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Are Moocs Galvanizing The Higher Education In India?

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Abstract
Education has undergone an unprecedented change since ancient times. With the advancements in ICT (Information Communication Technology), the landscape of e-learning has been expanded with the introduction of Massive Open Online Courses (MOOCs). The enrolments in the MOOCs have increased tremendously and recognizing the same, India has also started different platforms for MOOC Courses. There is a huge potential of MOOCs in a developing country like India so as to reach the masses, achieve desired literacy level and enhancing the skills of youth in order to deal with unemployment and promote other projects in digital era viz. Make in India etc. India after US is dominating the globe in terms of enrolments. Presently, NPTEL, IITBX, mooKIT and SWAYAM are the main MOOC platforms in India for delivering courses. But, it is also important to acknowledge that every technology comes with its own set of advantages and disadvantages. Thus, with the above backdrop, this review article discusses about MOOCs, history and evolution in detail, types of MOOCs in detail. It also draws attention on the technical and theoretical background of MOOCs platforms in India. In the end, it also presents some challenges while implementing the MOOCs in India. Considering how beneficial a MOOC can be, we still cannot claim it as a replacement to traditional system of education. A blend of both can only provide a balanced and complete education to the youth of today.

Keywords: E- Learning, MOOC, SWAYAM, Indian MOOC Platforms, C-MOOC, X-MOOC, Massive Open Online Courses.

1. Introduction:

The conventional system of education of our country is limited by time, space, cost, infrastructure, manpower, structured curriculum, assessments and certifications. The institution of higher education throughout the world presents a structured program in some conventional and specific domains with restrictions of number of entrants per year per course and at a very high cost. Increasing cost of education under traditional set-up is already a catchphrase in higher education circuit. Along with this, growing learner

demands and knowledge expansion has put a tremendous pressure on the education system. The major question which arises here is do we have a solution? Distance learning in its various incarnations has always been promoted as a supplement to traditional learning in dispersing vast quantity of knowledge and information to the learners. Moreover, in the present times, digitalization has revolutionized several spheres of our lives - from education to online shopping, ordering food, Net banking and much more. (Ralhan, Dev, 2016). In the education sector, particularly, it has broadened the scope of learning. Education with technology has a huge potential for the development in education and with the technology globalization, the idea of learning and teaching has undergone a remarkable change. The technology provides a learning environment which allows accessing the course material anytime, anywhere, connect other learners and get access to the content without considering any geographical boundaries. (Chauhan, Jyoti, 2017). Online learning delivers the courses with the help of technology and these significant changes in use of the technology in online education has seen emergence of the concept of Massive Open Online Course (MOOC).

Massive Open Online Courses (MOOCs) have emerged as a popular medium of learning proffering quality education and imparting training to masses worldwide. It is equally important to highlight that in country like India with the growing learner needs and knowledge expansion, MOOCs provide an opportunity to study university level courses at a lower cost. As already stated these MOOCs courses does not require a fixed location or a system. A user can access information from any location through computer. There is no mandatory rule for maintaining attendance. There are no pre-requisites for the enrollments with regards to previous educational qualifications and experience. One can even show a MOOC as a qualification through a paid verified certificate. They are delivered through third party platforms, utilizing distributed peer learning and broadcast. This creates a new relationship between students, institutions, academics and educational technology firms. It is noteworthy to mention that despite having differences from the traditional education, MOOCs and Ordinary courses share some similarities such as both have timelines that are predefined with topics being broken down on a weekly basis.

With respect to structure and functioning, it is slightly different such as in place of attending live lectures that happen traditionally, MOOC students watch the pre-recorded lectures in videos and quizzes etc. and participate in online discussion forums for clarifications. But, it also provides the opportunity to students to discuss and put forward their doubts and thoughts and build a kind of online community which is similar to traditional classroom settings. MOOCs are delivered by the instructors and usually they are hosted by the MOOC provider. The providers handle the user registration, content management, testing and all other “back-end” services. Initial MOOC courses had no prerequisites or admission requirements. Initially, MOOCs have started as non-degree courses; but there are a few institutions that have started offering advanced learning

options, certificates and credit preferences at an additional cost (Rahlan, Dev, 2016). This is an ideal medium for individual learners as they have the liberty to select courses from different institutions. This makes the certificate and the course more authentic and adds value to the resume. MOOCs have a huge potential in the school grade system especially with K-12 Sector because it provides a structure similar to the tuitions and helps the students to gain expertise in subjects like Maths, Sciences and English. The scope of MOOCs has also been expanded to higher education sector, imparting vocational and professional skills in corporate and many more.

MOOCs have started only few years ago, but it has seen a massive demand of the learners, with over millions of registrations. Coursera is one of the largest MOOC providers, with over 200 courses in different subjects such as economics, computer, music, business, health and science. Udacity and edX are the other leading online course providers. In a country like India with increasing learner population, the current student teacher ratio, expensive higher education, MOOCs have come as an antidote to this problem with free classes. At present, the participation or enrolment level of MOOCs in India is 3.4 million which is second to the U.S with the enrolment of 7.8 million. Recognizing the needs of the learner and participation trends, MOOCs gained MOOCs gained momentum in India too. Some MOOCs have started by the private players for profit making while others are introduced by the government to reach the masses, increasing the literacy level and enhancing the skills of the youth and also to promote various projects of the government in digital era such as Make in India etc. It is also pertinent to highlight that every technology comes with its own set of benefits and drawbacks. Thus, the present review article mainly focuses on understanding MOOCs, its history and evolution in detail, types of MOOCs in detail and drawbacks of MOOCs.

2. Evolution of MOOCs:

MOOCs evolution dates back to 2001-2002 when William and Flora Hewlett founded the Carnegie Mellon University Open Learning Initiative and the MIT Open Courseware project. This project freely offered course materials from these institutions online under Creative Commons licenses (Open Learning Initiative, 2013). (Alumu & Thiagarajan, 2016). The term MOOC was coined in 2008 by Cormier and Alexander at the University of Manitoba, Canada and they were also the first that offered MOOC online course. (Shatnawi, Gaber & Cocea, 2014). More than 2,000 students enrolled for the course (massive), and it was delivered using various open and free to use educational resources (open) such as wikis, online forums, Google Docs, YouTube, and Facebook groups (Mahajan, Gupta & Singh 2019).

After this in 2011, University of Illinois, Springfield offered the first MOOC in United States. It was called “Online Learning Today and Tomorrow” which had an enrolment of over 2500 students. During these times, courses from Khan Academy, iTunes U and TED increased too and the learners were provided with educationally oriented video content. In 2012, MOOCs

captured good public attention. After this, MOOCs for profit gained momentum and platforms like Silicon Valley start-ups, Udacity and Coursera emerged. All these courses included video lectures, exercises and discussion. Along the evolutionary path, the earliest documented predecessor of MOOC in India is distance learning, which started in the form of correspondence courses delivered via posts in early part of last century and is still prevalent in many parts of the world. Indira Gandhi National Open University (IGNOU) is one such example in India. Later, the courses were delivered via radio and television broadcasts, in isolation or in conjunction with both classroom and distance education. With the beginning of technological advancements, online or e-learning provided added advantage of synchronous interactions between learners and instructors. Online accessibility even to the remotest places have also enhanced the learning opportunities and promoted acceptance of MOOC. The scope and spectrum of MOOC has been further broadened by the introduction of peer review, peer assessment, and self-assessment in-built in to its scheme. In a nut shell, the four basic elements of MOOCs are:

M: Massive in number (There is no limit to student intake; there can be tens of them or there can be tens of thousands)	O Open for all, placed anywhere with minimum or no mandatory qualifications, free of cost or at minimum possible cost
O: Online (completely through internet). Class attendance is not at all required in this.	C: Courses i.e. based on well formulated syllabus, structured, time frame, affordable

Fig.1.: Basic elements of MOOCS

3. Classification of MOOCs:

MOOCs can be classified into following sub types:

3.1 C-MOOC:

In the very emergence of MOOCs, MOOCs started to appear on strong basis of collaborative philosophy, learning through interaction and connectivism theory. The term C-MOOC refers to a MOOC designed to emphasize connecting learners. C-MOOC stands for Connectivist MOOC. These types of MOOCs have been built upon the idea and platform originally envisioned by George Siemens. The relationship between work experience, learning, and knowledge, as expressed in the concept of 'connectivity' is central to connectivism, motivating the theory's name.

Connectivism is learning which has evolved from the cultural and social context. C-MOOCs are loosely structured and these are not funded by anybody or higher educational institute but they are organized by the people who have a passion for specific course or content area and their passion to contribute something to society as a gesture of their own. Organisers commit their time to create a framework for learning where participants from all over the

world can connect, share, contribute, collaborate to learn, and expand their network. It is a platform where peer to peer benefit is witnessed in a striking manner. Common interest of the learners is the foundation of C-MOOCs and this type of structure gives more authority to the participants than the course designer. C-MOOCs are open, flexible, less structured and it is the learners or the participants which decides the objectives of the course, design the path for achieving those goals and contribute regularly through blogs, tweets etc. which are shared over mail upon compilation by course organisers on daily basis, picks up a final path upon experimentation, keep record of their experiences, celebrate their success and collectively stand for any failures too. Participants go off the web and put use to learning in real world, in communities. Thus, this type of MOOCs focuses more about connecting the learners rather than teaching about some particular content. It is basically used for sharing best practices, for advanced development of the professionals and for creative learning. All these features of C-MOOCs makes it less ready for any kind of assessment and these does not fall into any category of assessment techniques. (Chakravarty, R & Kaur, Jaspreet, 2016).

Thus in nutshell, C-MOOCs represent highly distributed peer learning and is a part of the open educational resource movement. It is less structured and influenced by learners' empowerment. It provided access to learning materials to individuals who might wish to learn. The C-MOOC is an independent start-up set up by academics. The course has intermittent lectures and assignments. The main principal mode through which they operate is peer networks and they share knowledge, experiences through a range of online resources.

3.2 XMOOCs:

The second type called X-MOOCs is given mainly by campus-based Stanford University or Massachusetts Institute of Technology. This has come up as an evolution of institutional strategy towards digital technology and on-campus teaching. These courses have automated assessment, video lectures, supporting message boards and resources. Both types of MOOCs suffer from the disadvantage of limiting synchronous learning opportunities and personalized academic feedback to students. The courses in both the types of MOOCs are loosely structured and the organizers or the host institutions allow the learner to complete their exercises at their own pace. But, they have also introduced the concept of feedback and assessment. Automated peer assessment exercises are made available. Specifically X-MOOCs uses automated multiple choice quizzes as exercises at the end of short video exercises. This helps in knowledge retention and in final assessment. Peer learning is highly made use of, by both the models for course delivery. C-MOOCs which runs on the principle of connectivism consciously restructures the bond between course leader and learners resulting in good feedback from participants who have good professional knowledge and creativity while the X-MOOCs the relationship is always the hierarchal wherein an expert

dissipates knowledge to a relatively inert class. However, X-MOOC also considers the personalized feedback from the peer groups.

X-MOOCs are more unidirectional in approach. They are more structured like a traditional lecture formats and mainly delivered through proprietary learning management platforms. In other words, X-MOOCs can also be called as Ivy League-type, university-run, venture capital-funded MOOCs with comparatively fixed and prescriptive curricula. Some common examples of X-MOOCs available in market are Coursera, Udacity and edX. It is important to mention that the X-MOOCs have their background in the ascend of open courseware while on the other hand C-MOOCs seems to have developed out of the idea of open courseware and open educational resources. This type of MOOCs can also be seen as the extension of traditional course materials, learning theories, higher education teaching methods and are well-financed. They are nothing new but a remodelling of a traditional university learning system only where in video lectures and other tools, resources are used for teaching. Here, unlike the C-MOOCs the relationship between the instructor and the learner is formal in nature where the former designs the path of learning. Assessments in these courses are done by the short quizzes and instructor is the main subject expert of the course. The courses with poor course content, plagiarised materials and poor quality are closed down immediately.

With extended use of MOOCs, other taxonomies of MOOCs have emerged. MOOC have been appended to twelve different dimensions - the degree of openness, the scale of participation, the amount of use of multimedia, the amount of communication, the extent to which collaboration is included, the type of learner pathway, the level of quality assurance, the extent to which reflection is encouraged, the level of assessment, how informal or formal it is, autonomy, and diversity. (Conole, G., 2013). Any MOOC can be designed and evaluated against these 12 dimensions and criteria for ensuring quality assurance. Another Taxonomy of MOOCs was given by Clark which was based on the learning functionality and not on their origin. He proposed eight categories. Though the categories are not mutually exclusive, but they provide functional base. For instance, 'transfer MOOCs,' are the one which repurpose existing course content in a MOOC platform and mainly rely on a name of the institution or academic to attract learners; the next is 'made MOOCs' which mainly focuses on creativity and designing of new material. Synch MOOCs are the one having well defined timelines to submit assignments and finish the course work, 'while the Asynch MOOCs are self-paced having an open timeline for course completion. Adaptive MOOCs are the one which uses adaptive process to present personalized learning experiences while the group MOOCs' are the one which begin with smaller number of learners in a cohesive group with an intent to improve student retention, 'Connectivist MOOCs' depends upon the connections across a network rather than pre-defined content and tend to create their own trajectory rather than following any linear path an in last he discussed about the 'mini MOOCs' with courses of shorter duration lasting for few days. (Clark, D, 2013).

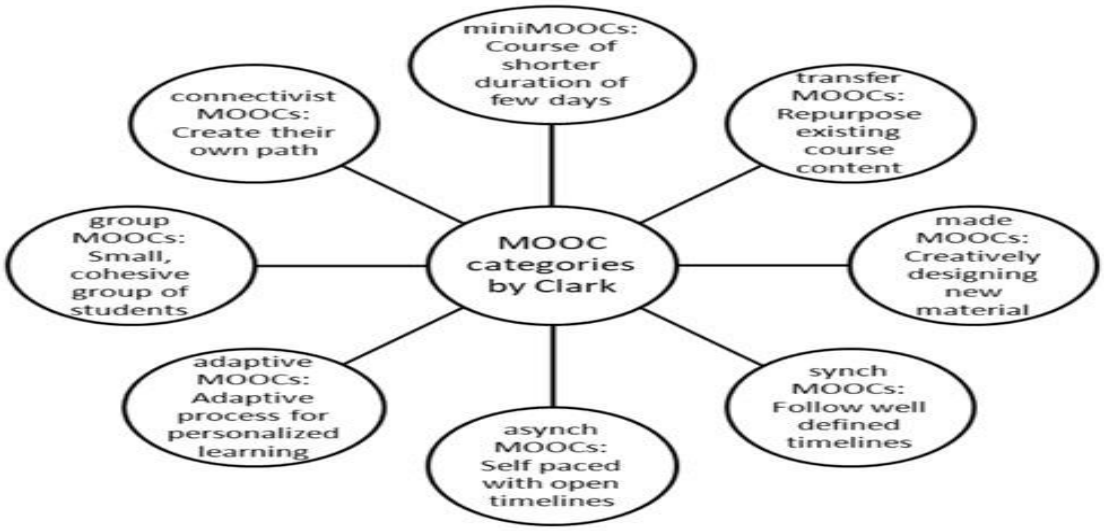

Fig. 2: Clark Taxonomy of Massive Open Online Course

There is a huge potential of MOOCs in India and over the years, the enrollments of the Indian students in MOOCs have increased worldwide. Therefore, the government of India has also started offering their own courses by developing their own platforms. Currently, there are very few universities and institutions which have the facilities to support these initiatives. Some of the MOOCs platforms and efforts are mentioned below:

4. MOOC Platforms in India

Access to education to all, is the changeling job for any developing country. As per UNFPA projections, India will continue to have larger population of youth till 2030. India has mammoth youth population with 356 million in the 10 to 24 year old. In a country like India, youth face enormous challenges ranging from access to education, employment and gender inequality and health services. (Singh, Ranjan, 2018). But, what is needed in the present time is the need of more education infrastructure and even with this growing population it is not possible to enroll every learner on traditional classroom teaching methods. There are also many others reason too, but it is responsibilities of the respective Govt. to provide the basic infrastructure for education to every citizen. So with the advancement of ICT the education methods change from traditional to technology based methods of education have revolutionized. Thus, in order to match the growing demand of learners, many initiatives have been taken by the Indian government to provide and support concept of open education. Initially, the objective was to provide open resources with the system of distance education in terms of repositories, libraries, educational media files, e-books, etc. These were made accessible for everybody. Before the emergence of MOOCs in India, some of the initiatives taken by the government while integrating IT into curriculum was National Digital Repository of IGNOU, CBSE Board initiative for class XI and XII students named project Shishya and Vidya Vahini by providing interactive training and

developmental communication. The government of India for the successful blending of IT into curriculum also created dedicated departments to make education accessible to many learners as much as possible. Some of the common names which contributed towards this path are EDUSAT, a satellite launched by India for education, Education and Research Network (ERNET) which works towards connecting various schools and colleges by network connectivity, Information and Library Network Centre (INFLIBNET) autonomous Inter-University Centre for connecting university libraries, also it has started several other programs. Though, there were many initiatives towards open education, online education and education with IT, still MOOCs was out of reach especially from the masses. Moreover, with the advent of online courses Indian government in 2013 launched e-PG Pathshala run especially for postgraduate course and managed by INFLIBNET of UGC. It is more of a repository of e-content and assessment than a MOOC. During this time, other platforms such as Apna Course and myBskool.com started their own courses. Both these platforms run their courses for profit and clearly, providing open education to the masses is not among their motives. (Chauhan, Jyoti, 2017). In India, many elite's institutions are running their courses on MOOCs and in terms of enrollments on various MOOCs platforms such as Coursera, eDX, Udacity, India is the second most country having high enrollment rates. Therefore, it becomes important for country like India to develop their own platform offered by the government to provide some online courses, presently only few main institutes have initiate to support such steps. Some of the Institutes are as under:

4.1 NPTEL:

NPTEL is a collaborative effort of seven IITs (Indian Institute of Technology) and IISc (Indian Institute of Science Bangalore) and stand for National Program on Technology Enhanced Learning project emerge which is funded by MHRD, started in 2003. This platform provides various online courses as well as accreditation in different topics related to engineering and science. This program has also initiated the NOC (NPTEL Online Certification) with cooperation of Google and NASSCOM (National Association of Software and Services Companies). All the courses developed and hosted by NPTEL can be accessed freely through the website http://nptel.ac.in. The fundamental objective of this program is to bring all the experts and best teachers under one umbrella of NPTEL and with the collaboration of IITs/IISc record the lectures and made available to people under open source accord. It is pertinent to state that NPTEL is the largest single repository of technical courses in the world in the streaming video format and with text meta data for videos, text transcription and subtitling, and possible conversions to all Indian languages. (Chauhan, Jyoti, 2017). Initially, during the launch of NPTEL there were certain obstacles in terms of uneven quality, less interactive platform, even during that time the course ceased to attract a large number of students. Since the beginning the platform has expanded and currently offering more than twelve hundred courses and with the growing demand and huge potential of this platform it is planning to launch 600 more courses on various topics for

the period 2016- 2020. With the introduction of new courses and content they are planning to function like MOOC providers in the market by offerings lectures, assignments and tests.

4.2 MooKIT:

MooKit is a platform run by the Department of Computer Science of IIT Kanpur since 2012. Currently, the MooKit is running eighteen plus courses and having more than two lakhs registered learners. This platform was specifically designed to rectify the problems related to low band width and low computing situations. The main feature of this platform is the indicator which shows current bandwidth of the connection, similar to the bars on a mobile phone. At the time of poor connection, it gives an indication to the learner and they can use other content delivery options such as stream only audio and play it in sync with the slides, which is often very close to the video experience. If the learner still faces a problem due to poor bandwidth, then in that case, learner can receive a call over phone and listen to the audio from there using the calling control provided on the interface. This feature is mainly beneficial to the learners especially those who belong to rural areas and suffers from the problem of poor connectivity. They just need a dumb or basic phone. Thus, there are some salient features of mooKIT which are as follows:

i)Flexibility in varying bandwidth, choose the delivery mode as per available bandwidth i.e. audio, video or phone.

ii) Opportunities for in depth discussions and interactions in details.

iii) Learners are allowed to participate in twitter or face book forums to access.

iv) Choosing new language easily.

v) Assessments done through the evaluation of assignments.

vi) Issue of certificate online.

vii) Customizable courses according to need.

viii) Cost effective course, offer/ join more than one online course.

4.3 IIT BombayX:

IITBombayX is a not profit MOOC platform started in 2014 under the government funded project of MHRD named National Mission on Education through Information and Communication Technology (NME-ICT). The salient feature of this platform is its specialisation in providing Hybrid MOOCs which grab the advantage of flipped classrooms, online talk and live correspondence. Currently, the platform delivers more tha sixty courses but all the courses are offered in English Language. However, in future, some courses under Skill MOOCs may be offered in some Indian regional languages as well. IITBX provide four types of MOOCs plan to meet different learning demand. For instance, **1. Edu MOOCs** as the name suggest focuses on improving the academic knowledge across various disciplines. These are mostly IIT Bombay add-on courses and are instruct with same thoroughness as compare to campus. **2. Life MOOCs** offer courses for lifelong learning is the trip that each student wants to pursue. The motive of Life MOOCs is to raise the position of learners and

also these MOOCs may well be utilized as forerunners to some other area of MOOCs. **3. Skill MOOCs** impart professional skills to the individuals and by obtaining such skills the learners get edge over headway in picking up. **4. Teach MOOCs** is plan for teacher in such manner to increase their teaching ability and mostly conducted through online interaction. IITBombayX has adopted the blended learning system which is a combination of both face-to-face class room learning and online education methods. Unlike other models of MOOC, the course completion at this platform is mandatory. This model is named as "Blended Learning - MOOC Model of IIT Bombay (BLMM)". In this system prime universities from India are offering MOOC courses to Indian local college learners.

4.4 SWAYAM:

It 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 has started with the ambition of introducing two thousand courses, to make it largest course catalogue, among all provided so far. For SWAYAM an independent platform is developed. The one unique feature which distinguishes SWAYAM from conventional MOOC platforms is that the learners can get credit for MOOC courses offered here and they can get their credits transferred and recognized at the parent institution. For SWAYAM, a credit framework has also finalized by the UGC through vide regulation, 2016 that allow the transfer of credits between institutions. An academic institution in India can offer up to twenty percent of its catalogue in a particular program via SWAYAM. Currently, SWAYAM offers the courses for school, certificate, diploma, undergraduate and post graduate covering different disciplines. All the courses provided via SWAYAM are accessible free of cost to learners, however, learners need a certificate are required to register themselves and completing the course successfully are required to pay a small amount of fee. At the conclusion of individual course there will be an appraisal for the learners through which the grade or marks granted in favor of learners may carry to the academic document of the learners. Right now, SWAYAM platform manges 500+ free online courses. For the objective of advancement of the communication of online courses, e content and supervise the appraisal measure of courses extent on SWAYAM, the different National coordinator have been appointed. But, the MHRD can add the Coordinators according to the growing requirement of courses. So ensure to provide the perfect quality content and made easily available to learners the following coordinator have been appointed. 1. AICTE for self measure courses 2. NCERT & 3. NIOS for school education 4. CEC for Under Graduate program 5. NITTTR for improving the quality of engineering education system 6. UGC for Post Graduate program 7. NPTEL for engineering 8. IGNOU for out of school program 9. IIM Bangalore for management studies.

5. Challenges:

India today has 1.5 billion populations in the age group of 32 year mere, as less by ten year from rest of the world. Moreover, it has a distinctive demographic advantage; India has risen to be the world's third biggest economy power. One of the biggest setbacks of the Indian education system is the mismatch of employer need and curriculums of education and also lack of skilled workforce further create an obstacle for continuous growth of India. As per one research report of MHRD, Government of India, there is a need of 6 universities and 270 colleges each every month to cope up the learning need. (Singh, Ranjan, 2018). India is a developing country with a high potential of MOOCs but various research reports indicates that the MOOCs are primarily available to those who are already educated. But, how will it reach to those least educated is the main question. With regards to India, the major problem is that without the considerable usage of ICT tools, the expansion of online education system would be unbelievable. The biggest challenge affects the advancements of MOOCs in country is the diversity. Ours is a diverse country with respect to language, learning habits, cultural context which differs from place to place and thus to meet the expectation of **diverse learner**, the scarcity of sufficient telecommunication infrastructure in rural and remotest settings is perhaps the most physical challenge of MOOCs. The utmost challenge for MOOCs is that it does not have fool proof system to check and valid the advancement of learners and also there are poorly developed mechanisms on merging the course credits with the present educational framework. MOOCs are helpful as they give an available method to individuals to increase new information skills and knowledge. However, the nature of MOOCs being less structured makes assessing their quality and effectiveness difficult. MOOCs have no established evaluation criteria. The Courses of MOOCs are more flexible than classroom teaching and also it has many learning objectives which makes it difficult to built a **validated assessment criteria**, thus making them difficult to evaluate. The traditional evaluation methods of classroom settings do not easily apply to MOOCs. Another concern with respect to the MOOCs is the course completion rate which in fact is very less as most of the leaner's engage only in discussions and do not complete their course. A major reason for this could be the content designed for the MOOC by various institutions which does not take into account the local, cultural context and the needs of the learners taking up the course. A major argument put forth by the academicians is that the course content generated could be totally independent and created by multiple users, which could lead to a chaotic learning experience if the user making changes lacks relevant subject expertise.

Accessibility is also one of the most vital hindrances for the successfulness of MOOCs because its course are available online for everyone and sometime in multimedia (Videos, audio lectures & online discussion etc) content need to access for everyone. If facilities of ICT are not available in that area it becomes difficult for leaner to attend / participate and also become difficult for his/ her to understand and evaluate. MOOCs are not ideal for courses where labs are needed for experimentation. MOOCs are hardly taken seriously by

participants. Another shortcoming related to MOOCs is that it provides authentic information on the websites, but do not undertake any responsibility for its accuracy. It is also a major concern that the institutions delivering MOOCs course may change the information, content on courses without any prior notice to the learners. The learners also sometimes do not take these courses seriously due the **non-certified degree** or qualification attached to it. Not all MOOC projects would have open licensing of content, well-defined learning goals, serious pedagogies and an open structure. In some of the MOOCs, the content is very short, non-engaging and incomplete, thus defeating the true purpose of MOOCs. MOOCs are self-motivated. It is only the individual desire to extract maximum out of it and obtain better learning outcomes. It is also pertinent to mention that MOOCs can never replace the need of classroom/traditional teaching.

6. Discussion:

With the advancement of technology, soaring high economic development worldwide, the world is adopting to ever new ways of learning. To make its youth well equipped at international expectations platform, India started on with MOOCs. Considering how beneficial a MOOC can be, we still cannot claim it as a replacement to traditional system of education. MOOCs is a latest addition in the education sector which has gained huge popularity globally as well as in India. Initially, the MOOCs platforms were designed for the professionals and students of engineering and technology, who found it difficult to upgrade their skills in the ever changing and disruptive world of technology. However, since then many of the MOOC platforms have scaled down, changed their business model or shut shop. So what changed? During the beginning of MOOCs, it gained popularity especially amongst the learners of STEM courses i.e (Science, Technology, Engineering and Medical) for shorter courses. The enrollments happened so quickly that India has became the second largest market after the US in MOOCs platforms. But, within a few years, the MOOCs throughout the world have started witnessing a declining trend in enrollments and number of users. This strained MOOCs platforms to switch from fermium models, offering a mix of free and paid courses.(Pani, Priyanka, 2019).

Another reason which accounts for the sudden downfall of the MOOCs courses is the low retention rate and rising affluence among students, as per a latest MIT research paper. The paper clearly detailed out why MOOCs largely fell short of transforming education worldwide and instead focuses on helping colleges take their academic programs online. India is still one of the largest countries in terms of MOOC learners, and MOOCs have a huge potential to bridge Industry-University divide and up skilling for better opportunities.

As already explained that motivation to complete the course and immediate doubt resolution are learner's needs which cannot be met by MOOCs and often this leads to drop offs. With regards to technical courses, the information can be easily provided to the learners through live, online learning model. But, the potential of MOOCs with respects of humanities and arts is still under exploratory stage. Although the MOOCs e-learning model

is scalable, the low course-completion rates and low effectiveness do not make it a sustainable model. With regards to India, MHRD launched SWAYAM, which stands for Study Webs of Active-Learning for Young Aspiring Minds, is a platform for online courses, with the bulk at the university level, and created in partnership with some of India's premier institutes of higher education, such as the IITs. The more important acronym, however, is MOOC, which stands for Massive Open Online Course. SWAYAM now offers about five hundred plus MOOCs for higher education, with the bulk of them in engineering, science and mathematics. There are recent debates over MOOCs which has been particularly contentious within the humanities where the students are often taught in smaller groups. Globally also, humanities courses are among the least represented on both Coursera and edX. Humanities subjects are very less represented on Indian SWAYAM Portal and other platforms. It is also pertinent to highlight that there are certain qualities of the humanities that are better suited to an intimate classroom setting than to a massive online format. (Reichard, Cara, The most and the crucial aspects in humanities courses are writing which is one of the most important skills that people learn and it tends to happen by people going line by line over essays and giving detailed feedback and that's unlikely to happen in a course that has 150,000 students i.e online. Online education is going to change higher education, and great universities are going have to adapt. But, we want to be sure we don't lose what's precious and irreplaceable about the university educational experience by becoming too infatuated with technology. A blend of both can only provide a balanced and complete education to the youth of today.

References:

- Ralhan, Dev Beas. (2016). Get the best out of MOOCs. The Hindu. Retrieved from: https://www.thehindu.com/features/education/Get-the-best-out-of-MOOCs/article14492693.ece
- Chauhan, Jyoti. (2017). An Overview of MOOC in India. International Journal of Computer Trends and Technology. 49, 111-120.
- Alumu, S; Thaigarajan, Padma. (2016). Massive Open Online Courses and E-Learning in Higher Education. Indian Journal of Science and Technology**,** Vol 9(6),1-10.
- Shatnawi S, Gaber MM, Cocea M.(2014). Text stream mining for Massive Open Online Courses: Review and perspectives. Systems Science and Control Engineering: An Open Access Journal, 2(1),664–76.
- Mahajan, R., Gupta, P. & Singh, T. (2019). Massive Opne Online Courses: Concepts and Implications. Indian Pediatric (2019),56(6),489-495. Retrieved from: https://doi.org/10.1007/s13312-019-1575-6
- Chakravarty, Rupak; Kaur, Jaspreet. (2016). MOOCs in India: Yet to Shine. International Journal of Information Studies and Libraries. Vol.1 (1). Retrieved from:

https://www.researchgate.net/publication/306155071_MOOCs_in_India_Yet_to_Shine/citation/download

- Conole G. (2013). MOOCs as disruptive technologies: Strategies for enhancing the learner experience and quality of MOOCs. Revista de Educación a Distancia (RED), 39 Retrieved from: http://www.um.es/ead/red/39/conole.pdf.
- Clark D. (2013). MOOCs: Taxonomy of 8 types of MOOC. Retrieved from: http://donaldclarkplanb.blogspot.co.uk/search?q =MOOCs:+taxonomy.
- Singh, Nirvikar (2017). India's leaders have failed its people, but in education, the people may have a chance to grow beyond what leaders have allowed**.** The Financial Express**.** Retrieved from: https://www.financialexpress.com/opinion/indias-leaders-have-failed-its-people-but-in-education-the-people-may-have-a-chance-to-grow-beyond-what-leaders-have-allowed/618571/
- Pani, Priyanka. (2019). Has MOOC lived upto its expectations? The HINDU. Retrieved from:https://www.thehindubusinessline.com/info-tech/has-mooc-lived-up-to-its-expectations/article26923928.ece#
- Reichard, Cara. (2013). MOOCs face challenges in teaching Humanities. The Standford Daily. Retrieved from: https://www.stanforddaily.com/2013/06/04/moocs-face-challenges-in-teaching-humanities/
- Singh, Ranjan. (2018). MOOCS: Future and Changing Trends With Reference To India. International Journal of Innovative Knowledge Concepts, 6(5), pp-63-68. https://pdfs.semanticscholar.org/67a5/8c66b1c2f5e3675b69662198838b12470a1b.pdf
- Ministry of Human Resource Development.(2015). Government of India, Ministry of Human Resource Development. Retrieved from Press information bureau website: http://mhrd.gov.in/sites/upload_files/mhrd/files/MHRD%20year%20ender%20%20for%202015.docx-1.pdf
- NPTEL IIT Bombay.(n.d.). Retrieved from http://www.cdeep.iitb.ac.in/NPTEL2/
- NPTEL home.(n.d.). Retrieved from http://nptel.iitg.ernet.in/indexHome.php
- The Future of MOOC - EduWire. (n.d.). Retrieved from http://eduwire.in/the-future-of-mooc/
- Devgun, P. (2013). Prospects for success of MOOC in higher education in India. International Journal of Information and Computation Technology, 3(7), 641-616.
- Mukul,A. (2016, Jun 17). Microsoft to design app for Indian govt's open online courses. Economic Times, News Article Accessed from: http://tech.economictimes.indiatimes.com/news/internet/microsoft-to-design-app-for-indian-govts-open-online-courses/52790346