

Library and Information Science MOOCs: An Indian Scenario

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Studies the Government of India MOOC initiative, SWAYAM. Highlights the potential issues and challenges that can arise with the present MOOCs in LIS. The major issues that have been identified include those related to language, personal attention, free vs. paid, government policy and the philosophy of MOOCs.

Keywords: LIS MOOCs; MOOCs; SWAYAM

Introduction

The term Massive Open Online course was coined by Dave Cormier in 2008¹. Massive Open Online Courses (MOOCs) was delivered for the first time in 2008 by the university of Manitoba². The university offered it as a credit course to their regular students. Apart from their regular students it was made available to off-campus students upon registration to the course. Since then, one can find mushrooming of MOOCs all over the world. Universities, teachers and faculties are developing MOOCs to deliver contents to the students worldwide, irrespective of age, class, creed, society, etc.. Seeing the popularity and the effectiveness of the MOOCs to reach out to the masses, New York Times designated the calendar year 2012 as “the year of the MOOC”³. By the end of 2017, around 94,000 MOOCs were available all over the world⁴.

MOOCs are the online courses where ‘n’ number of students can be enrolled or registered from any corner of the world and the content can be delivered and accessed via the Internet. The contents of the course can be free or can be charged based on the policy of the developer. Initially, MOOCs used to be delivered free of cost where as some of the developers are charging some fees for certificates which is issued after the successful completion of the course. According to Bast⁵, “MOOCs typically includes recorded video lectures, lecture handouts, discussion

forums and periodic assessment of progress by way of online-based quizzes”. MOOCs are open to anyone without any restriction on qualification, age, sex, experience etc. There are many MOOC platforms including Coursera, EdX, Edukarta and Udacity.

MOOCs in Library and Information Science

Sant Jose State University’s school of information has come out with a range of MOOC modules. The first MOOC module, “Hyperlinked Library” highlighting impact of various technologies on Libraries was developed and delivered in 2013. In 2014, another MOOC “Emerging future: Technology Issues and Trends” that focused on planning skills and technology trends in library was offered⁶. The MOOC, “The New Librarianship Masterclass” was developed by Syracuse University in 2013⁷. In 2014, a course on Metadata was delivered by Coursera which was developed by North Carolina University⁸. More recently in September 2018, Duke University has developed a MOOC on "Copyright for Educators & Librarians" via Coursera and another course on Copyright and Multimedia⁹.

In 2015, “Library Advocacy Unshushed” developed by University of Toronto was delivered by EdX¹⁰. In last two years, EdX has delivered MOOCs on more topics developed by University of Michigan and is focused on various aspects of Public Library system which include, Identifying Community needs

for Public Library management, Managing a diverse and Inclusive Workplace for Public Libraries, Personnel Management for Public Libraries, Budgeting and Finance for Public Libraries, Infrastructure management for Public Libraries, Strategic Planning for Public Libraries, Grant Writing and Crowdfunding for Public Libraries, Public Library Marketing and Public Relations¹¹.

Coursera in August 2018 delivered MOOC modules on, “Academic Literacy” developed by Moscow Institute of Physics and Technology¹² whereas EMMA (European Multiple MOOC Aggregator) has planned to deliver MOOC on, “Digital Libraries in Principle and Practice” developed by Università Degli Studi di Parma¹³.

MOOCs Dropout rate

Dropout, in the terms of academics can be seen as, one who is not able to complete the course or degree. The dropout rate in case of MOOCs is very high^{14,15}. Several studies have depicted the same. According to Liyanagunawardena, Parslow and Williams¹⁶, only 10% of the total enrolled participants were able to complete a MOOC. In spite of many advantages claimed by the MOOCs and the popularity they have gained during the years, retention of students is a big problem and it is because of its open nature. Pursel et.al.¹⁷ opined that, “MOOCs typically have low completion rates, at least when compared with traditional courses, as this course delivery model is very different from traditional, fee-based models, such as college courses”. The trend in Library and Information Science is no different.

Of the 2405 students who enrolled for New Librarianship, only 232 could complete the course successfully¹⁸. The completion rate here translates to 9.64% whereas the dropout rate comes to 90.36%. Metadata Course received a huge response with the registration of 27623 students, but only 5% could complete the course out of the total registered students¹⁹.

Step towards MOOCs: Indian Scenario

The first step towards the foundation of MOOCs in India can be seen in the development of National Digital Repository i.e., eGyankosh developed by IGNOU. Sakshat programme was started as a part of National Mission on education through ICT which

was launched by MHRD (Ministry of Human Resource Development), Government of India with a dream of developing one stop education portal and was formally inaugurated by the former President of India Dr. A.P.J. Abdul Kalam in 2006 aimed at delivering electronic content to the students and faculties at the colleges, Central and State Universities in the form of e-books, e-journals, digital repository and digital library with the facility for student to interact with the faculties, blogging, online chat and discussion forum²⁰.

CBSE promoted the Shiksha programme which was aimed towards delivering the electronic content to the class XI and XII students. In 2013, MHRD launched the e-PG Pathshala with e-learning platform maintained by INFLIBNET. It contains audio and video contents based on the curricula taught at the PG courses conducted at the university level²¹. The efforts described above were mostly focused on the delivery of online content with an aim of uplifting the knowledge of the students and given education to all the students who were not able to enter the stream of education.

In 2014, IIT Bombay (Indian Institute of Technology, Bombay) developed three courses for the EdX platform²² followed by IIT Delhi²³. IIT Kanpur was also involved in the development of MOOCs since 2012 and was using Sakai platform. Since the platform was very complicated to use and scaling was required, they developed the Mookit platform in 2014 for the delivery of MOOCs. There were other efforts made for the development of MOOCs by Birla Institute of Technology and Science (BITS) Pilani, Lady Sri Ram College (New Delhi), Learning Links Foundation and Bluebells Schools International (New Delhi), Jagga, a Bangalore based company, IISc Bangalore, Visvesvaraya Technological University etc.²⁴. The Major Breakthrough came in when the MHRD, Government of India announced a portal for MOOCs called SWAYAM i.e. “Study Webs of Active-Learning for Young Aspiring Minds” and is using open EdX as its platform.

The UGC (University Grants Commission) has propagated the SWAYAM by asking the universities in India to let the students earn credits under the, “Choice Based Credit System” from the MOOCs available on SWAYAM which in turn can be considered for the evaluation of his/her final assessment at the UG and PG degree. Accordingly,

the UGC has asked the university to make necessary amendments in the examination reforms so that the students may earn 20% credits undergoing MOOC through SWAYAM in a semester²⁵.

SWAYAM

In order to bridge the digital divide in the country, SWAYAM was designed to achieve the 3 important objectives related to the educational policy viz., access to education; equity in education and quality in education. The prime aim behind launching the SWAYAM platform is to deliver quality education with the top learning resources to the learners who do not have access to the courses/educational resources due to some reason. Nine national coordinators have been identified who are working and dealing with the education in a particular area.

Further there are nine agencies that include AICTE (All India Council for Technical Education) for self-paced and international courses, NPTEL (National Programme for Technology Enhanced Learning) for Engineering, UGC (University Grants Commission) for non-technical post-graduation education, CEC (Consortium for Educational Commission) for undergraduate education, NCERT (National Council of

Educational Research and Training) & NIOS (National Institute of Open Schooling) for school education, IGNOU (Indira Gandhi National Open University) for out of the school students, IIMB (Indian Institute of Management Bangalore) for Management studies and NITTTR (National Institute of Technical Teachers Training and Research) for Teacher Training Programme²⁶.

The content of the MOOCs in SWAYAM is aimed at developing courses which is not included in course syllabi and may taught as awareness courses, continuing education programme and for training of specific skills sets²⁷. According to Sharangpani²⁸, SWAYAM will be providing a list of 2000 courses of which 200 are currently available for registration. Currently, the contents of the SWAYAM are made available in two languages English and Hindi.

LIS education and LIS MOOCs on SWAYAM

The LIS education has been imparted in India through more than 180 universities and institutions. Some are offering one bachelor's degree, others are offering one-year Master's degree i.e., after completion of Bachelor's degree. Some universities have adopted two-years integrated Master's degree

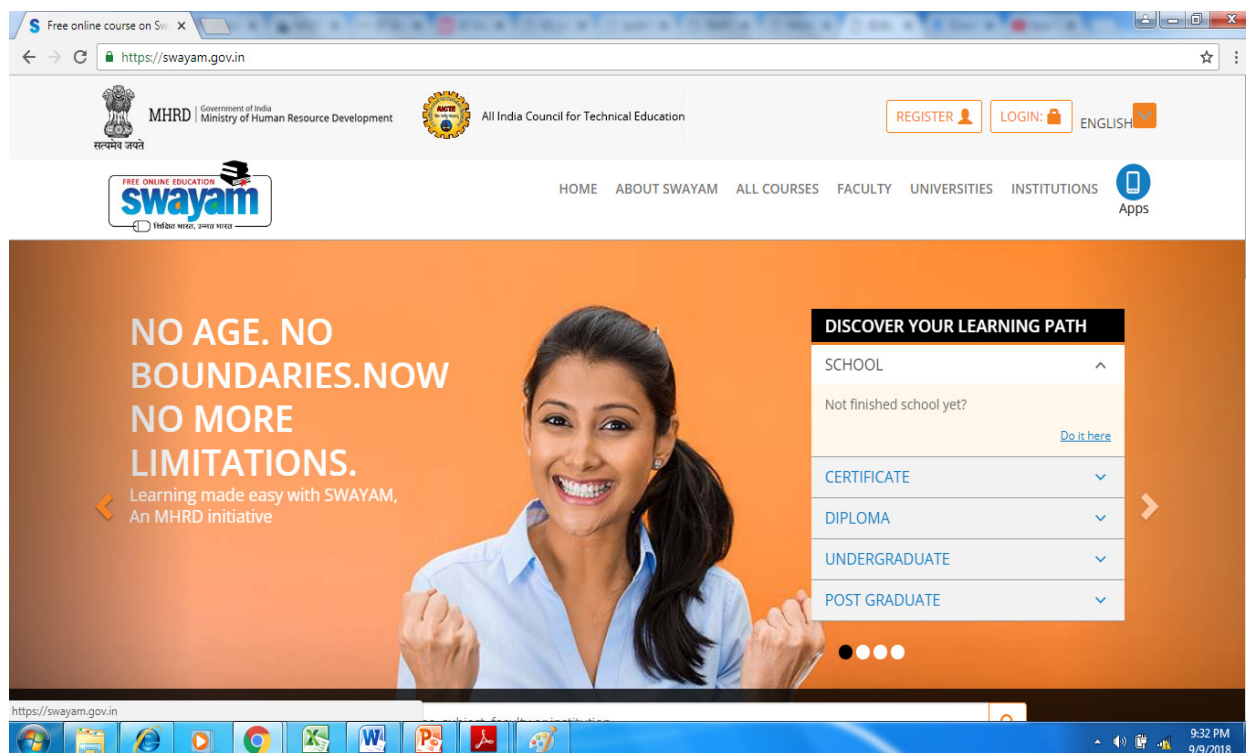


Fig. 1--SWAYAM Portal

programme. Apart from these, the universities are also engaged in offering research programme i.e., M.Phil. and Ph.D. Most of the LIS schools have adopted the syllabus recommended by the UGC Model Course Curriculum Committee in 2001. The committee stressed on inclusion of ICT components in the syllabus so that the LIS professionals may be ready to integrate technology in the library & provide better services. The UGC has made it mandatory for the universities and the institutions to adopt the CBCS (Choice based credit system). Some of the LIS schools have adopted while the others are on the way of adopting it.

The SWAYAM portal contains about 25 MOOCs specifically focused on the various aspects of librarianship (Table 1). Mainly it covers topics related to management of Libraries and Information Centres, Information and communication technology, Digital Library, Library Automation, Information Sources systems and Services, Information Storage & retrieval, Bibliometrics, Scientometrics, Knowledge Society and E-content development. The courses offered on SWAYAM ranges from 0 credit to 5 credits and are delivered in English Language only. The allocation of the credit for a particular course fully depends on the developer who has developed the course.

Opportunities

Flipped classroom

LIS schools may adopt MOOCs offered by different schools in a flipped classroom environment. The schools may encourage students to take the course and faculty members could assist students to prepare assignments and undertake practical in the classroom/computer labs. The time involved in delivering the lectures can be used for discussion on a topic, projects or group work etc.

Opportunity for students to access knowledge

MOOCs have facilitated the LIS students to gain access to the content developed and delivered by the top most faculties in the subject else which is not possible in the regular and traditional teaching.

Flexibility & Liberty

The students get liberty to access the contents many times till he/she understands the concept moreover they can access the contents whenever at

their own convenience. Also, the reading materials and list of references provided through MOOCs adds to the present knowledge of the student making him more focused learner.

Opportunity for teachers

Teachers can reach out to larger audience beyond the classroom. Instead of teaching a few, they get chance to teach to masses. This is going to help in raising their stature in the academics and society.

Issues & challenges in Indian context

Technological barriers

Students may have access to the internet through their smart phones but when it comes to the visibility and workability, it is comparatively low than that of a laptop/desktop. Another issue that may arise is with regard to submission of assignments. Since the keypad of smartphone is not much handy to type the long text, one cannot write a long assignment using phone. For writing assignment one needs a proper keypad.

Language

In most of the LIS schools in India, the education is in bilingual language i.e., in English as well as in the regional languages. The use of regional language differs from state to state. Presently SWAYAM has stated that, it would provide the MOOCs in English and Hindi. As far as use of Hindi Language is concerned it is mostly preferred in the Northern part of the country whereas in the southern part of the country, the regional language is preferred and hardly Hindi language is being used. But when it comes to the LIS MOOCs on SWAYAM, it is being developed only in English language.

Free vs. paid

MOOCs are available on SWAYAM might be free at this point, but it fully depends on the policy of the government. Tomorrow the government may charge for the certification and in one sense it has sufficient ground also i.e. investment made in the development of course. Same example may be found with the Udacity, initially they have made the courses free to all with the aim of democratizing education and later they started charging for the certification. Even some of the MOOCs are charged heavily as compared to the traditional university and colleges. E.g. IIT Bombay

Table 1—Courses offered on SWAYAM

Sr. No.	Title	Author	Hrs	Date	Language	Credits	Free/Paid
1	Management of Libraries and Information Centres & Knowledge Centres	Dinesh Gupta	0	15/11/2016 to 23/03/2017	English	0	Free
2	Digital Libraries	Jagdish Arora	0	15/11/2016 to 02/03/2017	English	0	Free
3	Library Automation and Digitization	Uma Kanjilal	0	17/07/2017 to 15/10/2017	English	0	Free
4	Advertising and Public Relations	K. S. Kusuma	20	04/08/2017 to 30/11/2017	English	4	Free
5	Information Sources and Library Services	Archana Shukla	100	17/08/2017 to 17/12/2017	English	0	Free
6	Digital Library	Jagdish Arora	100	20/08/2017 to 30/12/2017	English	5	Free
7	Scientometrics	I.K.R. Rao	60	21/08/2017 to 31/10/2017	English	3	Free
8	Information Storage & Retrieval	Devika Madalli	80	21/08/2017 to 13/11/2017	English	3	Free
9	Knowledge Society	KS Raghavan	100	21/08/2017 to 10/12/2017	English	0	Free
10	Information Sources Services and Systems	Renu Arora	100	21/08/2017 to 28/12/2017	English	5	Free
11	Information and Communication Technologies for Libraries	Usha Munshi	100	21/08/2017 to 28/12/2017	English	5	Free
12	Management of Libraries and Information Centres & Knowledge Centres	Dinesh Gupta	100	28/08/2017 to 09/12/2017	English	5	Free
13	Document Processing and Organization	Jaideep Sharma	60	01/07/2017 to 31/12/2018	English	4	Free
14	Database and Content Organization	V V Subrahmanyam	60	01/07/2018 to 31/12/2018	English	4	Free
15	Library Automation and Digitization	Uma Kanjilal	60	01/07/2018 to 31/12/2018	English	4	Free
16	Information Sources and Library Services	Archana Shukla	60	01/07/2018 to 31/12/2018	English	4	Free
17	Senior Secondary: Library & Information Science	NIOS	240	01/08/2018 to 31/01/2019	English	0	Free
18	Information Storage & Retrieval	Devika Madalli	80	13/08/2018 to 29/10/2018	English	3	Free
19	Bibliometrics and Scientometrics	I.K.R. Rao	80	13/08/2018 to 21/10/2018	English	3	Free
20	Information and Communication Technologies for Libraries	Usha Munshi	100	13/08/2018 to 26/11/2018	English	5	Free
21	Management of Libraries and Information Centres & Knowledge Centres	Dinesh Gupta	100	13/08/2018 to 26/11/2018	English	5	Free
22	Information Sources Systems and Services	Renu Arora	100	13/08/2018 to 26/11/2018	English	5	Free
23	Knowledge Society	KS Raghavan	100	13/08/2018 to 26/11/2018	English	3	Free
24	Digital Library	Jagdish Arora	100	13/08/2018 to 26/11/2018	English	5	Free
25	E-Content Development	Malliga NITTR	40	28/10/2018 to 24/12/2018	English	3	Free

has launched, "Foundation Program in ICT for Education-Autumn 2018" (September 13th to October 18th 2018) and the charges that the participant has to pay is Rs. 1850/- (850 + 1000) ²⁹ and that too for a small unit which is covered in any paper on IT. These charges are comparatively more than the government institutions and public universities charging to their students for completion of the degree. E.g., student when admitted to a course of Library & Information Science at Savitribai Phule Pune University have to pay Rs. 8988/- fees in order to earn total 64 credits (each paper is of 4 credits). This covers two full length paper on IT each of 4 credits. In short the student can gain the expertise in the IT content within approximately Rs. 562/-

Philosophy of MOOC Courses

The MOOCs definitely have the capability to reach masses, but it is necessary to draw a line between the contents offered in the classroom environment by the LIS Schools and the courses offered through MOOCs. MOOCs should be supplementary to the existing syllabus adopted by LIS schools. It should have value added content to the existing syllabi i.e., the contents which the university and the college are not able to include into their regular syllabi can be included into the MOOC module. For e.g., if we analyze the courses offered on SWAYAM, nearly 80% of the content are part and parcel of the core subjects taught in the LIS courses.

In light of the UGC policy, the students can opt 20% credits from the MOOC courses. This means that if a student completes course on either library automation or digital library of 4-5 credits and request to replace the credits instead of full paper of 4 credits on IT covering all aspects of library automation, digital library, web 2.0, cloud computing etc., then it creates a complicated situation. The graduates coming out of the LIS Schools will have the knowledge of Library automation or Digital Library but on the other hand will lack the knowledge of other aspects of the paper. There is need to develop and frame suitable policy as far as the contents in the MOOCs is concerned so that the LIS schools may not face problems in the transfer of credits of the students and to ensure maximum contents are delivered to the student before getting the degree.

Conclusion

As far as the LIS education is considered there are a few MOOCs developed for the LIS fraternity. Variation is found in the number of credits allotted to the courses which can create problems while transferring the credits for the parent institutions. If MOOCs are developed in the other regional languages along with English, it can create more impact on the learners.

References

1. Yuwan Li and Powell Stephen, MOOCs and Open Education: Implications for Higher Education. Available at <https://publications.cetis.org.uk/wp-content/uploads/2013/03/MOOCs-and-Open-Education.pdf> (Accessed on 5th September 2018).
2. Fini A, The technological dimension of a massive open online course: The Case of the CCK08 course tools, *International Review of Research in Open and Distance Learning*, 10 (5) (2009) 1-26.
3. Pappano L, The year of the MOOC, *The New York Times*. Available at: <https://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html> (Accessed on 4th September 2018).
4. Shah D, By the numbers: MOOCs in 2017. Available at <https://www.class-central.com/report/mooc-stats-2017/> (Accessed on 5th September, 2018).
5. Bast F, Science information resources, *Science Reporter*, 52 (10) (October 2015) 40-43.
6. Sant Jose State University, MOOCs. Available at <http://ischool.sjsu.edu/programs/moocs> (Accessed on 7th September 2018).
7. Sewell Claire, The MOOC Library Degree. Available at <http://www.librarianintraining.com/2014/12/the-mooc-library-degree.html> (Accessed on 1st September 2018).
8. Pomerantz J, Data about the Metadata MOOC, Part 1: Student Activity. Available at <http://jeffrey.pomerantz.name/2013/11/data-about-the-metadata-mooc-part-1/> (Accessed on 1st September 2018).
9. Duke University, Duke Online. Available at <https://online.duke.edu/course/copyright-educators-librarians/> (Accessed on 7th September 2018).
10. MOOC List, Library Advocacy Unshushed, available at <https://www.mooc-list.com/course/library-advocacy-unshush-ed-edx> (Accessed on 7th September 2018)
11. EdX, Courses in Professional Certificate Program. Available at <https://www.edx.org/professional-certificate/michiganx-public-library-management>, (Accessed on 7th September 2018).
12. Coursera, Academic Literacy. Available at <https://www.coursera.org/learn/academic-literacy> (Accessed on 7th September 2018).
13. EMMA, EMMA. Available at https://platform.europeanmocs.eu/course_biblioteca_digitale_in_teoria_ (Accessed on 6th September 2018).

14. Jordan K, Massive open online course completion rates revisited: Assessment, length and attrition, *The International Review of Research in Open and Distributed Learning*, 16 (3) (2015) 341–358.
15. Balakrishnan G and Coetzee D, Predicting students' retention in massive open online courses using Hidden Markov Models. Available at http://bid.berkeley.edu/cs294-1-spring13/images/7/7b/Balakrishnan,_Coetzee_-_Predicting_Student_Retention_in_Massive_Open_Online_Courses_using_Hidden_Markov_Models_-_CS294-1_project_report.pdf (Accessed on 3rd September 2018).
16. Liyanagunawardena T R, Parslow P and Williams S, Dropouts: MOOC participants Perspectives. Available at <http://centaur.reading.ac.uk/36002/2/MOOC%20Dropout%20Participants%20Perspective.pp95-100.pdf> (Accessed on 3rd September 2018).
17. Pursel B K, Zhang L, Jablokow K W, Choi G W, and Velegol D, Understanding MOOC students: Motivations and behaviours indicative of MOOC completion, *Journal of Computer Assisted Learning*, 32(3) (2016) 202–217.
18. Lankes R D, New librarianship master class: MOOC statistics. Available at: <http://quartz.syr.edu/rdlankes/Presentations/2013/MOOCStats.pdf> (Accessed on 1st September 2018).
19. Pomerantz J, Data about the Metadata MOOC, Part 4: Completion. Available at <http://jeffrey.pomerantz.name/2013/11/data-about-the-metadata-mooc-part-4/> (Accessed on 1st September 2018).
20. ELETS, Sakshat: New e-Learning Programme Launched in India. Available at <http://egov.eletsonline.com/2006/10/sakshat-new-e-learning-programme-launched-in-india/> (Accessed on 30th August 2018).
21. INFLIBNET (2014): e-PG Pathshala, available at <http://epgp.inflibnet.ac.in/>, retrieved on 28th August 2018.
22. The Economic Times, IIT Bombay Launches its first MOOC courses on the edX platform. Available at <https://economictimes.indiatimes.com/industry/services/education/iit-bombay-launches-its-first-mooc-courses-on-the-edx-platform/articleshow/35063730.cms> (Accessed on 25th August 2018).
23. Pujar S M and Tadasap P G, MOOCs- an opportunity for international collaboration in LIS education: A developing Country's Perspective. *New Library World*, 17 (5/6) (2016) 360-373.
24. Nisha and Senthil, MOOCs: Changing Trends towards Open Distance Learning With Special Reference to India, *DESIDOC Journal of Library & Information Technology*, 35 (2) (2015) pp. 82-89.
25. UGC, UGC (Credit framework for online Learning through SWAYAM) Regulation 2016. Available at https://www.ugc.ac.in/pdfnews/0272836_moocs.pdf (Accessed on 20th August 2018).
26. MHRD, About SWAYAM. Available at <https://swayam.gov.in/about> (Accessed on 9th September 2018).
27. SWAYAM, Guidelines for developing Online Courses for SWAYAM. Available at <https://image.swayam.gov.in/wqimgtest/f8b95943-b963-49b9-85ed-416f2e15d1b4.pdf> (Accessed on 26th August 2018).
28. Sharangpani I, All about MOOCs (Massive Open Online Courses) In India & Abroad. Available at <http://www.indiaeducation.net/online-education/all-about-moocs-massive-open-online-courses-india-abroad.html> (Accessed on 27th August 2018).
29. IIT Bombay, Foundation Program in ICT for Education-Autumn 2018. Available at https://www.it.iitb.ac.in/nmeict/workshopContent.html?workshopid=jkhV7z0JGlge_9VG5NGNZw#courseFee (Accessed on 5th September 2018).