MOOCs Revamping Indian Higher Education: Escalating Access, Equity, and Quality

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The 21st Century is known for both technological innovations and pedagogical advancements in education and research. The credit directly goes to newly invented digital disruptions with exceptionally growing needs, known as MOOCs (Massive Open Online Courses). For a developing economy like India, quality higher education is a great asset for its social and economic growth. Access, equity, and quality are the chief concerns in successfully accomplishing the vision of Indian Higher Education. Positioned second in population; third in the education system; and emerging youth nation; India can reap the maximum benefits of MOOCs for catering varied and fast-changing educational needs of modern learners. MOOCs can help Education Policy 2020 fulfill its vision of providing qualitative education to its citizen. It needs total revamping of higher education through judicious mixing of technology and pedagogy through MOOCs. This research paper is descriptive in nature and evaluates the meaningfulness of MOOCs in higher education in India. Critically examines the potential of MOOCs, challenges, and future prospects with respect to access, equity, and quality concerns.

Keywords: Massive Open Online Courses, MOOCs, higher education, online education, quality education, NEP 2020

INTRODUCTION

UNESCO has declared education a universal birthright of every born child and focuses primarily on equitable quality-based education and lifelong learning [Education-2030]. National Policy on Education 2020 (NPE-20) has given utmost importance to equity and quality-based education and regarded it essential for the development of maximum human capacities, the establishment of a society based on equity and justice, and the promotion of national development and integration. The policy envisions providing universal access to high-quality education for maximum utilization of human talent and resources for the betterment of the whole of mankind. India has the highest number of youths in the world who will decide the country's fate and future if provided with qualitative equity-based educational opportunities. Goal 4 (SDG4) of the 2030 Agenda for Sustainable Development, which India already adopted in 2015, seeks to "ensure inclusive and equitable quality education and promote life-long learning opportunities for all" by the year 2030 (p. 3). Higher education is mainly responsible for research and innovation, which further helps in refining the status and lifestyle of the people of the country. Higher education prepares students

for life's challenges and equips them with a suitable and right profession. National policy 2020 explains that higher education is prominently essential for human and social well-being, and its dreams of developing India as per the tenets of its constitution- "a democratic, just, socially conscious, cultured and humane nation" and through sustaining "liberty, fraternity, equality, justice for all." Higher education is committed to ensuring the country's sustainable livelihood and economic development. It instills among young learners a specified set of skills and values and prepares them to be morally and ethically sound persons (p. 33).

According to the data of Statista, 2021, India is the second most populated country after China, with just under 1.4 billion people. The data from the Ministry of Youth and Sports Affairs (2014) revealed that India is emerging as the most youthful nation globally, with an average age between the age range of 15-29 (p. 10). India is developing as a leading global labor market. The data from the Ministry of Labour and Employment showed that there is a great need for formally skilled labor in India, which is presently at 2%, far below that of many developed and small nations (p. 4). Providing a qualitative higher education to its youth with a global perspective can turn India into a knowledge-based developed economy. The Ministry of Education of India has three major basis and cardinal principles, i.e., Access, Equity, and Quality. The ministry is working on the same lines as suggested by UNESCO in its several agenda. India started this mission of education just from the eve of independence. There were only 500 colleges and 20 universities on the day of freedom in 1947, with a very small enrollment of nearly two lacks. After gaining independence, India never looked back and went on to grow its overall education system, especially higher education (Kaur, 2018). Since independence, various commissions, reports, policies, and projects collectively contributed to what India owes today as one of the world's largest education systems.

India has a rich flora and fauna; a favorable geographical location; an abundance of physical and human resources; and a rich diversity in terms of culture, language, regions, beliefs, commonalities, and religions. Even after 75 years of independence, the benefits of this maximum diversity have not been fully reaped. The dream of accessibility to quality education has been hurdled by the existing huge regional diversity preventing many young learners living in remote and deserted lands from gaining quality higher education. Varghese & Malish (2019) in his study found that the fast growth of Indian higher education has brought with it more regional and social inequalities with respect to access to higher education for poor, socially deprived, rural, and marginalized sections of society (p. 35-36). Sheikh (2017) revealed that equity in higher education shows a considerable mismatch between various sections of society GER. It includes gender and locality (p. 40). There are increasingly many instances of discrimination, even in renowned higher education institutions throughout the country, concerning educational opportunities on the grounds of gender, region, religion, language, caste, creed, etc. Such discrimination on several grounds has badly shattered the dreams of attaining equity in education. Poor teaching and learning strategies; low quality of content; lack of technology-enhanced learning; mindset of teachers and other stakeholders of education; lack of adequate training; poor digital infrastructure; and the digital divide; are chief barriers to attaining and maintaining the parameters of quality in higher education. Hence, it is really a challenging task for the government, administrators, and all other stakeholders of education to meet the educational and career demands of diverse learners of the 21st Century, who are smarter, more potent, and more creative on the three main parameters of equity, equality, and quality. Providing affordable equity-based qualitative higher education to the talented youth of the nation is the only way to optimize their potential, make them useful for societal and national development, and make them a real contributor to India's developing economy. This substantial task requires a reimagining of the entire education system, especially higher education, with a fresh outlook.

OBJECTIVES

Objectives shall explain the purpose of the study. The current study undertakes the following:

- To examine the current status of Indian higher education.
- To discuss various challenges to higher education in India
- To discuss and highlights the concept of MOOCs with its various features.
- To discuss the history of MOOCs in India.

- To throw light on real threats before the successful implementation of MOOCs in India.
- To discuss the hidden potential of MOOCs in revamping Indian higher education.
- To suggest measures to enhance the effectiveness of MOOCs.

RESEARCH METHODOLOGY

A descriptive research methodology has been used while writing this research paper. Various sources such as governmental documents, statistical reports, policies, related literature, and various important government websites have been used for the study. Researchers' personal experience as educators has been a good source of insight. The data have been extracted and analyzed in the light of these sources and used to solve the question at hand.

CURRENT SCENARIO OF INDIAN HIGHER EDUCATION: AISHE REPORT 2019-20

Higher Education in India is witnessing a phase of unpredicted explosion in the number of students enrolled every year. There is also a continuous and substantial expansion in the number of universities and institutes since the eve of independence (AISHE, 2019-20). The Survey report can well illustrate the actual scenario.

All India Survey on Higher Education, 2019-20 (AISHE-19) by the Govt. of India revealed that the number of universities has increased from 799 in 2015-16 to 1043 in 2019-20, with an increase of almost 30.5%. The number of colleges has also grown from 39,071 in 2015-16 to 42,343 in 2019-20, with an increase of almost 8.3%. There is a tremendous hike in the number of students enrolled, from 3,45,84,781 in 2015-16 to 3,85,36,358 in 2019-20, with a surprising increase of 11.4%. The number of teachers showed a declining trend from 15,18,813 in 2015-16 to 15,03,156 in 2019-20, with a decrease of around 1% in 5 years, comparatively less as compared to the strength of the students. The gross enrolment ratio (GER) also hiked to 27.1 from 26.3 in 2018-19, which is still far below the GER of developed Nations. Gender Parity Index (GPI) also showed a remarkable increment over the last five years, and it increased to 1.01 in 2019-20 from 0.92 in 2015-16. Pupil-teacher ratio was calculated as 28 for universities and colleges for regular modes, which is far behind the pupil-teacher ratio of developed countries like the USA, UK, and Australia.

Summary of Data

The data reveal the ongoing scenario and trends of higher education in India. Almost all fields of higher education have undergone reckless expansion. But a major concern is that the higher education quality and quantity ratio has not been balanced. It is still a big challenge for India to materialize the dreams of the ever-growing number of students and provide them equal opportunities for quality higher education. Access to higher education is still less than the minimum international threshold, and the distribution of institutions throughout the country is skewed. In spite of this exponential growth in enrolment, the GER of 27.1% (aishe, 2019-20) is still far behind our target GER of 50%, which the policy envisions attaining by 2030 (NPE, 2020). Also, the pupil-teacher ratio is not up to the mark, and classes are overcrowded. The increase in the number of institutes and universities is yet disproportionate to the quality of education that is being dispersed. In spite of thousands of universities and colleges, the international ranking of Indian Institutions has been consistently poor. As per QS World University Ranking 2021, only three Indian Institutions found a place among the top 200. These institutions include IIT-Mumbai, IISc-Bangalore, and IIT-Delhi. It is a most worrying fact for educational planners and administrators. This setback in Indian higher education has roots in a variety of factors and issues. Several studies may best explain these factors.

CHALLENGES TO INDIA HIGHER EDUCATION AT A GLANCE: NEW POLICY (2020) PERSPECTIVE

NPE-2020 highlighted some major issues and problems in Indian higher education. The ecosystem of higher education institutions is highly fragmented, and less attention is given to the development of

cognitive abilities. There is limited academic freedom for teachers for independent studies and research and a lack of autonomy in institutions. The governance, leadership, and regulatory mechanism are working below par. Higher education lacks a research environment and academic standards at most universities and colleges (p. 33). Sharma & Sharma (2015), in their study on the Indian higher education system, found that it has a mismatch between supply and demand, inadequate quality of research, poor faculty-student ratio, and poor employability of graduates (p. 2). There is a shortage of proper physical and infrastructural facilities, a scarcity of qualified faculty, and growing political interference in higher education (Vedantu, 2020). Manak (2020) discussed in his paper that higher education in India is not a proper and efficient mechanism to ensure accountability and track professors' continuous performance. The huge unplanned expansion gave rise to the trend of unaccredited institutions compromising quality and standards. There is a lack of transparency and professionalism to a great extent (p. 116-17). Tilak (2020) studied that as a result of the adoption of neo-liberal education policies, higher education in India has witnessed an excessive increase in student fees, excessive privatization of higher education, and uncurbed out-migration of students. Apart from this, we can conclude that even in this age of technology, the higher education system is strictly traditional and restricted to the chalk-talk method. In most cases, learning is not a joy for students; rather, it is imposed and monotonous for them. Teaching lacks depth, variety, experimentation, and individualization. The classroom experience greatly wants engagement, activities, and interaction. Poor pedagogies and outdated curricula are also major barriers to quality higher education.

It is the right time to plan well and execute sincerely such a mechanism that can overcome these challenges and barriers to higher education, along with the barriers of access, equity, and quality that are haunting the visions of higher education in India. One of the best practical solutions is the thoughtful integration of the latest technology with advanced pedagogies, digital content development, and an effective delivery mechanism and assessment system. Undoubtedly, Massive Open Online Courses (MOOCs) are the true game changer. Through developing and adapting MOOCs in higher education, we can achieve the triple objectives of access and expansion, equity and inclusion, and quality and relevance. MOOCs have such features and potential which can effectively help reshape and reimagine Indian higher education. The popularity and trends of MOOCs in higher education are gaining momentum day by day all over the world. The number of students opting for MOOCs is rapidly growing over the world. The number of students in India enrolling in Coursera, edX, Khan Academy, and Swayam (the renowned international MOOC providers) is increasing very tremendously and is likely to increase more in the coming years. MOOC has huge potential to cater to all the problems related to access, equity, and quality in higher education. However, India has started working on her own MOOC digital online plate-forms like SWAYAM, NPTEL, mooKIT, and other digital platforms. It is high time that India should focus on developing and designing its own MOOCs providers and working on the challenges on its way to implementation and successful extension.

MOOCs: MASSIVE OPEN ONLINE COURSES

MOOC is a recent innovation and digital interruption in the field of online and distance education. Knox (2015) said that MOOCs are noted as remarkable developments in the field of education and technology. It is a new way of providing education and training to higher education learners (Rivas, Baker, & Evans, 2020). MOOCs are affordable, flexible, and easily accessible Web-based learning programs designed for masses scattered worldwide (Chai, n.d.). MOOCs are “open, participatory, distributed” for learning trends in higher education in recent years (Baturay, 2015). MOOCs have additional merit over traditional teaching methods as they supplement classroom lectures by providing videos, study material, assignments, activities, question banks, and discussion forums. MOOC makes learning highly interactive, engaging, and joyful. It eliminates the barriers of distance and time by allowing a large number of students around the world to access the course material at any time of the day for free or at a reasonable cost for credit courses.

Dave Cormier of the University of Prince Edward Island 2008 coined the term “MOOC.” It was a response to a course called 'Connectivism and Connective Knowledge' (CCK08) led by George Siemens of

Athabasca University and Stephen Downes of the National Research Council. This course consisted of 25 paid and over 2200 online students who paid nothing. The declaration of the year 2012 as 'The year of the MOOC' by The New York Times expresses the potential and future perspective hidden in MOOCs. Many online course providers, like Coursera, Udacity, edX, etc., came into existence. They are associated with leading institutions of the world. MOOCs are in the developing phase and are yet to shine. The following are some famous online course providers in the world.

- Coursera is a leading MOOC provider established by Andrew Ng and Daphne Koller, professors at Stanford University, USA, in April 2012. It offers a variety of free courses and degrees, working with the world's best universities and top-class professors. It will have approximately 33 million users by 2018.
- Udacity is the fruit of the combined efforts of Sebastian Thrun along with Mike Sololsky and David Stavens, former professors at Stanford University. It was launched in February 2012.
- edX is a non-profit organization founded by Harvard and MIT in May 2012. edX provides interactive online classes from the world's best universities like MIT, Harvard, Berkeley, and others in the field of biology, business, finance, economics, mathematics, humanities, physics, etc.
- Khan Academy: It is a free and non-profit educational organization situated in America. It was established by Salman Khan in 2005 with a vision to provide free and qualitative online education to anyone anywhere over the globe. Academy offers exercises for practice, instructional videos, and highly individualized learning tools which help learners to learn at their own pace of learning.

EMERGING CHARACTERISTICS AND FEATURES OF MOOCS: CUTTING BARRIERS AND CHALLENGES

MOOC is the latest digital advancement and an emerging trend in the field of teaching and learning. It is gaining popularity and momentum both day by day all over the world. It dominates the existing traditional classroom practices, pedagogies, and structures. Many leading institutions of the world are coming forward to develop and design digital platforms to deliver MOOCs for their students. Every word of the term 'MOOC' speaks about its usefulness. Some of the major features are discussed here in brief.

MOOC is an acronym for a massive, open, and online course. Bozkurt, Ozbek & Ritcher (2017) discussed in their research that MOOCs are massive in nature and have diversity in several aspects as "cultural, socioeconomic, demographic, and many other dimensions." A large number of learners all around the world, irrespective of their geographical location, can access and participate in MOOCs. Powell & Yuan (2013) highlighted in their study one of the important features of MOOCs: their openness to curriculum, learning, assessment, and platform. MOOCs have the potential to address the main challenge of accessibility by providing higher flexibility. It is accessible to everyone, irrespective of age, language, culture, region, locality, and religion, without any pre-requirement. Anyone can access the course material at any time of the day from anywhere in the world through the internet. Haumin & Madhusudhan (2019) described that MOOCs are online as the content and course is delivered through digital platforms via the internet. It eliminates the time and distance barrier and offers its learners flexibility. There is no need for physical presence at any institute. Jaganathan, Sugundan & Sivakumar (2018) found MOOCs highly interactive for learners. They have the chance to interact with fellow learners and educators and are able to share their ideas and opinions. The online lectures are supplemented by reading material, videos, and assessment tools like quizzes, tests, assignments, and discussion forums. The variety of multimedia instructional material motivates the learners and arouses their interest in studying. Chakravarty & Kaur (2016) found that MOOCs engage learners and enable them to self-regulate their active participation as per their needs, interest, and previous knowledge and skills. It enables the learners to learn at their individual pace and satisfies their varying educational needs and problems. Pilli et al. (2018) revealed in their review study on MOOCs that developing and designing MOOCs is a sort of experimentation for teachers, researchers, business persons, and technicians. It will surely inculcate a sense of inquiry and experiments

in engaged education stakeholders. Enrolling more and more faculties at higher education institutions in developing and validating MOOCs will change their stereotypes, mindset, and fear of adopting technology in teaching and assessment. MOOCs have opened up the gateway for sharing, discussion, and dialogue among world educators, experts, researchers, and learners. MOOCs have shifted the teacher-centric approach to a more joint, collaborative learner-centric one. The distinguished feature of MOOCs makes them user-friendly and helps the education community share a common platform unifying the whole world. MOOCs support the idea of lifelong learning and adult learning by equalizing educational facilities for learners of all ages and levels (Bordoloi, Das, & Das, 2020). MOOC is bliss for those learners who have not been a part of the mainstream of education. This learning format is also useful for bridging the digital divide, preventing millions from accessing education (Savita, 2019).

MOOCS IN INDIA: A BRIEF ACCOUNT

TABLE 1
HISTORY OF MOOCS IN INDIA

Platform	Year	Developer	Link
NPTEL	2003	IIT Madras	https://gate.nptel.ac.in/
mooKIT	2012	IIT Kanpur	https://www.mookit.in/
IITBombayX	2014	IIT Mumbai	https://www.iitbombayx.in/
Swayam	2016	Govt. Of India	https://swayam.gov.in/

It has not been so long since India started providing online courses to its learners with the introduction of NPTEL (National Programme on Technology Enhanced Learning) initiated by MHRD in 2003 with the help of combined efforts of seven Indian Institutes of Technology (IITs) and Indian Institutes of Science (IISC) providing courses in the field of science and engineering after it followed the development of mooKIT, a powerful management system, founded by Indian Institute of Technology, Kanpur in 2012.

In around 2014, India came up with a new mode of learning which was blended learning, a judicious mixture of classroom learning and online approach, by introducing a new digital platform known as IITBombayX, a non-profit, open-source software funded by the Ministry of Human Resource Development (MHRD), Govt. of India. The main aim behind the development of IITBombayX was to expand access to education for learners spread across far-flung areas; to enhance teaching and to learn on campus, to support online and advance teaching and learning through research work; and to spread quality education wherever there is internet access.

SWAYAM (STUDY WEBS OF ACTIVE LEARNING FOR YOUNG ASPIRING MINDS)

India continued to make deliberate efforts in the direction of making MOOCs fully adapted to her educational background at all levels of education. One more fruit of her efforts is the recent innovation in online education, named SWAYAM stands for “Study Webs of Active Learning for Young Aspiring Minds,” a digital platform to provide a wide variety of online courses to cater to the diverse needs of the learners all around the country. It was launched by the Ministry of Human Resource Development, MHRD, Government of India, in 2016 to achieve the three cardinal principles of educational policy, i.e., access, equity, and quality. SWAYAM has been functioning through indigenously developed IT platforms and covers courses from class 9th onward to post-graduation, accessible by anyone, anywhere, and anytime in India. More than 1000 specially chosen faculty and teachers from across the country are engaged in preparing interactive and quality-based courses free of cost. Initially, it aimed at preparing 2000 courses and 80000 hours of learning coving courses from school level to university level. Seven coordinators have been appointed, viz. NPTEL, UGC, CEC, NCERT, NIOS, IGNOU, and IIMB for the design and development of MOOCs in their concerned area to accomplish this objective effectively.

The development of these several digital platforms to offer online education removes many challenges and hurdles in the path of democratization of education, viz. access, equity, and quality, and helps overcome many demerits of the traditional education system. Various studies on MOOCs in India have revealed that India has not been able to reap the benefits of technological inventions and advancements in the field of education. Swayam portal delivering MOOCs to promote online and distance education have not been very effective as it was found to suffer from high dropout rates. The full revamping of the higher education system is yet to be carried out. MOOCs in India have yet to reach their climax in the coming time, as the real potential of MOOCs is still undiscovered. If developed and designed carefully and implemented effectively, MOOCs can be proven game changers for Indian higher education.

REAL THREATS BEFORE MOOCS IN INDIA: A BRIEF REVIEW

With the advent of technology in teaching-learning practices and the increasing number of participants, there are chances for challenges and hurdles to come to the limelight. There are various challenges in developing and effectively implementing MOOCs in India's higher education. Some are discussed below:

Banwari (2018) pointed out in his study that language is a chief barrier to the success of MOOCs in India. There is a lack of courses in different regional languages, and most courses are offered in English (p. 407). Delivering MOOCs needs high data rates on both ends. Owing to huge regional diversity, there are many areas in India, like deserts, hilly areas, tribal regions, etc., where internet access is either very low or is not possible. It makes the dream of access and expansion of higher education quite impracticable. Implementation of MOOCs requires high digital literacy on the part of the learners and the teachers. Devi (2019) discussed in his paper some major limitations of MOOCs in India, which include a lack of awareness about MOOCs among students and teachers and high dropout rates (p. 455). The rate of completing the online course is very low due to a lack of variety and insufficient interactivity to capture the learners' attention and interest. Biswas & Sarkar (2020) conveyed that MOOCs require a high level of technological infrastructure (hardware and software) and internet connectivity, which are not easily affordable for a developing country like India. Developing MOOCs requires greater investments. In a developing country, to meet such requirements is very expensive and is beyond the reach of common men. The quality of material provided online is another issue. There is still a great dearth of experts and professional MOOC designers in India, making the online course less attractive and of poor quality, failing to capture the attention of young learners. Rolfre (2014) discussed that traditional education is chiefly overpowered by outdated pedagogies which are unable to meet the diverse learning needs of 21st-century learners. The same pedagogies are scaled up in MOOCs which is mainly responsible for low outcomes of MOOCs and high dropout. Sandeen (2013) revealed that MOOCs are also criticized for their low level of assessment. Assessment of higher-level domains (psychomotor and affective) is still a challenging task. Cheating is also a major worry in online assessment (Chen, 2014). Adhikari and Semalty (2021), in their study on SWAYAM MOOCs, revealed that many courses on Swayam lack utility for learners and proposed the development of more need-based MOOCs. They further proposed that MOOCs developers should be duly recognized and be given proper training in delivering content on digital platforms with pedagogic expertise. Developers should be exposed to Gagne's and Bloom's taxonomy (Adam, 2015). Murthy et al. (2018) discussed in their study that merely having content expertise is insufficient, and the same cannot promise the successful running of a MOOC program. They proposed that more effort should be put into developing and transacting the content effectively, interestingly, and engagingly. It will surely enhance the success rate of MOOCs in India. National Policy on Education-2020 demands an allocation of 6% of GDP on education, which has been overlooked since the Kothari Commission (1964-66) to the present year, 2021. Various infrastructural inadequacies, poor connectivity, and low technological support, as barriers to the success and future of MOOCs, can be overcome by fulfilling the recommended financial allocation of 6% with firm resolve and determination (p. 60). Zhakharova & Tanasenko (2018) revealed in their study that the production and development of MOOCs are a much time taking process and involves higher financial and labor cost (p. 186). It induces stress among developers during the course design. It needs special adjustments

in the educational system in terms of organization, management, control, skills, and technical competencies (p. 195).

POTENTIAL IN MOOCS: REVAMPING HIGHER EDUCATION IN INDIA

"MOOC has a huge potential veiled in India. Recent years have seen a tremendous hike in enrolment by Indian students in MOOCs all over the world. India is among the leading countries in terms of enrolments in courses offered by many popular MOOC providers, including edX, Coursera, and Udacity" (Chauhan, 2017). HarvardX and MITx carried out research in the year 2014, according to which 10.5M students in Coursera were of Indian origin. India has become the second largest community of online learners after the United States of America. Data trends revealed that India has a large community of learners who will be using online learning platforms soon (Das, 2018). Mukherjee, 2021 noted that Indian students consist of 8% of total learners enrolled in MOOCs worldwide and 12% of those enrolled on Coursera and edX. MOOCs have become the call of the hour, not only for India but for the whole world. Shah (2020) revealed in his review of trends and statistics of MOOCs that the number of students enrolling in renowned MOOC platforms has increased drastically in a single year.

TABLE 2
TRENDS OF ENROLMENT IN MOOCS

MOOC Platform	2019	2020	Total	Links
Coursera	8M	31M	76M	https://www.coursera.org/in
edX	5M	10M	35M	https://www.edx.org/
Future Learn	1.3M	5M	15M	https://www.futurelearn.com/
Class Central	350k	800k	2.3M	https://www.classcentral.com/

(Shah, 2020, class central)

The data tabulated above illustrate well the growing fervor for MOOCs over the globe. The users have grown many-fold in a single year marked by the spread of pandemics, where all educated was confined to online mode. Shah also concluded that the total number of learners registered in 2020 was about one-third of the total registered. He called 2020 a consequential year since the "year of the MOOC" as the total number of students enrolled throughout the world (excluding China) touches 180M. India is no exception to this increasing momentum of MOOCs.

India is the world's second-biggest market for MOOCs after the US. In a short time, India may surpass the US, after all. India's population is second to China's, and India is 3rd in terms of university enrolment worldwide after US and China, respectively. The demand for higher education is increasing day by day, which alone cannot be met by the traditional structure of education. Only MOOCs are a ray of hope for those who could not join regular study modes because of high fees, inflexibilities, and many other reasons. The number of learners registered on SWAYAM has also increased significantly in the last two years as a requirement to learn online during the period of covid19. MOOCs have the potential to meet the learning needs of students enrolled in regular and distance education. More than 3.85M students are enrolled in regular education, and more than 4.28M students have opted for distance mode of education (aishe, p. 22). Demands of such a huge number of students having maximum diversity in terms of learning needs, individual differences, and career goals cannot be solely met with existing educational setup, regular or distance. Kanjilal & Kaul, 2016 mentioned that MOOCs have the potential to bridge the gap between educational facilities existing in various sections of society across the country by ensuring 24 hours access to quality resources and teachers for learners without any discrimination with respect to social, economic, or educational status.

MOOCs have huge opportunities in terms of an open and online education revolution. If India can work out and resolve the major threats before the success of MOOCs as discussed above, namely poor connectivity; digital divide; etc., MOOCs could give a huge number of learners across the country easy

access and availability to high-quality education, transforming their lives and fully realizing their potential and dreams of life-long learning. India, being a developing country, has a number of burning issues like poverty, unemployment, child labor, ignorance, etc., where many young minds have to give up the dream of acquiring higher education owing to the rigidity of traditional education.

DISCUSSION AND CONCLUSION

Nath, Karmakar & Karmakar, 2014 concluded in their pilot study that MOOCs are a new era in the field of education and have greater acceptability for a large number of students from almost all fields of knowledge (p. 162). In light of the issues and challenges of Indian higher education and the prospects of MOOCs, as already discussed, we can express that rise of a new era in Indian Higher Education is possible by developing, designing, and validating MOOCs in a way to overcome challenges and to serve the masses in its true spirit. India has an ever-growing number of young talented minds entering higher education to realize their dreams of sustaining education for a long time. The rate of enrolment in higher education is alarming. Catering to the fast-changing and diversified educational needs and students' problems has been a major issue in India. India is committed to providing its young learners with equitable quality-based lifelong education, which seems to be only a dream in the existing traditional setup. Even after 75 years of independence, the Gross Enrolment Ratio (GER) of 27.1 is still very poor. It questions the provisions for the accessibility of young learners to educational facilities and opportunities. The emergence of MOOCs, a new and innovative strategy in providing education in terms of several digital platforms like NPTEL, SWAYAM, IITBombayX, etc., has awakened the hopes of realizing the dreams of our education policy. MOOCs have sufficient potential to minimize traditional education challenges and problems, ranging from poor infrastructural facilities; low access and quality; high dropout rates; discrimination and inequality; high cost to poor quality material; and lack of motivation and interest among learners. The increasing interest of Indian learners in global MOOCs providers like Coursera, edX, Udacity, etc. marks the hidden opportunities and potential of MOOCs which can be developed and sustained by developing and designing more and more indigenous digital platforms providing online education based on equity and quality. It is a golden opportunity for India to exploit all possible benefits from advanced technology by judiciously integrating it into educational practices and providing modern learners with the best alternative to the outdated traditional mode of teaching and learning. The future of MOOCs in India is blooming and has to attain its climax making India a global MOOCs provider.

MOOCs designed and developed by experts, and trained professionals may bring revolution to the Indian higher educational system overcoming all the drawbacks of a traditional setup. MOOCs can start a new phase in higher education by providing a fresh and innovative approach to imparting education in connection with classroom practices. Govt. should focus on setting up a team of experts and IT professionals from leading institutions throughout the country so that more and more courses, attractive and interactive in approach, well experimented with and validated, can be designed in a short duration. The existing MOOCs should be critically reviewed by experts and analysts and re-validated on several parameters. There is a great need for collaboration among Indian and foreign faculty of top institutions on cutting-edge problems of education, such as the development and validation of MOOCs; and designing indigenous digital platforms to enhance the effectiveness of existing platforms like Swayam. However, the government has started working on it by initiating various projects such as SPARC (Scheme for Promotion of Academic and Research Collaboration), STRIDE (Tans-disciplinary Research for India's Developing Economy), and GIAN (Global Initiative of Academic Networks). The sincere attitude and commitment of the government and various education stakeholders can make these initiatives a great success. Government and the ministry of education should provide adequate funding and resources to attract qualified faculty and researchers to pursue research studies on the development and validation of MOOCs. A comparative analysis of MOOCs across borders can also be beneficial to get real insight and input.

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