

## Hard to Keep Promises



When Massive Open Online Courses (MOOC) were announced in 2011, it came with a lot of promise — anyone from around the world right from an average villager to a college dropout could take the courses, and gain knowledge and employment. But are these objectives being met? Edex does an analysis.

### History

Popular search engine Wikipedia says the term MOOC was first coined by Dave Cormier of the University of Prince Edward Island, Canada. Soon Udacity, edX and Coursera followed suit with The New York Times even terming 2012 as “The Year of the MOOC”. In 2011, Stanford University, US, launched three courses, which were lapped up by 1.6 lakh students. In March 2012, Harvard and Massachusetts Institute of Technology joined forces to create edX, which soon saw the joining of University of Texas System (a cluster of nine universities), Wellesley College and Georgetown University. Coursera, another popular MOOC platform, is supported by University of Pennsylvania, Princeton University, Stanford University and The University of Michigan. While most MOOC players offer short-term courses, there are indeed a couple of those who offer degrees — World Education University offers degrees from its College of Arts and Humanities, College of Business, College of Education, College of Engineering and Computer Sciences, College of Health Sciences, College of Hospitality, Tourism and Retail Management, College of Legal Studies and College of Psychology, and Georgia Tech College of Computing offers a MOOC in Computer Science, which can be completed in three-six years.

## For self-motivated students

If one were to look at the population taking up the MOOC courses, reality hardly fits the objective with which these courses were started. It is not your average villager from Turkey or Bihar, but a self-motivated Harvardian or IITian that goes for the courses. A report in The New York Times said that eight out of 10 students enrolled for MOOCs provided by University of Michigan and University of Pennsylvania had a degree of some kind. The same report added that when it came to countries like India, Brazil, China, Russia and South Africa, 80 per cent of those who were taking up MOOCs had a first degree, while overall that figure stood at five per cent. Almost all MOOCs offered by top universities had similar profiles. Even Sebastian Thurn, Co-founder, Udacity, admitted to the media that only self-motivated students were taking up MOOCs. Not surprising that Thurn himself got the idea, recollecting the days he spent at University of Bonn as a student using the library resources to teach himself.

“Accessibility is a major issue. Have MOOCs connected every small village or city? No,” begins Prof Andrew Thangaraj, coordinator. NPTEL (National Programme on Technology Enhanced Learning). NPTEL is India’s version of the MOOCs, orchestrated by the IITs. Details at [www.nptel.ac.in](http://www.nptel.ac.in).

Can MOOCs replace traditional courses? Apparently not, if you go by an experiment done by Prof Jerry Brown of San Jose State University, California, US. When students banked only on MOOCs for learning, only 25 per cent passed. “With respect to NPTEL, the courses are structured by IIT professors who might not understand the level of comprehension of an average engineering student. Most of the NPTEL courses are used by IIT and IISc students. When students from other engineering colleges use our courses, the feedback I have got is that they are not able to grasp the subject well. We can’t obviously bring down the quality, but only look at ways by which students can upgrade their intellectual quotient. This is where college faculty should come into the picture. Perhaps one of them can act as a mentor so that students can learn their lessons better. Of course, this goes against the principle of MOOCs, which is to learn by yourself,” admits Prof Thangaraj.

Giving his point of view is Richard C Levin, CEO, Coursera, “We do not expect to be able to replicate the university experience, nor is that our goal. Online education provides opportunities to people who may not otherwise have the time for or access to a high quality education to enhance their skills and learn from some of the best instructors in the world. In many cases, an education on Coursera is not replacing a university education, but rather providing an alternative to no higher education or a supplement to higher education to better prepare for college or for a job, by gaining skills required by employers.”

Rooting for online education as having the potential to greatly enhance on-campus learning, Richard says that MOOCs can indeed complement traditional classroom formats, and grant instructors more flexibility in their teaching methods. “We built Coursera’s platform to support a ‘blended learning’ approach to education, wherein students view lectures online prior to coming to class, and then use classroom time to pursue more interactive learning exercises and in-depth group discussions,” he adds.

When students are learning by themselves, they are the ones in control. A lot of MOOCs are delivered in chunks, so that one can learn according to one’s convenience. Is this why there are more dropouts, we ask Prof Thangaraj. “When students can work on their own pace, perhaps one in 10 finishes the course. But even if someone doesn’t go up till the end, there will be some kind of takeaways, for these are quality lessons,” he reasons.

With respect to the quality aspect of NPTEL certificates, Prof Thangaraj says the certificates are given only after a proctored exam, where students have to be physically present, in an obvious clash with the ideals of MOOC.

### **Language barrier**

Another issue, he points out, is the language barrier, a problem peculiar to India or other developing countries. “It would auger well for the students if the MOOCs were in a language they understood or at least had subtitles (for video lessons). But even top universities don’t have the resources for it. With respect to NPTEL, we are working on making the audio and the transcripts available in vernacular languages.” Considering these issues, Prof Thangaraj says an average professor at a local college may be of more help to a student than MOOCs, considering accessibility and language issues. Exceptions to the rule include highly motivated students, he adds.

### **MOOCs’ effects on a resume**

MOOCs now come with the luxury of getting one’s degree validated for a small fee. But is it adding weight to your resume? Affirming so, Sijo Kuruvilla George, Co-founder, The Startup Village, Kochi, says “While it is indeed true that perhaps software giants like Infosys or CTS might still prefer those who flaunt traditional degrees, at The Startup Village, we make no distinction between ones who enrolled themselves in colleges or were self-taught. A lot of success stories from The Startup Village are of those who have not had the so-called conventional education. I have come across a lot of people using MOOCs to sample a lecture, or find ideas for business ventures. It acts as value addition.”

While most of the MOOCs are completely free, the players also make money by offering Verified Certificates for single courses as well for specialisations, series of courses that teach specific skills in depth. “A Verified Certificate is a way of certifying that a learner has satisfactorily completed all of the assignments and the examinations of a course though verifying a learner’s identity with facial recognition and keystroke analysis. Those who receive a Verified Certificate are able to upload it to their LinkedIn profile to display for employers and recruiters who increasingly recognise the value of these online learning certificates issued by prestigious universities,” says Levin.

Advocating that you cannot write off MOOCs, Sijo says that The Startup Village is soon going to model MOOC courses upon request from corporates, and is also in talks with the Kerala Government to get some part of the curriculum to be covered under MOOCs for school and college students.

### **What do students say?**

Edex caught up with a few students who had used MOOCs to improve their skills. Says Ankit Khandelwal, a self-confessed, self-taught MOOC student, “MOOCs do have some limitations, especially in the Indian context, when you take into account our poor bandwidth. To take up a MOOC course, you do need good internet connectivity, especially when it comes to downloading videos. Either internet connectivity has to improve or the big players need to start thinking of mobile versions.” Ankit holds a Bachelor’s in Chemical Engineering from Vellore Institute of Technology, MSc in Chemical and Biomedical Engineering from University of Denmark and constructed his own ‘21st Century Global Manager Project’ and earned himself a self-taught MBA from a combination of MOOCs from top universities on General Management,

Future Trends and Interdisciplinary Aspects amongst other subjects, spent several months in Denmark, China, Russia, Latin America, West Asia and Japan on volunteered projects and such.

Explaining a recent development to introduce MOOCs in Spanish, Chinese, Arabic, Japanese and German, Ankit is of the opinion that India would greatly benefit if we were to introduce MOOCs in regional languages too. “Some of the courses launched by IIT-Bombay, IIM-Bangalore and Indian School of Business-Hyderabad, are in English. But the problem with India being a multilingual country is how are you going to decide which languages you are going to go for?” he asks. He also points out that geographical diversity is a problem. “Most of the MOOCs originate in the US, perhaps a vast number of their subjects might not be of relevance to India.”

Praveen Sridhar, a fourth-year Mechanical Engineering student from Cochin University of Science and Technology, Kochi, says “I was a Computer Science fanatic in Class XI and XII. But unfortunately, couldn’t study Computer Science at CUSAT and therefore took up Mechanical Engineering. But again I didn’t want to lose touch with the subject I love most. This is when MOOCs came to my rescue. From early 2012 I have been taking MOOCs from edX and Coursera, on both Mechanical Engineering and Computer Science. This gave me an opportunity to experience the best of both worlds. Thanks to this supplementary training, I joined the online Mozilla community and was selected for Google Summer of Code, a three-month programme where you get a stipend to work with open source organisations online.”

Vouching for the online community of peers that come with MOOCs and the “fantabulous” discussion forums, Praveen does admit that MOOCs are designed for “perhaps English-medium educated higher secondary students. You also need good internet connectivity to stream these courses. That is perhaps why I spent half the time at The Startup Village or on a hunt for well-enabled Wi-Fi cafes,” he laughs.

Both students also admit that MOOCs are only for the highly motivated. For those who are self motivated, MOOCs are a blessing. One can find inspiration from Battushig Myanganbayar of Ulan Bator, who was not long ago profiled by The New York Times. He aced an MIT open course and also managed to get into the institute. All of 15, Battushig is now an MIT freshman.

## **Students’ choice**

India is Coursera’s second largest market outside the USA after China, with almost eight lakh registered learners. We have seen a strong appetite among Indian learners for technology and computer science courses — more than in any other country — and in business management as well. Karnataka has the largest number of Courserians, while Maharashtra and Delhi take the second and third positions, respectively. Our learners in India are very young, many of whom are in their early twenties,” providing some statistics is Levin.

He says that the IT surge in India has fuelled a particularly strong demand for online courses among the country’s knowledge-seeking population. Coursera offers courses that teach skills for the most in-demand jobs in the IT industry in India: software engineers, application programmers, database administrators (DBA), graphic designers/animators/web designers and project leaders/project managers. The two top performing courses in the Indian market cover the topics of Machine Learning and Algorithms, according to Levin.

Coursera sees a huge opportunity for online education in India, as admitted by Levin. “Coursera has (by far) the largest user base amongst MOOC providers, including in India. Interest from

learners in India will only increase with expanding internet access. The India market is primed for adaptation, as it has a great need for quality education to bridge the skill gap,” he adds.

He adds that Coursera is all poised to meet the demands of India’s young population. “Currently, more than 50 per cent of Coursera learners are below 30 years of age and this is even more the case in India — a great prospect given India’s young population. Our courses offer Indians of all ages the opportunity to learn on any topic of interest to them as well as earn certificates from the best global educational institutions.”

With MOOCs being only three years old, time is a factor in its success. With time, the hope is that MOOCs would become efficient by catering to a wider section of the society. [shilpa.vasudevan@newindianexpress.com](mailto:shilpa.vasudevan@newindianexpress.com)