Usability and Practices of MOOCs: ODL Professionals Perspective

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Abstract

The success of the open and distance learning system in our country's higher education system is attributable to its technological capabilities, accessibility, and flexibility. Distance and online education are viewed as a source of educational innovation and a foundation for modernizing higher education systems. MOOCs are ideal for encouraging lifelong learning in this regard. MOOCs make higher education more accessible and beyond for people who cannot afford the conventional education and are disadvantaged since they are offered without payment to any number of individuals, anywhere and at any time. In conjunction with this, the researcher intended to investigate MOOCs usability and current practices among the ODL professionals for their capacity building and professional development. The study adopted a descriptive survey design, 80 ODL professionals were selected through a convenience sampling method, among which the researcher received 68 responses. Data were gathered using a self-made questionnaire. Frequency and percentage statistics were used to analyse the data that were obtained. This study has revealed that most of the ODL professionals are not completely aware of MOOCs, their strength, delivery method, nature of the courses and other benefits. Many ODL professionals are not familiar with the usability of MOOCs for their capacity building and professional development. The researcher found a huge gap between enrolment and successful completion rate in MOOCs. The study concluded that more awareness and training programs are required to acquaint ODL professionals with this online learning system for effective teaching-learning and professional development.

Keywords: *Massive Open Online Courses, ODL Professionals, Open and Distance Learning.*

Introduction

Open and distance learning provides open access to higher learning to an enormous number of heterogeneous learners without discriminating factors like., age, gender, location and choice of courses. Open and distance learning system helps to transform a sense of reliance in the mind of ODL learners and ODL professionals to prepare them for facing the new innovations and challenges of the competitive world. In recent years, open and distance learning has undergone a very significant paradigm shift with technological advancements and innovations. Open and distance learning system has the potential to provide quality education in a diverse range of subjects on a cost-effective basis. With the help of collaboration, digital invention, and networking, open and distance learning strengthens the globalization of education. These days, distance learning governed by e-learning and virtual classroom system which offers multiple opportunities for the learner and ODL professionals to get acquainted with the application of the modern technologies for collecting valid information, storing and disseminating relevant information for the advancement of knowledge and capacity building of ODL professionals.

Technology has become the driver of our effective teaching-learning process. MOOCs are a great example of such type of technological inventions. Primarily, MOOCs started its journey as a simple online learning, now a day, have developed into a significant technological intervention to enhance access to continuous lifelong learning for every individual. MOOCs have the potential to enhance access to and improve the standard of instruction which will lead to quality education. MOOCs offer a

complete course experience for free; open access, audio and video based instructional material for all kind of learners (formal and non-formal). Only one digital device (laptop/desktop/smartphone) and internet connection are needed to access MOOC. Thus, MOOCs can offer high-quality education with universal entry feature at zero cost to all learners. One of the very important features of this technological intervention is that it is very flexible in time and place. In this type of online learning, the student does not have to keep track of his or her own learning because they have a learning management system (LMS) which helps in administration, tracking and recording of all the activities.

In foreign parts, the popular MOOC platforms are Coursera (USA), edX (USA) and FutureLearn (UK), Udacity (USA). In 2017, University Grant Commission (UGC), Govt. of India has notified that the MOOCs are to be offered through SWAYAM. SWAYAM is an online learning platform introduced by the Indian Govt. and it is designed to achieve the access, equity and quality of education. The major goal of this initiative is to take the best resources to everyone for quality education. UGC has introduced the credit framework for online courses through SWAYAM online learning platform under UGC Regulation 2016. In India, the learners' momentum of MOOCs is at the very initial stage. For our education system this is the time to synchronize with it, eradicate the digital divide, and achieve the objectives of education for all. To digitalize our education system and to cover the remote areas, Indian Govt. has introduced MOOCs through the SWAYAM platform. For this purpose, the learners under ODL mode and ODL professionals must be acquainted with the use and application of modern technologies to advance knowledge and for their professional development.

The Ministry of Education, Government of India has appointed nine National Coordinators (NC) to ensure the highest quality of online education. They are AICTE, CEC, IGNOU, IIMB, NCERT, NPTEL, NIOS, NITTTR and UGC. NCERT and NIOS has been appointed for school education, NPTEL for engineering courses, UGC for non-technical post-graduation education, CEC for under-graduate education, IGNOU for out-of-school students, IIMB for management studies and NITTTR has been appointed for teacher training courses. NITTTR is also offering a programme on ICT in Teaching and Learning through SWAYAM for professional development. IGNOU offering courses on Teaching and Learning, Communication Skills through SWAYAM. It is very clear that for getting benefit from MOOCs, our education system should be well acquainted with the application of different modern technologies to achieve the goal of education for all. MOOCs can be used as an effective tool for learner's better academic achievement and professional development of ODL professionals. In this study, the researcher has tried to explore the awareness level about MOOCs', usability and current practices of MOOCs for professional development among the ODL professionals under the dual-mode universities.

Literature Review

In this section, the documents containing information related to the research problem are systematically identified, documented and analysed. One study shows that only a very small percentage of student teachers are aware of MOOCs and found negative perception towards MOOCs (Shaheen Altaf Shaikh, 2017). MOOC awareness is very high among post-graduate students rather than under-graduate students (Nagasampige & Nagasampige, 2017). One study reveals a need to encourage learners to adopt MOOCs as a learning resource (Ambadkar, 2020). Learners have different type of needs so MOOCs platforms must provide multiple options to fulfil learners needs (Aharony & Bar-Ilan, 2016). Student possess a positive perception when learning through MOOC (Fesol et al., 2017). It is observed that most of the students are well aware about MOOCs nature, benefits and its power (Rusli et al., 2019). The teacher educators are aware about basic things of MOOCs but to develop more understanding, integrating MOOCs in their regular classroom practices is very important (Singh & Chauhan, 2017). Teachers perception and attitude towards MOOCs were positive and it was recommended to encourage the teachers to enrol in MOOCs for improving knowledge and skills (Caleb et al., 2019). A theoretical and technical discussion and comparative analysis is needed for conceptual understanding and implementation of MOOCs (Chauhan, 2017). MOOCs can be a powerful tool to deliver quality higher education in order to further professional development of teacher (Jobe et al., 2014).

Proper utilization of MOOCs leads to more effective teaching-learning and professional development. The review found that most of the studies mainly related to awareness about MOOCs among learners. Some studies are conducted on perception towards MOOCs among the learners. Most of the studies are conducted on the students. Taking into account all of these studies, the researcher discovered that a very limited number of studies have been undertaken on practice of MOOCs among ODL professionals. In this context the researcher decided to conduct a study on usability and practices of MOOCs among the ODL professionals and different aspects of MOOCs for professional development and capacity building in their field.

Statement of the Research Problem
The statement of the problem of present research is:
"Usability and Practices of MOOCs: ODL Professionals Perspective"

Delimitation of the Research Study
The research study was delimited to the ODL professionals or ODL teachers at PG level of different LSCs under the dual-mode university. Only the ODL professionals from 16 LSCs under the dual-mode university in the state of West Bengal, were taken as sample for the study.

Operational Definitions
Usability: Usability refers to the degree to which a product or service can be used by individual users to accomplish specified objectives effectively, efficiently, and satisfactorily in a particular context of use.
Practices: Practice is the act of applying an idea, concept, or approach into action in a practical setting. Exercise or performance of an activity or skill repeatedly in order to develop or maintain expertise in it.
MOOCs: MOOCs are online courses designed for large numbers of participants, can be accessed by anyone anywhere as long as they have an internet connection, are open to everyone with no entry qualifications and provide a full course experience online for free (United Nations Educational, 2016).
ODL Professionals: ODL professionals can be defined operationally for the study as the faculty members teaching in different distance learning institutions and are responsible to provide the quality education that the ODL learners desire or need.
Professional Development: The term professional development refers to someone's continual training and education in his or her field of endeavour. Professional development aims to keep readers updated on current innovations while also assisting in developing new skills and talents in order to grow in your area.
Learner Support Centres (LSCs): LSCs means a centre established by the higher educational institution for guiding, counselling, offering interaction between the teachers and the learners, rendering any academic support service and assistance required by the learners under ODL mode (University Grants Commission - Government of India, 2017).
Dual Mode University: Dual Mode University means a Higher Educational Institution where the conventional mode of education and distance mode of education or online education are both available for the learners' sake and interest.

Research Questions
1. What is the awareness level about the concept of MOOCs among the ODL professionals?
2. What is the awareness level on the usability of MOOCs for professional development of ODL professionals?
3. What is the level of practices of MOOCs for professional development among the ODL professionals?

Research Objective
The major objective of this research study is to find out the awareness, usability and practices of MOOCs and its different aspects for the professional development of ODL professionals.

Methodology of the Study

Research Design: Quantitative descriptive survey method was utilized for the conduct of the present research study. The research study was conducted using an online survey tool. Data were analysed using different statistical methods and interpreted to arrive at conclusions. Three dimensions were taken up in the present study: conceptual understanding of MOOCs, usability of MOOCs, and practices of MOOCs for professional development.

Population and Sampling Technique: Population for the present study was ODL professionals teaching in PG level of different LSCs under the dual mode university. Researcher have uses convenience purposive sampling method. The tool was framed using Google forms and digitally sent through email and different social media platforms to the ODL professionals or teachers. The sample size was 80 ODL professionals, among which the researcher received 68 responses (response rate: 85%) from ODL professionals teaching at PG level under a total of 16 LSCs.

Tools for Data Collection: A self-designed questionnaire containing 26 items was framed using Google forms and digitally sent to ODL professionals. It was a mix tool which includes different items. The questionnaire was both open-ended and close-ended in nature. The first section told the respondents about the sections and how to fill out the online survey. The second section asked for information about the people who answered. The final section comprised the three dimensions: understanding of MOOCs, usability of MOOCs and practices of MOOCs for professional development of ODL professionals.

Interpretation of Data

The first part of the questionnaire was designed to examine the conceptual understanding of MOOCs among ODL professionals teaching at PG level under different LSCs. To the basic understanding of MOOCs, it is found that only 54.42% i.e., 37 ODL professionals are aware of the full form of MOOCs. It means that 45.58% of ODL professionals are still not aware of the full form of MOOCs. Researchers found that 45.58% i.e., only 31 ODL professionals are aware that MOOC is offered online. It means that around 54.42% of ODL professionals have no idea about its mode of interaction. Few of them said that it is blended in nature, where some components of the study are face-to-face and few components are done online. Researcher found that only 41.17% i.e., 28 ODL professionals are aware that MOOCs are offered through SWAYAM online learning platform initiated by the Govt. of India. Around 61.76% i.e., 42 ODL professionals are not aware that MOOCs are flexible in time, pace and it promotes self-study of learner. Study reveals that 85.29% i.e., 58 ODL professionals have no idea that there are no prior qualifications is required to enrol in MOOCs. It is found that 60.29% i.e., 41 ODL professionals are well aware that certificate is provided after successful completion of MOOCs through SWAYAM platform. Most of the ODL professionals are not aware about the certification criteria for MOOCs under SWAYAM platform. Around 48.53% i.e., 33 ODL professionals are not aware that MOOCs through SWAYAM platform offers unlimited number of students to enrol. Around 72.05% i.e., 49 ODL professionals are aware that Email Id and internet connectivity to device is the basic requirement to access MOOCs under SWAYAM platform. Around 67.65% i.e., 46 ODL professionals have no idea about the four important quadrants (text material, video lecture, self-assessment tests, and discussion forum) of MOOC under SWAYAM online learning platform.

The second part of the questionnaire was designed to examine the usability of MOOCs for professional development of ODL professionals teaching at PG level under different LSCs. In relation to the usability of MOOCs for professional development of ODL professionals, it is found that 95.58% i.e., 65 ODL professionals have supported that the MOOCs can be used for capacity building and professional development of ODL professionals. Researcher found that around 97.06% i.e., 66 ODL professionals shows positive attitude towards integration of MOOCs in their teaching. It is found that 50% i.e., 34 ODL professionals have no idea about the nature of the courses on different disciplines available in MOOCs program on SWAYAM online learning platform. Around 41.17% i.e., 28 ODL professionals have said that the process and utilization of MOOCs on SWAYAM platform is quite complicated because of poor internet connectivity. All the ODL professionals shows favourable attitude towards the integration of credit-based MOOCs on the SWAYAM platform. Around 88.24% i.e., 60 ODL professionals have no idea that NIOS is offering 24 weeks Diploma in Elementary Education (D.El.Ed) program for teacher training and professional development.

The end part was designed to examine the level of practices of MOOCs among ODL professionals for their professional development. Researcher found that none of the institution offers training program on online learning and does not offer MOOCs for their students. Researcher also found that only one LSC out of 16 LSCs are well equipped with educational e-content or audio-visual production unit in their institute. Others have no audio-visual production unit for MOOCs. Only 8.83% i.e., 6 ODL professionals said that they have virtual learning environment at their institute. Few of them have no idea about virtual learning environment. It is found that the institutions have no dedicated policy to promote or support MOOCs program for betterment of teaching-learning which leads to professional development. There is no policy in dealing with MOOCs for professional development of ODL professionals in their institute. Researcher found that around 83.83% i.e., 57 ODL professionals have never participated or enrolled in any MOOCs on SWAYAM for their professional development but all the ODL professionals shows positive attitude to enrol themselves in near future in different MOOCs on SWAYAM online learning platform for their professional development and they want to integrate MOOC in their teaching-learning. It is also found that the ODL professionals from this LSCs have never participated in the development of MOOCs or e-content development for MOOCs. Out of 68 ODL professionals only one ODL professional successfully completed MOOC on ICT in Teaching and Learning and another one on Academic and Research Report Writing offered by NITTTR on SWAYAM online learning platform for the professional development.

Findings and Discussion of Result

Basic Understanding of MOOCs: This study found that many ODL professionals are not aware about the full form of MOOCs. Most of the ODL professionals are not aware about the mode of interaction of this type of MOOC on SWAYAM platform. This study also shows that most of the ODL professionals unaware of nature of the courses, course structure, enrolment and access procedure and they have many misconceptions about its mode of offering (online or offline). Many are not aware that MOOCs are offered through SWAYAM online learning platform initiated by the Govt. of India. Most ODL professionals have no idea that there are no prior qualifications required to enrol in MOOCs on SWAYAM online learning platform. Anyone can join in MOOC with minimum knowledge of technology. It is also found that the ODL professionals are not aware that certificate is provided after successful completion of MOOCs through SWAYAM online learning platform. Many ODL professionals have no idea about the course content material, assessment procedure and criteria to get a certificate. Many of them have no understanding about the four important quadrants (reading material, video lecture, self-assessment tests, and discussion forum) of MOOC on SWAYAM online learning platform. But most of the ODL professionals are well aware about its basic technical requirement to access MOOCs. Thus, it can be concluded that most of the ODL professionals are well aware about the technical requirement to pursue MOOC but unfortunately many of them have no clear idea about the nature of the course, course structure, mode of interaction, online learning platform, enrolment procedure, engagement procedure (synchronous and asynchronous), assessment procedure, and criteria for certification etc. So, it can be concluded that the conceptual understanding about MOOCs among the ODL professionals is very low.

Usability of MOOCs for Professional Development: Study reveals that most of the ODL professionals have supported that the MOOCs can be used for their capacity building and professional development. It shows a positive attitude towards integration of MOOCs in their teaching. It is found that half of the ODL professionals are not aware about the nature of MOOCs and different dimensions available on SWAYAM online learning platform. Few of them said that the process and utilization of MOOCs on SWAYAM platform is quite complicated because of poor internet connectivity. Without internet connection and a device (computer or laptop or smartphone) they will not be able to join in MOOCs program on SWAYAM platform for their professional development. All the ODL professionals shows positive attitude towards integration of credit-based MOOCs on SWAYAM platform. Many of them felt that the MOOCs on SWAYAM platform are costly because of the requirement of computer or laptop or smartphone with strong internet connection and finally need to pay an amount for proctored examination and certification. Most ODL professionals have no idea about the nature of courses on SWAYAM platform. They couldn't name a single MOOC on the SWAYAM online learning platform when asked. They have no idea that different types of professional development and teacher training

courses (MOOCs) (like., Design and Facilitation of E-learning Courses by IGNOU, Development of Self Learning Material by NITTTR, E-content Development by NITTTR, ICT in Teaching and Learning by NITTTR, Academic and Research Report Writing by NITTTR, and Psychological Foundation of Education by CEC and Diploma in Elementary Education by NIOS etc.) which are available on SWAYAM online learning platform. The ODL professionals felt that the interaction rate is higher in traditional face-to-face teaching mode than MOOCs. One of the very unique characteristics of MOOC on SWAYAM online learning platform is that we may explain our general misunderstandings, if any, and express our views on specific subject via discussion forums, which is one of the extremely unique advantages of MOOC on SWAYAM online learning platform. This demonstrates that ODL professionals are unfamiliar with the usability and overall advantages of MOOCs for professional development and capacity building. More awareness and training programme is required to acquaint the ODL professionals with this online learning system for effective teaching-learning and professional development.

Practices of MOOCs for Professional Development: The final section reveals that none of the institution offers MOOCs for their students and for better academic achievement. Even the institutions do not offer any training programme for capacity building on online learning or MOOCs. The institutions have no audio-visual production unit or e-content development cell for MOOCs. It is also found that most of institutions don't have any virtual learning environment. Few of them are not aware of virtual learning environment. Institutions have no dedicated policy to promote or support MOOCs program for betterment of teaching-learning which leads to professional development. Most of the ODL professionals have never enrolled in any MOOCs on SWAYAM for their professional development but all the ODL professionals shows positive attitude to enrol themselves in near future in different MOOCs on SWAYAM online learning platform for their professional development. There is a huge gap between enrolment and successful completion rate in MOOC. In reality, the course completion rate is very less than enrolment rate. The ODL professionals were interviewed to understand the reason for not enrolling in any MOOC program, and therefore it is found that lack of awareness, pressure to complete syllabus, language (lack of proficiency in English), poor internet access and lack of institutional policy are the major reasons for not enrolling in MOOCs.

The researcher has studied the usability and practices of MOOCs for professional development of ODL professional at post-graduation level. Through the study the researcher found that majority of ODL professionals have no clear idea on MOOCs and its usage for professional development. Ministry of Education, Govt. of India has taken many initiatives to promote self-directed and self-paced learning and for this purpose they advised all higher education institutions to incorporate MOOCs into their course curricula. In this respect, they also recommended to take necessary steps to develop MOOCs for their learners and professional development of the ODL professionals. There must be a dedicated policy for the ODL professionals to promote or support MOOCs in their institution. An academic department is required to support pedagogical use of technology.

Conclusion

Online education may be seen as a source of innovation for raising educational standards and a basis for altering higher education institutions. MOOCs are commendable in this regard for fostering and supporting lifelong learning. MOOCs may be made available to any number of individuals, at any location, and at any time. MOOCs serve all types of learners with a full course experience. In this case, all that is required is an internet connection and a single device (laptop, desktop, or smartphone) to have access to this form of high-quality instruction. MOOCs allow us to enrol in and complete higher education courses entirely online. It is also beneficial to individuals who cannot afford formal education and are members of the impoverished parts of society. MOOCs are ideal for increasing professional skill development and other capacity building initiatives. Massive open online courses (MOOCs) may be delivered to a large number of individuals as part of our lifelong learning programme. As a result, MOOCs are making a big contribution to the democratisation of higher education and boosting the quality of our educational system. MOOCs offer universal entry to a high quality of education and finally, it leads to our professional development (United Nations Educational, 2016).

References

Aharony, N., & Bar-Ilan, J. (2016). Students' Perceptions on MOOCs: An Exploratory Study. *Interdisciplinary Journal of E-Skills and Lifelong Learning*, *12*, 145–162. https://doi.org/10.28945/3540

Ambadkar, R. S. (2020). E-learning through SWAYAM moocs-awareness and motivation among commerce students. *International Journal of Scientific and Technology Research*, *9*(2), 3529–3538.

Caleb, O., Ndatsu, Z., & Olawale, I. T. (2019). *Education Lecturers ' Perception and Attitude towards Massive Open Online Courses Attitude of School Administrators in Niger State , Nigeria*. 1–8.

Chauhan, J. (2017). An Overview of MOOC in India. *International Journal of Computer Trends and Technology*, *49*(2), 111–120. https://doi.org/10.14445/22312803/ijctt-v49p117

Fesol, S. F. A., Salam, S., & Bakar, N. (2017). An Evaluation of MOOC Learning Based on Students' Perception. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, *4*(8), 2458–9403. www.jmest.org

Jobe, W., Östlund, C., & Svensson, L. (2014). MOOCs for Professional Teacher Development. *Society for Information Technology & Teacher Education International Conference*, 1580–1586. https://oerknowledgecloud.org/sites/oerknowledgecloud.org/files/proceeding_130997 (3).pdf

Nagasampige, M. H., & Nagasampige, K. (2017). A Qualitstive Study on Usage and Effectiveness of Massive Open Online Courses (MOOCs) in Indian University Education System. *European Journal of Open Education and E-Learning Studies*, *2*(1), 79. https://doi.org/10.5281/zenodo.583318

Rusli, R., Hashim, H. U., Hashim, H., & Yunus, M. M. (2019). Learners' Awareness towards the Use of MOOCs in Teaching and Learning. *Creative Education*, *10*(12), 3012–3019. https://doi.org/10.4236/ce.2019.1012225

Shaheen Altaf Shaikh, S. A. S. (2017). Student Teacher Awareness of MOOCS - Massive Online Open Courses. *International Journal of Educational Science and Research*, *7*(6), 105–110. https://doi.org/10.24247/ijesrdec201713

Singh, G., & Chauhan, R. (2017). Awareness towards Massive Open Online Courses (MOOCs) and their usage for Teacher Education in India. *Asian Journal of Distance Education*, *12*(2), 81–88.

United Nations Educational, S. and C. O. (UNESCO). (2016). *Making Sense of A Guide for Policy-Makers Making Sense of*. https://unesdoc.unesco.org/ark:/48223/pf0000245122

University Grants Commission - Government of India. (2017). *University Grants Commission (Open and Distance Learning) Regulations, 2017*. *17*(D). https://www.ugc.ac.in/oldpdf/regulations/distance education regulations.pdf