

Alpbach Higher Education Symposium  
2014-08-20

Session: Transformation Messages for Universities

**Prepare for evolution, not revolution!**

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Introduction

We have three transformation messages for universities. First, as key historical examples demonstrate, higher education develops by evolution not revolution. Second, MOOCs are not a revolution but they can help institutions adapt to a new environment where online technologies will be pervasive. Third, successful adaptation calls for collaboration, both internally and with external partners.

Evolution, not revolution

Academe has never sent an *ancien régime* to the guillotine!

Three major developments in higher education, two in the 19<sup>th</sup> century, one in the 20<sup>th</sup> century, seemed revolutionary at the time but look today simply like steps in an evolutionary process. Two hundred years ago Wilhelm von Humboldt urged universities to be more liberal and research focused. He envisioned university education as a student-centred activity of research, stating that: '*the university teacher is thus no longer a teacher and the student is no longer a pupil. Instead the student conducts research on his own behalf and the professor supervises his research and supports him in it*'.

Later in the same century the Morrill Act created the Land Grant colleges and universities in the United States. These new institutions had to focus on the teaching of practical agriculture, science, military science and engineering in response to the industrial revolution. This mission contrasted with the historic focus on an abstract liberal arts curriculum, but it was not a revolution. Most land-grant colleges are now large public universities that offer a full spectrum of educational opportunities.

In the 20<sup>th</sup> century there was talk of revolution when the UK Open University was launched. By the 1960s the blending of technologies had begun to revolutionise the communications environment that universities could use, but not higher education *per se*. The Carnegie Commission's famous 1970s aphorism is still true today: '*Taking, as a starting point, 1530, when the Lutheran Church was founded, some 66 institutions that existed then still exist today in the Western world in recognizable forms: the Catholic Church, the Lutheran Church, the parliaments of Iceland and the Isle of Man, and 62*

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*universities... They have experienced wars, revolutions, depressions, and industrial transformations, and have come out less changed than almost any other segment of their societies'.*

### MOOCs are not a revolution

Despite two years of feverish claims in the press, MOOCs are not a revolution either. Indeed, they are not really higher education. The traditional functions of universities are teaching, research and service. MOOCs touch on all three functions without being fully aligned with any of them. In particular, a vital element of the teaching function is to assess students' learning and award credentials to those students who meet the criteria. Credentialing is the most important power that societies give to their academic institutions. Yet most MOOCs do not lead to credentials and therefore lie on the margins of mainstream higher education. They are, however, a significant moment in its evolution because of the trends they have initiated and accelerated.

MOOCs have stimulated more soul searching about the purposes and pedagogy of higher education than any other recent phenomenon. They have also given a tremendous boost to the development of online learning generally. However, most MOOCs still rely on a small institution-based team of overworked (and often overwhelmed) instructors and assistants desperately trying to provide some order to an operation that is already complex – even without the absent element of student assessment and certification. This approach is not sustainable.

The challenge for institutions is to combine the lessons they have gleaned from MOOCs with the standard practices of open, distance and online learning so as to offer courses and programmes that lead to credible and useful credentials. Offering rigorous credit courses at scale is perfectly possible, but it requires the implementation of teaching and learning systems based on the well-tried principles of division of labour, economies of scale and specialization. Taking this approach will solve the other major problem of MOOCs, which is the absence of a viable business model for the universities offering them. Students expect to pay for credit courses, although the fees required to cover their costs in an online learning system can be lower than hitherto.

### Collaborate!

Walter Perry, the founding head of the UK Open University, always claimed that its most important innovation was not any particular technology but the development of courses by teams of academics rather than solitary individuals. Universities offering MOOCs have also found it necessary to adopt this approach, even though this teamwork may not be apparent to the learners if the teaching consists mostly of short videos starring a single faculty member and quizzes with machine feedback.

To evolve successfully into the online environment universities must offer (at scale to keep fees low) credit courses that include rigorous student assessment leading to credible

certification. The division of labour and specialisation needed to achieve this means, in particular, teams of mentors to provide academic support to students, markers to assess and comment on their assignments, and professionals with diverse skills to back up the operation. This is a very different from the cottage industry approach, centred on individual academics, that has been traditional in higher education.

Most universities will require help to make this transition, whether they evolve into online teaching gradually, one programme at a time, or attempt to transform the whole institution quickly. There are many examples of successful partnerships between universities and companies, such as *Academic Partnerships* (to which both authors act as advisors), to implement such changes. The keys to success, as in any partnership, are first, that each partner concentrates on its areas of special expertise and, second, that both partners benefit. In concrete terms this means that the university should be sovereign in matters of curriculum and assessment standards while the business partner concentrates on making the processes and the technologies work.

### Conclusion

MOOCs are not in themselves a revolution but the hullabaloo they have generated is leading most universities to develop policies for online teaching. These are often part of a wider strategy for adapting to a contemporary environment that requires them to pay more attention to the demands of the labour market and to get their costs down. The overall effect of these developments will be instil into the teaching function of higher education the emphasis on teamwork that we already take for granted in research.