MOOCS: THE NEW GENERATION LEARNING

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Gone are the years when what we learned in school and colleges stuck with us throughout our working life. With the rapid pace of technological advances, constant learning is the most pressing need of the day. And massive open online courses (MOOCs) are adequately equipped to address and serve it. MOOCs have been one of the most hotly-debated topics in the education circles over the past few years. Opinions have been extremely polarizing, with some people heralding it as the greatest leap for education since the invention of the printing press, and some dismissing it as another fad.

MOOC is an online course which aims unlimited participation and open access via the web. The first MOOCs emerged from the Open Educational Resources (OER) movement (1). The term MOOC was coined in 2008 by Dave Cormier of the University of Prince Edward Island in response to a course called *Connectivism and Connective Knowledge* (also known as *CCK08*). CCK08, which was led by George Siemens of Athabasca University and Stephen Downes of the National Research Council, consisted of 25 tuition-paying students in Extended Education at the University of Manitoba, as well as over 2200 online students from the general public who paid nothing (2). This provides interactive user forums to support community interactions among students, professors, and teaching assistants. MOOCs are a recent and widely researched development in distance education which were first introduced in 2006 in USA and emerged as a popular mode of learning in 2012. According to *The New York Times*, 2012 became "the year of the MOOC" as several well-financed providers, associated with top universities, emerged, including Coursera, Udacity, and edX (3,4).

These did not rely on posted resources, learning management systems, and video lectures, instead using structures that mixed the learning management system with more open web resources. MOOCs from private, non-profit institutions emphasized prominent faculty members and expanded existing distance learning offerings into free and open online courses. MOOCs are of two distinct types: one of them emphasizes the connectivist philosophy and other resembles more traditional courses. Stephen Downes proposed the terms "cMOOC" and "xMOOC" to distinguish in between them.

The principle on which cMOOCs are based is of connectivist pedagogy indicating that material should be aggregated rather than pre-selected, remixable, re-purposable and feeding forward. It tries to connect learners to each other to answer questions emphasizing collaborative development of the MOOC.

xMOOCs have a much more traditional course structure typically with a clearly specified syllabus of recorded lectures and self-test problems. The instructor is the expert provider of knowledge, and student interactions are usually limited to asking for assistance and advising each other on difficult points (5).

MOOCs are becoming popular as they offer university-level courses without the need to complete an entire programme of studies. Students get the opportunity to study high quality courses online with prestigious universities, often at no cost. Users can select courses from any institution offering them independently. There are no entry requirements. Video-based study offer interaction either through peer review and group collaboration or automated feedback through objective, online assessments.

EdX is a non-for-profit provider, created by Harvard and MIT universities. Now extended to the Australian National University, TU Delft(the Netherlands), and Rice, Berkeley and Georgetown universities in the US. Around the world, other MOOC providers include EduKart in India, ALISON in Ireland, and Aprentica in Latin America.

The reasons behind considering MOOC are-

i. Quality courses with low cost,
ii. Can be studied in combination with other work and
iii. Study resources are easily accessed from any computer at any location through web.

MOOCs can generate affective learning through four pathways or mechanisms:

i. Sharing instructor enthusiasm.
ii. Discussion on controversial topics.
iii. Exposure to diversity.
iv. Experiencing innovative teaching approaches.

The disadvantages are that while most courses are free, some are fee-paying and videos are normally short, drop-out rates are high – up to 90%. These rates are marginally lower for paid-for courses. A reasonable degree of computer literacy is needed. Many of the MOOC users are graduates seeking to top up their skills and competences. MOOCs do not feed into a degree or other qualification but are self-contained. Only a few students complete the courses. Content of MOOC offered by other country may not match the culture and condition of the home country of the student accessing the course.

The advantages of MOOCs over physical colleges and universities are-

- Scaling up the course batch size is a few clicks away.
- Thousands of young minds can be guided by a emeritus tutor.
- Self-paced study enables student to study and learn at their own leisurely rate.
- Online courses can help mitigate and remove all systemic barriers, thus truly making education a universally available resource.

Three of the most pressing critiques of an open learning system are (a) lack of an effective system to measure and validate the progress of the learners, (b) how to integrate the course credits into the present system so that it counts towards a degree from a college, and (c) how to ensure personalized guidance and mentorship. However, all these are resolvable as having certain multiple choices questions at the end of each session to evaluate the understanding of the learner and a few universities have started launching their full-fledged courses online or allowing certain validated MOOCs to contribute credits to their physical courses.

In India, SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) was launched on 15 August 2016 which is an information technology platform. Aims at providing high quality education on various subjects from school level(class IX-XII) to under graduate and post graduate students, covering all disciplines is a new portal for MOOC. SWAYAM is a programme designed to achieve the three cardinal principles of Education Policy viz., access, equity and quality. The objective of this effort is to take the best teaching learning resources to all, including the most

disadvantaged. SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. In order to ensure best quality content are produced and delivered, seven National Coordinators have been appointed: They are NPTEL for engineering, UGC for post-graduation education, CEC for under-graduate education, NCERT & NIOS for school education, IGNOU for out of the school students and IIMB for management studies. SWAYAM platform is indigenously developed by Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE) with the help of Microsoft and would be ultimately capable of hosting 2000 courses and 80000 hours of learning: covering school, under-graduate, post-graduate, engineering, law and other professional courses.

It is thus anticipated that MOOCs impact is going to be felt strongly on the education system in India not only in improving standards and availability of quality education in all fields, on the click of a button but also granting affordability of learning science for students from rural background or colleges in remote areas with paucity of competent science instructors.

References:

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