
A Study on the Effectiveness of MOOC's Platforms in Fostering Skill Development among Students in Bengaluru

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ABSTRACT

At a global level, acquiring education has become increasingly important, yet challenging beyond the basic level due to factors such as entrance examinations, rising tuition fees, distance, and living expenses. To address these barriers, e-learning platforms have emerged as an alternative mode of education, providing flexible, accessible, and cost-effective opportunities for learners. Platforms such as Coursera, edX, Udacity, Udemy, TCS iON, and MyCaptain are reshaping higher education by offering diverse courses that cater to skill development and career readiness. This study examines the effectiveness of e-learning platforms in fostering skill development among students in Bengaluru. It highlights both the advantages and the challenges faced by learners, including issues related to language barriers, lack of credit recognition, limited personalized course structures, and minimal tutor interaction. The research further explores how these platforms can be integrated into blended learning models to enhance employability and lifelong learning. The findings aim to provide valuable insights into the role of e-learning



in bridging skill gaps and offer recommendations for improving its effectiveness in the student community

INTRODUCTION

The **landmark change in the Indian education system in 2020 through the National Education Policy (NEP)**, coupled with the pandemic situation, paved the way for a large-scale shift towards online learning. In this context, **e-learning platforms and MOOCs (Massive Open Online Courses)** have gained significant importance in promoting holistic development, encompassing both academic and non-academic domains. By enabling a **multidisciplinary approach**, these platforms help students acquire conceptual understanding across diverse streams, thereby strengthening skill development and employability.

Unlike traditional classroom learning, MOOCs and other digital platforms make use of advanced technologies such as recorded lectures, video tutorials, and virtual classrooms, to which students have quickly adapted. The vision of the NEP is to promote lifelong learning, overall development, and student well-being, and e-learning platforms play a vital role in realizing these objectives. The **higher education system in India has thus moved forward to embrace the “new normal” through online and blended learning.**

The **21st century has witnessed an educational paradigm shift driven by Information and Communication Technology (ICT)**. With the proliferation of ICT, **online, open, and flexible learning** has moved from the periphery to the core of mainstream education. ICT has not only improved the quality of digital delivery but has also expanded access to learning resources. Online platforms today serve as **distributed, participatory, and lifelong learning spaces**, ensuring flexibility and inclusivity. In this regard, MOOCs are seen as tools that democratize knowledge, foster lifelong learning, eliminate barriers to access, and create equality of opportunity in education.

India too has embraced this transformation. On **9th July 2017, the Honorable President of India, Shri Ram Nath Kovind, launched SWAYAM**, a national MOOC platform developed by MHRD and AICTE with support from Microsoft. SWAYAM offers more than 2,000 courses and represents India's commitment to the digital learning revolution. With this, India has emerged as the **second-largest market for MOOCs in the world after the US.**



Against this backdrop, this study titled “**A Study on the Effectiveness of E-Learning Platforms in Fostering Skill Development among Students in Bengaluru**” seeks to analyze how such platforms are influencing students’ skill acquisition, the challenges they face, and the potential for integrating these platforms into higher education to enhance employability and lifelong learning.

CONCEPT OF OPEN EDUCATION ;

- 1.Open access education,
- 2.Open source software
- 3.Web 2.0 culture (Digital learning)
- 4.Massive Open Online Courses (MOOCs)

ORIGIN OF MOOCs

The first course in this format was offered in 2008 at the University of Manitoba and was entitled Connectivism and Connective Knowledge .It highlighted that Massive Open Online Courses are not completely new. The first MOOC, belonging to the first generation, was given by George Siemens and Stephen Downes in 2008.The success of first-generation connectivist MOOCs inspired other researchers who are namely Sebastian Thrun and Peter Norvig. They gave the first extended MOOC in 2011, which belongs to the second generation.We have two types of

MOOCs, they were then called cMOOCs and xMOOCs respectively. The success of the first and second-generation MOOCs raised a lot interest in the public sphere, in academia, and in higher education institutions. This led to the innovative experimental idea of hybrid MOOCs, first delivered by a group of academics from the University of Edinburgh in 2013 .

TYPES OF MOOCs;

There are two different MOOC types according to the pedagogical approach .

The first-generation cMOOCs embraced a decentralized, learner-centred approach;

The second-generation xMOOCs were characterized by teacher-centred teaching and learning;

The third-generation hybrid MOOCs took a more pragmatic approach by combining the two previous approaches to diversify learning opportunities and to reach a broader audience.



Benefits of MOOCs

- ❖ MOOCs provide many opportunities for learners, faculty members, universities, and MOOC providers.
- ❖ MOOCs deliver education around the world.
- ❖ MOOCs can create opportunities for accessing quality higher education by building learning communities on a global scale.
- ❖ It can reduce the cost of tuition
- ❖ There is also the possibility for innovative instructional designs to support self-regulated learning
- ❖ MOOCs also have potential in the field of corporate training, where they have been used to promote new recruiting techniques and innovative marketing and branding channels .
- ❖ MOOCs can help remove these cultural and social limitations.

Limitations of MOOCs;

- ❖ Questionable course quality.
- ❖ High dropout rates
- ❖ Unavailable course credits
- ❖ Ineffective assessments
- ❖ Complex copyright issues
- ❖ Lack of necessary hardware required to join moocs .
- ❖ No personalized doubts clarification session between tutor and the student
- ❖ Learner authentication and cheating.

NEED OF THE STUDY

The purpose of this study is to examine the effectiveness of MOOC platforms in fostering skill development among students in Bengaluru. As online education has emerged as a crucial mode of learning in the digital era, MOOCs provide learners with opportunities to enhance knowledge, skills, and capabilities beyond traditional classroom settings. This study gains importance as MOOCs have become the need of the hour for students to adapt to evolving educational demands. Although MOOCs present significant benefits, issues and challenges such as limited interaction, course complexity, and lack of credit recognition remain. Hence, this study seeks to evaluate the current status of MOOCs adoption and their role in supporting students' academic and professional development.



REVIEW OF LITERATURE

E-learning is expected to improve both the access and the quality of higher education. However, extant usage of online learning technologies like MOOCs has suffered from big dropout rates. One possible reason is the lack of real-time dialogues between learners and teachers. A helpful feature to add to the e-learning experience is real-time cloud meetings that offer real-time dialogues to make learning easier and more motivating to many students. The survey of students who have taken e-learning courses both with and without live cloud meetings reveals that students who find learning to be easier with cloud meetings also find e-learning with cloud meetings to be more beneficial than MOOC courses without live dialogues. Students who find e-learning with cloud meetings to be more beneficial than MOOC courses without live dialogues also have stronger intention to take online courses with cloud meetings. The adoption of e-learning beyond MOOCs for higher education. [Chunhui Liu\(2020\)](#)

The study found the most critical factors affecting the use of MOOCs are attitude toward MOOCs, behavioral intention, and facilitation condition. Performance acceptance not only has a significant effect on attitude, but it effects MOOCs' usage indirectly as well. In addition, computer self-efficacy affects many factors: performance expectancy, effort expectancy, and attitude. This study contributes to the IS/IT literature as few studies have adopted the UTAUT model in the context of MOOCs and then extended it to include computer self-efficacy and attitude. Our significant finding is that although most technology acceptance models exclude attitude, this study found that it plays a critical role that affects the behavioral intention in the UTAUT model. [M Altalhi](#) (2021)

II. RESEARCH METHODOLOGY

The study is intended to identify the impact of Moocs among students. The study is descriptive in nature, based on primary data and secondary data.

Primary sources: It is gathered information using questionnaires through Google forms about the study within Bangalore district.

Secondary data: The secondary data is collected from various books. Journals, reports, publications and websites.

Sample size: Considering the time constraints it was decided to conduct the study based on sample size of 50 students.



Plan of analysis: From the primary data analysis and interpretations are done through tables and graphs and inferences are drawn on the basis of the responses received from respondents.

OBJECTIVES

- To study the **effectiveness of MOOCs platforms in fostering skill development** among students in Bengaluru.
- To recognize the **learners’ perspectives and the nature of content** offered through MOOCs in relation to skill enhancement.
- To render **constructive suggestions** based on the findings for improving the role of MOOCs in promoting student learning and employability.

ANALYSIS AND DISCUSSION

Figure 1.1: Percentage of respondents based on Department.

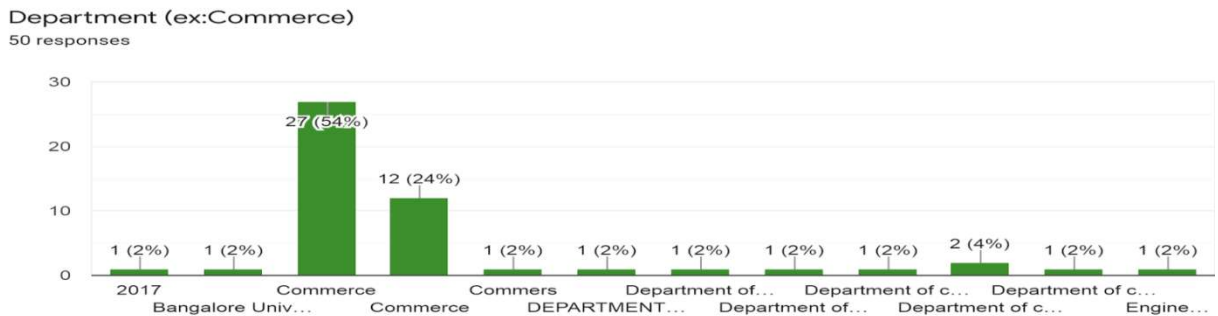
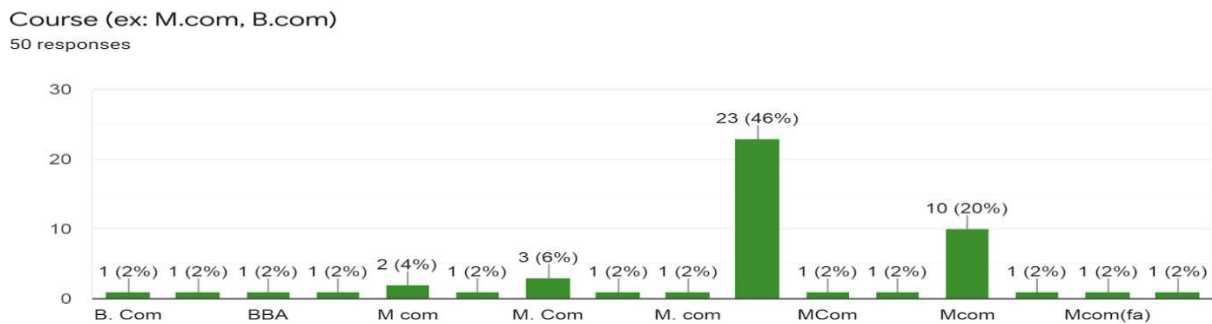
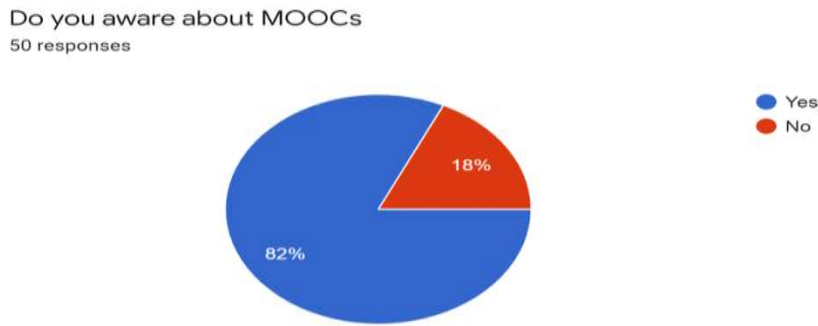


Figure 1.2: Percentage of respondents based on Courses.



The majority of respondents, as shown in Figures 1.1 and 1.2, belong to the Commerce Department and are pursuing M.Com courses. This indicates that the opinions on MOOCs in this study are primarily derived from Commerce postgraduate students in Bengaluru

Figure 1.3: Percentage of respondents based on awareness of MOOCs



More than 40% of the respondents reported becoming aware of MOOCs through their faculty members, while 36% gained awareness from friends, and about 20% came to know about MOOCs through advertisements.”

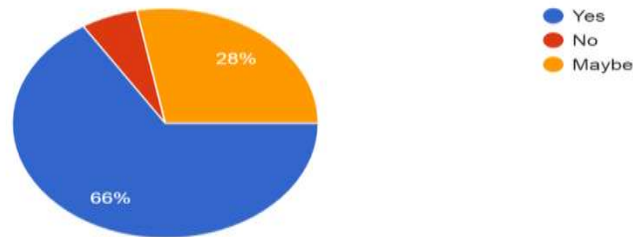
Figure 1.4: Percentage of respondents showing no.of MOOCs courses completed.



From the above data, it can be inferred that the majority of students have completed at least one MOOC course, while only 10% of students have completed 2–3 courses. This suggests that although MOOCs are gaining acceptance, their effectiveness in fostering sustained engagement and continuous skill development among students in Bengaluru is still evolving

Figure 1.5: Percentage showing MOOCs create opportunity to access high quality education among students.

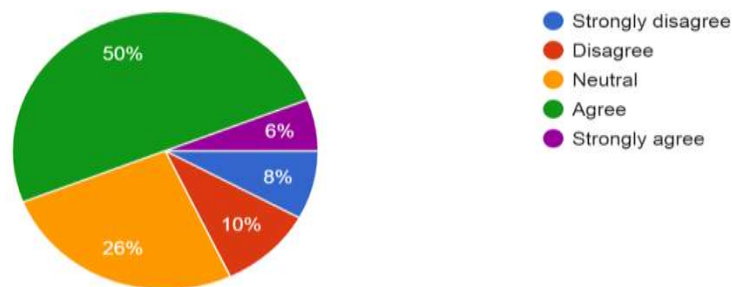
Do you think MOOCs create opportunity to access high quality education?
50 responses



A majority of students agreed that MOOCs provide such opportunities, while 28% felt that they may do so, and only 2% rejected the idea. This indicates that MOOCs platforms are widely recognized by students in Bengaluru as an effective medium for enhancing access to quality education and fostering skill development.

Figure 1.6: Percentage showing that cost of learning in MOOCs.

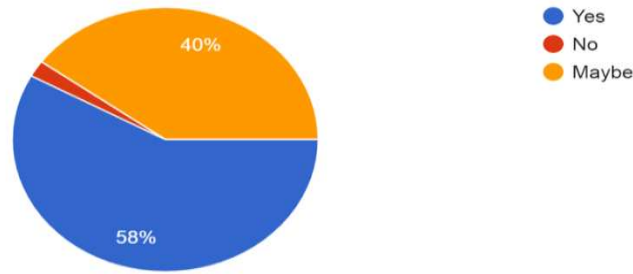
MOOCs reduce the cost of learning (tution)
50 responses



The data on the cost of learning through MOOCs shows that 50% of students agree that MOOCs help in reducing the cost of education, while 26% remain neutral and 10% disagree. This finding suggests that MOOCs are largely perceived by students in Bengaluru as a cost-effective mode of learning, thereby supporting affordable access to education and contributing to skill development.

Figure 1.7: Percentage showing that promotion of new techniques in MOOCs..

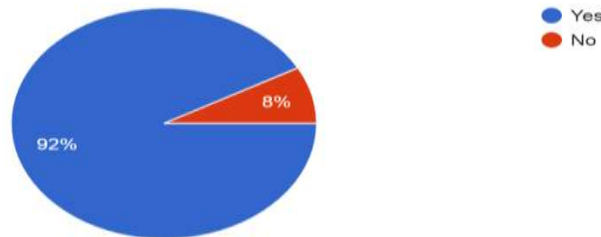
Moocs promote new recruiting techniques. Do you agree?
50 responses



The data on the promotion of new techniques through MOOCs reveals that 58% of students agree that MOOCs introduce innovative learning and recruiting techniques, 40% believe it may be so, while only 2% disagree. This indicates that MOOCs are widely acknowledged by students in Bengaluru as platforms that not only enhance learning but also foster skill development by exposing them to new and modern techniques.

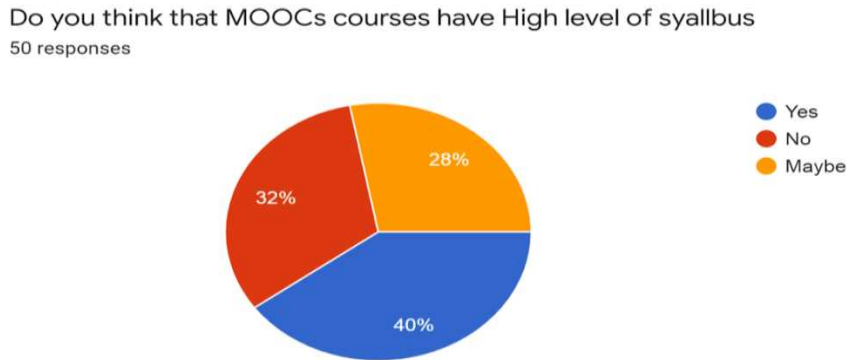
Figure 1.8: Percentage showing that MOOCs create global scale learning.

Through MOOCs students can learn at a global scale?
50 responses



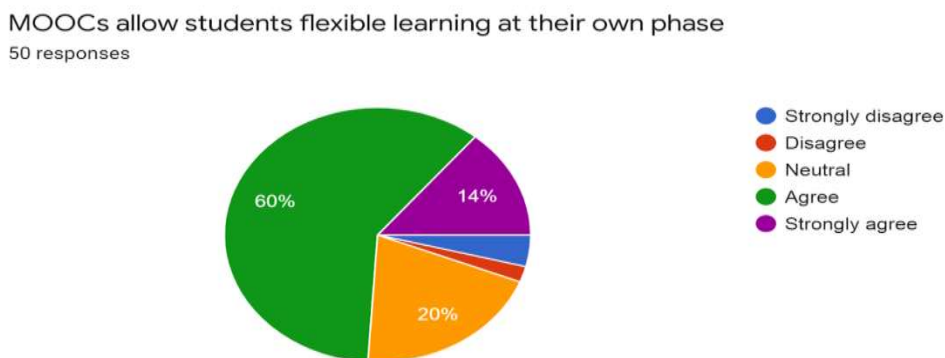
The data on global-scale learning indicates that the majority of students strongly believe MOOCs provide opportunities to engage in learning at an international level. This reflects that MOOCs platforms are perceived by students in Bengaluru as gateways to global exposure, cross-cultural knowledge sharing, and enhanced skill development

Figure 1.9: Percentage showing MOOCs has high level of syllabus.



More than 40% of students agree that MOOCs provide a high-level and comprehensive syllabus, whereas 32% do not share this view. This suggests that while a significant proportion of students in Bengaluru perceive MOOCs as offering advanced content that contributes to skill development and industry readiness, a section of learners still feel the syllabus may not fully align with their academic or professional expectations

Figure 1.10: Percentage showing MOOCs allow the students for flexible learning at their own phase and development of skill



Among the 50 respondents, a majority agreed or strongly agreed that MOOCs allow them to learn at their own pace while simultaneously supporting skill development. However, around 6% of students disagreed with this view. This indicates that flexibility remains one of the key strengths of MOOCs, enabling students in Bengaluru to balance academic growth with skill enhancement.



FINDINGS

1. The majority of students opting for MOOCs in Bengaluru belong to Commerce and Management backgrounds, particularly postgraduate learners (M.Com), indicating higher awareness and adoption among advanced-level students.
2. Most students became aware of MOOCs through faculty, peers, and institutional guidance, showing that academic networks play a key role in spreading awareness.
3. The COVID-19 pandemic (2020–21) acted as a major trigger for students to explore and enroll in MOOCs, which reflects the platforms' growing relevance in crisis-driven education models.
4. A significant proportion of students have completed at least one MOOC, though only a small percentage have gone beyond two to three courses. This indicates that while MOOCs are effective in generating initial participation, sustaining long-term engagement is still a challenge.
5. Students widely acknowledged that MOOCs provide access to **quality educational content**, flexibility in learning, and exposure to **global knowledge systems**, thereby fostering skill enhancement and career readiness.
6. MOOCs are also recognized as cost-effective learning platforms, reducing the financial burden associated with traditional higher education.
7. However, challenges persist in terms of **complex course content, lack of personalized guidance, rigid submission deadlines**, and the absence of credit recognition in formal education systems.
8. A section of students expressed concern that the high flexibility of MOOCs sometimes reduces seriousness and completion rates, suggesting the need for better motivational frameworks and institutional integration.

CONCLUSION

The study concludes that **MOOCs platforms are emerging as highly effective tools for fostering skill development among students in Bengaluru**, particularly in enhancing access to quality, flexible, and globally relevant education. They have proven beneficial in complementing formal education by



equipping learners with updated knowledge, professional skills, and exposure to modern techniques at comparatively lower costs.

However, the effectiveness of MOOCs is moderated by several challenges, including limited student–teacher interaction, language barriers, and the absence of formal credit recognition. These limitations result in high dropout rates and restrict the full potential of MOOCs as mainstream educational alternatives.

To maximize their impact on skill development, MOOCs should be integrated into **blended learning models** within higher education institutions. This would ensure structured participation, personalized support, and formal recognition of courses, thereby improving employability and lifelong learning opportunities for students in Bengaluru.

In essence, MOOCs are not a substitute but a **strategic supplement** to formal education—bridging skill gaps, promoting inclusivity, and preparing students for the demands of the 21st-century knowledge economy.

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