

Access, Equity, and Quality in Higher Education: Envisioning India Through SWAYAM

Harihara Bhesera, Shankar Lal Bika
Central University of Punjab, Bathinda, India

The scientific and technological advancement in the 21st century has revolutionized all most every sector including education. The application of information and communication technology is widely acknowledged among the learners and educators, especially, in distance and online education across the globe. The Massive Open Online Course (MOOC) is an outstanding result of the technological revolution in the field of education. The MOOC is an online learning platform introduced to serve the contemporary demands of quality education of the learners. Ministry of Human Resource Development (MHRD), Government of India, meanwhile, introduces the Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM) as its native MOOC platform having the three cardinal principles such as access, equity, and quality in education. SWAYAM is the indigenous MOOC platform in India designed to provide quality educational experiences to the learners in the country and abroad. This paper conceptualises how SWAYAM is serving the three cardinal principles, i.e., access, equity, and quality with special reference to higher education (HE) in the present context. The paper focuses on the milestone of Indian higher education with the dynamic role of SWAYAM initiative. This paper will be beneficial especially for SWAYAM MOOCs aspirants and learners and teachers of higher education institutions in India.

Keywords: access, equity, higher education, quality, SWAYAM

Introduction

Higher education (HE) plays an eminent role in the formation and expansion of knowledge and economic growth of the country. The socio-economic transformation of the country generating knowledge and innovation is paramount in part of HE. Since independence, education, especially HE, has been the central focus of the developmental agenda in India. HE is prominent in decision making and policy formation in the country for advancing social, cultural, political, and economic status and quality life among people (Saravanakumar & Devi, 2020; Chankseliani, Qoraboyev, & Gimranova, 2021). People's development is central to HE in India. The National Education Policy 2020 emphasises the role of HE in promoting social and human values, constitutional morality, and sustainability having the broad aim of national welfare. The policy further emphasises the responsibility of HE for the preparation of conscious human being, and skilled and productive citizens (Ministry of Education, 2020). For achieving such a great vision, however, quality HE is the need of the hour which is accessible to all irrespective of caste, ethnicity, gender, class, religion, and disability. For the full-fledged socio-economic development of the country the participation of each citizen regardless of any of the above disparities

is essential and the participation of each citizen will become possible only when equitable opportunities provided. Often the terms equality and equity create confusion where equality may be understood as the distribution of equal rights and opportunities while equity is the need based facilities that is provided to the people; for instance, construction of ramps for the persons with disabilities. Nevertheless, it is important to ensure equity and quality in HE by which every citizen will get the opportunity to participate and grow and can fulfil the aspiration of contributing toward the national development (Kumar, Prakash, & Singh, 2021).

Furthermore, the Sustainable Development Goal 4 (SDG 4) of the global 2030 agenda talks about the inclusive and equitable quality education and promotion of life-long learning for all, considering the social, economic, and ecological sustainability across the world (Unterhalter, 2019). In this context, however, the role of HE education is widely acknowledged in leading the sustainable development goals. Therefore, countries around the world are transforming its respective HE sectors considering the inclusivity, equity, and quality parameters (Ruiz-Mallén & Heras, 2020). In the Indian scenario, the government is making all the efforts to ensure equity and quality in HE as part of the changing global scenario and emerging needs. However, in-between the scientific and technological advancement, SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) has been introduced by the government of India to promote access, equity, and quality in education especially in the higher education (HE).

The SWAYAM

The scientific and technological advancement in the 21st century has revolutionized all most every sector including the education. A drastic change can be experienced in the field of education because of the growing interest among learners and educators toward the information and communication technology. With the advanced use of computer application in education, a paradigm shift has been taken place. Consequently, many forms of technology and web-based learning platforms are introduced throughout the globe. The origin of Massive Open Online Courses (MOOCs), hence, appears significant in the era of science and technology. Soon after the MOOC was introduced in 2001, it became popular within a short period of time looking after its accessibility, usability, and excellence. As part of the growing interest of the globe towards MOOCs, however, the Ministry of Human Resource Development (MHRD), Government of India launched Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM) in 2016. SWAYAM is India's native MOOC platform designed to impart quality education to a massive target group through an online mode in an easily accessible and equitable platform (Kaveri, Gupta, Gunasekar, & Pratap, 2016). It attracts learners from within the country as well as abroad to get benefitted of quality educational, learn new skills, and advance career. As the title, Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM) shows it is an effort to provide learning opportunities to the aspiring learners (Paul et al., 2018; Kumar & Mahendraprabu, 2021). The SWAYAM is a deliberate collaborative effort of the government and the national coordinators (NCs) such as All India Council of Technical Education (AICTE), National Programme on Technology Enhanced Learning (NPTEL), University Grants Commission (UGC), Consortium for Educational Communication (CEC), National Council of Educational Research and Training (NCERT), National Institute of Open Schooling (NIOS), Indira Gandhi National Open University (IGNOU), Indian Institute of Management (IIM), Bangalore, and National Institute of Technical Teachers Training and Research (NITTR). The above mentioned government institutions are solely responsible for creating and imparting high quality MOOCs across the discipline of science, technology, engineering, management, education,

law, humanities, and social sciences. The platform covers all most all the disciplines to provide better learning opportunities for all (Singh, 2019; Kumar & Mahendraprabu, 2021).

In country like India having larger population and limited institutional accessibility and infrastructural facilities the initiative like SWAYAM is highly acknowledgeable. The people around the rural India who are unable to find institutional accessibility and better quality education especially in tertiary level area are the major focus group of the SWAYAM initiative. Hence, students from backward region, working professionals, and college dropouts can get the benefit of SWAYAM online courses (Nayek, 2018; Mondol & Majumdar, 2019). There is no issue of intake and eligibility. The SWAYAM platform covers the courses of Class 9 to till post-graduation. The national coordinators bear the responsibility of developing high quality courses that benefit learners in career development, promotion in professional career, college preparation, supplemental learning, and life-long learning, etc. The SWAYAM courses are designed by most of the professionals of reputed institutions and/or organizations to ensure quality and authenticity of the courses (Kumar & Mahendraprabu, 2021). The courses provided through the SWAYAM platform are free of cost and can be accessed anytime and anywhere; the only requirement is a digital device (computer, laptop, tablet, or smartphone) having internet connectivity. The SWAYAM initiative also aims to cater the disadvantaged population of the country who are deprived of knowledge economy in this global technological revolution (Majumder, 2019). The people who are interested to learn but could not make it possible due to certain socio-economic issues can also be benefitted from the SWAYAM online MOOCs. Students and professionals can also get enrolled in their respective courses through SWAYAM portal to advance their knowledge (Pramanik, 2018). The purpose of this paper is to conceptualize the role of SWAYAM in serving the three cardinal principles, i.e., access, equity, and quality in education, especially, in higher education. The primary focus of this paper is to draw how far the SWAYAM courses are accessible, equitable, and is of quality for the learners.

Access

The SWAYAM platform is a web-based portal developed to provide easy access to rich learning experiences. SWAYAM is the learning platform enhanced by the computer and network connectivity. It provides anytime-anywhere facility to the learners that means learners can access the SWAYAM web-based learning platform from any part of the world and in any specific time; all they need a computer and internet connectivity (Suresh & Srinivasan, 2020). Interestingly, SWAYAM has developed its mobile app to provide people with more flexible access through smartphone devices. The major focus of the SWAYAM initiative is to cater the needs and aspiration of learners across the country, especially, the learners from the rural and remote India who aspire to learn and advance their knowledge (Paul et al., 2018). Many students in the rural parts of India did not have access to higher education and quality infrastructures while many dropped their study due to socio-economic problems; however, in such situation SWAYAM is a new hope for those who aspire to learn and enhance their knowledge (Gupta & Chaturvedi, 2022). The learners can get the access to varieties of SWYAM online course across the disciplines of science, technology, engineering, management, law, education, and arts and humanities. The SWAYAM online courses are free of cost but a minimum fee is payable if someone wants to appear the SWYAM proctored examination and earn certificate (Agnihotri & Pandit, 2021). Lakhs of learners enroll and earn certificates for their academic and professional purpose. The table below presents the data of enrollment and successful completion of courses with certification under the national coordinators (NCs) with reference to higher education (HE).

Table 1

Enrollment Status and Successful Certification (Higher Education)

NCs	Course completed	Enrollment	Registration for examination	Successful certification
AICTE	289	1,090,420	160,057	18,559
CEC	1,117	2,489,364	61,236	34,658
IIMB	203	571,767	16,124	8,902
NPTEL	4,813	20,234,606	2,569,501	1,570,302
UGC	263	284,812	12,310	9,327
Total	6,685	24,670,969	2,819,228	1,641,748

Source: SWAYAM Portal (https://swayam.gov.in/nc_details/).

The table indicates that millions of students are getting enrolled in SWAYAM online courses in HE. As of 2022, the enrollment of learners in HE under five national coordinators is 24,670,969 but unfortunately the rate of successful completion of courses with certification is very alarming. As per the data presented in the above table, out of 24,670,969 enrolled learners, only 11.43% have registered for examinations and 6.65% have successfully completed the courses with certification in higher education (HE). The causes are many for the low success rate of SWAYAM in successful certification. However, inadequate schooling before higher education (HE), the lack of computer and smart phone devices, internet connectivity, and problem of English language skill are among the many issues related to access and successful completion of the courses. The study conducted by Roy and Brown (2022), as per the Government of India data 2017-2018, reveals that 23.4% of urban households possess a computer, whereas, only 4.4% households possess a computer in rural India. In addition, the study reveals that only 42% urban households and 14.9% rural households have access to internet facility.

Equity

The principle of equity is very essential to meet the needs and requirement of each and every learner. Therefore, the SWAYAM platform provides the courses to cater maximum needs and requirements of learners as possible. The learners from remote and backward regions are the main target group of the SWAYAM platform. SWAYAM platform is a deliberate effort to provide learning opportunities to the learners who are not in the mainstream knowledge system because of the lack of technological exposure. It provides ample learning opportunities to all the learners across varieties of academic, technical, vocational, and professional courses with the help of high professional institutions in the respective disciplines. To meet the needs of the diverse learners group with diverse learning styles the courses provided are in the form of e-tutorial (audio lecture, video lecture, animation, etc.), e-text (pdf, ppt, e-books, etc.) and it has also the provision of discussion forum for students who need extra support. Interestingly, SWAYAM platform has already been started many courses in several regional languages to ensure equity among learners of different states. Learners can get subtitles and video transcription in a single click in languages such as Hindi, Marathi, Bengali, Kannada, Tamil, Malayalam, Telugu, and Gujarati, etc. The translation of many courses can be accessed through the SWAYAM online platform.

Quality

The prime objective of the SWAYAM online courses is to develop quality content for the learners to provide enriched knowledge and better learning experiences. The premier institutions are partnering with the national coordinators to design and disseminate the SWAYAM courses. Especially, in the HE the high quality contents are being developed by the expert instructors of the reputed partnering institutions of the country. The SWAYAM

courses designed by the experts are through the four quadrants quality parameter to provide rich learning experiences with advanced use of multimedia information and communication technology. The four quadrants are (1) video lecture, (2) specially prepared reading material that can be downloaded/printed, (3) self-assessment tests through tests and quizzes, and (4) an online discussion forum for clearing the doubts (Samanta, 2018). The courses are designed in such manner to make the learning interesting and reliable for the learners. The multimedia approach is being used by the expert course developer to make learners better understand the subject matter and enrich the learning experiences to make use of it in every day socio-personal, academic, and professional life. The courses enrich the knowledge of the learners and its applicability (Gupta, Chauhan, & Hanne, 2020).

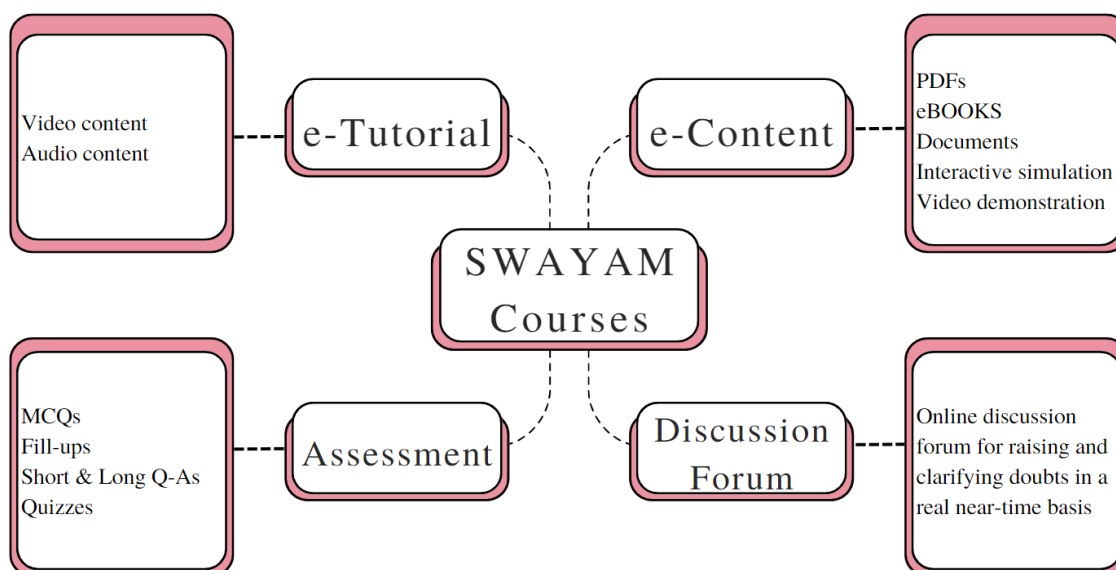


Figure 1. Four quadrants of SWAYAM courses.

The quality concerns of SWAYAM encourage the expert and committed teachers in designing the SWAYAM courses more effectively. The national coordinators primarily focus on the quality of the courses whose are being provided through SWAYAM platform. Moreover, the SWAYAM courses are designed as per the SWAYAM guidelines to ensure quality and accountability of the courses. The SWAYAM four quadrants courses expose the learners to varieties of learning modes that provide genuine experience of scientific and technological revolution in the field of education. The platform offers courses from school level to higher education. The national coordinators who bear the responsibilities of developing courses for higher education are: (a) National Programme on Technology Enhanced Learning (NPTEL) develops courses on engineering, (b) All India Council of Technical Education (AICTE) develops self-paced and international courses, (c) Consortium for Educational Communication (CEC) develops under-graduate courses, (d) Indian Institute of Management (IIM), Bangalore develops courses for management studies, and (e) University Grants Commission (UGC) develops the post-graduate non-technical courses. This is how the national coordinators of SWAYAM are dedicated for serving the country with quality accessible and equitable education.

Apart from this, as per the UGC Regulations 2016 Guidelines on Credit Framework for online learning courses through SWAYAM, the institutions/universities are allowed to identify and adopt the SWAYAM online courses where credits can be transferred to the regular academic degree of students. This provision enables the students to learn the SWAYAM courses as part of their regular academic degree. Moreover, the students perusing

higher education (HE) get the exposure to enhance their knowledge through the high quality SWAYAM online courses (Mendez, Shah, & Patra, 2019).

Conclusion

The government of India has always been attempted to revamp the quality of its education system. However, higher education (HE) is central to the government's vision of making India as a knowledge hub and transforming its socio-economic status. The Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM) plays a prominent role in enhancing the knowledge system of the country keeping in view the participation of each and every individual of the nation. HE as a major sector of the SWAYAM initiative has been attempting to make HE education quality-oriented. Quality higher education is the need of the hour to meet the emerging that ensures quality life to the people in society. However, the SWAYAM has to go many more miles having the aim of transforming India as the best in the world.

References

- Agnihotri, M. A., & Pandit, A. (2021). Overview and future scope of SWAYAM in the world of MOOCs: A comparative study with reference to major international MOOCs. In *Computational intelligence in digital pedagogy* (pp. 169-201). Singapore: Springer.
- Chankseliani, M., Qoraboyev, I., & Gimranova, D. (2021). Higher education contributing to local, national, and global development: New empirical and conceptual insights. *Higher Education*, 81(1), 109-127.
- Gupta, A., & Chaturvedi, S. (2022). E-learning opportunities in higher education with special reference to SWAYAM and SWAYAM PRABHA. Shodh Samagam.
- Gupta, V., Chauhan, D. S., & Hanne, T. (2020). Flexible higher education through SWAYAM. In *Handbook of research on creating meaningful experiences in online courses* (pp. 59-65). Pennsylvania: IGI Global.
- Kaveri, A., Gunasekar, S., Gupta, D., & Pratap, M. (2016). Convergence or divergence: MOOCs and legacy of higher education outcomes. In *IEEE 4th International Conference on MOOCs, Innovation and Technology in Education* (pp. 20-24). Madurai, India.
- Kumar, K. S., & Mahendraprabu, M. (2021). Open educational practices of SWAYAM programme among research scholars. *Education and Information Technologies*, 26(4), 4621-4645.
- Kumar, K., Prakash, A., & Singh, K. (2021). How National Education Policy 2020 can be a lodestar to transform future generation in India. *Journal of Public affairs*, 21(3), e2500.
- Majumder, C. (2019). SWAYAM: The dream initiative of India and its uses in education. *International Journal of Trend in Scientific Research and Development*, 3, 57-60.
- Mendez, M. C., Shah, D., & Patra, S. P. (2019). Exploring SWAYAM: How India is making MOOCs an integral part of its education system. In *2019 IEEE Learning With MOOCs (LWMOOCs)* (pp. 64-68). IEEE.
- Ministry of Education. (2020). National Education Policy 2020. Retrieved from https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- Mondal, G. C., & Majumder, P. (2019). Impact of "SWAYAM" towards academic achievement. *International Journal of Research and Analytical Reviews*, 6(2), 592-599.
- Nayek, J. (2018). A survey report on awareness among LIS professionals/students about SWAYAM: A government of India initiative on E-learning. *Knowledge Librarian. An International Peer Reviewed Bilingual E-Journal of Library and Information Science*, 5(1), 39-45.
- Paul, P., Bhimali, A., Kalishankar, T., Aithal, P. S., & Rajesh, R. (2018). SWAYAM: The platform for modern and enhanced online and flexible education-a knowledge survey. *International Journal of Applied Science and Engineering*, 6(2), 149-155.
- Pramanik, S. (2018). Attitude of postgraduate students towards SWAYAM: Indian version of MOOCs. *Harvest*, 3(1), 33-38.
- Roy, S., & Brown, S. (2022). Higher education in India in the time of pandemic, sans a learning management system. *AERA Open*, 8, 23328584211069527.
- Ruiz-Mallán, I., & Heras, M. (2020). What sustainability? Higher education institutions' pathways to reach the Agenda 2030 goals. *Sustainability*, 12(4), 1290.

- Samanta, A. (2018). Analytical study of SWAYAM. *International Journal of Research and Analytical Reviews*, 5(3), 1374-1379.
- Saravanakumar, A. R., & Devi, K. R. P. (2020). Indian higher education: Issues and opportunities. *Journal of Critical Reviews*, 7(2), 542-545.
- Singh, N. (2019). SWAYAM-Indian MOOCs: An insider's perspective. *Asian Journal of Distance Education*, 14(1), 47-55.
- Suresh, K., & Srinivasan, P. (2020). Massive open online courses—Anyone can access anywhere at anytime. *Shanlax International Journal of Education*, 8(3), 96-101.
- Unterhalter, E. (2019). The many meanings of quality education: Politics of targets and indicators in SDG 4. *Global Policy*, 10, 39-51.