Impact of Massive Open Online Courses (MOOCs) on Higher Education:
Opportunities or Threat

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Introduction

The Massive Open Online Course (MOOC) movement is playing a pivotal role in transforming the higher education. Courses designed for large numbers of participants, that can be accessed by anyone anywhere as long as they have an internet connection, are open to everyone without entry qualifications, and offer a full/complete course experience online for free(OpenupEd 2015). The impact of MOOC is questionable due to long history of revolutionary potential in Open Distance Learning as expressed by the "hope, hype and disappointment" (Gouseti, 2010). As more initiatives are launched, millions of people around the world continue to participate in MOOCs through a small but growing diversity of courses and platforms; and they continue to attract a high level of interest from reputed educational institutions, senior politicians, policy-makers and popular media houses. The key point is that different interest groups and stakeholders have quite different reasons for promoting MOOCs and therefore the opening up of education agenda must be seen alongside powerful forces that view online learning as a means of intellectual development, enhancement in self esteem, increasing competition between institutions, introducing new business models with reduced public funding for universities, and the creation of a global higher education digital marketplace (Brown et al., 2015).

Krause and Lowe (2014) present a useful synthesis of the claims made about the promise and perils of MOOCs. On the one hand, they show that MOOCs have the potential to challenge the closed and privileged nature of academic knowledge in traditional universities. That said, in many respects this feature of openness is a profound second order outcome of the Internet rather than a result of MOOCs per se. Moreover, there is high dropout rates for MOOC courses and only handful of MOOC courses are available by few universities which provides the pathways and supports to recognise the academic qualifications.

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Nevertheless, the growth of the MOOC has potential to address the problem of meeting increasing demand for higher education, particularly in developing countries where it is almost impossible to build enough traditional institutions to cope with the number of prospective students.

Daniel (2012) believes the new openness movement is a real game changer, as it has potential to widen access to life-long learning, address key gaps in skill development, and ultimately enhance the quality of life for millions. There is even some hope in India that MOOC courses may be able to play an important role in closing the growing inequality gap of literacy and in reducing youth unemployment. The national institutes of India like IIMs and IITs also have started MOOC courses. The Government of India has also decided to start 350 online courses through SWAYAM (Budget 2017-18). There is a need to create a solid systematic structure for the validation and recognition of accomplishment of the courses from online sources as Coursera, Edx and SWAYAM, UGC, and other educational authorities which seeks cooperation between these institutions.

The present paper describes the claims and counter-claims which addresses the opportunities and threats of the MOOC movement, as perceived by a random sample of experienced Open Distance Learning educators working in the area. The present study sought to hear from a selected group of educators with a strong commitment to the goal of opening up access to higher education. More specifically, the study was designed to examine the impact of MOOC movement on higher education as opportunity or threats. The data has been gathered and analysed with the research objectives with regard to degree teachers' perception on the use of MOOCs in degree Colleges in Bengaluru, state of Karnataka and Ranchi, state of Jharkhand. Set against the above claims and counter-claims, the paper describes an effort to address this gap in the literature by documenting the opportunities and threats of the MOOC movement, as perceived by a random sample of experienced leaders working in the area on Open Distance Learning programmes.

Review of Literature

The unique characteristics of MOOCs- including free registration, open access to learning (regardless of prior qualifications), a large and diverse learner body who not only have different backgrounds but also wide ranging motivations for enrolling in a course, and the absence of a single, linear learning progression followed by all students on a course- are shaping the learning process. Breslow et al. (2013) urged researchers to take advantage of the huge quantity of data MOOCs generate to identify in greater detail what contributes to and

constrains students' learning. The ability to track how often and with what aspects of the MOOC individuals engage has enabled studies to classify learners based on their patterns of interaction with MOOC features (Kizilcec et al, 2013). Much of the research on learner behaviour has focused on trying to understand the low completion rates (Jordan, 2014), which current estimates place at less than ten percent (Breslow et. al., 2013; Jordan, 2014). Studies have examined the role that participants' educational backgrounds, gender and geographic location (Breslow et. al,2013;Guo & Reinecke, 2014; Kizilcec et. al.,2013) have on their continued engagement in a MOOC, while further research has investigated the connection between the nature of learners' participation in the online discussion forums and completion rates (Gillani & Eynon,2014).

MOOC is an online course that engages students in the learning process, offers a way for students to connect and collaborate, and provides a platform where course materials are shared and negotiated among participants, MOOCs also emphasis participant autonomy, creating a broad form of legitimate peripheral participation where individuals negotiate their own level of engagement (McAuley et. al., 2010). The pedagogical model driving the initial development of MOOCs focused on incorporating high levels of learner control, offering synchronous, real-time, sessions with the facilitator and other speakers, providing a digital artefact that summarized course activities such as participant blogs posts, online discussion, external resources, developing dynamic social systems as a means of participant organization and collaboration, and emphasizing the critically of creation in the learning process (McAuley et. al., 2010). Further, the early MOOCs were designed to be tuition-free, openly accessible courses that did not generally incorporate or grading (Levy, 2011).

The focus in these studies on progression, retention and MOOC completion rates as indicators of learning have enabled an understanding of the of the whole MOOC cohort but provide little insight into the behaviour and learning of the individual. Furthermore, the use of completion rates as a proxy for learning success is problematic in the MOOC context, Unlike in traditional Higher Education courses where learner expectations are largely standardised (successful completion of a course or degree programme is a marker of success), the diversity of learners in a results in a range of motivations for participation (Kizilcec et. al., DeBoer, Ho, Stump, & Breslow, 2014).

Significance of the study

The study aims to provide authentic information for parents, educators and policy makers to reflect upon various factors that help the MOOCs to be a successful tool to educate millions

of learners. In doing so, they can investigate the possibility of introducing those factors to their institutions, which may consequently lead to enhance learners' educational outcomes. This study will also be significant because the findings will stimulate the awareness on the importance of MOOCs and strategies that would reduce negative effects of MOOCs on learning environment.

The findings of this study will also be useful to understand the opportunities and threats in relation to MOOCs. Further it will also act as a reference point to other interested scholars interested in this area of research.

Research Design

In this research, quantitative methodology has been used to collect and analyze the data obtained from all the respondents. A questionnaire developed and used by Ghazinoory, Abdi & Azadegan-Meh,2001; Zavadskas, Turskis & Tamosaitiene 2011; Robert Schuwer, Ines Gil-Jaurena, Cengiz Hakan Aydin, Eamon Costello, Christian Dalsgaard, Mark Brown, Darco Jansen and Antonio Teixeira (2015) have been administered among respondents. A total of 300 have been selected randomly as sample of the study. The sample responded to the statements given and chose their answers based on their perceptions. The survey has been distributed by hand to the respondents. The various sections of the questionnaire included: (a) Personal Details, (b) Experience with MOOC for Teaching, (c) MOOC access for teaching, (d) Opportunities for teachers for MOOC use,(e) Threats of using MOOC in teaching and learning, (f) Teachers' opinion about MOOCs use and impact on students' learning outcome.

Research Questions:
i. To identify degree teachers' perceptions in the main opportunities of the MOOC movement for higher education in India.
ii. To identify degree teachers' perceptions in the main threats of the MOOC movement for higher education in India.

Data Collection Procedures

Data collection defines the procedure for collecting data by the researchers. Four identified degree colleges of each city were included in the study. The questionnaire has been equally distributed to 450 teacher educators identified for the study, each 225 from both the cities colleges. They have been given one week to fill the questionnaire and return it to the researchers. All of the participants volunteered themselves in the research. Some

questionnaires have been with missing information that details could not be used as a contribution in this research. Finally 300 questionnaires have been used by the researchers for data analysis of which 150 male and 150 female educators.

Data Analysis Process

The data collected from the respondents have been gathered together to be analyzed using the Statistical Packages for the Social Sciences (SPSS) version 21. The analysis includes inferential analysis. The researchers used descriptive analysis to analyze the mean and standard deviation. Inferential statistics (t-test) has also used to analyze the research findings.

Hypothesis Testing

There is no relationship between gender and the use of MOOC to support teaching and learning in the classroom.

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	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Equal variances Assumed	.055	.815	.174	98	.862	.040	.229	-.415	.495
Equal variances not Assumed			.174	41.031	.863	.040	.230	-.424	.504

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male	150	2.08	.997	.199
Female	150	2.04	.992	.115

The result shows in independent t-test means, that the use of MOOCs in teaching and learning in the classroom of the male (M=2.08, SD=.997) is higher than the use of MOOCs in teaching and learning in the classroom learning of the female (M=2.04, SD=.992) is insignificant, t=.174, d.f.=98,p=.0005,however,since the p<.05 so the null hypothesis is rejected and alternate hypothesis is accepted, and the means of two groups are significantly different from each other. Thus, the data provide sufficient evidence to conclude that the use of MOOCs in teaching and learning in the classroom by males are higher than among the females.

Conclusion

Massive open online courses (MOOCs) are one of the most prominent trends in higher education in recent years. It represents open access, global, free, video-based instructional content, problem sets and forums released through an online platform to high volume of participants aiming to take a course or to be educated. With time and place flexibility, MOOCs gathers scholars and learners around the world. It promise to open up higher education by providing accessible, flexible, affordable and fast-track completion of courses for free or at a low cost for learners who are interested in learning. MOOCs bring new opportunities for innovation in higher education that will allow institutions and academics to explore new online learning models and innovative practices in teaching and learning. MOOCs become the latest trend in the field of distance education which indicates a significant need of research studies to reduce the threat related on it.

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