



MOOCS FOR PROFESSIONAL DEVELOPMENT OF TEACHERS: BENEFITS AND IMPROVEMENT

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Abstract: Many people consider MOOCs to be a crucial tool for expanding access to higher education for millions of individuals, including those in developing countries, thereby improving their quality of life. MOOCs are viewed as helping to democratize higher education not only locally or regionally but also on a global scale. By providing easily accessible content and knowledge, MOOCs enable students to enroll in full courses offered by various universities worldwide, a feat that was previously unattainable. With the advent of affordable technology, MOOCs offer access to a vast array of courses from prestigious institutions and educators. The rising costs of tertiary education are often attributed to institutions bundling too many services. MOOCs provide an opportunity to shift some of these services to other appropriate entities in the public or private sector. Designed for large-scale participation, MOOCs are available to anyone with an Internet connection, without entry requirements, and offer comprehensive online courses free of charge. They are considered a form of open education delivered at no cost through online platforms. Initially, the core philosophy of MOOCs was to broaden access to quality higher education to a broader audience, aligning with Goal 4 of the 2030 Agenda for Sustainable Development. The collaborative learning environments of MOOCs facilitate global learners in working together towards shared objectives without the need for physical meetings, fostering partnerships among participants.

Keywords: MOOCS, Professional Development, Democratize, Higher Education.

1. INTRODUCTION:

Professional development for teachers now goes beyond basic in-service workshops and encompasses a more comprehensive system of ongoing education. To progress in their careers, teachers should actively pursue professional development opportunities that are continuous and in line with standards and assessments. It is widely recognized that the quality and level of student achievement are predominantly influenced by teacher competence, sensitivity, and motivation. The National Council for Teacher Education defines teacher education as a structured program that combines education, research, and training to prepare individuals to teach across all levels of education. Teacher education focuses on enhancing teachers' skills and knowledge to effectively meet the demands of the profession and overcome its challenges. Teacher education encompasses both formal and informal activities that equip individuals to fulfill their roles within the educational field. It is concerned with aspects such as the teacher-educator, the student teacher, the content being taught, and the teaching-learning strategies employed. The goal of teacher education is to provide prospective teachers with the necessary knowledge, attitudes, competencies, and skills to excel in their roles within the classroom, school, and community. Educational institutions have a crucial role in guiding students from ignorance to knowledge through various learning experiences, with teachers playing a key role in this transformation. According to the National Council for Teacher Education, teachers are the linchpin of any educational program and are primarily responsible for driving the educational process. Therefore, investing in the training and preparation of teachers is essential to safeguarding the future of a nation. The significance of skilled teachers in a nation's education system cannot be overstated.

2. MOOC: Before the digital age, distance learning took the form of correspondence courses from the 1890s to the 1920s, followed by radio and television broadcasts of courses and early forms of e-learning. Historically, completion



rates for courses were low, with fewer than five percent of students finishing (Saettler, 1968). The 2000s marked significant changes in online and distance education, with a rise in online presence, open learning opportunities, and the advent of Massive Open Online Courses (MOOCs). MOOCs originated from the open educational resources (OER) movement, with the term "MOOC" coined in 2008 by Dave Cormier of the University of Prince Edward Island in response to the "connectivism and connective knowledge" course (CCK08). A MOOC is an online course designed for unlimited participation and open access via the web (Kaplan & Heinlein, 2016). In addition to traditional course materials like lectures, readings, and problem sets, many MOOCs offer interactive user forums to facilitate community interactions among students, professors, and teaching assistants. MOOCs are a recent and extensively researched development in distance education, first introduced in 2006 and gaining popularity in 2012. Over time, MOOCs have evolved into three main variations: xMOOCs, cMOOCs, and quasi-MOOCs. Traditional educational institutions typically adopt xMOOCs, where the teacher plays the role of the expert and the learner as the consumer. A cMOOC follows a connectivist pedagogical model, with Siemens and Cormier originally offering these types of courses. CMOCs are open and decentralized with minimal structure (King Nanaimo, 2013). A quasi-MOOC, the third variation, offers web-based materials as open educational resources and aims to support specific learning tasks with limited social interaction or grading, exemplified by platforms such as Khan Academy. In the current landscape of teacher education, MOOCs have emerged as a novel approach for gaining knowledge and skills, presenting both challenges and opportunities to traditional education (Beaven, 2013). MOOCs are reshaping the traditional teaching paradigm, leading the way in education trends and offering new avenues for teacher professional development. The widespread adoption of MOOCs is poised to revolutionize traditional education, analogous to the impact MP3 had on the music industry. MOOCs are increasingly being integrated into teacher professional development programs due to their cost-effectiveness and educational outcomes (Ji & Cao, 2016). Despite the advantages of MOOCs in teacher professional development, there is still some resistance among educators towards embracing this new teaching method. Moreover, there is a scarcity of resources focused on teacher professional development within the realm of MOOCs. While previous research predominantly concentrated on higher education and lifelong learning, there is a growing necessity to explore the application of MOOCs in teacher professional development contexts (Ji & Cao, 2016). In the evolving landscape of teacher education in India, MOOCs play a crucial role in helping educators adapt to technological advancements. These online courses facilitate teacher professional development on a large scale, connecting thousands of learners and educators worldwide. MOOCs offer access to diverse educational courses with minimal barriers, allowing teachers to tailor their learning according to individual needs. By bringing together top educators, technical experts, and professional courses across various domains, MOOCs cater to a wide range of learners' needs. Different types of MOOCs, such as xMOOCs and cMOOCs, offer varying teaching and learning philosophies to meet the diverse requirements of learners, thereby enhancing teachers' professional development and daily work effectiveness (Ji & Cao, 2016).

3. Instructional Design: Many Massive Open Online Courses (MOOCs) utilize video lectures as a modern approach to traditional teaching methods. Throne, speaking before the President's Council of Advisors on Science and Technology (PCAST), emphasized that MOOCs are structured as challenges rather than lectures. The data gathered from assessments can be extensively analyzed through machine learning technologies. This innovative approach aims to replace outdated teaching practices with evidence-based methodologies, potentially revolutionizing education. Some experts consider the videos and content produced by MOOCs to be the evolution of traditional textbooks. David Finegold of Rutgers University even goes as far as to label MOOCs as the new textbooks. Research on edX student behavior revealed that certificate-earning students tend to stop watching videos exceeding 6 to 9 minutes, with a median viewing time of 4.4 minutes for 12 to 15-minute videos. In some educational settings, a blended learning model combines online lectures with in-person interactions, leading to enhanced student performance. The incorporation of online course content into traditional campus-based courses has shown significant improvements in pass rates. Massive enrollments in MOOCs necessitate instructional designs that facilitate large-scale feedback and interaction, typically achieved through peer review, group collaboration, and automated feedback mechanisms. Connectivist MOOCs focus on peer collaboration, while broadcast MOOCs rely more on automated feedback systems. Assessments in online courses present unique challenges, with a focus on proctoring and preventing cheating. Peer review processes often use sample answers or rubrics to guide graders. Interpersonal interaction and support are crucial for student success in online courses, according to Shanna Smith Jaggers of Columbia University. Techniques such as assigning mentors to students can enhance the learning experience. Maintaining student engagement and connection in online courses can be challenging. Techniques like providing audio feedback, engaging in discussion forums, and offering personalized support can help address these issues. Grading by peer review may yield varied outcomes, with some limitations in encouraging creativity.



4. Benefits of MOOCs:

Enhancing access to higher education MOOCs are considered a crucial tool for broadening access to higher education (HE) for millions of individuals, particularly in developing countries, ultimately improving their quality of life. They play a role in democratizing HE not only locally or regionally but globally as well. MOOCs facilitate the democratization of content, making knowledge accessible to all. Students can enroll in complete courses offered by universities worldwide, a feat previously unattainable. With affordable technologies readily available, MOOCs expand access to a vast array of courses from prestigious institutions and educators. Providing a cost-effective alternative to formal education The rising costs of tertiary education stem from institutions bundling numerous services. MOOCs enable the transfer of some of these services to other suitable entities in the public or private sector. Designed for large participant numbers, MOOCs are accessible to anyone with an Internet connection, welcoming all individuals without prerequisites to partake in comprehensive online courses for free. Contributing to sustainable development goals Viewed as a form of open education available at no cost via online platforms, MOOCs uphold the original philosophy of extending quality higher education to a broader audience. Therefore, MOOCs serve as a vital instrument in accomplishing goal 4 of the 2030 Agenda for Sustainable Development. Offering a flexible learning timetable MOOCs allow learners to access specific lectures, videos, and assessments at their convenience compared to fixed class schedules. By permitting individuals to complete coursework at their own pace, MOOCs provide flexibility tailored to learners' personal agendas. Facilitating online collaboration The digital learning environments of MOOCs simplify global learner collaboration toward shared objectives. Online collaboration fosters partnerships among learners without the need for physical meetings. Despite potential time zone differences affecting communication hours, projects, assignments, and more can be accomplished to leverage the diverse skills and resources learners bring, regardless of their location. Distance collaboration benefits learners who may have previously struggled with more individualistic learning approaches, such as honing writing skills.

MOOCs are gaining traction in the field of education, particularly in teacher professional development. They offer benefits such as enhanced learning experiences and the ability to cater to diverse needs, indicating a promising future for their use in teacher training. The application of MOOCs in this area is dependent on supportive governmental policies and reflects the increasing recognition of teachers' roles in society. MOOCs provide flexibility for teachers to access classes anytime and anywhere, revolutionizing traditional classroom teaching methods. Government support and contributions from users, particularly teachers, ensure the quality of MOOCs. These platforms allow teachers to showcase, maintain, and assess their professional skills. However, there is a need for standardized development, operational mechanisms, and application standards in MOOCs for teacher professional growth. Additionally, MOOCs offer easy accessibility, flexible learning hours, subject-specific development opportunities, and access to knowledge from top professionals and universities. They also reduce financial burdens on educational institutions for teacher training and encourage knowledge sharing through online platforms. MOOCs facilitate peer and self-assessment, fostering continuous professional improvement among teachers. Moreover, they provide insights into the latest teaching technologies and practices through interactive courses led by renowned educators.

5. Suggestions for Enhancing Role of MOOC in Present Scenario: MOOCs have shown potential for teacher professional development. The long-term effectiveness and sustainability of MOOCs are still up for debate, but most researchers agree that MOOCs do have a lasting impact on teacher professional development. The University Grants Commission, along with heads of universities and educational institutions in India, should partner with leading MOOC providers and top global universities such as Stanford, Harvard, and the Massachusetts Institute of Technology to establish a suitable Indian MOOC platform. Universities and educational institutions will need to develop a certification framework to ensure that MOOC certifications or course accreditations for teachers are recognized as equivalent to traditional courses. The business model will need to be determined since many MOOC providers offer free education. Given the existing initiatives like "SWAYAM" by the HRD ministry for students in India, expanding the platform to offer certified professional development courses and online training programs for teachers should be considered. Leading MOOC providers like Coursera, Udemy, and edX already offer specialized courses for teacher professional development, and their insights can help shape an effective Indian MOOC platform for teachers' professional growth. Enrolment in Massive Open Online Courses (MOOCs) has significantly risen in recent years, with India emerging as a key player in global enrolment growth after the US. Recognizing the increasing demand for education, India has initiated several projects to provide MOOC courses. Currently, platforms such as NPTEL, mooKIT, IITBX, and SWAYAM are utilized in India for course offerings. This article presents a theoretical and technical overview of these platforms along with a discussion of their features, followed by a comparative analysis using web analysis. Implementing MOOCs in India poses certain challenges, some of which have been addressed with the introduction of SWAYAM.



6. CONCLUSION: It may be therefore concluded with MOOCs, educators can learn for free in a flexible online environment, getting the opportunity to collaborate with, and learn from, virtual colleagues. Currently, the most popular and well-regarded MOOC providers are Coursera, edX and Udacity. A growing number of smaller providers and many universities also offer courses on topics ranging from student engagement to implementing the Common Core. Teacher Professional Development seems a fit approach to enhance the teachers' capabilities and commitment as it encompasses all behaviours which are intended to effect change in the skills, knowledge and experience one gain both formally and informally as one work, beyond any initial training.

REFERENCES:

1. Ambadkar, R. (2014). MOOCS: An aid for professional development of teachers in India. *Global Online Electronic International Interdisciplinary Research Journal*, 3(1), 91-96.
2. Beaven, A. (2013). Using MOOCs in an academic English course at university level.
3. In A. Beaven, A. Comas-Quinn, & B. Sawhill (Eds.), *Case studies of openness in the language classroom* (pp. 217-227). Retrieved February 5, 2018 from <http://Research-publishing.net> Bharti, P. (2014).
4. Indian HRD ministry launches a MOOC platform SWAYAM Ed tech review. Retrieved February 1, 2018 from <http://edtechreview.in/trends-insights/trends/1598-indian-hrd-ministry-launches-amoooc-platform-swayam>.
5. Ji, Z., & Cao, Y. (2016). A prospective study on the application of MOOC in teacher professional development in China. *Universal Journal of Educational Research*, 4(9), 2061-2067.
6. Kaplan, A. M., & Heinlein, M. (2016). Higher education and the digital revolution: About MOOCs, SPOCs, social media, and the cookie monster. *Business Horizons*, 59(4), 441-450.
7. King, J., & Nanaimo, M. (2013). MOOCs for the rest of us. Retrieved February 4, 2018.
8. McGraw, R., Kinuthia, W., Marshall, S., & McNamara, T. (2013). *Open educational resources: Innovation, research and practice*. Commonwealth of learning (COL) and Athabasca University: Vancouver.
9. National Council for Teacher Education. (1998). *Curriculum framework for quality teacher education*. New Delhi: NCTE. Retrieved February 4, 2018.
10. Pappano, L. (2012). The year of the MOOC-The New York Times. Retrieved February 01, 2018 from <http://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html>.
11. Saettler, P. (1968). *A history of instructional technology*. New York: McGraw-Hill. Singh, J. D. (2016). Globalization and new scenario of teacher education. *International Educational Journal*, 1(1), 48-57.