DeTao Masters Academy
Education Masters Stamenka Uvalić-Trumbić & Sir John Daniel
2015 Workshop Series: Redesigning Higher Education

Workshop #1:
Education Reform: What role for University-Business-Industry Collaboration?
March 12 & 13, 2015

Importing and Exporting Courses: Global Overview of a Developing Trend
Sir John Daniel
Education Master, DTMA

Introduction

Good morning, it is a pleasure to be back at Tongji University and I express our warm thanks to Vice-President Jiang Bo for hosting this second day of our workshop on *Education Reform: What role for University-Business-Industry Collaboration?*

I hope that those of you who were at the workshop at DeTao yesterday found the sessions interesting.

Today I shall explore another aspect of university-business-industry collaboration, which is the importing into university programmes of courses prepared by business or industrial organisations outside the university. In order not to keep repeating 'business and industry' I shall just refer to these bodies as 'industry'.

Why university-industry collaboration in teaching?

Why would universities, which usually pride themselves in doing their own teaching with their own faculty, want to bring in courses from other organisations?

There are two reasons. The first is the concern that many university courses and programmes are not well matched to the workplaces that students will encounter. One way to address this problem is to bring people in from industry, either in person or online, to teach courses related directly to employment opportunities and the situations they will find in their future workplaces.

The second reason is that most universities now want to do more of their teaching online. Today's technologies have stimulated universities to evolve in this direction; a process of evolution has been accelerated by the phenomenon of MOOCs – Massive Open Online Courses. Many universities have experimented with MOOCs and there are now some 4,000 MOOCs available worldwide.

MOOCs have given universities a taste for teaching online and some skills for doing it, but have also taught them that MOOCs do not address the real challenges of higher education. That is because, first, MOOCs do not usually lead to credentials and, second, since MOOCs are offered free they do not have a sustainable economic model.

Even universities that have not experimented with MOOCs now want to offer more of their regular courses online. Three reasons for this are: one - that students like the convenience and flexibility of online learning; two - online teaching allows universities to operate on a larger scale and reach more students; and three – regular credit courses have an economic model.

We conclude that universities want to teach courses more closely related to the workplace and that they want to teach some of them online. Both these aims lead them to look for partners in industry and both aims are partly driven by economics. Full-time professors are expensive and it is difficult for them to remain up to date in all the industrial applications of their subjects, many of which change rapidly.

Yesterday we heard about internships and work placements. Clearly, students who work with the latest technology and methods in their work placements and then return to find their university courses teaching out-of-date approaches will not be impressed. Bringing in part-time teachers from business is one answer and working with business to create online courses is another.

Some universities also feel that they need help to go online. This help may begin by focussing on the technical systems supporting the online courses but it often evolves beyond that to seeking assistance in the development of the processes for course development and management. Once all those processes are in place it is a small step to insert online courses produced by the industry partner into the teaching and learning system.

A trend in its infancy

This all sounds simple and logical but I stress that this trend for universities to collaborate with industry in their online programmes is at an early stage. Universities that have taken industrial partners usually thought long and hard before they took this step. I give two examples.

The first comes from the Pearson Company, which is a big industrial player in this field. A colleague there told me that Pearson's negotiations with Arizona State University involved 50 meetings before the agreement to collaborate was reached.

The second example comes from Academic Partnerships, a company that works with nearly 50 US universities and some outside the US. Their experience is that, on average, it takes eighteen months of discussion and negotiation before agreement on a collaborative venture is reached. No doubt future agreements will be reached more quickly because both the industrial and academic partners will have gained experience of what works well and what doesn't work well.

Not surprisingly, partnerships work best when the agreement makes the responsibilities and accountabilities of each partner very clear. It also seems to be the case that it easier to

implement these partnerships for graduate programmes, certificate programmes and short courses rather than for regular undergraduate programmes. However, having said this, I note that one of the most successful areas for the Academic Partnerships Company, involving many universities, is the Bachelor of Science (Nursing) undergraduate degree programme.

I also note that while some of the earliest of these university-industry partnerships involved universities that operate for profit, increasing numbers of public not-for-profit universities are now joining in. The idea of public-private partnerships in the teaching function is gaining currency.

For the rest of this talk I shall concentrate on partnerships that facilitate the offering of courses and programmes online. I shall identify three types of partnership, although there is often overlap between them.

Digital enablers

In the first type of partnership the industry partner acts primarily as a 'digital enabler', that is to say it helps the university with the technological aspects of going online. You will be familiar with this in the case of MOOCs. Companies such as Coursera, edX and FutureLearn were created in order to make it possible for universities to offer online courses to large numbers of learners – hundreds of thousands of learners – all over the world. Back in 2012 the technological capacity and know-how for doing this was beyond the reach of all but the largest open universities.

These companies charge universities fees for their services and millions of learners have taken the MOOCs that have resulted. The same principle applies to digital enablers that work with universities to put their regular credit programmes online.

But things have moved on since 2012. Technology has continued to develop and credit courses do not involve the very large numbers of the early MOOCs. Rather than using a big proprietary platform, universities and their partners can construct an online learning ecosystem using various readily available technologies. Numerous learning management systems, some built on open source software, are available. The social media provide many tools for student interaction and outside China course videos can be viewed on YouTube.

Teaching-learning systems

This leads to the second type of partnership. Although mastering the technology itself may now be less of a challenge, universities wishing to go online at scale quickly find that they need to develop more systematic approaches to course development and student support. These approaches are not new in themselves because open universities, which offer distance learning at scale, have been using them for nearly fifty years. However, campus universities usually need help with setting up such systems, which are organised

very differently from normal campus teaching. Whereas teaching on campus is primarily a task carried out individually by members of faculty, online teaching calls for division of labour and teamwork.

Whether they are attempting to put the whole institution online or just a selection of programmes, universities can find it helpful to have an industry partner that can assist them in establishing and operating the systems for course development, student support and student assessment. The university and the industry partner then share the tuition fees, depending on the relative costs of their respective activities in the partnership.

Universities do not usually like paying out money to partners for their teaching activities, but they do so more happily if the partnership results in a large increase in student enrolments. For example, some of the partners offering the Bachelor of Science (Nursing) with the Academic Partnerships Company have seen enrolments grow by a factor of ten.

One spin-off of these partnerships is a higher quality of teaching. The industry-university collaboration usually introduces more systematic processes for developing courses that include carefully crafted objectives and a tight relationship between objectives and student assessment. Systems of student support that involve numbers of part-time tutors can, if properly managed, be more effective than the rather haphazard arrangements for supervising students on most campuses. As a result, after a long period when comparisons of student performance between campus and online learning showed little difference, the performance of online students is now pulling ahead in well-organised partnerships.

Independently managed courses

In the third type of partnership, which is very new, the industry partner offers the university ready-made courses – usually short courses well suited to online learning. The industry partners either develop the courses themselves or commission them from universities with recognised strengths in the subject areas. The course topics are usually closely related to workplace needs.

It is easiest to describe this development through an example, the ‘Specialisations’ offered by the company Academic Partnerships. The idea of these short courses grew out of the company’s experience of its partnerships with universities to move their credit offerings online, as in the Bachelor of Science (Nursing) example given above. While this type of partnership has been successful, the close interaction between company and university it requires is costly and sets a floor for the amount by which tuition fees can be reduced – an important consideration if this approach is to work in the poorer countries.

Specialisations are short (e.g. 5 week) self-contained and fully online courses that are commissioned from ‘provider’ universities and offered through ‘host’ universities, often in other countries. The host university agrees to charge a small additional fee across the board so that all its students can take one or more of these short specialisations. The

company manages students' progress through the courses electronically from start to finish (registration, pacing, assignment correction and final assessment). The host university is then notified of successful course completions and includes the specialisation(s) on the students' transcripts, either as an integral part of their study programme at the host institution or as an optional extra.

Working with host universities has two big advantages over the alternative of retailing these specialisations to the population at large as distance learning opportunities. First, the host university can deliver a large captive audience of students. Second, by including the fees for specialisations in the overall student fees charged by the host university the arrangement achieves economies of scale that allow the cost to be both low and calibrated to fee levels in the country. Third, by including successfully completed specialisations on student transcripts, the host university implicitly recognises their value as a credential. Such recognition would take longer to achieve if the specialisations were simply made generally available, as experience with the credentialing of MOOCs has demonstrated.

We stress that this model of course export and import is still in its infancy, although a number of such provider-company-host partnerships are being launched this year. If the model proves successful it will have various advantages. First, it will enable host universities to offer their students short, employment-related online courses without the necessity of acquiring the know-how and subject expertise to develop and operate such courses themselves. Second, because the courses are managed almost entirely electronically, costs can be low if economies of scale are achieved. Third, provider universities, which may have no intention of making credit programmes available to their own students online, can acquire new expertise, enhance their reputations in the online space and create a useful income stream.

Conclusion

This is a very brief summary of the development of industry-university collaboration in the offering of courses. It began when industry provided technological systems to help universities go online. This led naturally to industry-university collaboration in the development and offering of online courses as universities realised that going online could enhance both the scale of their teaching operations and their academic reputations. The latest development, aimed partly at making the costs of contemporary work-related courses affordable in developing countries, is to take full advantage of the economies of scale of online course management while sourcing the courses from providers with recognised expertise on the topics.

It will be interesting to follow these developments over the coming years. If universities that import courses in this way find that it increases their popularity with students and their reputation with employers, then we can expect many other universities to start incorporating courses from industry or other universities into their programmes.

I end by noting that the DeTao Masters Academy also plans to be a supplier of online courses to universities. In a moment you will hear from DeTao Masters Robin King and Soon-In Lee, who are bringing their industrial expertise to teach classroom courses at the Shanghai Institute of Visual Arts.

Some of our Masters are now preparing online courses as well and will invite Chinese universities to integrate these into their existing programmes. Professor Yan Jin, an expert in Design Theory and Methodology is pioneering this initiative.

His online course will be part of a series called O2O, meaning ‘Online to Onsite’. Some ten Chinese universities will be offering this course onsite on their campuses later this year.

The O2O model is very different from the Specialisation model that I just mentioned. In the case of O2O the receiving universities are expected to adapt the online course to their own teaching needs, meaning for example, that student assessment will not be the same in each host university. You can see that there are two very different models emerging: the standardised model of Specialisations and the adaptable model of O2O.

You can make an analogy with cake mixes sold in a box. In the early days these were simply boxes of powder, which you mixed with water and baked. But these did not sell well because people wanted to feel they had greater input into the process. So they changed the formula of the powder so that you had to add eggs and milk before baking. This was very successful and a huge market for cake mixes developed.

I leave you to think about which of the two models will do best in university-industry collaboration for the import and export of courses.