

MASSIVE OPEN ONLINE COURSES (Moocs): OPPORTUNITIES AND CHALLENGES FOR FACULTY IN HIGHER EDUCATION

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ABSTARCT

The efforts would be an how MOOCs can be a disruptive strategy for the institutes of higher education and therefore why such institute should do planning to adopt MOOCs in a new business model and what necessary could be the challenges and opportunities for the faculty members working in the area of higher education and why it has become important to understand about MOOCs would be answered by highlighting the motivation for MOOCs, MOOCs can be adopted for any level of education but this paper try to emphasize on what MOOCs can contribute for higher education.

KEYWORDS: MOOCs, Challenges, Opportunities, Motivation, Higher Education

INTRODUCTION

Two Stanford professors presented two online free courses in artificial intelligence in July 2011 then MOOCs have come up in higher education and later on four million students have signed up for MOOCs. MOOCs (Massive Open Online Courses) can be seen as a term or word related to the scalability of open and online education. The term 'MOOC' was coined by a group of Canadian academics in 2008. MOOCs are 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.

Massive: An online course designed for large number of participants. Some says unlimited which should be considered as large number of participants rather than literally unlimited.

Open: Course can be accessed by (almost) anyone anywhere as long as they have an internet connection Open as in freedom of place, pace and time Open to everyone without entry qualifications.

Online: Complete course online all aspects of course are delivered online.

Course: It represents unit of study. The course offer a full course experience including

- Educational content
- Facilitation interaction among peers (including some but limited interaction with academic staff)
- Activities/tasks, tests, including feedback
- Some kind of (non formal) recognition options
- A study guide / syllabus

MOTIVATION FOR MOOCs

Now a day there has been a growing and devastating demand of public to reduce the cost of higher education and many people think MOOCs as a means to solve this problem. MOOCs provide a free and open learning environment and participants have to choose the segment as per their goals and interest so following are the points why it has become so important.

- Increased access to internet and advanced web technologies: Use of new web technologies like voice over internet (VOI) and Wi-Fi have changed many areas of our life taking publishing research work to social networking and communication.
- Introduction of 3G and 4G network: 3G and 4G have boosted the uses of internet over mobile.
- Speedy adoption of tabs and smart phones: Use of tabs and smart phones among people across the world, 24 by 7 open affordable communication channel.
- Growth in text based content: Wikipedia, face-book, twitter.
- Development of video content: Time spends on video sharing sites has increased.
- Transformation of print form of research Journal into digital form.
- Availability of plagiarize software to check any breach of IPR (Intellectual Property Right).
- Initiative to bring 'Open Online Resources 'by some universities.

HIGHER EDUCATION AND MOOCs

MOOCs are the way for increase experimentations with thoughtful and bold ideas for higher education in this digital era that serves the need of all learners in society.

- Digital education defining the future models of higher education: MOOCs is one of such Massive Open Online Courses (MOOCs) have captured the interest and attention of academics and academic administrators. Despite being free of charge, the firms dealing with MOOCs offer a more-than-passing resemblance to ordinary college classes—except they are delivered over the Internet to thousands of people at once.
- A MOOC is a new kind of college-like experience: How can you teach thousands of students anything at once for free? It seems not feasible. MOOCs is not just about delivering information via internet but it is about educating people on a large scale by adopting the most accepted pattern of off line education system.
- Led to increased interest in education for non-traditional students: MOOCs, which by-and-large attract non-traditional students has led more institutions to start thinking about how to serve this population.
- Brought teaching to the forefront of higher education: from beginning some of the biggest criticisms of MOOCs have been that watching someone on a computer screen is not a very effective way to learn, of course watching someone lecture in front of a class of 100 people is not much better. MOOCs and other digital forms of learning have led to an increase focus on the quality and practice of teaching, which is already improving both online and traditional courses.

- A crisis took the stigma out of online education: Top-ranking institutions appear to be in an advantageous position when it comes to online provision. The vast majority of students cannot access these institutions because of a selection process that admits only the brightest and the richest. MOOCs may gradually diminish the fee obstacle, thus depriving smaller universities of a big chunk of students. Distance education has been around for centuries, and online education for several years, but it has been stigmatized, largely because of its association with the for-profit sector. But then MIT, Harvard, and Stanford started launching MOOCs, and perceptions started to change

Higher education is going digital, responding to the architecture of knowledge in a digital age, and MOOCs, while heavily criticized, have proven a much-needed catalyst for the development of progressive programs that respond to the changing world.

MYTH ABOUT MOOCs

MOOCs will not solve the problem of expensive education or educational scarcity in emerging economies: Moocs students spend the majority of their study time watching videos and reading. To aid understanding they join discussion groups with other students, and they take computer-marked tests that direct them back to material they have not understood. For feedback they exchange assignments with a partner and peer grade them against a set of criteria. Lecture videos ensure repeat lecture, Content is free hence add no cost to student, Open discussion about their doubts with so many peers give a enough explored solutions.

In MOOCs the “content is free” is a myth: There is a mass of free material on the web. Google has been admired as Google Guru, you tube, slide share, Vimeo are some of the source of free content. It is agreed that for educational purposes, web content has to be curated by someone who knows how it relates to an intended learning outcome and this is what the institutions working with MOOCs do with the content.

From MOOCs business perspective ‘Education is a mass customer industry’:

Every course offered offline engaged students having same educational need thus offline system is basically considered education as mass customer industry but due to resources limitation the seats reserved limited in almost every course. In case of MOOCs technology is used to overcome the crunch of resources such as faculty, content and interaction space. Using MOOCs every student can pick course as per his or her interest, can take test as per level of his preparation.

MOOCs are not suitable for all kind of higher education courses: It is not the limitation of MOOCs but the limitation of the courses developed as per the requirement of MOOCs.

MAIN MOOCs PLATFORMS

Coursera and Edx are two main platforms of Moocs that partner with the top universities in the world to offer courses online for anyone to take, for free for educating thousands of students. Moocs technology enables the best professors to teach tens or hundreds of thousands of students to help them master new concepts quickly and effectively.

Table 1

Coursera	Edx
Platform founded by Stanford university. Computer science academic professor Daphne Koller and Andrew Ng. launched in April 2012.	Platform founded by MIT and Harvard following MITx electronics and circuit course in January 2012.(John Daniel)
Three million registered users by march 2013.	First course asedxcommenced in October 2012
The platform has partnership with 69 universities including Stanford, Princeton, university of Pennsylvania, California institute of Technology, university of Washington, university of Edinburg and Ecole Polytechnic federale de Lausanne.	Courses from the 12 members of the edx consortium: MIT, Harvard, Barkele, university of Texas system, Wellesley college, Australian national university, university of toronto, RICE, Ecole Polytechnic federale de Lausanne.
Offers over 300 courses from range of subjects including computer science, biology, life science, humanities, economics, business and management, food and nutrition, social sciences.	33 courses from range of subjects including computer science, humanities, law and health, physical and natural science and social sciences

CHALLENGES: MOOCs

Moocs have to face challenges in terms of quality, sustainability how MOOCs can “overcome inequality” in terms of access and quality of higher education needs to be reconsidered in a number of ways. We now know that MOOCs are primarily available to those already most educated. How will we reach those least educated?

Sustainability

According to Global Industry Analysts (2010), the global e-learning market will reach \$107 billion by 2015. However, it is not entirely clear how the MOOC approach to online education will make money. Most MOOC start-ups do not appear to have clear business models and are following the common approach of Silicon Valley start-ups by building fast and worrying about revenue streams later.

Quality

For MOOCs, most participating institutions do not offer credits for the courses delivered via MOOCs, This somewhere reflect quality deficit in MOOCs, however this may be as a result of concerns about their branding. Other than this there are no other certifications that guarantee quality in MOOCs. In most cases, compared to other online courses, MOOCs lack structure, and rarely include the central role of the instructor or teacher. They are largely self-directed learning which a very different experience to formal education is. The open nature of MOOCs creates a population that is self-selected to be engaged and passionate about this approach to learning. MOOCs demand a certain level of digital literacy from the participants, which has raised concerns on inclusivity and equality of access.

Completion Rate

Whether the dropout rates and progression should be a concern for MOOCs is a contested debate. Meyer (2012) reported that the dropout rates of MOOCs offered by Stanford, MIT and UC Berkley were 80-95%. For example, only 7% of the 50,000 students who took the Coursera-UC Berkeley course in Software Engineering completed. There is a similar reported dropout rate in Coursera’s Social Network Analysis class where only 2% of participants earned a basic certificate and 0.17% earned the higher level programming with distinction certificate.

Validity

Another major reason why MOOCs are not so widely spread yet is because they are considered to be “competitive” to university attendance. MOOCs give everyone the opportunity to access academic material and even acquire an online degree, which raises a series of questions, such as the future of instructor-led classroom, physical or virtual the real value of university degrees earned online compared those earned at a college or university campus.

Low Motivation

It is generally true that self-study requires commitment and self-discipline. In most cases, especially for asynchronous MOOC courses, learners may not be motivated enough to keep up with their online content.

Pedagogy for Online Delivery

Even though recent reports suggest that online learning will hardly ever replace traditional educational settings, MOOCs certainly represent an efficient learning method since their pedagogy is developed in accordance with the needs of modern learners. Furthermore, given the fact they are mostly created by renowned educators, it is unsurprising that their design follows the highest educational standards.

Competition among MOOC Providers and Smaller Academic Institutions

The decision to offer MOOC programs or not, also affects the way actual universities and colleges operate. Are MOOCs the new face of academic institutions for the 21st century they cannot do without? How the private sector does enter the game? Are small colleges willing to buy MOOC material from other universities, or even, private companies, or they will try to build their own MOOC material? Can they afford to do so? Isn't this a typical example of unequal opportunities? From an instructor's and organizational point of view, it requires extensive time, money, effort and devotion to build a new MOOC course, and smaller colleges certainly neither do they possess the resources to develop them, nor the worldwide reputation to “market” them accordingly in order to promote their work.

Education Perceived as a Product

Talking about promotion, by default converts education into a product. MOOC is a new product to be marketed and launched only by academic institutions which can afford to develop and advertise it worldwide. An innovative way to increase their revenue, which is generated by selling the MOOC content they are developing to those who cannot afford to build their own learning material.

OPPORTUNITIES: MOOCs

MOOCs offer many opportunities once developed and delivered it is less labor intensive approach in higher education.

Front End Services for Students

MOOCs provide front end services to the students including proctored examination, certification, career guidance and direct tutoring.

Back End Services to the Third Parties

Which includes employers for recruiting analytics, design consultancy, recruitment services and advertising.

Education Services

MOOCs provide educational services to higher education institutions including license of courses and to training providers and workplace development programs.

Expansion

MOOCs have the potential to bring higher education and generate revenue from millions of students who don't have access to today.

Tutoring

Data and analytics constitute another promising source of revenue. For example, students might pay for advanced learning.

CONCLUSIONS

MOOCs promise to open up higher education by providing accessible, flexible, affordable and fast-track completion of universities courses for free or at a low cost for learners who are interested in learning. The popularity of MOOCs has attracted a great deal of attention from Higher Education institutions and private investors around the world seeking to build their brands and to enter the education market. Institutions will need to look more closely at and learn from the different initiatives outside traditional institutions that are developing new business, financial and revenue models to meet the different needs of new groups of learners in an open higher education marketplace. Open education brings 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.

REFERENCES

1. Clark, D (2013) MOOCs: taxonomy of 8 types of MOOC, available at:<http://donaldclarkplanb.blogspot.se/2013/04/moocs-taxonomy-of-8-types-of-mooc.html>
2. Daniel, J (2013) MOOCs and higher education: evolution or revolution? available at: <http://blog.oup.com/2016/04/moocs-highereducation/#sthash.Z2Db0SeC.dpufM>
3. Global e-learning market to reach US\$ 107 billion by 2015, According to global industry analyst, Inc. Available at: http://www.prweb.com/releases/distance_learning/e-learning/prweb_9198652.htm
4. Lane, A (2009) the impact of openness on bridging educational digital divides, International Review of Research in Open and Distance Learning, vol 10, no 5, available at:http://oro.open.ac.uk/24791/1/IRRODL_2009.pdf
5. Meyer, R. (2012). What it's like to teach a MOOC (and what the heck's a MOOC?), <http://tinyurl.com/cdfvvqy>
6. Salisbury, A.D. (2014) Impact of MOOCs on higher education, a report from the UT Arlington symposium
7. W, Gary. How MOOCs Present Massive Opportunities for Research on Learning University of California, Irvine.