

Lifelong learning opportunities through MOOCs in India

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83

Received 17 October 2019

Revised 28 November 2019

28 December 2019

Accepted 7 January 2020

Abstract

Purpose – Lifelong learning needs to be visualized as the milestone for generating a progressive and knowledge society. Because it is through lifelong learning that one can continuously upgrade one's knowledge and acquire the relevant skills for getting livelihood opportunities. Moreover, for ensuring a sustainable and advanced society in the 21st century industrial setup, people are desirous to receive a global form of learning as they tend to follow the principle, that is, "earning while learning". In this context, the various types of online courses, Massive Open Online Courses (MOOCs) and Open Educational Resources (OERs) provide myriad opportunities to the people by introducing them to a global form of learning. Against this background, the introduction of MOOCs in India for providing lifelong learning opportunities might work in a big way. However, to what extent, can MOOCs promote the idea of lifelong learning in a vast country like India needs to be discussed in greater detail.

Design/methodology/approach – While writing the paper, descriptive research methodology has been used. The sources such as [Report of Census 2011](#), Human Development Report 2016, 2018, Economic Survey 2016 are also consulted. Analysis has been done based on the data extracted from the secondary source of information.

Findings – The literature review made in the paper implies that the educational institutes across India may adopt some of the good national and international practices for transforming the society and produce some need-based MOOCs under the SWAYAM platform with regard to providing opportunities of lifelong learning. Thus, the courses run through SWAYAM should help in achieving the three cardinal principles of the Indian Education – access, equity and quality. However, there are many challenges to be met while the adoption and development of MOOCs for the purpose of lifelong learning in India are taken into consideration. The current modes and popularity of digitally offered education in India thus need to be justified.

Research limitations/implications – The discussions made in the paper are limited to a reference to the Indian MOOCs particularly under SWAYAM, and it is a general study only.

Practical implications – It is important to note that a new kind of transformation is currently being initiated across the world by encouraging more and more online interventions in the field of education. In fact, various studies are also being conducted on the implementation of online courses across the world, particularly in the developed countries where more than 70% education is delivered online. However, in a country like India, the practical utility or the implementation of the online courses such as MOOCs is not so popular even at present, and it is only limited to a small section of the society. The University Grants Commission (UGC) with a view to promoting CBCS as well as Credit Transfer made 20% course delivery through MOOCs mandatory in Indian higher education. However, the CBCS system itself has several loopholes considered in the Indian context, as it was launched without sufficient ground work, and no one seems to have a clear idea of its implementation method. The UGC's move was to introduce a system of education that would help in bringing parity of Indian higher education with Western or European higher education systems. This paper shall try to imply how the Indian MOOCs should be used in providing lifelong learning opportunities to the people of the country.

Social implications – This paper refers to a new social constructivism initiated through MOOCs, where a learner can directly interact with the people in the community, share their own ideas and thoughts and



collectively undertake new researches. This is sure to transform the Indian society in the days to come, although a study on the usefulness of the existing MOOCs is of utmost necessity

Originality/value – This paper reiterates the necessity of a detailed study of the available MOOCs in India based on the findings of the common problems and challenges of MOOCs development and implementations that need to be resolved first. Then the paper provides an analysis of this situation so that one could develop or adopt a MOOC in order to meet one's need of lifelong learning in a country like India.

Keywords Lifelong learning, MOOCs, SWAYAM, Credit transfer, Learning opportunities

Paper type Research paper

1. Introduction

In the 21st century, providing educational opportunities to all has been one of the top priorities of higher education across the world. However, the learners out there should also be able to avail the opportunity to enroll themselves in need-based and skill-based quality courses so that they get the maximum benefit after the completion of their courses. Currently, many universities in the developed countries such as the United States, Korea and China are able to get to the top ranks due to their higher educational standards and attainments. However, in the developing countries such as India, Afghanistan, Bangladesh and Pakistan the work forces are not properly engaged, one reason being their poor educational attainment. Eventually, problems such as unemployment, underemployment and brain drain are rising at a higher rate in these countries. Besides, many Asian countries currently are still facing many unresolved problems such as gender disparities, disparities in accessing quality education, disparities in providing education to the rural and urban population, digital division between the haves and have nots, marginalization of the weaker and poor sections from the ambit of modern education and so on. Such differences and disparities are in fact crippling the developing societies on their way towards positive transformations through the benefits of education.

In the context of higher education across Asia, the average Gross Enrolment Ratio (GER) is 30%. But there are also some differences among the Asian countries. For example, China has more than 39% GER in tertiary education, India has 23% and Bangladesh has only 13%. A country like Korea has more than 95% GER in tertiary education, whereas a low-middle-income country like Afghanistan has not more than 9% GER in tertiary education. (UNDP, 2016) Besides, more than 70% women in some developing countries of Asia are engaged in the unorganized sectors (Economic Survey, 2016), as most of them only work for their day-to-day living, which normally remain uncounted and unrecognized. This has been a big challenge for the Asian countries, necessitating an urgent need to mitigate this situation. But, for the growth of the national income in near future, the developing countries need to be transformed into a major knowledge economy having adequate and abundance of skilled and trained manpower.

It is therefore important to find out if the education and training people receive are actually need-based and appropriately skill-oriented so that it could offer them a life with the minimum standard of living. So, the urgent need of the hour is to explore the various available educational avenues and find out how the best practices adopted by the advanced educational institutions from the developed countries can help the people belonging to economically and socially disadvantaged groups to become empowered with the education they have received. In this regard, the governmental interventions in the educational sector may play a prominent role in upgrading the educational institutions to meet people's needs in the context of the 21st century. Therefore, in a country like India at present, the policymakers are discussing how education could be made skill-oriented which would further strengthen the capabilities of the learners and make them productive citizens for a better future.

It is indeed worthy to mention that the developed countries are opting for more actionable educational goals with the help of the optimal utilization of online delivery of

educational contents that has helped them emerge as the hub of world class education. However, a developing country like India is still facing various challenges while making room for quality education for all. Questions such as whether quality education can be achieved at all, whether the various disparities among the people in accessing education can be removed, whether the new educational interventions such as Massive Open Online Courses (MOOCs) are able to provide lifelong and sustainable learning opportunities in the true sense – are still some of the very pertinent issues for a country like India. The emergence of new and modern educational interventions such as Open Educational Resources (OERs) and MOOCs has provided certain innovative prototypes of education for the knowledge-hungry people. But, this also necessitates a study on the differences in the adoption and implementation of online delivery of educational contents in both the developed and developing countries solely on the basis of their utility and success rate.

Currently, the whole world is talking about sustainable education for sustainable living. Sustainable education, one may argue, follows an inclusive and non-discriminatory pedagogy. Moreover, it may be seen as the only way to provide the basic knowledge, training and skills to the learners to make them productive in the real sense. Sustainable education would allow every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future which in turn would bring long-term benefits and welfare to all. It is worth mentioning here that the document entitled *Transforming Our World: The 2030 Agenda for Sustainable Development* mentioned 17 Global Sustainable Development Goals, which would transform the world by 2030. One of the objectives of Goal 4 is to achieve inclusive and equitable quality education while also promoting lifelong learning opportunities for all as it is expected to lead to sustainable living. The main idea here is to focus on the acquisition of foundational and higher-order skills, greater and more equitable access to technical and vocational education, training and higher education throughout a person's life and so on. However, the knowledge, skills and values acquired also need to be functional so that these can contribute to the development of the society in a holistic way. These modern contexts of education have facilitated myriad opportunities for the educational institution to create and share digital contents, communicate, collaborate and solve all educational problems so that fulfilment in life can be achieved more effectively and creatively.

Therefore, in order to promote and ensure sustainability in education, the differences in the implementations of educational policies and services between the developed and developing countries should be meticulously discussed so that the existing gaps in providing modern education through online interventions such as MOOCs in a country like India can be identified and scrupulously dealt with. It is against this context, one needs to consider the kind of education that can lead to the sustainable development in a country like India where the basic demand is to enhance the skills and capacities of the people particularly the youths. Considering the priority given on education in general, the Ministry of Human Resource Development, Government of India, has come up with different policies and schemes for popularizing online education through MOOCs that would help in providing need-based and sustainable education to the masses. Thus, the introduction of MOOCs in India under SWAYAM (Study Webs of Active Learning for Young Aspiring Minds) for enhancing sustainable and lifelong learning opportunities to the Indian learners might work in a big way. However, the problems associated with the Indian MOOCs made available under SWAYAM, to the extent to which the existing MOOCs are able to promote the idea of lifelong quality learning among the learners, the success rate of the existing MOOCs in a geographically massive country like India and so on are some of the issues that need to be seriously discussed in order to find out the aptness of the new educational interventions such as MOOCs that are expected to provide learning opportunities to thousands of Indian learners from diverse backgrounds.

2. Objectives of the paper

From the aforementioned deliberations, it may be assumed that in the present industrial era, MOOCs can play a crucial role in mobilizing education in a cost-effective manner. The MOOCs initiatives taken in the Indian context are focused on providing lifelong skill-based learning opportunities to the population who want education to fulfil their dreams. Through this paper, an attempt has been made:

- (1) To explore how the existing MOOCs would help in providing new opportunities to the learners in accessing lifelong quality education in India.
- (2) To enlist the challenges of producing and adopting MOOCs in the context of India for mobilizing the education system and providing educational opportunities to the learners.

3. Methodology or data source

While writing the paper, descriptive research methodology has been used. Sources such as [Report of Census 2011](#), [Human Development Report 2016, 2018](#), [Economic Survey 2016](#) and so on are consulted. The data analysed in this paper are extracted from the three National Coordinators namely Consortium of Educational Communication (CEC), University Grants Commission (UGC) and Indira Gandhi National Open University (IGNOU) under SWAYAM as available in the website www.swayam.gov.in.

4. MOOCs under SWAYAM – a new paradigm in Indian higher education

India is a country with rich demographic dividend as nearly 54% of the population are under the age of 25 and 66% under the age of 35 ([Census of India, 2011](#)). But, the fact is that the adult (15+ years) literacy rate is 69.3% at all India level. Again, if we consider the percentage of the population with at least secondary education above the age of 25 and older, a huge gender disparity becomes visible as females constitute 39.0% and males 63.5%. In addition to that, in case of the Labour Force Participation Rate, the percentage of male is 78.8% and of female, it is 27.2% ([UNDP, 2018](#)). These data hint towards the lack of adequate skills in the learners, mostly the adult learners, for securing livelihood opportunities. On the contrary, everyone in India should be well equipped with digital skills as the prerequisite for getting jobs and securing livelihood in the digital economy. Thus, the various forms of online learning including MOOCs are expected to help the learners to possess the relevant and need-based digital skills and knowledge of a subject that would further help them adopt inclusive equitable education and lifelong learning.

However, in case of the education systems in India, it is found that a major percentage of the population is general degree holders rather than professional and vocational skill holders. This has led to an increase in the educated unemployment as more than 90% of the Indian population is engaged in the unorganized sector, which also indicates the poor level of Workforce Participation Rate (WPR) in various parts of India. However, the Recognition of Prior Learning (RPL) can be an important mission on the part of the Indian policymakers on education where traditional knowledge can be certified and given the credit so that a skill-enabled population can be created in the true sense. Through the RPL, people irrespective of their age, sex and geographical location and so on can get formal recognition of their traditional knowledge so that they can productively use such informal skills. Therefore, the education providers may launch some courses where people get the scope for additional education for upgrading their innate knowledge and skills in their own preferred areas and generate some income. Finally, the Govt. of India came up with the National Skills Qualifications Framework (NSQF) – a competency-based framework that organizes all

qualifications according to the levels of knowledge, skills and aptitude. Under the NSQF, a learner can acquire the certification for competency needed at any level through formal, non-formal or informal learning.

The emergence of SWAYAM can be seen as an Indian response to the emergent 21st century culture of online learning or ODeL (Open Distance and e-Learning). Acknowledging the potentials of MOOCs for transforming a society, the MHRD, Govt. of India, introduced SWAYAM in the year 2016, where teachers from institutions such as the IITs, IIMs and central universities offered online courses to the citizens of India. In order to ensure the quality of the course contents produced and delivered through SWAYAM, nine National Coordinators such as NPTEL for engineering, UGC for post-graduation education, CEC for undergraduate education, NCERT and NIOS for school education, IGNOU for out-of-school students and IIMB for management studies and so on had been appointed. Subsequently, the UGC through the credit framework for online learning courses through SWAYAM Regulation 2016 mentioned that at least 20% materials from the total number of courses by an Indian University should be released in the form of MOOCs for the fast mobilization and dissemination of knowledge and information among the prospective learners.

The UGC further came up with the Choice-Based Credit System (CBCS), and it was stated that the students would be able to choose from among the prescribed courses which are referred to as core, elective or minor or soft skill courses, and they could learn at their own pace and the entire assessment is graded based on a credit system. The idea of the Indian Government has been to promote academic excellence in the area of choice, to provide adequate flexibility in the choice of subjects and to develop curriculum with a focus on the students. Another recommendation of the UGC is that all universities should develop an LMS (Learning Management System) besides releasing their OER materials as MOOCs in the SWAYAM platform for making education more vibrant and sustainable. Against this backdrop, the emergence of MOOCs in various relevant areas of knowledge under different educational institutions of India has been a welcoming step as thousands of learners have been benefitted by a variety of need-based free MOOCs with almost no restrictions during enrolment.

While explaining the state of MOOCs in India, [Nisha and Senthil \(2015\)](#) have provided an interesting summary of how technology has changed the face of distance learning over the years and how relevant and beneficial these courses have been for the distance learners. They opined that India is the only economy to have such a rapid change with the futuristic idea about the MOOCs education. But the authors also stated that making education available to the common people in the villages spread across the nation is one of the biggest challenges, and the solution to this problem could be seen in the form of education through MOOCs. While saying so, they made important references to various MOOCs platforms such as The Open University, Iversity, ALISON, Open Learning, Coursera, Udacity, edX and EduKart which are available free of cost to the distance learners. They also discussed how MOOCs could be made available in India by various institutions and companies. They referred to Birla Institute of Technology and Sciences (BITS), Pilani, and their collaboration with the MIT and Harvard's MOOC platform edX to offer MOOCs to their own students as well as the students outside BITS. Then the authors also referred to how the Indian IITs joined hands to deliver MOOCs under the NPTEL programme funded by the MHRD, Government of India. Although they stated that providing timely support and assessment of students are the most challenging tasks as far as MOOCs are concerned, they strongly agreed that MOOCs and online education have a huge potential which would help in accelerating and ensuring social cohesion and sustainable growth in the context of India.

Another pertinent study on the awareness of MOOCs in India has been carried out by [Singh and Chauhan \(2017\)](#) where they have stated that MOOCs can be used as a best effective means for pre-service and in-service teacher training programmes for their professional

development. In order to assess the awareness level of the teachers, the authors selected 156 teacher educators teaching in Elementary and Bachelor of Education through convenient sampling method for their study. However, the study revealed that the teacher educators were having the basic ideas about MOOCs, their strength, mode of offering the courses and their benefits. Still, it was revealed that there is a lack of understanding about the role of MOOCs for teacher training or about the Indian MOOC initiatives under the SWAYAM. The study concluded that there is an emergent need not only to develop proper understanding about MOOCs for teacher educators but also to provide them with the facilities to develop and integrate MOOCs into their regular classroom practices. Regarding the awareness level on the initiatives of SWAYAM, the authors stated that 34.52% teacher educators did not know what SWAYAM stands for. Only 38.9% were aware about its launching date and year. When they were asked about the nature of the courses being offered through SWAYAM, the responses were quite scattered. Around 70% of the teachers knew about diploma and certificate-level courses, around 53% knew about degree-level courses and around 32% knew about senior secondary-level courses. Such findings reflect that the awareness among the teacher educators about various initiatives in India is still pretty less and sincere efforts are required to increase the awareness about the various MOOCs initiatives in Indian higher education in general and teacher education in particular.

In a broader perspective, [Bandalaria \(2018\)](#) made some other important observations on how MOOCs are playing a significant role in transforming and empowering higher education across Asia. She mentioned that the creation of MOOCs platforms and the presence of country-wise national providers of MOOCs offering open learning to all have been a continuous process since 2013. These initiatives witnessed some countries developing national MOOC platforms where their universities could offer MOOCs, whereas some other universities started their journey by offering MOOCs through the major providers such as Coursera, edX and OpenLearn. Like SWAYAM in India, other national platforms such as K-MOOC in Korea; J-MOOC in Japan; Thai-MOOC in Thailand; [OpenLearning.com](#) in Malaysia; University Joint Alliance Platform in China; and the MODEl for the Philippines also emerged. These country-wise MOOCs initiatives have also provided important avenues to the participating universities and agencies to collaborate while offering open online courses that will serve the learners in their respective countries; facilitate monitoring of quality of open learning mechanism; and formalize national policies on the recognition of learning obtained from the completion of these open online courses. Basically, these MOOCs platforms enabled credit transfer across the disciplines at the undergraduate and postgraduate levels while also providing lifelong learning opportunities in order to develop the productivity level of the masses.

Tony [Bates \(2016\)](#) in the chapter “Strengths and Weaknesses of MOOCs” from his book *Teaching in Digital Age: Guidelines for Designing Teaching and Learning* reflects on some starker realities of MOOCs adoption and implementation even in the developed countries while referring to the people MOOCs mainly serve. He refers to a research report made on Harvard University and MIT where it was found that on the first 17 MOOCs offered through edX, 66% of all participants and 74% of all who obtained a certificate had a bachelor’s degree or above, 71% were male and the average age was 26. It was also found that “a high proportion of the participants came from outside the United States, ranging from 40 to 60% of all participants, indicating strong interest internationally in open access to high-quality university teaching” (pp. 165). Then the author referred to yet another study made by the researchers at Columbia University Teacher’s College where they found that “Data from MOOC platforms indicate that MOOCs are providing educational opportunities to millions of individuals across the world. However, most MOOCs participants are already well-educated and employed and only a small fraction of them fully engages with the courses. Overall, the evidences suggested that MOOCs are currently falling far short of ‘democratizing’ education

and may, for now, be doing more to increase the gaps in access to education than to diminish them” (pp. 165–66). Such studies usually help in having important insights into the utility aspects of MOOCs even in the developed countries.

In 2015, the UNESCO also developed a total of nine modules on Open Access – five for the Researchers and four for the Library Schools, as part of its endeavour to build inclusive knowledge societies through information and communication technologies (ICT) which is also one of the key objectives for UNESCO’s Medium-Term Strategy. By adopting this objective, the member states of UNESCO recognized that knowledge plays a key role in the economic growth, social development, cultural enrichment and democratic empowerment of the people. Subsequently, the UNESCO issued a unique mandate to work on Open Access (OA) policy to bridge knowledge pools on OA across the world. By consulting these modules as models, the Indian universities could also develop a course on research and library as MOOCs in the SWAYAM platform.

Thus, it becomes imperative to note the extent to which and the ways through which the various available MOOCs under SWAYAM in India are able to create the much needed knowledge movement. In fact, a serious enquiry should be made on how far these courses offered through the different coordinating agencies under SWAYAM are able to suit the learning needs of the people by bridging the digital divide among the students who might have hitherto remained untouched by the digital revolution. Besides contributing to the knowledge movement in an unprecedented way, through the courses offered under SWAYAM, credit transfer can also be made, as dictated by the UGC Regulation 2016 (MHRD, Govt. of India, 2016). The intention of the Government has been to internationalize and standardize the Indian education system from the eighth standard to higher level across the whole country. Through the courses launched under SWAYAM, the transfer of the credit among the learners of the different universities and institutions of the country is sought to be initiated so that learners irrespective of sex, age and place are finally able to receive lifelong learning opportunities. However, the extent to which the available MOOCs are actually contributing to credit transfer in both conventional and Open and Distance Learning (ODL) universities of India needs further discussion.

5. Successful implementation of MOOCs for lifelong learning: some examples

A number of important studies have been carried out in different parts of the world to discuss the usefulness of MOOCs for the purpose of lifelong learning. The following are some of the studies where it is seen that online learning in general and MOOCs in particular have the potential to address the needs of the changing profile of the learners.

5.1 Grade change, tracking online education in the United States by Elaine Allen and Jeff Seaman

In the 11th Annual report on tracking online education in the United States, [Allen and Seaman \(2014\)](#) explored the nature and extent of online education. Analysis was carried out on a comprehensive sample of active, degree-granting institutions of higher education in the United States. The report illustrated that the percentage of higher education institutions that currently had a MOOC increased from 2.6% to 5.0% over the past years. The majority of the institutions (53 %) reported that they were still undecided about MOOCs, while over 33% responded that they had no plans for a MOOC. Only 23% of the academic leaders had believed that MOOCs represented a sustainable method for offering online courses, down from 28% in 2012. However, several leaders of higher education were uncertain about the benefits of MOOCs for the students or institutions but expressed their doubts that MOOCs could have a real impact on reducing the high costs in higher education.

5.2 *Technology-enabled learning (TEL) and lifelong learning for farmers (L3F) MOOCs of Commonwealth of Learning (COL)*

5.2.1 *Technology-enabled learning (TEL) via MOOCs of COL.* For the last few years, the [Commonwealth of Learning \(COL\) 2014](#) has been best utilizing the benefits of MOOCs. Having developed the guidelines for quality assurance and accreditation of MOOCs as part of the implementation of technology-enabled learning (TEL) in educational institutions, COL has been focussing on strengthening face-to-face training in the partner institutions and beyond to assist the teachers in adopting TEL through blended learning mode. To provide training opportunities to a large number of teachers, COL developed a MOOC on “Introduction to Technology-Enabled Learning” and entered into collaboration with the Centre for Distance Education (CDE) at the Athabasca University, Canada, in 2016. Offered twice in 2017, over 5,000 participants attended the TEL-MOOC 1 and TEL MOOC 2. Registration in TEL-MOOC 2 was over three times higher than that of the registration in TEL-MOOC 1. While the TEL-MOOC 1 had participants from 75 countries (including 40 Commonwealth member countries), the TEL MOOC 2 had participants from 94 countries (including 48 Commonwealth member countries). The results of both cohorts of the TEL MOOC showed that the successful certification rate in TEL-MOOC 1 was about 11% and increased to 18% in TEL-MOOC 2. Considering the usual success rate of any MOOC, this certification rate in TEL-MOOC was very high. Most of the learners in this MOOC expressed satisfaction with the instruction and technology and looked forward to enrolling in similar MOOCs offered by COL in collaboration with reputable institutions.

5.2.2 *Lifelong learning for farmers (L3F) of COL.* COL also took initiatives for promoting lifelong learning opportunities to the learners engaged in the vocational institutions and the farmers along with gender-specific courses for empowerment. Lifelong Learning for Farmers (L3F) is a holistic model which emphasizes continuous learning among the farmers using ICT, horizontal and vertical learning and networking with stakeholders. The L3F initiative focuses on linking human capital with social and financial capital. The initiative presents a model that is premised on the belief that an effective linkage of these three capitals will help in spiraling a self-sustaining development process. Taking into account the power of ICT and ODL, L3F has been able to evolve a socially acceptable, economically feasible and financially viable farmer extension system. Studies conducted during the period of 2012–2015 showed that the L3F model was effective in reaching a large number of farmers at a lesser cost. The model enhanced the empowerment and livelihood security of the marginalized farming households, particularly the women in countries such as Ghana, India, Jamaica, Kenya, Sri Lanka, Tanzania and Uganda. In fact, it is so cost-effective that every \$1 invested in the programme yielded \$9 worth of social returns to the farming communities. Financial institutions discovered that they earned eight times more income from L3F participants and the cost of capacity-building using ODL was six times lower than that of conventional face-to-face training. These results have attracted the attention of major government and international agencies who have adopted the model. Further, for the period from 2015 to 2021, the programme is focused on enabling the national and sub-national government institutions, as well as civil society and the private sector to establish models in their countries and constituencies. (<https://www.col.org/programmes/lifelong-learning-for-farmers>) These institutions are being encouraged and facilitated to reach large number of smallholder farming communities, particularly the marginalized women and youth, and provide them with opportunities for strengthening their livelihoods in a sustainable manner.

5.3 *Opportunities and challenges of MOOCs: perspectives from Asia by Joyce Chao-chen Chen*

The author of the paper stated that in the modern era of access to vast quantities of information daily, a person should reasonably acquaint oneself with an opportunity to learn.

According to the author, the library is the social institution and powerhouse for this purpose. For traditional distance learning, it is essential for libraries to serve as a focus of academic support. The author also referred to Sebastian Thrun, the co-founder of Udacity and how in order to realize the dream of lifelong learning through blended and online learning, he wanted to bring education to the doorsteps of the unreached and provide opportunities to the non-traditional learners who wanted to pursue lifelong learning. The author further explains how in the Internet age, in order to access the learning opportunity online, it is important to train the people and make them competent with information literacy through academic libraries that provide pedagogical support. MOOCs make sense with digital libraries which can support learning by playing a significant part in blending the MOOC-specific platform with learning resources. For instance, c-MOOCs could be useful for those areas where there is lack of adequate online infrastructure and resources. The author also referred to Khan Academy of India which provides resources freely to anyone to foster the openness movement and the resources could be aggregated and remixed so that learners could tailor them to their own needs. The most important point that the author makes is that such platforms can be shared even more widely across Asia and the world at large.

On the basis of the review of some successful cases of MOOCs implementation, it can be argued that the policy of the Indian Government for offering online courses in an indigenous national platform like SWAYAM since 2016 is a welcome move through which equality, quality and inclusive education could be cherished. However, it is equally important to examine the actual implementation of the courses under the SWAYAM platform in order to gain a true picture of the state of online courses in India. Besides, the aforementioned examples would also help in pondering over whether the courses under SWAYAM are actually able to offer opportunities for lifelong learning, whether credit transfer is actually possible or is taking place through the available MOOCs and so on. The way COL is trying to conceptualize the idea of MOOCs for lifelong learning through L3F, perhaps the same modalities can be adopted while offering MOOCs by the coordinating agencies such as IGNOU under SWAYAM in India to make MOOCs more effective for the Indian learners.

6. Current status of MOOCs in India

In India, for making education accessible to all, there is a need of using non-discriminatory and inclusive pedagogy for reaping the benefits of world-class education in equal manner. It is important to take note of the fact that since 2016, through SWAYAM, the Indian Government intended to promote an internationalized system of education. As per the report provided by the Minister of State (HRD), Dr Satya Pal Singh in the Lok Sabha: “Till 2018, more than 39 Lakhs learners have been enrolled in more than 1,600+MOOCs courses that have been run through SWAYAM. 60,000 persons have completed the courses. Credit transfer facility up to 20% is enabled through the notification issued by UGC/AICTE—‘Credit Framework for online learning courses through SWAYAM Regulation 2016’. It is the endeavour of MHRD to align the courses on the SWAYAM portal with the curriculum of Universities.” (<https://pib.gov.in>) Again, if we particularly comprehend the courses offered through CEC for undergraduate programme, UGC for postgraduate programmes and IGNOU for out-of-school learners for providing lifelong learning opportunity, which are three prominent National Coordinators of SWAYAM, it seems that compared to the CEC courses, the enrolment trend, the number of courses as well as the certification percentage are comparatively low under the UGC and IGNOU. Table 1 provides a picture of the present status of MOOCs offered by the three National Coordinators:

Till April 2019, CEC has 19 partnering institutes, 265 completed courses, 263,560 students’ enrolment, 5,221 registered students for examination and 1,625 students successfully completing certifications. In case of the UGC, which provides postgraduate courses as

MOOCs, till April 2019, it has 22 partnering institutes, 220 completed courses, 164,997 students' enrolment, 4,965 students registered for examination and 1853 students successfully completing the certifications. As a platform of providing lifelong learning opportunity, till April 2019, IGNOU has only 3 partnering institutes, 36 completed courses, 47,529 students' enrolment, 483 students registered for examination and none of them successfully completed the certifications. Interestingly, in Table 1, it is seen that only 2% learners at CEC, 3% at UGC and 1.01% at IGNOU registered for the examination. The majority of the students left out from the courses before completion. Besides, the percentage of passed-out learners who have received the completion certificates is very low compared to the total enrolment in courses offered by UGC (37.32%) and CEC (31.12%). In case of IGNOU, which offers lifelong learning opportunities, not a single learner who had received course completion certificate was found till April 2019. This situation has shown the stark reality regarding the popularity and awareness of the India learners, particularly the youths, regarding the available MOOCs under the SWAYAM platform.

The data analysed in Table 1 provides important details of the current modes and popularity of digitally offered education in a country like India. However, the educational institutes across India may adopt and produce some need-based MOOCs under SWAYAM with a view to introducing some opportunities of lifelong learning in the real sense. Thus, the courses run through SWAYAM would help in achieving the three cardinal principles of the Indian Education Policy, namely access, equity and quality. The UGC has issued notification to the Indian universities to identify the courses where credits can be transferred on to the academic record of the students for courses done through SWAYAM. The assumption is that credit transfer shall bring flexibility into higher education, permit continuous global mobility to students and enable them to pursue subjects/courses of their choice from interdisciplinary, intradisciplinary and skill-based courses. It can therefore be assumed that this would lead our education system to match up with the available international educational systems and patterns.

7. Challenges of adopting and implementing MOOCs in the Indian context

In the industrial and techno-based era, MOOCs have emerged as one of the most potential tools for offering quality learning opportunities to the entire world. It is observed that country-wise, various national digital platforms have evolved as the fallouts of the explosion of knowledge and technology in both the developed and developing countries. In case of India too, it is observed that the policymakers and education providers seem to be emphasizing more on the implementation of online courses in virtual learning environment. But in the real sense, due to the variations and availability of adequate resources in different parts of the country, the outcome or the success rate of such online courses is yet to be fully assessed in India. The following are some of the challenges to be met against the contexts of discussions in this paper.

Status (till April 2019)	CEC	UGC	IGNOU
Partnering institutes	19	22	3
Completed courses	265	220	36
Student's enrolment	263560	164997	47,529
Registered for the examination	5,221 (2%)	4,965 (3%)	483 (1.01%)
Successfully completed	1,625	1853	None
% of successfully passed-out learners	31.12%	37.32%	0%

Source(s): (www.swayam.gov.in)

Table 1.
Status of MOOCs
offered through CEC,
UGC and IGNOU till
April 2019

- (1) In a diverse country like India, the education system is so heterogeneous that the introduction of a common framework of MOOCs-based learning system throughout the country by the UGC is practically too difficult.
- (2) Designing the curriculum based on experiential learning pedagogy in online format for the learners is not so easy because quantification of units and counselling hours in curriculum transaction is not viable all the times.
- (3) The lack of proper knowledge and training on the part of the teachers and the administrators in using the ICT-based technologies in educational purposes in schools as well as higher educational institutions still remains a challenge to overcome.
- (4) The lack of motivation of the teachers in altering their teaching methods from chalk-talk to techno-pedagogy is also a big challenge in the Indian context. Besides, there is a lack of awareness on the existing techno-pedagogical skills on the part of the education providers or the academic institutions particularly using MOOCs.
- (5) Proper infrastructure is the prerequisite for providing ICT-based learning opportunities to the learners. Therefore, there is a need of material and human resources as well as media culture in an effective way. But in the Indian context, there is a division between haves and have nots (which is also known as digital division) in terms of accessing Internet connectivity and other required facilities for running a course smoothly.
- (6) There is a lack of proper research on the usefulness of MOOCs as part of the CBCS or how MOOCs has facilitated the idea of credit transfer at both UG and PG levels, or the completion rate of such courses by the learners in the context of India.
- (7) Some of the other reasons behind MOOCs losing popularity are questionable course quality, high dropout rate, unavailable course credits, ineffective assessments, complex copyright and limited hardware. Table 1 has shown the percentage of the learners who had registered for the examination which is not more than 3% under UGC, 2% under CEC and 1.01% under IGNOU. More than 97% dropouts in the MOOC courses in India can be seen as one of the biggest challenges of MOOCs implementation in India.
- (8) No adequate research seems to have been carried out while offering MOOCs for lifelong learning through SWAYAM. Thus, it becomes difficult to ascertain the success rate of the existing MOOCs. This also demands a detailed study of the different existing MOOCs in SWAYAM offered by the National Coordinators and their utility.

8. Conclusion

It is important to note here that a new kind of social transformation is currently being initiated across the world by encouraging more and more online interventions in education. In fact, various studies have been being conducted on the implementation of online courses across the world, particularly in the developed countries where more than 70% education is delivered online. However, in India, MOOCs do not seem to be so popular till today and it is accessible only to a small section of the society. The UGC, with a view to promoting CBCS as well as credit transfer, made 20% course delivery through MOOCs mandatory in the arena of Indian higher education. However, the CBCS itself has several loopholes in the Indian context,

as it was launched without sufficient ground work and a majority of the people does not have a clear idea of its implementation method for the time being. The UGC's mandate for credit transfer through MOOCs was to introduce a system of education that would help in bringing a parity of the Indian higher education with the Western or European higher education systems. This, however, necessitates a detailed study on MOOCs differentiation in India on the basis of a survey of the common problems that need to be resolved first and how an analysis of the situation is too essential as part of meeting the needs of lifelong learning for the Indian learners.

As many researches have already proven, MOOCs are the future of ODL in the present century. They have not only made education accessible to anyone, anywhere, anytime across the world but have also provided a new direction to avail the quality educational opportunities provided by hundreds of public and private universities or organizations in the whole world. In fact, for providing the lifelong quality education as well as sustainable education, there is a need of offering courses through the blended mode which is suitable at the present-day Indian context. As think tanks, the Indian universities should play a central role in making the students as well as the common masses aware of the educational interventions made by MOOCs under the SWAYAM platform. Besides, there is a further scope for addressing the practical utility of MOOCs in the real sense through some empirical studies done on the exiting MOOCs offered by various leading universities across India. Thus, the new social constructivism of lifelong learning that is being initiated through MOOCs in India should be a matter of serious scrutiny in the days ahead.

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