MOOCs fail in their mission to disrupt higher education

Brendan O’Malley  23 January 2019

The vast majority of learners on massive open online courses or MOOCs never return after their first year and low completion rates have not improved in more than six years.

In addition, the growth of MOOC participation has been concentrated almost entirely in the world’s most affluent countries, according to a study reported in Science magazine, published by the American Association for the Advancement of Science.

The authors of the study, Justin Reich and José A Ruipérez-Valiente, say the promise of a disruptive transformation of post-secondary education heralded in 2012 – when it was first announced that video lectures from the world’s best professors could be broadcast to every corner of the world via MOOCs – has not been realised.

The hope of extending access in areas barely reached by traditional tertiary provision, with students being able to demonstrate their attainment online by using computer graded assessments, has not been fulfilled.

“After promising a reordering of higher education, we see the field instead coalescing around a different much older business model: helping universities outsource their online masters degrees for professionals,” the authors say.

They examined data on MOOCs on edX taught by its founding partners, Harvard University and Massachusetts Institute of Technology, from 2012 to 2018.

The data includes nearly 12.7 million course registrations from more than 5.6 million learners.

The most used revenue model was to offer places on courses and online learning materials free but charge for certificates of completion. But the study found challenges with this approach.

**Bubble of interest deflated**

The researchers found that the initial bubble of interest in MOOCs has been deflated by the drop-out rate. More than half of those who register (52%) never enter the courseware. Similarly, there is a sharp drop-off after the first year of a course, with only 12% of the
largest cohort, the 1.1 million learners in 2015-16, taking a course in the following year.

Second-year retention rates fell every year, dropping from 38% in 2013-14 to 7% in 2016-17.

Researchers also found that the MOOCs drew more than 80% of their learners from highly or very highly developed countries.

“Rather than creating new pathways at the margins of global higher education, MOOCs are primarily a complementary asset for learners within existing systems,” the researchers say.

They add that the low completion rate of MOOCs has “barely budged despite six years of investment in course development and learning research”.

This calls into question the ‘blue ocean’ business strategy of casting the net wide with free access in order to catch a smaller number of learners willing to go on and pay for certification.

It also calls into question the ability of MOOCs to extend higher education participation into areas of the world that traditional provision doesn’t reach and predicts in future a greater concentration on those with the ability to pay.

EdX in October became the last of the big providers to partner with universities to create fully online professional masters programmes and in December followed Coursera and Udacity in beginning to build paywalls around their content.

This means they will now have to compete with ‘traditional’ online providers – traditional compared to MOOCs in the sense that they have been around for the past two decades not just six years – such as Pearson, Embanet, 2U and Wiley Education Services, which provide services to universities that outsource their online programmes to them, commonly in return for a share of tuition fees.

**Intensification of competition**

The result will be an intensification of competition to provide online professional masters programmes.

A recent example of this came with Coursera’s announcement on 17 January that it is rolling out 100 new courses, 30 new specialisations and two public health-focused masters degrees geared to helping to “address the acute shortage of skilled workers in the health industry and meet the demands of a digital health economy”.

The courses are aimed at providing learners with “the skills they need to enter high demand jobs”.

Coursera’s marketing spiel for the courses says that along with 170 partner universities it aims to provide access to “flexible and affordable education options” that can help usher in
the next generation of healthcare workers in high-demand fields like health informatics, healthcare management and public health.

At the high end, though, the masters course with Imperial College London will cost students from outside the United Kingdom £19,440 (US$25,200) and students from the UK or European Union £11,300 (US$14,600) in total tuition fee costs. This is described as a “breakthrough price point for a top degree”.

At the lower end, to access the new specialisations students will pay a subscription of US$39 to US$79 a month.

Daphne Koller, co-founder of Coursera, told University World News that her company was not one of those who claimed to be heralding the disruption of higher education. After emerging as a separate entity in 2012 they soon realised the largest group of learners on their platform were people “who wanted us to up-level their skillset for their career”. So they began a gradual transition to offering courses to meet that demand.

‘Cautionary tale’

Reich and Ruipérez-Valiente point out that there is a basic problem if MOOC providers are competing to undercut traditional providers in this market and attract the less traditional consumers – potential students from less well-off families, especially from families with no history of attending higher education – since research shows they typically perform worse in online courses and most need human support in the form of tutors and peer learning groups.

They conclude that the history of MOOCs offers a “cautionary tale for education policy-makers” facing innovations in education technology.

“New education technologies are rarely disruptive but instead are domesticated by existing cultures and systems,” they say in Science.

COMMENTS

MOOCs didn't have a mission to disrupt higher education. That was simply one of the absurd predictions for them made by overexcited commentators during the years of MOOC hype. With no barrier for entry, low completion rates are not a failure, because it means students can simply show up to see whether the format might work for them, or learn one or two things that interest them, and leave happy without having done the whole thing, or even having much of anything. It’s their goals that matter, not the providers’. As for not having reached enough students in lower income countries, I too wish this were happening more quickly, but it’s worth asking whether more patience is required when considering that sort of major change.

Steve Foerster on the University World News Facebook page
But a MOOC-styled masters degrees (i.e. the Georgia Tech Masters in Computer Science) is already disrupting master degrees. The edX Masters degrees will start having an impact shortly. Watch this space!

**Brian Mulligan** on the *University World News* Facebook page

That's true. But I think the idea is that that's not MOOCs being disruptive because that's just MOOC providers moving into the OPM [online programme management] space.

**Steve Foerster** on the *University World News* Facebook page

They may be moving into the OPM space, but they are also disrupting by pulling customers away from existing providers using a new business model.