

## Massive Open Online Courses : Hype and Hope

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### ABSTRACT

The study identifies various issues and challenges faced by massive open online courses (MOOCs) while offering open online courses to vast number of learners. An exhaustive review of literature was taken up to carry out the study. The article reviewed the, issues and challenges faced by MOOCs. MOOC also provides an opportunity to groom the intellectual capacities of people at mass level. The initiative has removed all the barriers of time and space which is much evident in traditional educational system by offering courses at the doorstep of learners. To make universal education dream come true, there is a need to look at apprehensions which researchers have identified in the existing online learning environment.

**Keywords:** E-learning; Online courses; Open courses; Massive open online courses; Distance education; MOOCs-issues and challenges

### 1. INTRODUCTION

Massive open online courses (MOOCs) are latest e-Learning initiative utilising modern technology and widely investigated advance in distance education that developed over time as a prevalent mode of learning. Siemens and Downes coined the term MOOCs, where maximum number of apprentices can get enrolled from anywhere across the globe. MOOCs comprise of wide and assorted content, contributed to by multiple subject specific experts, educationalists, and mentors, accumulated into a central repository, such as a website. The unique feature of MOOCs is that, the content can be remixed. Thus, 'the content doesn't need not to be designed to go together but become linked with each other through MOOCs'<sup>1</sup>. MOOCs offer open and free education to the entire community where learners choose from diverse range of courses and get registered in the course of their choice very conveniently at their place and without wasting time. Enrolled student though study independently but at the same time they do collaborate with their peers and experts across the globe. MOOCs proved to be beneficial for individuals who fail to pursue education through regular mode due to certain issues like scarcity of funds, lack of opportunities, geographical location, etc.

Pedagogically, MOOCs are designed to be tremendously interactive using various tools like blogs, videos, podcasts and forums embedded into the programs to engage students and help them to collaborate and solve real world problems by conducting real debates and dialogues about various ideas,

concepts and theories used for peer review and assessment<sup>2</sup>. Information and communication technology (ICT) endowed education system with opportunities through web based learning methods, and this gave rise to the development of MOOCs<sup>3</sup>. Wide attention from mass media; entrepreneurial vendors, education professionals and tech literate individuals have been received by MOOCs from last couple of years. MOOCs actually came up with free access and provide course that brought down the cost of higher education. From open access to open web based courses, there is increasing drive among higher education institutions to take part in the 'open' movement. Number of elite universities are now introducing web based courses by setting up open learning platforms. Commercial start-ups such as Coursera and Udacity have joined their hands with prestigious universities, offering free or less charged online courses<sup>4</sup>. MOOCs underline openness in relation to learners' aptitude to access content online, in terms of fee to access, in terms of open courseware, or with respect to student group effort<sup>5</sup>. European Commission explain MOOCs as 'an online course open to anyone without restrictions (free of charge and without a limit to attendance), usually structured around a set of learning goals in an area of study, which often runs over a specific period of time (with beginning and end date) on an online platform which allows interactive possibilities (between peers or between students and instructors) that facilitate the creation of a learning community. As it is the case for any online course, it provides some course materials and (self) assessment tools for independent studying'<sup>6</sup>.

Various authors define it as a 'massive model of educational delivery, with theoretically no limit to enrolment;

open, allowing anyone to participate, usually at no cost; online with learning activities typically taken place over the web; and a course, structured around a set of learning goals in a defined area of study<sup>7,8</sup>.

MOOCs is in a transitory phenomenon, ordained by higher education's resistance to change and lack of financially sustainable models, it has become clear that MOOCs are here to dwell. As MOOCs progress, sponsors and courses alike are mounting at a rapid rate. The effect of MOOCs on research in higher education is lost in the hype. In fact, MOOCs have stirred the higher education research. Harvard and MIT jointly invested \$30 million in edX by means of opportunities for research as part of the rationale for such a massive investment<sup>9</sup>. MOOCs aim at providing open access online lectures, course material and problem sets to maximum number of participants through web<sup>10</sup>. MOOCs' engrossed worldwide publicity through rapidly growing providers and platforms thus declaring year 2012 'the year of MOOCs' by New York Times. In another study, researcher studied the motivation for learners' and mentors' use of massive open online courses and found aspiration to know about nascent topics or to update their knowledge, curiosity about MOOCs or individual yearning to collect as many certificates for completed courses as possible to be the reason and motivation for learners to sign up for MOOCs<sup>11</sup>.

## 2. ISSUES AND CHALLENGES

MOOCs as an open access educational platform have elevated various concerns and criticisms in educational forum. This subdivision scrutinises the issues and challenges for the MOOCs:

### 2.1 Quality

Quality assurance is one of the major issues of MOOCs for higher education. Compared to other web based courses, MOOCs lack structure and hardly embrace the vital role of a mentor or a teacher. MOOCs are autonomous learning platform that is entirely different from formal education system. MOOCs that are pretty open in nature develop a self-selected population that is passionate and promised about this learning approach. To make maximum of this platform, learners need to be digital literates that raises the concerns on inclusivity and equality of access. Margaryan<sup>12</sup>, *et al.* evaluated the instructional design quality of MOOCs, the results reveal that majority of MOOCs are good about the organisation and presentation of the course material. However, number of MOOCs score below par on instructional design policy. The results indicate that although most MOOCs are well organised but their instructional design quality is poor.

According to Hew & Cheung<sup>11</sup>, the loose structure of these courses makes it difficult to assure its quality and even to measure obtainable goals. Traditional instructors and trainers disbelieving this format voice appropriate apprehension about standards and quality of MOOCs. Daniel<sup>13</sup>, suggests that MOOCs need to make an approach to get the courses evaluated by the learners and educators that can lead to a quality rank table of courses offered. In this way, the courses with poor rating either dissolve due to less demand or will endure by

recuperating course quality in response to poor scores.

### 2.2 Completion Rate

The course withdrawal rate is another concern for MOOCs and much argued debate. Although thousands of learners register for courses, but actually only few of them complete the course. Various studies reveal that completion of MOOCs classes are bleak as compared to traditional online education as less than ten per cent of learners enrolled in MOOCs are found to complete their course<sup>14-16</sup>. Despite growth in enrolment rate of students in MOOCs courses, the average completion rate as on 15<sup>th</sup> July 2015 was 15 per cent<sup>15</sup>. Hew & Cheung<sup>11</sup>, reveal the reason behind 90 per cent dropout in MOOCs is dearth of inducements, inability of learners to comprehend the course material available, lack of help when needed or many a times learners having other priorities to fulfill. If learners come up with the stimulus to merely learn some novel information and do not look for any university credit, then the uniqueness of a fresh set of ideas wears off as the work involved to complete the course escalates. Also, the nature of the media used to access the course may be a distraction to dissuade participants from concluding<sup>17</sup>. The dropout rate problem depends basically on the perceived intentions of MOOCs. If the basic aim of MOOCs is just to offer opportunity to access free and high quality courses from leading higher educational institution and professors, then high dropout rates may not be a crucial issue. However, it is extensively agreed that it would be expedient to mend the retention rates of MOOCs by finding out the reason for dropping out the courses by the learners<sup>18</sup>.

### 2.3 Assessment and Credit

MOOCs face difficulty to gauge and assess the students' performance, feeling of teaching in vacuum due to the lack of feedback and response from learners and lack of student participation. The main assessment instrument used by most MOOCs to gauge learners is quizzes where multiple choice questions with programmed answers are given. Several MOOCs put forward open ended questions for assessment and support individual student's learning, for example coursera—that comprise of submission of long type responses, rated through peer assessment. However, evaluating large number of essay assignments is quite difficult for one lecturer<sup>11</sup>. Jordan<sup>15</sup>, reveals that maximum MOOCs providers use 'auto grading' assessment system for evaluating the learners and 'peer grading' is adopted by very less course providers. Apprehensions are also conveyed around deception and copying with online learning, especially where courses are entitled for academic credits.

### 2.4 Language

Language arbitrates the way a learner think and articulate. Language proficiency is a significant cross-cultural thing mainly for non-native speakers<sup>19</sup>. Language barrier can be decreased with asynchronous online learning<sup>20</sup>. English language considered as a global language is most commonly used around the world with one's mother tongue together. Bilinguals are alleged to be better learners while non-english speakers may face difficulty in using English language. This is perhaps prime concern for MOOCs providers<sup>21</sup>. In another study, author

reveals that language barrier can affect the learning process of learners and also is one of the foremost dropout reasons in MOOCs. Therefore learners need to have enough language learning aptitude to access MOOCs<sup>19</sup>. Wright<sup>22</sup>, reveals that English language remains to be dominant scholarly language in many of the countries even if English is not spoken language of the native people. Majority of MOOCs are produced and offered in English language. For example, Coursera advertised 390 courses on its website out of which 363 were in English, 11 in Spanish, 09 in French, 05 in Chinese, 01 in German, and 01 in Italian. Udacity and edX is found to offer only English language courses<sup>23</sup>. However, the share of English language courses were reduced a bit from 80 per cent to 75 per cent by the rise of some region specific MOOC providers like FUN and MiriadaX. Spanish and French are second biggest languages in which MOOCs are offered after English and currently courses are offered in only 16 languages<sup>24</sup>. Strategies are ahead to get the selected MOOCs translated for Coursera<sup>25</sup>; however the effectiveness of translation of language with no appropriate modifications might well hamper the overall accessibility of the learning resources. Translation of selected courses may also lead to the dominance of those translated subjects<sup>26</sup>. The language issue may be unintended; but it does pass on messages that can be considered to be valuable.

### 2.5 Limited Internet Access

Access to steady and uninterrupted electricity supply and internet connection, with good bandwidth at reasonably good price do not exist with equity across the people of developing countries and this issue may not be taken in account or may be taken for granted by MOOCs providers<sup>27</sup>. Internet connection in many of the countries remains to be excessively high compared to their average annual income. In New Zealand, 'internet access is not pervasive; quarter of homes still do not have access to the internet and one fifth don't have a computer'<sup>28</sup>. Some governments are taking initiatives to make available maximum internet access to people through the provision of cyber cafes and in terms of stimulating opportunities for extended study, to access cyber learning opportunities<sup>26</sup>. However, these still appear to remain limiting factors.

### 3. CONCLUSIONS

MOOCs provide an opportunity to groom the intellectual capacities of people at mass level. Offering courses at the doorstep of learners it has shaken the barriers of time and space which is much evident in traditional educational system. Learners from remote place are able to get connected with educators across the globe. They are able to hold discussions and interactive with people from diverse culture and ideologies. To make universal education dream come true, there is a need to look at apprehensions which researchers have identified in the existing online learning environment. National and international accreditation councils should be put in place to check and validate the course contents. To get the wider audience, people at social platforms should be encouraged to translate the course in different language and to least develop subtitles in different languages to multimedia content. Though active participation in online courses has been witnessed but so

far pass out percentage is not much promising. The language of the contents should be simple, lucid, and easy to understand and comprehend. Further, there need to be flexibility in time line of courses. Users should be able to take the courses as and when they desire to and should have liberty to complete the courses at their own pace. Since courses are delivered online, contents should be created in such formats that require least internet bandwidth and should be operable at low end android and other property electronic gadgets. MOOCs are foreseen future of our education system; we need to be cautious and wise to canvass the learning environment of our upcoming generations.

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