCs creates unique opportunities and challenges for academic libraries. As stated by Kerry Wu, moocs foster worldwide learning groups that support both students and universities as well as providing academic libraries with peculiar challenges and opportunities. It is suggested that librarians must up to date on the current development and participation in the mooc campaign on individuals and institutional level. **(Wu, K., 2013)**. MOOCs provide learning opportunities to

anyone, thus it can be used as a professional development tool for librarians to develop and upgrade their professional skills. Libraries can play key role for success of MOOC. There exists a strong relationship between libraries and MOOCs, as both promote dissemination of knowledge, support open access, life-long learning, and provide self-learning environment.

Benefits of MOOCs:

a) **As a professional development tool for LIS professionals-**

Libraries are considered as important social institutions, without a library system community is incomplete .Now-a-days, libraries are facing tremendous changes due to impact of ICT, changing patron needs and changing in the resources, services and products of the libraries. In this changing environment, the role of the LIS professionals become more important. In present scenario, professional development of LIS professionals become inevitable. MOOC is an innovative and excellent platform that helps and encourages continuing education programme and workplace learning of LIS professionals. MOOCs can serve an effective tool for continuing professional development of LIS professionals. According to Pujar and Bansode, MOOCs play a significant role in managing the continuing education needs of the library community. **(Pujar & Bansode, 2014)**. MOOCs give splendid opportunities to them to develop, increase and upgrade their professional skills without physically going and attending workshops and seminars but virtually at their own place. **(Sawant, S. IFLA WLIC 2016)**. It helps professionals to continue education for their promotion and enrichment of knowledge and gain a grip on the areas in weak. **(Kuri, R. & O. Maranna)**. In developing country like India where facilities of skill development for LIS professionals are unsatisfactory, MOOCs emerged as a boon. **Pujar & Tadasad (2016)** study on LIS professionals of India about MOOCs revealed that moocs help in continuing education.

Since, technologies and demands of users are ever changing. Also old technologies are getting obsolescence and new technologies are emerging very quickly. So, LIS professionals must be skilful to accomplish demand of users in changing environment. They need to be technically skilful to adopt new technologies. MOOC helps LIS professionals not only to be current to the latest technologies but also to use this technologies to develop and improve library services. The MOOC environment is highly useful for the professional development of LIS professionals. It promotes and assists LIS professionals in continuing education. **(Kaushik, A., 2016).** The SJSU School of Library & Information Science (SLIS) offered 'HYPERLINKED LIBRARY', its first open online course in 2013 which provides professional development opportunity to librarians, library staffs and professionals. It explores how libraries are using emerging technologies to serve their user communities. **(Stephens, M., 2013; Stephens and Jones, 2014).** In present Internet era, it becomes imperative for LIS professionals to update their skills and acquainted themselves about current trends and technologies. MOOC is a best platform for LIS professionals to enhance their professional skills and competencies as it assist in handling emerging technologies perfectly so that they are able to achieve their desired goal successfully. SWOT analysis of MOOCs in LIS domain done by A. Kaushik reveals that it brings opportunity in building professional development and other skills. **(Kaushik, A., 2018).**

b) **As a professional development tool for LIS educators-**

Now-a-days, the role of the LIS educators become more crucial as the educational needs of learners are changing fast. So this is need of the hour that LIS teachers should focus on digital competencies and skills to make the learning process more meaningful and enjoyable. MOOC can be considered as a good platform for teachers to enhance their teaching skills. It can help them to upgrade their skill and expand their knowledge base. According to Pujar & Bansode, MOOC improve the skills of librarians and teachers, thereby improving teaching and library services. **(Pujar & Bansode, 2014)**. It gives window of opportunities to teachers to connect with large number of students without any geographical barrier. Teachers are able to reach wide audiences beyond the classroom. Instead of teaching some of them, they have the possibility of teaching the masses. It will help elevate their stature in the academic community and in society. **(Bansode, S.Y., 2019)**. **Sarika Sawant (2016)** conducted an online survey on LIS educators of India to know their opinion about taking up MOOCs. The study showed that most of the LIS educators believed that MOOC can be considered as a means of continuing professionals as well as personal development .The study also revealed that LIS educators believed that MOOC being beneficial to increase professional learning and general competence and it will support knowledge generation. Thus, MOOCs not only support professional development but personal development too.

c) **Transformation of Indian LIS education through MOOCs –**

Library and information science course runs in various universities and institutions of India. Many universities offer one year B.lib and one year M.lib course. Different universities have their own different syllabus. Syllabuses are rigid and very lengthy. In semester system, it becomes difficult task for LIS teachers to teach every topic in depth. LIS schools of India are still facing various challenges such as lack of faculty members, skills and infrastructure. In this limited resources it is impossible for any university to teach and train their students on all modules of library science. Education with training is essential so that present LIS students will become trained and skilled LIS professionals in future. Here, moocs can play a significant role to provide and deliver effective teaching and training both. This gives massive opportunities to LIS students to learn difficult courses from prestigious universities of the world. 'New Librarianship' by ischool, Syracuse University; 'The Hyperlinked Library' by San Jose University; 'Metadata' by Jeffery Pomerantz, North Carolina University shows that there are great scope of MOOCs in LIS domain. Besides, there are various worldwide platforms like Edx, Coursera, Udacity etc. that offer MOOC courses on library and information science. LIS students should also take benefit from these. MOOCs offer flexibility and liberty to students as they can choose any course from any university at any time as per their own interest without geographical restriction.

MOOCs may help to revamp the status of LIS education. As **Pujar and Bansode (2014)**, **Kaushik, A.(2016)** & **Bansode, S.Y.(2019)** identified the possible areas in LIS education in which MOOC can be implemented which surely helps to improve the status of LIS education in India, flipped classroom is one of them .The traditional classroom may be transformed into flipped classroom in the MOOC environment. The LIS schools of India can adopt flipped classroom concept in which students study at their own places, so that, they can gain some prior knowledge before going to classrooms. It will help them for better understanding of concepts and theories. The classroom time can be utilized in discussion, preparing assignment and clearing doubts with teachers. MOOCs have potential to change the reluctant learners to passionate and active learners. It provides skill-based education at minimum cost. MOOCs may

foster a unique opportunity to expand horizon of LIS education of India. It gives Indian LIS students a chance to acquire knowledge, skill and expertise to compete in present job market.

Objectives:

1. To know the involvement of Indian universities and institutions on Edx and Coursera.

2. To determine the ongoing library and information courses available on Swayam.

3. To measure the successful percentage of learners on Swayam.

Methodology:

Keeping in view the objectives of the study, descriptive research methodology was employed. The collected data was analysed quantitatively. The official websites of Edx, Coursera and Swayam were browsed.

Findings:

a) *The involvement of Indian universities and institutions on Edx and Coursera:*

Platform	Total no. of participating institutions from India	Name of Institutions	Partnering universities of India
Edx	Two	1) IIT Bombay (Edx charter member) 2) Indian Institute of Management, Bangalore (Edx Member)	0
Coursera	Nine	1)Indian Institute for Human Settlements 2)Indian Institute of Management, Calcutta 3) India Institute of Management, Kozhikode 4) IIT Bombay 5) Indian Institute of Technology, Guwahati 6)Indian Institute of Technology, Roorkee 7)Indian School of Business 8) Indian Statistical Institute 9)Yunus Social Business Fund, Bengaluru	1) Ashoka University 2) O.P. Jindal Global University

NOTE: Philips is also a member of Coursera and State bank of India is member of Edx.   [Table 1]

b) *The ongoing (Enrolment Closed) library and information courses available on Swayam:*

Name of Course	By	Start date	Duration	Level	Credit Points	Learners enrolled

Course	Provider	Date	Duration	Level	Credits	Enrolled
1. Libraries: An introduction	IGNOU	15.07.2020	12 weeks	Diploma	4	2802
2. ICT in Libraries	IGNOU	15.07.2020	12 weeks	Diploma	4	2612
3. Libraries: An introduction	IGNOU	15.02.2021	12 weeks	Diploma	4	1023
4. Library information and society	IGNOU	01.03.2021	12 weeks	PG	4	701
5. Information sources & services	IGNOU	01.03.2021	12 weeks	PG	4	328
6.Organising and managing information	IGNOU	01.03.2021	12 weeks	PG	4	317
7. ICT fundamentals	IGNOU	01.03.2021	12 weeks	PG	4	1176
8. Communication skills	IGNOU	01.03.2021	12 weeks	PG	4	7177
9. ICT in libraries	IGNOU	15.02.2021	8 weeks	Diploma	4	885
10. Document processing and organisation	IGNOU	15.02.2021	4 weeks	PG	4	1095
11. Document processing and organisation	IGNOU	15.07.2020	4 weeks	PG	4	811
12. Information sources and library services	IGNOU	01.06.2020	12 weeks	Diploma	4	1501
13. Information sources and library services	IGNOU	15.02.2021	12 weeks	Diploma	4	823
14. Database and content organisation	IGNOU	15.02.2021	15 weeks	Diploma	4	1144
15. Database and content organisation	IGNOU	01.06.2020	15 weeks	Diploma	4	1023
16. Digital library	CEC	05.07.2021	15 weeks	PG	5	1221
17. Digital library	CEC	04.01.2021	15 weeks	PG	5	1052
18.Digital library	CEC	06.07.2020	15 weeks	PG	5	1815
19. Digital Library	CEC	13.01.2020	15 weeks	PG	5	1466
	IGNOU	15.02.2021	12 weeks	Diploma	4	1490

20. Library automation & digitisation						
21. Library automation & digitisation	IGNOU	01.06.2020	12 weeks	Diploma	4	1390
22. Web content management	CEC	31.01.2021	12 weeks	PG	4	720
23. Web content management	CEC	14.09.2020	12 weeks	PG	4	1672
24. Emerging trends & technologies in library and information science(ETTLIS)	ARPIT	01.12.2020	16 weeks	PG		3187

NOTE: Only those courses are considered which comes under Library & Information Science category and relevant to LIS domain. One such course comes from ARPIT.

Table 2

c) *Successful percentage of learners on Swayam:*

National coordinators	Partnering Institutes	Completed Courses	Student Enrolment	Exam Registration	Successful Certification	Percentage of Successful Certification
AICTE	07	131	280628	12030(4.287%)	10233	85%
CEC	19	587	1235001	14608(1.183%)	9691	66.34%
IGNOU	03	111	226547	1908(0.842%)	1440	75.472%
IIM Bangalore	03	105	329250	4861(1.476%)	3383	69.595%
NCERT	08	112	234526	0	0	0%
NIOS	01	174	3132625	0	0	0%
NITTTR	03	70	183997	1561(0.848%)	961	61.563%
NPTEL	26	2471	12563084	1139494(9.07%)	83266	7.307%
UGC	133	263	284766	12310(4.323%)	9289	75.459%

NOTE: All the data gathered from the official website of SWAYAM (Accessed on 18 September 2021).

Table 3

Discussion:

We found that only nine Indian institutes and two Indian universities are members of the Coursera and only two institutes are Edx member.

There are various LIS courses available on SWAYAM. Most of the courses are diploma and PG level. Total 24 (10 Diploma & 14 PG) courses are available in LIS domain, out of which 10 diploma and 7 PG courses are conducted by IGNOU, 6 PG courses by CEC and 1 by ARPIT. All the courses have credit of 4 or 5. The duration of each courses is different i.e. 4 weeks, 8 weeks, 12 weeks and 15 weeks.

Overall 14693 learners are enrolled in diploma courses and 22,738 learners are enrolled in PG courses.

26,298 learners are enrolled in IGNOU courses. However, 7946 learners are enrolled in CEC courses and 3187 learners are enrolled in ARPIT course.

IGNOU and CEC both are the leaders in making LIS courses. All the diploma courses are conducted by IGNOU. Most of the learners are enrolled in PG courses of IGNOU & CEC. However, the total number of learners enrolled in IGNOU courses are more than CEC.

Table 3 shows that the percentage of the learners who had registered for the examination is 9.07% under NPTEL, which is highest, 4.3% under UGC, 4.2% under AICTE, 1.4% and 1.1% under IIM Bangalore and CEC respectively, and less than 1% under IGNOU and NITTTR. The highest percentage, i.e., 85% of successful completion is on AICTE. The successful completion percentage of three national coordinators lies in between 60% to 70% and two have more than 75% successful completion.

Conclusion:

Mooc is an outstanding platform to gain knowledge & skills and make advancement.

But, there are many hurdles to implement MOOC in India. Language is one of the significant barriers in MOOC implementation. S. Pramanik in his study found that language and cultural diversification are the crucial factors that hinder the successful execution of MOOCs. **(Pramanik, S., 2018).** Furthermore, very few universities of India are taking part in Edx and Coursera like famous platforms, which clearly indicates their non-interest. Lack of enthusiasm and motivation are the main reasons why MOOC is not successfully implementing in India.

The number of courses available on the SWAYAM is not very satisfactory. Among all nine coordinators, only IGNOU and CEC develops courses in library & information science. The online survey conducted by Jayanta kr. Nayek among LIS professionals and students indicates that they are very much interested in SWAYAM, but the number of LIS courses on SWAYAM is very less as compare to other courses **(Nayek, J.K., 2018)**. Also, the number of learners registered for the examination is very less as compared to the number of learners enrolled in the courses i.e. the dropout ratio is more than enrolment ratio.

Definitely, MOOCs have proved to be fortune for the LIS students, professionals and teachers. LIS schools must adopt it. But, limited infrastructure and scarcity of funds are two major challenges to accept it in totality.

References –

1. Agrawal, A. and Singh, R. K. (2018). Massive open online course (MOOC) in India: With special reference to library and information science, *Journal of Indian Library Association,* 54(4), 74-78.

2. Bansode, S. Y. (2019). Library and information science MOOCs: An Indian scenario, *Annals of Library and Information* Studies*,* 66, 39-45.

3. Bordoloi, R. (2018). Transforming and empowering higher education through open and distance learning in India, *Asian Association of Open Universities Journal,* 13(1), 24-36, doi: 10.1108/AAOUJ-11-2017-0037.

4. Bordoloi, R.; Das, P. & Das, K. (2020). Lifelong learning opportunities through MOOCs in India. *Asian Association of Open Universities*, 15(1), 83-95.
Doi: 10.1108/AAOUJ-09-2019-0042

5. Chakravarty, R. and Kaur, J. (2016). MOOCs in India: Yet to shine, *International Journal of Information Studies and Libraries*, 1(1), 14-21.

6. Chauhan, J. (2017). An overview of MOOC in India, *International Journal of Computer Trends and Technology (IJCTT)*, 49(2), 111-120.

7. Deng, Y. (2019). Construction of higher education knowledge map in university libraries based on MOOC, *The Electronic Library*, doi: 10.1108/EL-01-2019-003.

8. Humin, L. and Madhusudham, M. (2019). An Indian based MOOC: An overview, *Library Philosophy and Practice (e-journal).2382. https://digitalcommons.unl.edu/libphilprac/2382.*

9. Joshi, N. M. (2015). Acceptance of MOOCs for engineering education of India, *10th International CALIBER-2015 HP, 12-14 March, 2015. Shimla, Himachal Pradesh, India: HP University and IIA,* 334-341.

10. Kaushik, A. (2016), Massive open online course (MOOC) in library and information science domain, *PEARL-A Journal of Library and Information Science*, 10(2), 79-86, doi: 10.5958/0975-6922.2016.00010.3.

11. Kaushik, A. (2018). SWOT analysis of MOOCs in library and information science domain, *Library HI Tech News*, (9), 11-14, doi: 10.1108/LHTN-08-2018-0048.

12. Kaushik, A. (2020). Literature on massive open online courses (MOOCs) and library and information science: An analysis, *library philosophy and practice.* (e- Journal).4210. https://digitalcommons.unl.edu/libphilprac/4210.

13. Kaushik, A. and Kumar, A. (2016). MOOC-ing through the libraries: Some opportunities and challenges, *International Journal of Information Dissemination and Technology*, 6(1), 21-26.

14. Kaushik, A. and Kumar, A. (2017). Designing massive open online courses   (MOOCs) in library and information science, *International Journal of Information Dissemination and Technology*, 7(1), 49-53.

15. Kuri, R. and O. Maranna. MOOCs: A new platform for LIS professional development, 8th KSCL Conference on "Libraries with no boundaries", 204-208.

16. Nayek, J.K. (2018). A survey report on awareness among LIS professionals/students about SWAYAM: A government of India initiative on e-learning, *Knowledge librarian,* 5(1), 39-45. http://www.klibjlis.com

17. Pathak, D. and Das, k. (2015). Linking, improving, status, career: Making in library and information science MOOC, *10th International CALIBER -2015 HP, 12-14 March 2015.Shimla, Himachal Pradesh, 383-389.*

18. Pramanik, S. (2018). Attitude of postgraduate students towards SWAYAM: Indian version of MOOCs, *Harvest (Online)*, 3(1), 33-38.

19. Pujar, S.M. and Bansode, S.Y. (2014). MOOCs and LIS education: A massive opportunity and challenges, *Annals of Library and Information Studies*, 61, 74-78.

20. Pujar, S. M. and Tadasad, P.G. (2016). MOOCs-an opportunity for international collaboration in LIS education: A developing country's perspective, *New Library World*, 117(5/6), 360-373, doi: 10.1108/NLW- 07-2015-0048.

21. Sawant, S. (2016). MOOCs as a means of continuing professional development for LIS educators in India, *IFLA WLIC, Columbus.*

22. Sawant, S. (2017). Non library oriented MOOCs useful for LIS professionals and students. *Library Hi Tech News*, 9, 19-20.
Doi: 10.1108/LHTN-05-2017-0032

23. Sharma, R. (2018). Combining MOOCs with social media: An effective way of imparting LIS education in India, *IFLA WLIC, Kualalumpur*, 1-14.

24. Sharma, Y. P. (2015). Massive open online courses (MOOCs) for school education in India: Advantages, challenges and suggestions for implementation, *Microncosmos International Journal of Research (MIJR)*, 1(2), 1-5.

25. Stephens, M. (2013). MOOCs for LIS professional development: Exploring new transformative learning environments and roles, *Internet Learning*, 2(2), Art 6. http://digitalcommons.apus.edu/internetlearning/vol2/iss2/6.

26. Stephens, M. and Jones, M.L.K. (2014). MOOCs as LIS professional development platforms: evaluating and refining SJSU's first not-for credit mooc, *Journal of Education for Library and Information Science*, 55(4), 345-361*.*

27. Wu, Kerry (2013). Academic libraries in the age of MOOCs, *Reference Services Review*, 41(3), 576-587, doi: 10.1108/RSR-03-2013-0015.

28. https://www.edx.org (accessed on 14 October 2021).

29. http://www.coursera.org (accessed on 11 October 2021).

30. SWAYAM central. www.swayam.gov.in (accessed on 18 September 2021).