Massive Open Online Courses – Anyone Can Access Anywhere at Anytime

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Abstract

Information Communication Technology influences all dimensions of education. Especially in distance education, rapid change occurs. Based on the huge availability of online resources like open education resources, distance education can be accessed openly at a low cost. In the 21st century, teaching and learning, Massive Open Online Course (MOOC) is a new trend of learning for digital learners. MOOC is an open education system available on the web. It is a low-cost courseware, and the participants can access the learning content from anywhere and anytime. The MOOCs are categorized cMOOCs, xMOOCs, and Quasi MOOC models. India is a developing country, and it is making steps ahead to digitalization on its processes. e-panchayat, a-district, e-hospital, e-greetings, e-office, e-visa, e-NAM (National Agricultural Market), e-pathshala are the examples for India stood on digitalization. India tried to ensure access, equity, and quality education to the massive. With this aim, the SWAYAM portal initiated, and it was the milestone of Indian distance education and providing open education to massive through MOOCs. This paper portrayed on Massive Open Online Course (MOOC), its different types of MOOCs, platforms for MOOCs, MOOCs in India, and its merits.
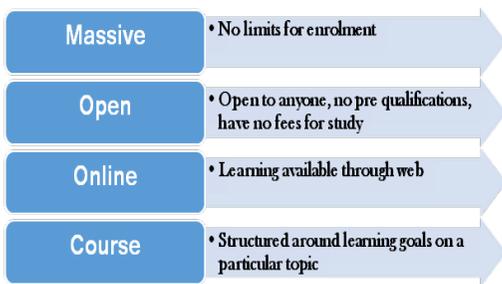
Keywords: MOOCs, cMOOCs, xMOOCs, SWAYAM, and Quadrants.

Introduction

Generally, the dimensions of education have been enriched and furbished by Information Communication Technology (ICT). The boom of ICT, new trends, and innovations are flourished in teaching and learning. Distance education is rapidly changed today with new technologies. Based on the huge availability of online resources like open education resources, distance education enabled access openly at a low cost. In the 21st century, teaching and learning, Massive Open Online Course (MOOC) is a new trend of learning for digital learners. Consider the history of providing education; there are two different strands available. In the first strand, the open course grew at the surface of the open education system. In 2007, David Wiley ran a campus course online is the second strand. The campus online course is the base for an open online courses for connectivism and emerged as Connective Knowledge in 2008, called as CCK08. The Massive Open Online Course (MOOC) is a new trend in 21st-century teaching and learning. It is an online course anyone from anywhere can be accessed online. MOOCs are the new paradigm shift in the present scenario, and it makes an impact on the global education system. Denial (2016) rightly indicated that over 400 MOOCs are available worldwide and register 35 million users at any given time (as cited in Chauhan and Chauhan, 2018). MOOCs are online courses that can be accessed anywhere at any time online. The first MOOC offered with open source and opened educational resources at the University of Manitoba.

Meaning of MOOC

MOOC is an acronym, and the abbreviation is a Massive Open Online Course. It is a new trend of teaching and learning in the 21st century. The term 'MOOC' was used by Stephen Downes and George Siemens at the University of Prince Edward Island for the first time in 2008 (as cited in Chauhan and Chauhan, 2018). Its special features are, there is no limit for participants' enrolment, and it enables open access of contents, and it can be accessed anywhere and anytime. It is a free web-based distance learning program that is designed for the participation of large numbers of geographically dispersed students (Josesheba, 2016). MOOC facilitates the engagement of the participants who can organize their learning goals with their prior knowledge and skills. MOOC also can be expressed as follows (XLpro Training Solution Private Limited, 2015),

Massive	• No limits for enrolment
Open	• Open to anyone, no pre qualifications, have no fees for study
Online	• Learning available through web
Course	• Structured around learning goals on a particular topic

From the definitions above, MOOC is generally defined as "It is an online education system which aims a large scale enrolment of participants to access free education on the web with the features like texts, videos, quizzes, assignments, and online examinations and it can be accessed anywhere and anytime."

Types of MOOCs

There are different models of MOOCs available, and it has its courses and mode of delivery. The following are the types of MOOCs.

- *cMOOC Model* – It insists on autonomy in creation and creativity and also developing social network learning. This model focused on the creation and generation of knowledge to the learner. MIT courseware, Open University, and open learning are examples of this type of MOOCs.

- *MOOC Model* – It is based on the traditional learning approach, and the mode of contents are videos and short quizzes. It focuses the duplication knowledge, and it is tested through testing methods—for example, Udacity, Coursera, udemy, Khan Academy, Venture, and edX.

- *Quasi MOOC Model* – It is a model that delivers content like open educational resources, and it provides little knowledge to the learners. It is possible in social interaction and grading.

All the above three models, cMOOCs is the common MOOC pattern. According to Swam, et al., (2013), cMOOCs are objectivist rather than constructivist, primarily teacher-centered, highly structured, a mix of abstract and concrete content, focusing on convergent answers, relying on feedback generated by learners, focusing on individualistic learning, possessing a mix of authentic and artificial alignments, and setting the user role in the middle between active and passive (as cited in Babu and Ali, 2018). The other types of MOOCs are available in the society, and they are such as SPOCs (Short, Private Online Courses), VOCs (Vocational Open Online Courses), SOOCs (Selectively Open Online Courses), mini-MOOCs and mobile MOOCs, etc. (Weller and Bridgman, 2016).

A Platform for MOOCs

The medium in which the MOOC contents are transferred is called a platform for MOOC. Varsity, Open2Study, Miriada, Coursera, edX, Future Learn, Udacity, Udemy, Master University, Alison, Canvas, Codecademy, etc., are the MOOC platforms (Raju, 2018). Many platforms are available in society, and some of them are briefly explained below, with the help of the table included in the article by Nisha and Senthil (2015).

- *Alison* – It is a not-profit organization that started in 2007 in Ireland. They provide 600 courses freely, having the participants up to 4 million. But a nominal charge is collected for issuing the certificate for completed classes.

- *Edukart* – It is a profitable Indian organization established in the year of 2011.

- *Iversity* – It is a nonprofit organization established in 2011 in Germany. It has above

5 million participants and no charges for the certificate.

- *edX* – It was founded by the collaboration of Harward and MIT as a nonprofit organization and started in the USA in the year of 2012. It featured video lectures, virtual laboratories, and discussion forums. It has a unique feature that the registered participants can receive the mail whenever the courses updated and have multi-lingual supports. It has above 3 million participants with 415 classes, and participants need to pay an amount for the certificate according to their courses studied.
- *Open Learning* – It is a profitable Australian organization launched in 2012. But they were charging a nominal cost for issuing the certificate.
- *The Open University* – It is a nonprofit organization in the UK that came to serve in the year of 2012. It provides 230 courses and has above 3 million participants and charging nominal fees for certificates.
- *Coursera* – It is started by the USA in the year 2013. Compare to other platforms, this is a profitable organization, but it does not claim any charges for a trail period. It provides above 10 million participants and providing 839 courses with a pre-defined schedule.
- *Udacity* - It is also a profitable organization like a Coursera established in the USA in 2013.

MOOCs in India

In the year 2018, the Ministry of Electronics and Information Technology [MEIT], mentioned The digital India program is a flagship program of Government of India with the vision that to transform India into a digitally empowered society and knowledge economy. India has digitalized many of the aspects in its administration, like railway computerization, land record computerization, e-district, e-panchayat, etc., In the positive way of digitization, India has introduced remarkable milestone is introducing 'SWAYAM,' a Massive Open Online Course (MOOC). The three viewpoints of education are access, equity, and quality. India is facing a challenge that knowledge must reach the unreached and providing it to the massive. To achieve this goal, the Ministry of Human Resource Development (MHRD) of India initiated such an excellent learning portal of SWAYAM. It was originated with the idea that Consortium for Educational Communication (CEC) had developed 87 e-content for undergraduate students through 21 media centers, and they have been utilized worldwide by millions of participants as short courses (Consortium for Educational Communication [CEC], 2018). An indigenous portal SWAYAM has been lightened with the collaboration of MHRD and All Indian Council of Technical Education (AICTE) with the assistance of Microsoft (MHRD, 2018).

SWAYAM is a buss word and the combination first letters of 'Study Webs of Active Learning for Young Aspiring Minds.' It was announced as a MOOC platform in August 2014 and took two years for shaping. Finally, it comes into service on August 15, 2016 (Chauhan and Chauhan, 2018). SWAYAM was furbished with additional features, and the furbishing works were completed on 27th June 2017 (MHRD, 2017). Hon'ble Indian president Pranab Mukherjee formally launched SWAYAM on 09th July 2017 (MHRD, 2018), and he said while launching, the SWAYAM portal "enables one to take courses offered by the best teachers, remaining where they are. SWAYAM should be a call to the pioneers amongst teachers to put new courses in the upcoming areas on this platform in the MOOCs". The person who wants to take a course from SWAYAM, he/she undergone the process of four quadrants, and they are briefly explained below,

- *e-tutorials* - This is the first quadrant which comprises of video lectures, and it also includes audio-video, multimedia, animation, simulations, virtual labs, video demonstration and state of the art pedagogy.
- *E-content/e-text* – The second quadrant includes reading materials like self instructional materials, illustrations, PDF, case study, presentations, related links, documents, open-source content on the internet, research papers, and journals for e-text and it can be downloaded.
- *Discussion forum* - Third quadrants deal with a discussion between the course coordinator and the learner's regards to their doubts and clarification.

- *Assignment* - The fourth and last quadrant is a self-assessment part, which could be in the form of multiple-choice questions, fill in the blanks, Quizzes, Short and long answers, assignments, and frequently asked questions. An assignment is duly checked by the course coordinator, and the feedbacks will be updated, and the learner can view their feedback on their desktop page of SWAYAM.

Ministry of Human Resource Development (MHRD) has constituted 8 institutions as National MOOCs Coordinators for developing and delivering MOOC courses to all over India. It also entrusted the responsibilities to the NMCs to supervise the subjects, which is fully covered. The following table has been developed by the authors with referred SWAYAM portal for courses offered by NMCs, and they are given in table 1.

Table 1: National Wide List of NMCs

S. No	Name of NMC	Subject Specification	Total No. of Partnering Institutes	No. of Courses	Students Enrollment	Successful Certification
1.	University Grants Commission (UGC)	Non Technical/Engineering Programmes	133	263	284766	9289
2.	Indian Institutes of Management, Bangalore (IIMB)	Management Programmes	3	58	144561	3383
3.	All India Council of Teacher Education (AICTE)	Technical/Engineering Programmes	7	132	255565	-Nil-
4.	Consortium for Educational Communication (CEC)	General Programmes, Management Programmes, Natural and Applied Science Programmes, and Social Science Programmes	19	356	518172	8524
5.	National Institute of Technical Teacher Training and Research (NITTTR)	Teacher Education Certificate Programmes	3	22	65598	961
6.	Indira Gandhi National Open University (IGNOU)	Non Technical/Engineering Programmes	3	52	91458	962
7.	National Council of Educational Research and Training (NCERT)	School Programmes / Food Nutrition for Healthy Living	8	75	75870	-Nil-
8.	National Institute of Open Schooling (NIOS)	Out of School Education	1	130	2942319	-Nil-
9.	National Programme on Technology Enhanced Learning (NPTEL)	Sciences, Humanities and Technologies	26	1660	8163683	631545
	Total		203	2748	12541992	654664

NMCs have a responsibility in choosing the Subject Matter Experts (SMEs), and they are requested to host courses taught in e-classroom from 9th to PG in various disciplines. Those courses are delivered through MOOCs, for anyone can access the course anywhere and anytime. All the course contents were hosted in 'SWAYAM Cloud', and it is supported 3 crore users and 10 lakh concurrent network connections in the few years.

Merits of MOOCs

Each MOOCs platform has its own merits and demerits even though the common merits of MOOCs platform are listed below.

- *Free Registration* – All MOOCs permit free registration
- *Less Cost* – Participants can access the course low cost
- *Open Access* – It is easily and freely accessible
- *No boundaries* – There are geographical boundaries to access the learning content, any one access the content from anywhere of the universe
- *Anytime* – Participants can access the content anytime that is the content is available at 24r7.
- *Collaboration* – It permits to peers collaboration from any parts of the universe
- *Model of traditional Method* – It consists of traditional course materials, and the lectures are based on lectures
- *Automated process* – It is automated in providing contents, testing, and quizzes
- *High-quality content* – The contents are developed by capturing high-quality video machines of high rated resource persons
- *Linear instructed* – The courses are organized and delivered in a linear manner

Conclusion

Massive Open Online Courses is an education system that permits a large enrolment worldwide. It is a new paradigm shift in the present scenario, and it makes an impact on the global education system. There are three types of MOOCs are available like as MOOCs, xMOOCs, and Quasi MOOCs models. There are 400 MOOCs platforms available, and some of the important platforms are Alison, Coursera, edX, Iversity, and Udacity, etc., India initiates the SWAYAM portal with the aim that access, equity, and quality education to the massive through MOOCs. SWAYAM provides 2748 MOOCs, in that above 1.2 crore students were enrolled, and above 6.5 lakh students have completed the course. MOOCs have features like low cost, open access, and make collaboration. The main feature of the MOOCs is that the participants can access the content anywhere and anytime at a low cost, and

some are free. With these supportive passages, the author of this paper concluded that Massive Open Online Course (MOOC) provides the opportunity to access the content anywhere at any time of this universe.

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