# ASSESSING LEARNER DEMOGRAPHY AND FEEDBACK ON SWAYAM PORTAL: INSIGHTS FROM ENROLLED LEARNERS

#### DR. NARAYAN PATIDAR

Program Coordinator, Educational Multimedia Research Centre, Devi Ahilya Vishwavidyalaya Indore, MP, India

#### DR. CHANDAN GUPTA

Director, Educational Multimedia Research Centre, Devi Ahilya Vishwavidyalaya Indore, MP, India

#### **ABSTRACT**

Introduction: The study highlights SWAYAM's potential to transform education in India by leveraging ICT and MOOCs to provide inclusive, affordable, and quality learning. Addressing challenges like low awareness, digital literacy gaps, and infrastructure limitations is vital to ensure equitable access and maximize its societal impact.

**Research Methodology:** The study examines learner demographics, internet usage, and feedback on SWAYAM courses through a quantitative survey of 243 participants. It highlights key insights into the platform's accessibility, course quality, and user experience, emphasizing the need for improvements to enhance learner engagement, satisfaction, and the platform's overall educational impact.

Findings: The study analysed learners' demographics, internet usage, and feedback on SWAYAM courses, revealing key insights. Most participants accessed the internet daily, primarily using mobile devices, with education as the primary purpose. Learners valued Management, Commerce, and Science courses the most. Video lectures were the most appreciated feature, followed by assignments, live sessions, and quizzes. Respondents expressed overall satisfaction with course materials, instructor support, and the platform's usability. Certification opportunities and attractive course pages positively influenced enrollment decisions. A significant majority were likely to recommend SWAYAM and continue using it, underscoring its effectiveness in meeting diverse educational needs.

Key Words: SWAYAM Portal, MOOCs Courses, India, Digital Education

# INTRODUCTION ABOUT SWAYAM MOOCS

The study examines the success of SWAYAM, an open and remote education system that provides massive open online courses via ICT. It focuses on determining the topic domains and enrolment of learners to evaluate their willingness to participate. The research aims to inform policymakers, determine enrolment characteristics, and determine the need for more government, coordinator, and institutional initiatives to ensure benefits are distributed to every segment of society, aiming for education for all (Samanta, 2018). Massive Open Online Courses (MOOCs) have gained popularity in India since the early 2010s due to their low tuition costs, flexibility, and ease of access. These student-friendly courses promote open participation and free education, especially in rural areas. The Indian government has shown interest in MOOCs for standardized education, prioritizing MOOC provision at 2,200 colleges, 500 government institutions, 300 schools, and 50 vocational training centers in the Union Budget FY17. This demonstrates the government's commitment to improving online education quality (Haumin and Madhusudhan, 2019).

India's education system has evolved through various phases, including the Gurukul System, British model, government-controlled process, and virtual and satellite platforms. However, many graduates leave education due to financial, familial, or other factors. The Ministry of Human Resources and Development (MHRD) has created SWAYAM, an online learning platform, to address these issues and provide employable skills. SWAYAM can host 80,000 hours of learning and 2,000 courses for various levels. The University Grants Commission (UGC) has announced Regulation, 2016 governing the credit Framework for online learning courses through SWAYAM (Subramanyam and Sowmya, 2019). The Indian Government has launched SWAYAM, a Massive Open Online Courses (MOOCs) platform, to provide accessible, equitable, and quality



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education. However, its success depends on user awareness and its potential to enhance lifelong learning skills. Low awareness among Commerce students is influenced by factors like lack of ICT skills, classroom teaching, and one-to-one contact with educators. Collaboration between the government, national coordinators of SWAYAM, universities, and Industry Academia is needed to encourage students to adopt MOOCs (Ambadkar, 2020).

The SWAYAM platform, developed by the Ministry of Human Resource Development and the All-India Council for Technical Education, offers engineering and law courses using video lectures, printed reading materials, self-assessment quizzes, and discussion forums. SWAYAM, also known as Study Webs of Active-learning for Young Aspiring Minds, is a statewide MOOC podium in India that aims to provide high-quality, affordable, and accessible education at any time and location (Kamble and Chavan, 2020). India's educational system faces challenges due to ICT expansion, leading to the implementation of Massive Open Online Courses (MOOCs) and the development of SWAYAM, an online national gateway for excellent education. SWAYAM offers free or low-cost courses, focusing on quality of learners, content developers, and course material. The success of SWAYAM depends on the involvement of students, government, national agencies, and educational institutions. MOOCs are becoming popular in western countries, affecting India's education system (Vijayashekaranayaka, 2020).

The Indian government's SWAYAM program aims to achieve three key Education Policy objectives: access, fairness, and quality. It aims to make instructional materials accessible to all students, including those not part of the digital revolution. To successfully implement SWAYAM-MOOCs, high-speed internet connections are required on all campuses, and teachers must motivate students to use MOOCs effectively. The program also aims to preserve the country's cultural and linguistic legacy (Pujar, 2021).

#### LITERATURE REVIEW

In the study, Samanta (2018) stated that SWAYAM is a transformative step in open and distance learning, providing educational opportunities across diverse subject domains through ICT. The platform's success relies on government support, national agencies, and top educational institutions. This study underscores the importance of expanding awareness and enrollment to achieve inclusive education for all. Fostering broader participation can help bridge educational gaps and empower learners from all sections of society, fulfilling the goal of education for all. Subramanyam and Sowmya (2019), in their research, presented that the SWAYAM platform is a significant innovation in the Indian education system, addressing the gap between formal education and the skills demanded by industries. By offering a wide range of courses online, it provides an accessible and affordable opportunity for learners to upgrade their skills, making them more employable in a competitive job market. The platform's integration with modern technology and its focus on practical, application-based learning make it a vital tool for the future workforce. As internet accessibility and smartphone usage rise, they play an important role in shaping skilled, job-ready graduates in India.

Agnihotri and Pandit (2020), in their research, revealed that SWAYAM is a unique initiative in India's education sector, aiming to provide free online courses accessible to all. However, despite its potential, SWAYAM faces significant challenges, including low enrollment and completion rates, limited reach, and the absence of career counseling and placement assistance. To enhance its impact, it needs to expand its horizons, improve course content, and increase awareness among students about the benefits of MOOCs. With better support and engagement from users, it can play a significant role in enhancing education accessibility and quality in India, contributing to sustainable development, and reducing educational inequality. Lakshmi and Karthika (2020) in their study highlighted the importance of SWAYAM as a cost-effective and accessible educational tool that enhances students' skills and knowledge. By leveraging digital platforms, it provides quality education to both urban and rural students, breaking down sociological, geographical, and political barriers. The findings suggested that it is a valuable alternative to online coaching, offering a blended learning model that benefits both students and teachers by providing access to diverse educational resources.



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In the paper, Vijayashekaranayaka (2020) explained that SWAYAM represents a significant step by the Indian government to improve the quality of education nationwide using ICT and MOOCs. By providing free or low-cost access to quality learning resources, it aims to improve skill development and create a skilled workforce. However, its success depends on the quality of course content, the involvement of educational institutions, and the engagement of learners. The initiative's future will reveal whether it can fulfill the national dream of accessible, quality education. Kaushal, Singh, and Devi (2022) in their research paper highlighted that the Digital India plan aims to transform India into a digitally empowered society yet faces significant challenges like low digital literacy, inadequate infrastructure, and slow internet connectivity. While technology offers benefits such as improved academic quality, global access, and cost savings, persistent issues like illiteracy, accessibility, and information overload hinder progress. To overcome these challenges, the researcher suggested enhancing digital literacy, especially for women, and improving infrastructure. Initiatives like Pradhan Mantri Gramin Digital Saksharta Abhiyan are critical in addressing these gaps, ensuring that digital transformation is inclusive and beneficial across all sectors of society.

Kaushal (2023) in his research article explained that while the Indian government's initiatives like Digital India and Pradhan Mantri Gramin Digital Saksharta Abhiyan aim to enhance digital literacy and inclusivity, challenges such as inadequate infrastructure, slow internet, and high costs hinder progress. Addressing these issues requires a collaborative effort between central and state governments to improve digital accessibility, particularly in rural areas. Enhancing digital literacy, especially among women, and integrating digital tools in education are crucial for fostering a more inclusive and digitally empowered society. Siddiqi and Kaushal (2023) in their research paper revealed that adapting pedagogy for the 21st century requires more than just integrating technology; it demands a comprehensive shift in educational philosophy. Digital teacher education equips educators with essential competencies, adaptive strategies, and ethical awareness, enabling them to create inclusive and dynamic learning environments. This transformation empowers teachers to guide students in a technology-driven world, fostering innovation, adaptability, and lifelong learning. As education evolves, ongoing exploration and refinement of these intersections are crucial for future growth.

Negi and Kaushal (2024) in their article highlighted that digital education has become an essential part of modern learning, offering accessibility, personalization, and flexibility. AI, VR, AR, and blockchain will shape the future of education as technology advances, offering innovative and global learning opportunities. These developments will transform the educational landscape, requiring adaptation from individuals, institutions, and policymakers. Embracing these changes is crucial to unlocking the full potential of digital education, ensuring it remains relevant and impactful in an evolving world. Patidar, Sharma, and Kaushal (2024) in their survey revealed SWAYAM's effectiveness in delivering quality online music education, with learners expressing strong satisfaction and engagement, particularly valuing the video lectures. The platform's music courses have successfully met the needs of a diverse learner demographic, driven by personal interest and professional development. High levels of awareness, interest in certifications, and the likelihood of recommending them to others highlight their positive impact. The appealing course pages and overall user experience further enhance its potential for sustained growth and continued success in the field of online music education, positioning it as a valuable resource for lifelong learning.

Sharma and Kaushal (2024) in the research article revealed that bridging the digital literacy gap is central for India's progress towards a digitally inclusive society. Despite advancements in internet access and digital infrastructure, challenges remain, particularly in rural and underserved areas. By prioritizing digital education, skill development, and inclusive access, India can overcome these barriers. Collaborative efforts from the government, private sector, and civil society are essential to empower citizens and fully harness the benefits of the digital revolution, fostering a truly inclusive digital age.

#### STATEMENT OF THE PROBLEM

The title of this study was entitled as "Assessing Learner Demography and Feedback on SWAYAM Portal: Insights from Enrolled Learners".

# **OBJECTIVES OF THE STUDY**

Following were the objectives of the study:

- To collect and analyze demographic information of learners enrolled in SWAYAM courses.
- To know the internet usage information of learners enrolled in SWAYAM courses.
- To evaluate learner feedback regarding the quality and effectiveness of SWAYAM courses.

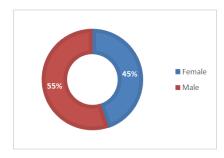
#### RESEARCH METHODOLOGY

The research design was survey in nature. Quantitative research methods were used to collect data. Quantitative data was collected using surveys. The survey link was shared with the learners enrolled in SWAYAM courses. A total of 243 respondents filled out the survey.

#### DEMOGRAPHIC PROFILE OF THE LEARNERS

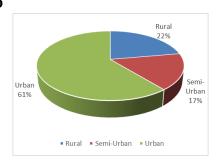
A total of 243 learners participated in the study.

## **GENDER**



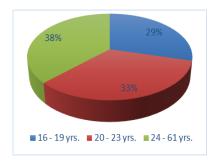
55% learners were male while 45% learners were female.

#### RESIDENTIAL BACKGROUND



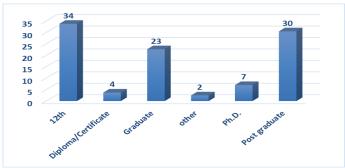
22% of respondents came from rural areas, 17% from semi-urban areas, and 61% from urban areas.

# **AGE GROUP**



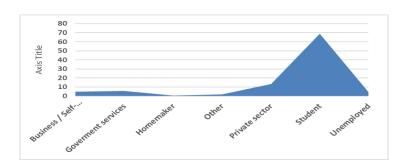
29% of respondents were 16-19 years old, 33% were 20-23 years old, and 38% were between the ages of 24 and 61.

# **EDUCATIONAL QUALIFICATION**



A total of 30% of the respondents were postgraduates, 23% were graduates, 34% were 12th graders, 7% had a PhD, 4% held a diploma or certificate, and 2% had other credentials.

# **PROFESSION**



69% respondents were students, while 31% respondents were from various occupations like business, service, self-employment, etc.

The respondents were mainly from urban areas and fell within the age group of 16-61 years, mostly 12th standard students and undergraduates and postgraduates.

# INTERNET USAGE PROFILE

Table No. 1: Internet Profile of the Enrolled learners

| Which devices are preferred for internet access  | Frequency | Percentage |
|--|-----------|------------|
| Desktop/Laptop                                   | 101       | 42         |
| Smart TV   | 3         | 1          |
| Tablet/Mobile Phone                              | 139       | 57         |
| How much time do you use internet in a week?     | Frequency | Percentage |
| 1-2 days   | 7         | 3          |
| 3-4 days   | 18        | 7          |
| Daily  | 210       | 86         |
| Weekends   | 8         | 3          |
| How many hours you access the internet in a day? | Frequency | Percentage |
| 1-3 hours  | 89        | 37         |
| 3-6 hours  | 81        | 33         |
| 6-9 hours  | 36        | 15         |
| More than 9 hours                                | 37        | 15         |
| For what purpose you access the internet?        | Frequency | Percentage |
| Business   | 8         | 3          |
| Education / Learning                             | 184       | 76         |
| Entertainment                                    | 36        | 15         |
| News   | 5         | 2          |
| Other  | 10        | 4          |
| Total  | 243       | 100.0      |

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From the analysis, it has been proved that, the most frequent tool a user accesses the internet with is the tablets followed by mobile phones, desktops, and then laptops. At the lowest frequency rate is applying the smart TV, an analysis showed that 86% access the internet daily, however, accessed 1-4 days in a week, or only during the weekends.

Internet usage patterns reveal that 37% of users spend 1-3 hours online daily, 33% use it for 3-6 hours, and 30% are heavy users, spending more than 6 hours per day. The purpose for which the internet is used, education or learning cited as the most significant at 76%, then entertainment at 15%, and minimal percentages for business, news, and other reasons each at 3%.

Overall, the data points out the extensive accessibility and usage of the internet, and education/learning is found to be a very significant motivator for using the internet among respondents.

# LEARNER'S FEEDBACK

Table No. 2: What types of courses are you interested in accessing on SWAYAM website?

| Types of courses on SWAYAM | Frequency | Percentage |
|----------------------------|-----------|------------|
| Arts                       | 52        | 21         |
| Music                      | 77        | 32         |
| Science and Technologies   | 116       | 48         |
| Humanities                 | 60        | 25         |
| Management and Commerce    | 119       | 49         |

The frequency and percentage of the diverse courses on SWAYAM are depicted in the above table. There is a huge proportion of Management and Commerce courses in course offerings, close to half of them, 49%. The Science and Technologies courses also comprise around half of the proportion of course offerings, that is, 48% of the total course offerings. A relatively small portion of 21%, 25%, and 32% of course offerings comprised Arts, Humanities, and Music respectively.

In conclusion, the most frequent courses are those on Management and Commerce and Science and Technologies, while relatively lesser frequency is seen in Arts, Humanities, and Music.

Table No. 3: Feedback on course materials available on SWAYAM course

| Did you find the course materials (videos, readings, assignments, etc.) easy to understand and engage with? | Frequency | Percentage |
|---|-----------|------------|
| Yes, very much  | 116       | 60         |
| Yes, to some extent   | 54        | 28         |
| No, not really  | 22        | 12         |
| Total   | 192       | 100.0      |

Most of the respondents are of the opinion that the course materials (videos, readings, assignments, etc.) are easy to understand and interesting, followed by those who said they were easy in some way at 28%, and a small percentage that found them not easy at 12%.

Table No. 4: Feedback on instructor support

| How satisfied were you with the interaction and support from instructors or facilitators? | Frequency | Percentage |
|---|-----------|------------|
| Very satisfied  | 70        | 37         |
| Satisfied   | 70        | 37         |
| Neutral   | 45        | 24         |
| Dissatisfied  | 3         | 2          |
| Very dissatisfied   | 2         | 1          |
| Total   | 190       | 100.0      |

From the table above, it seems that an overall moderate level of satisfaction prevails, since most of the participants (74%) delivered positive responses (either "Very satisfied" or "Satisfied"), although 24% were neutral, and a small fraction was not satisfied, which was 3%.

Table No. 5: Feedback on various elements of SWAYAM course

| What aspects of music learning do you find most valuable in SWAYAM courses? | Frequency    | Percentage |
|---|--------------|------------|
| Video lectures  | 134          | 77         |
| Assignments and projects  | 59           | 34         |
| Live sessions/webinars  | 49           | 28         |
| Interactive quizzes   | 47           | 27         |
| Discussion forums   | 39           | 22         |
| Total   | 190 Response | 100.0      |

As can be seen from the above table, the most precious for the learners in music courses of SWAYAM are:

- Video lectures seem to be the most precious component by a significant majority of 77% who report this preference. It only goes to show that video-based learning is a major strength of the platform.
- Assignments and projects come next with the value being accorded by 34% respondents, suggesting that practical work is essential for consolidating learning.
- At the same time, 28% respondents have expressed interest in sitting live sessions/webinars wherein one can engage with instructors or peers in real-time.
- 27% respondents find interactive quizzes value-added in self-assessment tools for learning.
- Discussion forums are seemingly underemphasized but still valued by 22% respondents, which means
  that though some students enjoy peer-to-peer and instructor interaction, it is not an attractor for the
  majority.

Table No. 06: Feedback of SWAYAM Certification

| Would you be interested in pursuing certifications in courses through SWAYAM? | Frequency | Percentage |
|---|-----------|------------|
| Maybe   | 61        | 29         |
| No  | 26        | 13         |
| Yes   | 120       | 58         |
| Total   | 207       | 100.0      |

Most of the respondents, 58%, are interested in certifications or diplomas in music through SWAYAM. A small percentage is unsure, and some respondents do not want to pursue this option. It is found to be 13%.

Table No. 07: Feedback on learners' satisfaction towards overall experience

| How satisfied are you with the overall experience of taking online music education courses? | Frequency | Percentage |
|---|-----------|------------|
| Dissatisfied  | 3         | 2          |
| Neutral   | 57        | 35         |
| Satisfied   | 76        | 47         |
| Somewhat dissatisfied   | 3         | 2          |
| Somewhat satisfied  | 24        | 15         |
| Total   | 163       | 100.0      |

The analysis of satisfaction with the overall experience of taking online music education courses reveals that 62% of respondents felt satisfied to some degree, while only 4% expressed dissatisfaction. However, the relatively high neutral response (35%) indicates that there is room for improvement in enhancing the course experience for a significant number of learners.

Table No. 08: Feedback on Course page of SWAYAM course

| Course page of SWAYAM website attracts you to enrol? | Frequency | Percentage |
|--|-----------|------------|
| Likely   | 67        | 34         |
| Neutral  | 42        | 21         |
| Unlikely   | 8         | 4          |
| Very likely  | 79        | 40         |
| very unlikely  | 4         | 2          |
| Total  | 200       | 100.0      |

Out of the 200 respondents, a vast majority "Very likely" or "Likely" to enrol concerning the attractiveness of the course page. On the other hand, 21% of respondents have an answer that is simply neutral. Only 6% answer that they are either "Unlikely" or "Very unlikely" to enrol.

This indicates that, in general, the SWAYAM course page plays a positive role in encouraging enrolment.

Table No. 09: Recommendations to others

| How likely are you to recommend SWAYAM's music courses to others? | Frequency | Percentage |
|---|-----------|------------|
| Likely  | 61        | 32         |
| Neutral   | 46        | 24         |
| Unlikely  | 3         | 2          |
| Very likely   | 75        | 39         |
| Very unlikely   | 5         | 3          |
| Total   | 190       | 100.0      |

Of the respondents, 39% are highly likely to forward SWAYAM's music courses to other people, followed by those likely, namely 32%. The rest fall within the neutral range (24%), unlikely (2%), and very unlikely (3%).

Table No. 10: SWAYAM Courses in future

| Overall, how likely are you to continue using SWAYAM website for education in the future? | Frequency | Percentage |
|---|-----------|------------|
| Likely  | 64        | 33         |
| Neutral   | 44        | 23         |
| Unlikely  | 7         | 4          |
| Very likely   | 77        | 40         |
| Total   | 192       | 100.0      |

Many respondents (40%) are very likely and 33% of the respondents are likely to continue using the SWAYAM website for education in the future, followed by those who are neutral (23%), and unlikely (4%).

#### **CONCLUSION**

Respondents generally find the course materials easy to understand and engaging, with a moderate level of overall satisfaction. Video lectures are the most valued component, followed by assignments/projects, live sessions/webinars, and interactive quizzes. A significant portion of respondents are likely to enroll in SWAYAM courses and recommend them to others. Overall, SWAYAM is a popular platform for online education, offering a variety of courses and resources to meet diverse learner needs.

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