

AWARENESS AND PROFICIENCY OF EDUCATORS IN USING MOOC PLATFORMS: ANALYSING ENGAGEMENT AND ONLINE TEACHING PRACTICES

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Introduction

The integration of digital tools and the internet into educational curricula has transformed education, creating a flexible and dynamic learning environment. In the current era of rapid technological advancement, Massive Open Online Courses (MOOCs) and various e-learning platforms have emerged as pivotal tools in higher education. These platforms offer many opportunities for professional development, pedagogical innovation and enhanced learning experiences. However, the effectiveness of these digital tools largely depends on the awareness and proficiency of educators in utilising them.

In education, educators are the primary facilitators of learning and must first master any new technologies or platforms before implementing them. Thus, understanding educators' level of awareness and proficiency with MOOC platforms is crucial. This knowledge can identify gaps and areas where further training and support are needed, ultimately improving the quality of education delivered to students.

Despite the growing prevalence of online learning, there remains a disparity in the extent to which educators engage with and utilise MOOC platforms. While some educators embrace these digital tools and integrate them seamlessly into their teaching practices, others may be less familiar or comfortable with such technologies. This study seeks to explore the current state of educators' engagement with MOOC platforms and their proficiency in using e-learning tools. Additionally, it aims to investigate educators' experiences with completing MOOC courses and their online teaching practices.

MOOC platforms such as Coursera, edX, Swayam, NPTEL, Udemy, and others have gained significant traction over the past decade. These platforms offer a wide range of courses across various disciplines, providing educators with opportunities to enhance their

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knowledge and skills. However, the extent to which educators are aware of these platforms varies. While some platforms are well-known and widely used, others may not be as familiar to educators. This study will examine the level of awareness among educators regarding different MOOC platforms and identify which platforms are most commonly recognised.

Proficiency in using e-learning platforms is another critical aspect of educators' engagement with digital tools. Effective utilisation of these platforms requires a certain level of technical skill and confidence. Educators must be able to navigate the platforms, access and utilise the resources and integrate them into their teaching practices. This study will assess educators' self-rated proficiency levels in using e-learning platforms, ranging from beginner to expert. Understanding educators' proficiency levels can help identify areas where additional training and support may be needed.

Participation in MOOCs is another indicator of educators' engagement with online learning. Completing MOOC courses can provide educators with valuable knowledge and skills that can be applied in their teaching practices. However, not all educators may have had the opportunity or inclination to complete MOOC courses. This study will explore the extent to which educators have participated in MOOCs and the number of courses they have completed. It will also investigate the reasons why some educators have not taken MOOC courses, identifying potential barriers to participation.

Online teaching has become increasingly prevalent in higher education, particularly in the wake of the COVID-19 pandemic. Many educators have had to adapt to online teaching platforms and methodologies, often with little prior experience. This study will examine the number of hours per week that educators spend teaching online, providing insights into their online teaching practices. Understanding the extent of educators' engagement with online teaching can inform strategies for supporting and enhancing their online teaching experiences.

Research question:

1. What is the level of awareness and proficiency of educators in using MOOC platforms?
2. How does this relate to their experience with completing MOOC courses and their online teaching practices?

Sub-Question:

1. Awareness and Proficiency:
 - o How aware are the educators of various MOOC platforms (e.g., Coursera, edX, Udacity)?
 - o How do educators rate their proficiency in using e-learning platforms?

2. Experience with MOOCs:

- o Have educators ever completed any MOOC courses?
- o How many MOOC courses have they completed?
- o What are the reasons educators have for not taking MOOC courses?

3. Online Teaching Practices:

- o How many hours per week do educators spend teaching online?

LITERATURE REVIEW:

Research has shown varying levels of awareness among educators regarding different MOOC platforms. The study by Nagasampige and Nagasampige (2017) indicated that courses on platforms like Udemy have awareness among students and professionals in the Indian university education system. However, the SWAYAM platform is becoming popular in India by providing free education through digital resources, interactive forums and various learning activities. It supports the Digital India initiative by making education accessible to all (Shewale, 2021). These studies highlight the need for greater exposure and training on a broader range of MOOC platforms. Additionally, studies from other regions, such as the research by Johnson et al. (2018) in the United States, underscore the global trend of increasing awareness and adoption of MOOCs, particularly in higher education institutions.

The proficiency of educators in using e-learning tools is a critical factor in the effective integration of digital resources in teaching. The study by Thanavathi (2021) stated that teachers in India encounter difficulties due to insufficient proficiency in using e-learning tools. This finding is echoed by Charania et al. (2023), which highlights India's efforts aimed at improving teachers' proficiency in integrating technology for project-based learning. Therefore, it is important to continuously support the use of innovative tools for professional development. Globally, Falloon (2020) found similar challenges, indicating a widespread need for ongoing professional development to enhance digital literacy among educators.

Several studies have investigated educators' participation in MOOC courses. The findings revealed that most participants viewed this MOOC as an effective platform to enhance their pedagogical knowledge, improve classroom practices and support continuous professional development (Koukis&Jimoyiannis, 2019). Tang's (2021) study highlighted that teachers' experiences with MOOCs underscored the importance of interactions, especially learner-content interaction, as a critical factor influencing course completion in MOOC-based professional development courses.

The shift towards online teaching has been accelerated by the COVID-19 pandemic, necessitating rapid adaptation by educators. The study of Carrillo and Flores (2020)

highlighted there is a growing necessity for a holistic approach to the pedagogy of online education that seamlessly integrates technology to enhance both teaching and learning processes. The findings of Tartavulea et al. (2020) indicate that institutional support, trust in the online system and the perceived effectiveness of formative assessment are factors positively correlated with the impact and effectiveness of online education

METHODS:

Research Design:

The research applied a descriptive research design to investigate educators' awareness and proficiency with MOOC platforms and their usage of online teaching tools. This design was chosen because it provides a clear and detailed description of how educators are currently using online learning resources and technologies.

Data Collection Methods:

Data were collected through a structured questionnaire distributed to educators across various higher education institutions. The researchers systematically utilised Purposive and cluster sampling techniques were used to select educators from higher education institutions in Coimbatore. The questionnaire was designed to gather information on the following aspects:

F Familiarity with MOOC platforms: Respondents were asked to indicate their awareness of ten different MOOC platforms.

F Proficiency in using e-platforms: Respondents rated their proficiency in using e-platforms as learning tools.

F Participation in MOOCs: Respondents indicated whether they had completed any MOOC courses and, if so, how many.

F Reasons for not completing MOOCs: For those who had not completed MOOCs, respondents were asked to provide reasons.

F Online teaching hours: Respondents were asked how many hours per week they spend teaching online.

This research article is part of a broader study on hybrid teaching. The questionnaire was distributed among 167 educators who are teaching English in Arts and science Colleges in Coimbatore with differences in qualifications and experiences. The sample questionnaire is attached in the Appendix-I.

Analysis Techniques:

The collected data were analysed using descriptive statistical methods. The following steps were taken in the analysis:

F Data Cleaning: The data were reviewed for any inconsistencies or incomplete responses. Incomplete questionnaires were excluded from the analysis.

F Frequency and Percentage Calculations: The frequency and percentage of responses were calculated for each question to provide an overview of the data.

F Cross-Tabulation: Cross-tabulation was used to examine the relationships between different variables, such as the number of MOOC courses completed and the number of hours spent teaching online.

The analysis aimed to identify patterns and trends in the data, providing insights into educators' familiarity with MOOC platforms, their proficiency in using e-learning tools, and their engagement with online teaching.

RESULTS:

Familiarity with online course websites

In this study, educators showed varying levels of awareness across different MOOC platforms. As shown in Table 1, non-additive percentages are used. Out of 10 options, a few platforms received more than 50% of respondents' awareness. These platforms are Coursera (64.7%), Swayam (88.6%), and NPTEL (86.2%). This high level of awareness suggests that these platforms are well-recognized among educators, possibly due to their widespread use and promotion.

Table 1

Distribution of the respondents according to their familiarity with Online course websites

S. No.	Familiarity with online course websites	No. of Respondents (n =167)	Percentage*
1.	Coursera	108	64.1
2.	EdX	48	28.7
3.	Swayam	148	88
4.	NPTEL	144	86.2
5.	Udemy	59	35.3
6.	Udacity	7	4.2
7.	LinkedInLearning	59	35.3
8.	Skillshare	19	11.4
9.	Alison	23	13.8
10.	Others	2	1.2

(*Non-addictivePercentages)

In the investigation, educators showed varying levels of proficiency in using e-platforms as a learning tool. As illustrated in Table 2, most respondents identified themselves as Intermediate (49.7%). Additionally, 35.9% of educators considered themselves Advanced. However, a smaller proportion were categorized as Beginners (4.8%) and Experts (5.4%). This indicates a significant middle ground where educators have some experience but may need further development to reach expert levels.

Table 2

Distribution of the respondents according to their opinion on proficiency in using e-platforms as a Learning tool

S. No.	Opinion on proficiency in using e-platforms as a Learning tool	No. of Respondents (n=167)	Percentage*
1.	Beginner	8	4.8
2.	Intermediate	83	49.7
3.	Advanced	60	35.9
4.	Expert	9	5.4
5.	None	7	4.2

MOOC participation:

The examination revealed whether educators had completed any MOOC courses. As displayed in Table 3, out of 167 educators, 90 had completed MOOC courses, while 77 had not taken any courses. This data highlights that over half of the educators have engaged with MOOCs, suggesting a positive trend towards online professional development.

Table 3

Distribution of the respondents according to their opinion on MOOC (Massive Open Online Course) Participation

S. No.	Opinion on taken a MOOC (Massive Open Online Course)	No. of Respondents (n=167)	Percentage*
1.	Yes	90	53.9
2.	No	77	46.1

Number of MOOC courses completed:

The analysis examined the number of MOOC courses completed by educators. As presented in Table 4, 63 educators had completed between 1-4 courses. This was followed by 18 educators who had completed 4-8 courses and 5 educators who had completed

more than 8 courses. The data shows that the majority of MOOC participants engage with multiple courses, indicating a sustained interest in this mode of learning.

Table 4
Distribution of the respondents according to their number of MOOC courses completed

S. No.	Number of MOOC courses completed	No. of Respondents (n =63)	Percentage*
1.	1-4 courses	40	63.5
2.	4-8 courses	18	28.6
3.	Above 8 courses	5	7.9

Reasons for not completing MOOC courses:

As highlighted in Table 5, in the pool of 77 educators who had not completed MOOC courses, most (63.6%) did not respond to the question, while a significant portion (36.4%) mentioned they were not interested. This non-response rate could suggest various underlying factors, such as lack of time, perceived irrelevance, or other personal or professional barriers.

Table 5
Distribution of the respondents according to their reasons for not completing MOOC courses

S. No.	Reasons for not completing MOOC courses	No. of Respondents (n =77)	Percentage*
1.	No Response	49	63.6
2.	Not interest	28	36.4

Hours spent teaching online:

Online teaching is increasing in higher education. As demonstrated in Table 6, 41.9% of educators handle online classes for 2 hours per week, followed by 31.1% who handle online classes for 1 hour per week. Additionally, 27.0% of educators never handle online classes. This data indicates a growing but varied adoption of online teaching practices.

Table6 : Distribution of the respondents according to their number of hours per week using online platforms for teaching

S. No.	Numberofhoursperweek usingonlineplatformsforteaching	No.ofRespondents(n =167)	Percentage
1.	1 hoursperweek	52	31.1
2.	2 hoursperweek	70	41.9
3.	Never	45	27.0

DISCUSSION:

Integrating digital aids and the internet with the educational curriculum creates a flexible learning platform for both teachers and learners. In education, educators are the first learners; before experimenting with a pedagogical method, they must master it. In higher education, online learning and teaching are becoming unavoidable platforms. An educator must have an awareness of these online learning platforms.

As illustrated in Table 1, all educators are aware of MOOC courses. However, some MOOC platforms are more familiar to educators, such as Coursera, Swayam, and NPTEL. Despite this awareness, proficiency in using e-learning platforms as a learning tool remains low. As displayed in Table 2, more than 50% of educators consider themselves beginners (4.8%), intermediate (49.7%), or having no proficiency (4.2%). This indicates a significant need for targeted training and professional development to enhance their digital skills.

Most educators have attended MOOC courses. In a pool of 90 educators, 63 have completed at least one MOOC course, as outlined in Table 3. This completion rate of 63.5% for one to four courses, as evident in Table 4, demonstrates a strong interest in learning through MOOC platforms. However, there is still a notable group of 77 educators who have not registered for MOOC courses. As highlighted in Table 5, 49 of these educators did not respond to the reason for their non-participation, while 28 expressed dissatisfactions with MOOC courses. This dissatisfaction could stem from factors such as course quality, perceived relevance, or technical difficulties.

Online teaching is increasing in higher education, with 73% of educators using online platforms to teach, as depicted in Table 6. This trend underscores the growing importance of digital literacy among educators. However, the low proficiency levels and the significant number of educators who have not engaged with MOOCs suggest a need for further support and resources.

To address these challenges, institutions should consider implementing comprehensive professional development programs focused on digital skills and e-learning tools. Providing incentives for completing MOOCs and creating a supportive community for sharing best practices could also enhance educators' engagement and proficiency. By investing in educators' digital literacy, institutions can ensure more effective and innovative teaching methods, ultimately benefiting learners.

CONCLUSION:

Educators show high awareness of platforms like Swayam (88.6%) and NPTEL (86.2%). A significant number of educators rate themselves as Intermediate (49.7%) in using e-platforms. Over half (53.9%) of the educators have completed MOOC courses, with

the majority completing 1-4 courses. The main reason for not completing MOOCs is a lack of interest, although a high non-response rate suggests other potential barriers. A notable proportion of educators are engaging in online teaching, with 41.9% teaching for 2 hours per week.

The results suggest that while educators are generally aware of and interested in MOOCs and online teaching, there are gaps between proficiency and participation. Addressing these gaps through targeted training and support could enhance educators' effectiveness in leveraging digital platforms for teaching and learning.

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