MOOCs through SWAYAM: An e-learning Platform for Implementing Online & Flexible Education as per the NEP-2020

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### ABSTRACT

Integrating technology with education enhances the teaching-learning process by increasing its effectiveness and making it engaging. With the advancement in information technology, several educational institutions have adopted online education allowing learners to access education anywhere and anytime. One such Technological innovation is Massive Open Online Courses (MOOCs) that are flexible, affordable and make learning democratic. This research paper is an attempt to get background knowledge about SWAYAM MOOCs, its features, objectives, structure and components as well as their constituents i.e. SWAYAM Prabha free DTH educational channels. The SWAYAM is the flagship programme of Online Education of the Ministry of Education (MoE), Govt. of India. There are common features, goals and differences between SWAYAM and SWAYAM Prabha .The implementation of SWAYAM MOOCs is also aligning with the NEP-2020 goals. The present study focuses on a critical analysis of the policy and present practices of SWAYAM and SWAYAM Prabha. The findings revealed that the initiatives by the Government of India (GoI), SWAYAM and SWAYAM Prabha contribute towards online education. SWAYAM has 3 cardinal principles and a 4-quadrant approach, focusing on accessibility and affordability of education with quality content delivered by expert faculty members of different national coordinating centers. Another such initiative by the Government of India is SWAYAM Prabha which shares common goals and features with SWAYAM like access to quality content and education but there are differences too, SWAYAM develops the MOOCs whereas SWAYAM Prabha majorly focuses on quality video content based upon the academic programmes both at the
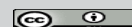
School and Higher Education Level that broadcasted 24/7 in free of cost for the learners. Talking about the objectives of SWAYAM MOOCs, opportunities for interaction, bridging the digital divide, and high-quality learning experiences are focused. The status of SWAYAM includes the number of courses completed till now by the national coordinating centers and the completion rate of SWAYAM. The scope of SWAYAM is very broad with diverse demographics, credit transfer, diverse disciplines, and expert faculty to teach the content with more stress on lifelong learning. The assessment strategies practiced in SWAYAMinclude both formative and summative managed by the National Testing Agency. SWAYAM and NEP-2020 are intertwined. As observed many goals of NEP-2020 are achieved through SWAYAM and SWAYAM Prabha. It is suggested that the government and the educational institutions, including the faculty members should take initiatives to make students more aware of SWAYAM. The shortcoming that is observed is the low completion ratio of SWAYAM. More studies can be done to find the intention and barriers to SWAYAM and to what extent the goals of NEP-2020 are met.

MOOCs (Massive Open Online Courses) are accessed by millions of users at their convenience for quality learning. Dave Cormier of the University of Prince Edward Island came up with the term MOOC in response to a course called Connectivism and Connective Knowledge (CCK08) course in 2008 by Stephen Downes and George Simens. There are two types of MOOCs given by Stephen Downes namely cMOOCs that focus on collaborative learning and xMOOCs that focus on content knowledge and skills. There are many platforms (MOOCs) available such as Coursera, EdX, Future Learn, Moodle, SWAYAM, etc. Data relating to MOOCs depicts that their popularity is increasing globally day by day (Class Central, 2021).
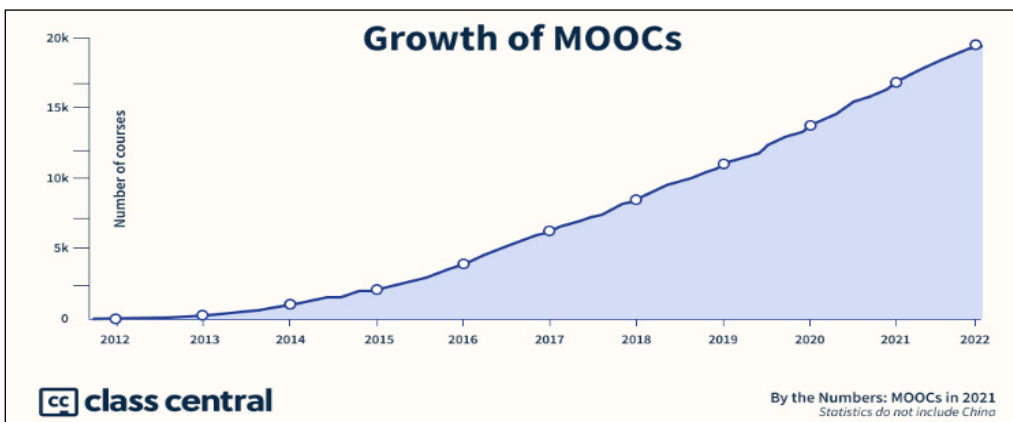
Fig. 1: Growth of MOOCs (***Source:*** Class Central 2021)

Table 1: Users exit (2021) from the MOOC platforms Source: Class Central

MOOC Platforms name	Countries (MOOCs)	Users that Exit (2021)
Coursera	USA	97 million
edX	USA	42 million
Future Learn	UK	17 million
Swayam	India	22 million
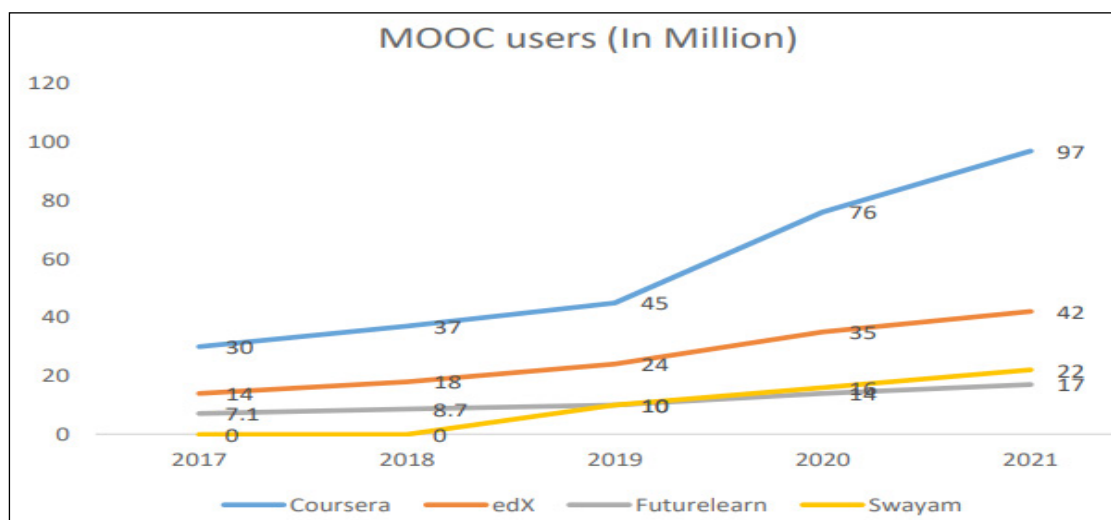
Fig. 2: MOOCs provider-wise number of users Source: Class Central, 2021

According to Hollands and Tirthali (2014), MOOCs have the potential to reach and meet the needs of learners in a wider demographic situation catering to their academic, professional, and/or skills-training needs at all stages of their education and development. On 9th July 2017, the Ministry of Education (MoE), inaugurated the online learning platform SWAYAM that aims to provide affordable and accessible education with quality content to all despite of any background of the learners. Another initiative by the Government of India is the SWAYAM Prabha which is a DTH (Direct-to-home) based free Educational TV Channel. Both SWAYAM and SWAYAM Prabha have the common goal of providing educational content to the masses. National Education Policy (NEP-2020) emphasizes the importance of holistic and flexible education which aligns with the SWAYAM platform. According to NEP-2020, e-learning platforms like SWAYAM must be extended, and virtual labs should be created using platforms like SWAYAM Prabha and SWAYAM.

There are many common aims shared by SWAYAM and NEP-2020. SWAYAM can significantly contribute to achieve the goals of NEP-2020. This research is an attempt to get the background knowledge of SWAYAM and SWAYAM Prabha, their features, objectives and scope, status and how they contribute to online education and to know the common goals of education and how SWAYAM contributes in achieving the goals of NEP-2020.

The objectives of the study are:

1. To study policy perspectives of SWAYAM MOOCs as an e-learning platform and its operation.

2. To analyze the features, scope, purpose, and status of SWAYAM as an e-learning platform for promoting equitable, flexible, and democratizing education.

3. To analyze the features, scope, and purpose of SWAYAM Prabha as a free DTH-based Educational TV Channel platform.

4. To study the role of SWAYAM MOOCs in achieving the goals of NEP-2020.

MOOCs

Dave Cormier of the University of Prince Edward Island coined the term "MOOC" the Massive Open Online Courses in 2008 in response to Stephen Downes and George Simens' course Connectivism and Connective Knowledge (CCK08). MOOCs became popular in 2012 known as the "Year of MOOCs". While MOOCs share the common characteristics of being massive and online courses, they can be characterized into different types based on their pedagogy, structure and objectives.

There are two types of MOOCs given by Stephen Downes:

cMOOCs: The "c" in cMOOC stands for Connectivism. The focus of cMOOCs was on collaborative learning, creation of knowledge and network building among the learners. It is based on the pedagogy of connectivism learning theory. It was less structured than xMOOCs, relies on the learner's autonomy and self-directed exploration. cMOOCs are learner-centered, and assessment often relies on self-reflection and peer assessment**.**

xMOOCs: The "x" in xMOOC stands for extension. The delivery of xMOOCs was on content knowledge and skills in a more structured format than cMOOCs. It was based on the pedagogy of constructivist learning theories, with a focus on well-defined learning outcomes. Structurally it revolves around the traditional teaching model, including lectures, quizzes, test, and assignments. Assessment in xMOOCs often relies on test, and quizzes, to assess learners' understanding.

SWAYAM

Fig. 3: SWAYAM Logo (***Source:*** SWAYAM CENTRAL (Swayam.gov.in))

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SWAYAM (Study Webs of Active Learning for Young Aspiring Minds), launched on 9th July 2017. The Ministry of Human Resource and Development,currently known as MoE (Ministry of Education), Govt. of India has launched SWAYAM to offer free and high-quality e-learning education to students from grade 9th to post-graduation. SWAYAM has 10 national coordinators namely National Programme on Technology Enhanced Learning (NPTEL), All India Council for Technical Education (AICTE), University Grants Commission (UGC), National Council of Educational Research and Training (NCERT), Institute Of National Importance(INI), National Institute of Open Schooling (NIOS), Indira Gandhi National Open University (IGNOU), Indian Institute of Management Bangalore (IIM-B), Consortium for Educational Communication (CEC), and National Institute of Technical Teachers Training and Research (NITTTR) curating the courses. Accessing SWAYAM MOOCs is free of cost, only a nominal fee is charged to enrol in the examinations to receive a certificate. On passing the examinations certificates are awarded to the students. It has three cardinal principles namely access, quality, and equity, and has a four-quadrant approach such as e-tutorial, e-content, discussion forum, and assessment.

Cardinal principles are —

Access	Quality	Equity
SWAYAM aims to ensure that all students have access to high-quality education.	SWAYAM aims to provide high-quality educational experiences for all through top faculty.	SWAYAM aims to provide equal opportunities for all learners to succeed.

Four quadrant approach are —

Quadrant-I	Quadrant-II
E-tutorials:	**E-content:**
Audio-video lessons, simulations, animation, etc	E-books, pdf, OER, Case studies, articles, presentations, etc.
Quadrant-III	Quadrant-IV
Discussion forum:	**Assessment:**
Real-time discussions between the learners and the course coordinators.	MCQs, Quizzes, short and long answer type questions.

These National Coordinators providing courses in multiple sectors have experienced faculty from reputed institutions, and to provide excellent coverage the content of SWAYAM courses is translated into regional languages. These languages are Telugu, Bengali, Marathi, Hindi, Gujarati, Tamil, Malayalam and Kannada. The 10 National Coordinators are as follows:

Table 2: National Coordinators of MOOCs offered through SWAYAM

Sl. No.	National MOOCs Coordinators	Sectors/ Discipline Areas
1	Indian Institute of Management Bangalore (IIMB)	Management courses
2	Indira Gandhi National Open University (IGNOU)	Diplomas, UG, PG and Certificate Courses

3	Consortium for Educational Communication (CEC)	Non-Technology UG Programmes
4	All India Council for Technical Education (AICTE)	Technology and Engineering
5	Institute Of National Importance (INI)	Non-Technical Courses
6	National Institute of Open Schooling (NIOS)	Out-of-school education programmes (9th to 12th)
7	National Council of Educational Research and Training (NCERT)	School Education (9th to 12th)
8	University Grants Commission (UGC)	Non-Technology PG Degree Programme
9	National Programme on Technology Enhanced Learning (NPTEL)	Engineering Courses
10	National Institute of Technical Teachers Training and Research (NITTTR)	Programme on technical teacher training

Source: SWAYAM Central (swayam.gov.in).

Eligibility for SWAYAM

Anyone can register on the SWAYAM portal; there are no special requirements. SWAYAM courses are accessible to everyone with a device and internet, allowing anyone to start their online learning journey.

Objectives of SWAYAM

Opportunities for interaction: SWAYAM provides interaction opportunities with course coordinators and peers through discussion forums where they can clarify doubts.

1. **Multiple features:** An advanced system enabling easy access, monitoring and certification.

2. **Enhancing quality:** Delivering high-quality learning experiences through courses designed and delivered by expert faculty from renowned institutions.

3. **Bridging the digital divide:** By bridging the gap between the rural and the urban areas, SWAYAM helps students deprived of the digital era.

4. **Providing flexibility:** Offering a comprehensive mobile and web platform with interactive e-content suitable for everyone from 9 to post-graduate.

Scope of SWAYAM

As per Government of India (Department of Higher Education, Ministry of Human Resource Development, 2015) SWAYAM shall cover the following:

Accessibility and Reach

- *Multiple educational levels:* SWAYAM provides courses at multiple educational levels, from 9th to 12th grade to post-graduate.

- *Diverse Demographics:* SWAYAM is open to all, it aims to reach learners from all backgrounds from urban to rural areas, working professionals, etc. promoting inclusive education.

- *Credit Transfer:* SWAYAM provides credit transfer to the learners towards a formal degree. The learners enrolled are provided with prior information for the courses under credit transfer. As per the notification of UGC, students enjoy 40% credit transfer of their programme from the SWAYAM based Online Courses.

Pedagogy

- *Disciplines:* For Higher education disciplines like science, arts, maths, commerce, social sciences, management, etc. Similarly, for school education (9th to 12th) courses are available.

- *Expert faculty:* The SWAYAM courses are designed and developed by expert faculty known as course coordinators in SWAYAM. These course coordinators belong to reputed institutions like IITs, IIMs, and government institutions.

- *Engaging learners:* Through the 4-quadrant approach, SWAYAM engages learners by providing high-quality lectures by experienced and top faculty all around the country, content in the form of PDFs, the opportunity to interact with course coordinators as well as peers, assessment through MCQs, quizzes are there.

Impact and Future

- *Lifelong learning:* SWAYAM promotes lifelong learning, enabling learners to upskill, and reskill.

- *Continuous Innovation:* SWAYAM is evolving constantly to enhance the learning experience, and to expand its reach.

Features of SWAYAM

- *Free of cost:* Registration in SWAYAM is free of cost, anyone with a device and internet connection can enroll them for online learning.

- *Self-paced learning:* Learners can learn and access course materials at their own convenience.

- *National coordinators:* These institutions provide online courses for SWAYAM in specific sectors.

- *Course coordinators:* These are the subject experts from reputed institutions providing e-content.

- □ *SWAYAM board:* Manages the platform formulation, and quality of content and facilitates the conduct of examinations.

- □ *SWAYAM academic board:* The apex academic body sets the quality standards for SWAYAM courses.

- □ *Transfer of Credits:* SWAYAM allows learners to transfer credits to the formal education program. The UGC Gazette Notification dated March 25, 2021, allows up to 40 percent of the credit transfer.

- □ *Multimodal learning:* SWAYAM utilizes different formats like video lectures, quizzes, assignments and discussion forums.

- □ *Proctored platform for exam and certification:* Learners can take proctored exams to get successful certification upon course completion.

- □ *Multilingual support:* SWAYAM provides courses inregional languages too that broaden its scope and reach.

Assessment and Certification in SWAYAM

Assessment in SWAYAM

- □ *Assessment:* The assessment includes both formative assessment and summative assessment to promote critical thinking to gauge students' performance. The assessment is in the form of test, quizzes, projects, or reports. The National Testing Agency (NTA) takes the exam for the final certification of the students in MOOCs through SWAYAM.

- □ *Final Examinations:* After the course ends, the learners must give a proctored final exam which can be held at the designated examination centers or can be held online.

Certification in SWAYAM

- □ *Eligibility for certification:* Learners should have completed the assessment and should score minimum passing marks.

- □ *Credits:* Along with the certificate, credits are also given to the students that can be transferred to their parent institute.

- □ *Verification:* The certificates by SWAYAM are authentic and can be verified online.

Status of SWAYAM

In SWAYAM, the total number of courses completed till October 2024 is 11845 with 4207731 student enrolment, 4922758 exam registrations and 3111700 successful certifications. Taking about the SWAYAM completion rate i.e. 13 % approximately with over 4 crore enrollments in different courses.
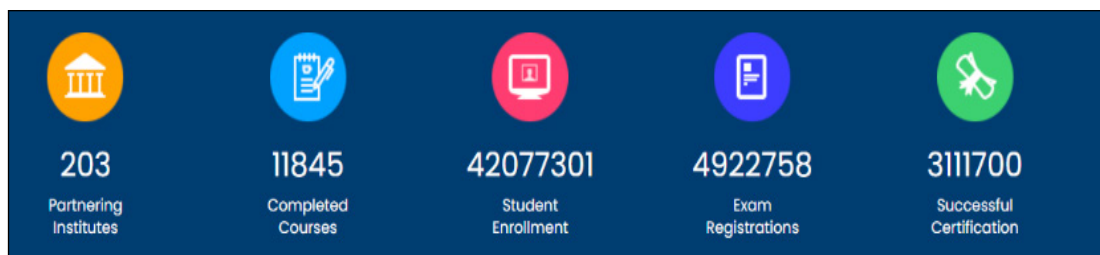
Source: SWAYAM Central, October 2024 (swayam.gov.in)

Fig. 4: Enrolment status in Swayam

According to an article in Times of India (2023), SWAYAM outperforms e-Learning platforms and records over 3 crore student enrolment with a completion rate of 10%.
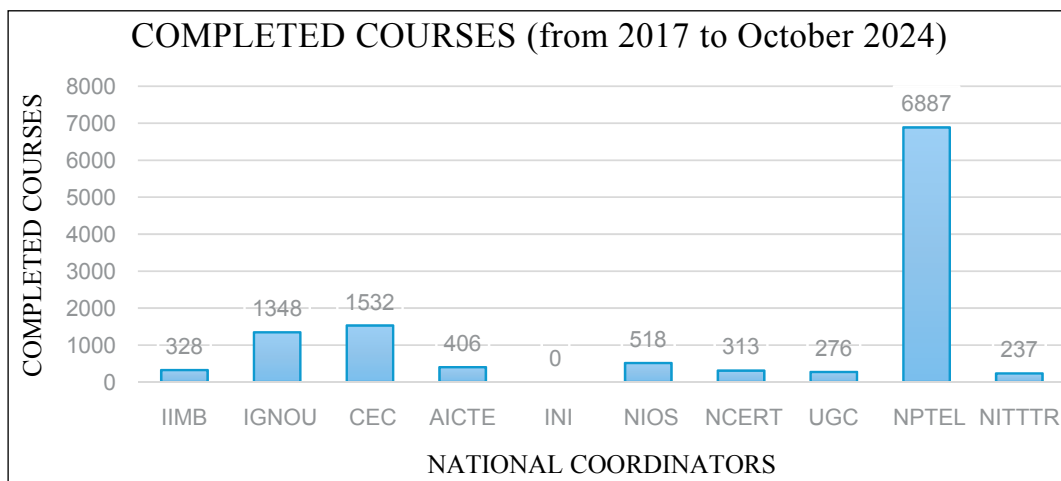
NATIONAL COORDINATORS

Table 3: National coordinators of SWAYAM and courses completed

Sl. No.	National Coordinators	Completed Courses (from 2017 to October 2024)
1	Indian Institute of Management Bangalore (IIMB)	328
2	Indira Gandhi National Open University (IGNOU)	1348
3	Consortium for Educational Communication (CEC)	1532
4	All India Council for Technical Education (AICTE)	406
5	Institute Of National Importance (INI)	0
6	National Institute of Open Schooling (NIOS)	518
7	National Council of Educational Research and Training (NCERT)	313
8	University Grants Commission (UGC)	276
9	National Programme on Technology Enhanced Learning (NPTEL)	6887
10	National Institute of Technical Teachers Training and Research (NITTTR)	237
	TOTAL:	**11845**

Source: SWAYAM Central (swayam.gov.in)

Cumulative data up to October 2024

COMPLETED COURSES (from 2017 to October 2024)

National Coordinator	Completed Courses
IIMB	328
IGNOU	1348
CEC	1532
AICTE	406
INI	0
NIOS	518
NCERT	313
UGC	276
NPTEL	6887
NITTTR	237

Source: SWAYAM Central (swayam.gov.in)

Fig. 5: National Coordinators and the Courses Completed

Cumulative data up to October 2024

According to Table 3, there are 10 National coordinators of SWAYAM providing courses in multiple fields. The highest number of completed courses up to October 2024 is 6887 by the NPTEL followed by CEC (1532) and IGNOU (1348). The total number of courses completed till October 2024 under SWAYAM is 11845.

SWAYAM Prabha

For the dissemination of educational content, the Government of India has launched SWAYAM Prabha which would broadcast educational channels via DTH (Direct to Home) 24×7 using the GSAT-15 satellite.

Features of SWAYAM Prabha

- SWAYAM Prabha is known for its accessibility to reach learners in remote areas.
- Education materials can be downloaded online, in addition to TV channels.
- SWAYAM Prabha covers diverse subjects including humanities, science, technology and commerce, etc.
- It consists of 40 DTH television channels that are broadcasted 24/7 focussing on different contents.
- Content delivered on SWAYAM Prabha is created by experts from reputed institutions and universities.

- SWAYAM Prabha is integrated with SWAYAM to provide access to diverse courses.

- There are different partners and contributors to SWAYAM Prabha namely IGNOU, NIOS, NCERT, CEC, UGC, SATHEE, IITs, INFLIBNET and TIRUPATI.

- SWAYAM Prabha provides content in different sectors —

  - School Education

  - Higher Education

  - Competitive Exams

Objectives of SWAYAM Prabha

- The main objective of SWAYAM Prabha is to make educational content available to all learners, especially in remote areas.

- SWAYAM Prabha serves as a supplementary resource to enhance the experience of traditional classrooms.

- Students can choose from a pool of diverse disciplines and learn at their convenience.

- To help the learners become more proficient in using online resources.

- To foster the spirit of national integration and to develop a sense of unity by providing a common education platform that can be reached by anyone despite of any culture or background.

SWAYAM and SWAYAM Prabha share common goals and features-

- Both are the initiatives of the Government of India that work towards the improvement of quality of education and to make it accessible throughout the country.

- They support lifelong learning among individuals by encouraging continuous education and skill development.

- A wide range of quality courses across various subjects, and disciplines are offered by SWAYAM and SWAYAM Prabha.

- Both Government initiatives use digital platforms to deliver content, promoting self-paced and flexible learning.

- Both platforms work to enhance the teacher resources by providing additional materials to enhance classroom instructions.

- The educational content in SWAYAM and SWAYAM Prabha is delivered by experienced faculty from renowned institutions.

Differences between SWAYAM and SWAYAM Prabha-

SWAYAM and SWAYAM Prabha are the initiatives of the government but apart from sharing common goals they also have major differences —

- SWAYAM is a MOOC (Massive Open Online Courses) and SWAYAM Prabha delivers educational content via 40 DTH channels.
- Anyone with a device and internet connection can access SWAYAM and SWAYAM Prabha focuses on video lectures and programs designed for students without internet access.
- SWAYAM follows a 4-quadrant approach and has 3 cardinal principles and SWAYAM Prabha just focuses on the video lectures.
- For Assessment SWAYAM offers assignments, quizzes, and certification upon passing the exams and in SWAYAM Prabha the educational content is available 24/7 through GSAT 15 satellite.

National Education Policy (NEP-2020)

NEP-2020 in its section Online and Digital Education: Ensuring Equitable Use of Technology recommends the following initiatives.

- Online platforms like SWAYAM and DIKSHA should be extended to provide teachers with supportive tools for assessing the development of the learners.
- Platforms like SWAYAM and SWAYAM Prabha should be used for developing virtual labs.
- To address the digital divide to provide access to quality education.
- Rigorous training for teachers on online teaching platforms and tools focusing on learner-centered pedagogy, and active student engagement.
- National Education Policy 2020 and SWAYAM are closely intertwined. The relevance between them are-

Accessible and Inclusive Education

- SWAYAM- SWAYAM provides free online courses, these courses can be accessed by anyone from anywhere.
- NEP-2020- NEP-2020 also emphasizes inclusivity and accessible education for all, particularly marginalized groups.

Flexible learning

- SWAYAM-Students in SWAYAM can learn at their own pace, promoting a flexible learning environment.

☐ NEP-2020- Includes multiple entry and exit points in a degree program, advocating flexibility in learning.

Integration of Technology

☐ SWAYAM- SWAYAM is a MOOC, it uses a digital platform to deliver educational content to its learners.

☐ NEP-2020- To enhance the learning outcomes, NEP-2020 also aims to promote the integration of technology with education.

Quality Education

☐ SWAYAM- It delivers quality content designed by experienced faculty of top institutions and universities.

☐ NEP-2020- Focuses on providing quality education across all levels.

Teacher professional development

☐ SWAYAM- Various courses are offered by SWAYAM to train teachers, aligning with NEP-2020.

☐ NEP-2020- The NEP-2020 also highlights the importance of professional development for teachers.

Skill Development and lifelong learning

☐ SWAYAM- SWAYAM provides various skill development courses, and vocational training supporting NEP-2020 aim.

☐ NEP-2020- It also stresses skill development courses and vocational education to prepare students for the workforce.

Multilingual content

☐ SWAYAM- SWAYAM promotes multilingualism by providing educational content in regional languages

☐ NEP-2020- NEP-2020 also emphasizes the use of regional language or mother tongue as a medium of instruction.

Interdisciplinary approach

☐ SWAYAM- A wide range of courses are provided by SWAYAM across various disciplines.

□ NEP-2020- It also stresses on multidisciplinary approach, to encourage learners to explore a variety of courses to develop a deeper understanding of how knowledge is connected across disciplines.

Quality Assurance and Certification

□ SWAYAM-SWAYAM with the expertise of reputed institutions and course coordinators ensures the quality of the courses. Certificates are also awarded on successful completion of courses that serve as an asset for further education or employment.

□ NEP-2020- NEP-2020 also emphasizes the need for assessment and outcome-based assessment to provide the learners with recognized qualifications reflecting their skills and learning.

□ Together, SWAYAM and NEP-2020 can transform the country's education landscape through their commitment.

Challenges of SWAYAM and SWAYAM Prabha

Despite the strength and potential of SWAYAM and SWAYAM Prabha, several challenges hinder their growth and implementation. The challenges are:

Challenges of SWAYAM

Technological barriers

Many students, particularly in rural or underprivileged areas, face difficulties in accessing digital devices or internet connectivity. Also, there is a lack of digital literacy among different groups of society which is a hindrance in getting the benefits of SWAYAM.

Awareness of SWAYAM

Many learners in rural places are still unaware of the SWAYAM platform and its benefits. The government should take suitable steps to raise awareness about SWAYAM among the faculty members and students.

Course Design & Pedagogy

Many courses on SWAYAM follow a traditional approach of teaching and learning. They lack engaging teaching methods like gamification, case studies, etc. which limits their effectiveness.

Infrastructure & support

SWAYAM provides technical and non-technical support, but still learners face difficulties navigating the platform, that may be a reason for less engagement of learners as they do not get proper solutions to their problems**.**

Engagement of course coordinators

Some course coordinators do not actively participate in developing and delivering the content, which minimizes teacher-learner engagement.

Integration with formal education

The integration of SWAYAM courses with formal education is in an evolving phase. Some universities and institutions still do not accept SWAYAM courses for credit transfer. It may be difficult for learners to pursue SWYAM courses and take the benefits of credit transfer. Moreover, the first session in SWAYAM in an academic session is completed in July of every year and many a time students are awarded certificates late. It sometimes creates difficulty for the students in their parent institute to get credit transfer.

Global outreach

SWAYAM is not a global platform. The courses offered under SWAYAM are basically academic programme-based courses. Assessment in SWAYAM courses is also done through NTA in its identified Exam Centres in India. As a result, overseas students face difficulty getting enrolled and pursuing the courses.

Language as a barrier

India has a rich diversity of languages which may be a barrier for some learners belonging to different academic backgrounds or language practice. Most of the courses in SWAYAM are in English language. Though SWAYAM provides some courses in regional languages also but it's not enough for a diversity-rich country like India.

Challenges of SWAYAM Prabha

Technological barriers

While SWAYAM Prabha relies on DTH technology, which can be accessed via satellite TV, the reach of DTH can still be limited in remote areas.

Limited engagement with learners

SWAYAM Prabha uses a broadcast format, which is a one-way communication. It may be a reason for less engagement between the learners and the teachers.

Awareness

Many learners in remote areas may not be aware of SWAYAM Prabha and its benefits. The government

should take initiatives to strengthen the reach of this platform and develop awareness for the target audience.

Lack of customization

SWAYAM Prabha takes a one-size-fits-all approach. The content is not tailored to the needs of the learners, which is a challenge. The parity of courses across universities is also a difficulty in which SWAYAM Prabha develops videos.

Inadequate monitoring

There is limited tracking of learner progress in SWAYAM Prabha as it operates primarily through a broadcast format. Hardly has been observed that appropriate assessment strategies are included in the SWAYAM Prabha videos. It makes it difficult for the learners to understand the videos.

CONCLUSION

With the advent of technology, a significant shift can be observed in the educational sector. To provide education, different online platforms enable learning from any part of the world. One such innovation is MOOC (Massive Open Online Courses). MOOCs integrated with university programs would increase the likelihood of MOOCs completion. MOOCs have become a game-changer in education, making learning inclusive and global. (El, 2016). After MOOCs came into existence in 2008, several MOOCs came into existence, one such e-learning platform is SWAYAM which aims accessibility and affordability in education. Anyone with an internet connection and a device can access courses in SWAYAM. It follows a four-quadrant approach and has a provision for credit transfer which attracts learners. The number of learners enrolled in SWAYAM is in the millions, SWAYAM has diverse disciplines to choose from and the course content is prepared and delivered by expert faculty that are experienced and belong to reputed institutions. There are 10 national coordinators under SWAYAM. Learners can access the courses in their regional language also. Both formative and summative assessments are in SWAYAM, formative assessment aims to engage the learners throughout the course and allow them to test their knowledge. Summative assessment is done in the form of a proctored exam. After passing the exam, certification is awarded to the learners, and the credits earned by them through the course can be transferred to their parent institute. The learners can transfer up to 40% of credits. Talking about the status of SWAYAM, the total number of courses completed till October 2024 is 11845 with 4207731 student enrolment, 4922758 exam registrations and 3111700 successful certifications. The SWAYAM completion rate i.e. 13 % approximately with over 4 crore enrolments in different courses. Another platform that works to disseminate educational content to the masses is SWAYAM Prabha. It consists of 32 DTH channels broadcasted 24/7 using GSAT-15 satellite, providing content in different sectors namely school education, higher education, and competitive exams that are available online. SWAYAM Prabha and SWAYAM share common goals and features, both support lifelong learning, quality content is available and are flexible. But there are differences too, SWAYAM is a MOOC (Massive Open Online Courses), whereas SWAYAM Prabha broadcasts its content through DTH (Direct-to-home) channels.

National Education Policy (NEP-2020) in its section on Online and Digital education stresses the extension of E-learning platforms like SWAYAM, to assist teachers with tools for monitoring the progress of the learners, to address the digital divide that is a main objective of SWAYAM. According to NEP-2020, SWAYAM and SWAYAM Prabha should be used to give practical knowledge to students through virtual labs. SWAYAM and NEP-2020 are closely intertwined, many goals of NEP-2020 can be achieved through SWAYAM including accessible and inclusive education, flexible learning, integration of technology, quality education, teacher professional development, skill development, etc. Together NEP-2020 and SWAYAM can transform the education sector in a better way, even the goal of NEP-2020 to increase the Gross enrolment ratio (GER) to 50% in 2035 from 28.4% (AISHE 2021-2022) can be achieved through SWAYAM. The challenges faced by SWAYAM include Technological barriers, awareness of SWAYAM, the design of the course, infrastructure and support services, engagement of the course coordinators, integration with formal education, global outreach and language is also a barrier. Similarly, technological barriers, inadequate monitoring, awareness, less engagement with learners and lack of tailored content according to the needs of the learners are the challenges of SWAYAM Prabha.

Recommendations

Even though the government is continuously working to develop the education sector through e-learning platforms to promote online education, it is necessary to spread more awareness about SWAYAM and increase its completion rate, as the enrolment-to-completion ratio is very low. More studies can be done to find the intention and barriers to SWAYAM and to what extent the goals of NEP-2020 are met.

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