

Forces For Change: The Evolution Of The Teaching And Learning Process In An Established Open And Distance Education University

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INTRODUCTION

The Open University of Hong Kong was established in 1989 by the Hong Kong Government as a self-financing non-profit making institution to “provide opportunities for higher education by means of open learning”. Since that time over 27,000 people have graduated from the University and some 140,000 students have taken advantage of our alternative learning opportunities. Currently around 22,000 learners are pursuing an undergraduate or postgraduate qualification and an additional 18,000 students are enrolled on various short courses and professional programmes through the Li Ka Shing Institute of Professional and Continuing Education (LiPACE) which is one of the five academic units of the University.

The OUHK’s original course development and delivery models were largely based on those used in existing distance tertiary institutions (most notably the UK Open University). This led the University to adopt a “one size fits all” or so called Industrial model for all of its courses irrespective of course level or student numbers. Courses are largely text based supported by optional face-to-face tutorials.

Since the University’s establishment, the course development and delivery processes have remained largely unchanged. A need to achieve greater efficiencies and cost effectiveness, without loss of quality, combined with a wish to tap into new markets and take advantage of the rapid development of new technologies has prompted the university to re-examine its practices to see whether these technologies can be effectively utilized in the course development and delivery process.

MAINTAINING COST EFFECTIVENESS

Student Numbers

As a self-financing institution deriving the majority of its income from student fees, the university is under constant pressure to ensure that we deliver courses to students at an affordable cost. Affordability is achieved in mass distance education by enrolling large numbers of students on courses to offset high development costs. While entry level courses would typically have populations of 300-500 students, a number of courses, particularly those at Higher or Honours level, attract relatively small numbers of students. This is largely due to the fact that we have a two-tier qualification at undergraduate level. Students can exit with an ordinary degree (120 credits) if they wish, rather than proceeding to an honours degree (160 credits). Some students choose to exit early, especially as many are successful in using their ordinary degree as an entry qualification for postgraduate programmes at conventional institutions. This early exit behaviour associated with the normal attrition encountered at all ODL institutions leads to a situation of small population higher level courses (defined in our case, as fewer than 50 students).

Maintaining Quality of Course Materials

Another factor driving up costs is the maintenance of course materials. For some courses the materials do not date particularly rapidly (for instance Chinese Arts, History and so on). For others, such as Information Technology, the costs and time involved in keeping the materials up to date are high. Many of these courses require changes in the order of 30-40% of total course content per year.

Meeting Market Needs

When the University was established there was a large pool of potential students among adults who had been deprived of the opportunity to gain a tertiary education. Through the efforts of the OUHK and the greater availability of alternative study paths both in the conventional sector and through transnational providers, this pool of students is shrinking. The university is therefore seeking new sources of students including school leavers and those based in the Chinese mainland. In addition there is a need to recognize that not all students are looking for a full undergraduate programme delivered by traditional distance

education means - many students wish to take one or two course for professional updating purposes or to prepare for the demands of a new work assignment.

Use of E-Learning

Finally, the university recognizes that teaching and learning methodologies have evolved over the past 15 years. Many institutions are making significant use of ICTs in both the support and delivery of learning materials. The University has operated an Online Learning Environment (OLE) for many of its courses since 1997 but even so felt that further developments in this area should be possible. The ongoing evolution of distance education delivery methodology has been amply demonstrated by Taylor (1996) who described four generations of delivery technology with distinctive characteristics.

Taking all these factors into consideration, for the university to continue to thrive and prosper, there is a need to look again at its processes and modes of operation and attempt to redefine its niche in the tertiary education system of Hong Kong.

CHANGING THE MODELS

The University's course development and delivery procedures take no account of the level, length (OUHK courses are either 5, 10 or 20 credits and run for either one or two semesters) or popularity of a course. We have adopted a one size fits all process which can no longer be supported in the current environment.

The three drivers of cost/efficiency, the pursuit of new markets and the evolution of the course development and delivery process have forced us to examine our current systems and see if there are more appropriate ways to operate in certain circumstances.

THE COURSE DEVELOPMENT MODEL

The course development model adopted by the OUHK is largely derived from that used at the UKOU. Essentially this means that, for the majority of courses, we develop a comprehensive pack of text-based learning materials which are backed up by optional face-to-face tutorial sessions. Some courses have additional video and audio materials. We maintain that these packs are self-

contained and that everything the student needs to successfully complete the course is contained within them. Because of our lean staffing structure we did not adopt the in-house development process used at the UKOU. For most courses we contract outside consultants to develop the learning materials under the guidance of an internal course team. However this comes at a significant cost. The average cost for developing a 10 credit course (one twelfth of an ordinary degree) is around HK\$1 million (or around US\$ 128,000).

Whilst this cost can be justified for popular courses with a high student population, it is more difficult to justify it for low population courses especially in those subject areas which are in need of frequent updating. This has pushed the university to examine other ways of developing course materials in such cases.

1. No Materials Development

In such cases the course would be taught face-to-face, possibly by the full-time member of staff responsible for the course or possibly by a part-time tutor. The implications for this alternative will be examined later in the paper.

2. Alternative Development and Course Content Delivery Strategies

Experience from Australia and Canada would suggest that perfectly acceptable distance education courses can be developed which do not rely on having comprehensive course materials. Tony Bates (personal communication) has indicated that it is possible to produce a course equivalent to a 5 credit course in OUHK terms with 12 person days of academic staff input. This would significantly reduce our development costs. However, such courses traditionally make heavy use of such techniques as Problem Based Learning (PBL) and Resource Based Learning (RSL).

These alternative models create a dilemma with regard to the issues of indirect versus direct costs. The question facing the institution is, does it put a large amount of money into the course development process to produce self-standing course materials which require minimal teaching support or, alternatively, does it produce cheaper courses (using PBL etc) which requires a much greater human teaching input with an emphasis on delivery rather than development?

One issue which the university must consider closely is the needs and desires of our student base. As these alternative models are only likely to be used for

higher level courses they will probably not be taken by our students until quite late in their OUHK careers. By the time students have been studying with us for a few years they have become used to, and indeed welcome, the flexibility that our learning model provides. We have trained them to become independent learners and they are therefore unlikely to welcome any changes which impose a fixed and compulsory tutorial attendance requirement upon them. Therefore if the university were to adopt a development model which required greater use of teacher input, serious consideration would have to be given to maintaining learner flexibility. The asynchronous use of ICTs where students and instructors can interact on-line but at a time to suit them is a possible solution which retains study flexibility. The ability to post messages, reflect on responses, revise interpretations, and modify original assumptions and perceptions is described by Chamberlin (2001) as a “silver bullet” and a distinguishing characteristic of online education. Delivery by face-to-face means alone would probably not be welcomed by the majority of our experienced students. It is interesting to note that many conventional face-to-face institutions worldwide are adopting a convergence model of course delivery where a mix of face-to-face and ICT-based instruction is used.

THE COURSE DELIVERY MODEL

As will be clear from the above, any review of the course development strategy will require a rethink of course delivery models. Thus the university’s course delivery model has also come under scrutiny, particularly in how it is applied to low population courses.

As explained earlier, the majority of courses utilize a pack of comprehensive teaching materials backed up by a series of bi-weekly or monthly tutorials. In addition, tutors give teaching comments via feedback on assignments and there is an end of course examination for every course (except projects). All courses have a fixed start and end date. Our reconsideration of the delivery process has focused on three major areas:

- Online Courses
- Courselets
- Taught Courses

Each of these topics will be considered in turn.

ONLINE COURSES

The use of the online environment is being much touted as the universal panacea for distance education and it is certainly a very tempting argument. However, experience to date has been very mixed. It is also important to try and establish a common descriptor for online delivery as e-learning can mean very different things in different situations.

Many institutions have attempted to launch online courses and programmes with varying degrees of success. Perhaps the most high profile failure over the past year has been the collapse of the UKeU which, during its lifetime, only managed to recruit 900 students. Other failures include New York University Online, Scottish Knowledge, Fathom, a creation of Columbia University, and several other US based enterprises.

The OUHK has been using an online learning environment since 1997. Since that time some 234 courses have been making use of a web-based learning platform for various aspects of course delivery. The university has also been making strides with regard to making as many administrative services as possible available online.

Since what constitutes an online course can vary among institutions, care needs to be taken when assessing how popular online components are among the student population. Another important issue is the previous learning experience students have had.

Many of the very positive comments about online courses are coming from students who have only previously studied in a traditional mode. Here students are often cited as extolling the virtues of online delivery. However, in many cases what students are actually praising is the greater flexibility of the study mode and ease of access to information such as scanned articles and journals (Roger 2001). It could be argued that this is in no way different from good text-based distance education where students receive all the learning material they need for the course (including journal articles and readers) in the study pack. In fact, providing such material online could be regarded as taking away a level of study flexibility for the students as they need to have access to a PC and probably an internet connection. Certainly it can be argued that this reduces openness of access and transfers the costs of producing materials to students.

Of great importance here is the attitude of students who have previously experienced high quality text-based distance education to the delivery of content online. In a survey of OUHK students taking courses with an online component in 2003, when asked to respond to the statement "I prefer to read online units instead of printed ones" 54% of the 135 students surveyed disagreed or strongly disagreed. Only 15% agreed or strongly agreed. This contrasts with the response to the statement "I enjoyed using the Online Learning Environment as part of this course" where 92% responded positively.

It is quite clear from the results of this survey that students mostly appreciated the ability offered by the online environment to interact with other students and their tutors as well as have queries answered quickly. This correlates with other research which indicates that collaborative learning is seen as a significant advantage of online learning (Delfgaauw 1997, McLendon & Albion 2000, Twigg 2001). The ability to submit assignments electronically was also highly appreciated. These findings have been supported by other research in the University.

It seems likely that the delivery of materials online can be advantageous depending on the subject matter involved. This is particularly the case in certain science subjects where it is beneficial to be able to see animated simulations or industrial processes. Likewise, for language courses it can help to have synchronous access to an online tutor to help with the development of speaking and listening skills.

Essentially, the decision on how to incorporate e-learning should be dictated by the current delivery mechanism of the institution. An institution which mostly uses conventional teaching methods will likely see advantages in moving towards a blended approach which includes some elements of online delivery. Institutions which have traditionally used well developed text based distance education materials will probably find advantages in the development of electronic learning platforms which allow online academic debate and greater interaction between students and tutors as well as between students and the institution.

COURSELETS

As has been indicated earlier in the paper, the OUHK takes a modular approach to course delivery. However, courses only come in three sizes (5, 10 and 20 credits) and have fixed start and finish times. In order to give greater flexibility to students and to try and develop some new markets, the University has decided to trial the development of a new type of course – the ‘Courselet’. Courselets will be of 1-3 credits in length and will be available online, on demand. There will be no tutor support except for a web based discussion board. There will be no continuous assessment and the final exam will be in the form of a proctored computerized multiple choice test taken at the time of the student’s choosing.

It is hoped that courselets in this format can be made available at a lower price per credit than for a conventional foundation level course. Students would be able to count up to 10 credits gained by studying courselets towards any OUHK qualification.

It is also hoped that this scheme will encourage students to study with the university who otherwise might be discouraged by the prospect of having to pay for an entire 5 or 10 credit course. There is some evidence that this may be successful. The University previously offered several 20 credit courses which, for similar reasons, it divided into ten credit courses. The ten credit courses have proved to be more popular than the 20 credit versions. Many new OUHK students have not studied formally for some time and may be very unsure about their readiness to re-enter the study environment. Under the current system they have to make a sustained effort over a fixed period of time (one year or one semester). Most have never taken a distance learning course before and while many students can cope with this method of delivery, many more find independent study difficult. In common with many ODL institutions, we have quite a high drop-out rate at foundation level. The Maths and Science foundation courses for instance have a survival rate of only around 50%. It is hoped that by offering students the opportunity to progress in smaller steps over a different period (either shorter or longer) we might at the same time encourage new students who have been unsure about trying Distance Education and reduce drop-out for those new students who find the current system too demanding as a returning learner. It seems likely that if such students can prove to themselves that they can successfully complete a course and earn credits, they will be encouraged to continue on their learning path. In taking a 10 credit course at the

OUHK rather than a face-to-face part-time course, students are opting out of a rigidly timetabled environment where they would spend 2-3 hours per week in a classroom for 8-14 weeks and committing themselves to a situation in which they are expected to study for 300 hours over 44 weeks. This is a daunting prospect and requires a student to maintain a strict personal discipline over a long period in the knowledge that any slip at the beginning will only make the challenge more difficult. The courselet structure will divide this marathon effort into 'bite-size' chunks more easily assimilated in the busy Hong Kong lifestyle.

We also hope to use this scheme to test demand for courses which have totally online delivery of course content. Since these courses are mostly aimed at students new to the University who will not have had any experience of using comprehensive text-based self-learning packages, we are keen to learn if such students will readily adapt to the online delivery of course content. The use of the online environment is also the only viable way to provide such a level of flexibility for students.

For the pilot to have any credibility it will be important to have 20-30 credits worth of on-line materials ready for the launch. Courses will only be available in this form at foundation level and will be developed by using an adapted form of the current text-based course materials.

We hope that the development of courselets will promote even greater flexibility for students and encourage more students to join and remain in the ODL system.

TAUGHT COURSES

The post-secondary education sector in Hong Kong has undergone some radical changes in the last few years. The most significant among these have been two developments in the provision of alternative qualifications routes for schools leavers. In 2000 the government, in collaboration with a number of tertiary institutions (including OUHK) introduced a one-year full-time programme for those students who had not matriculated from Form 5 – Project Yi Jin. The OUHK was the lead institution on the development of this project which is now taught by several post secondary institutions in Hong Kong. Although distance education was not the chosen method for course delivery, each course was developed using comprehensive course materials including a tutor pack and a

student pack. This is a good example of blended learning. Currently, 168 students are enrolled on the Yi Jin programme with OUHK and some 3,500 are enrolled in total across the Hong Kong Special Administrative Region. These students are taught in a traditional classroom environment.

Another development has been the introduction of Associate Degree programmes in Hong Kong. These two year full-time programmes targeted at Form 6 school leavers are, in addition to being a qualification in their own right, designed to give entry to year 2 of a three year degree programme or year 3 of a four year programme. Currently the OUHK has some 200 full-time AD students. In 2002/03 there were approximately 9,000 students studying for associate degrees in Hong Kong and it is predicted that there will be approximately 30,000 students studying on these programmes by 2010.

As well as providing more of these programmes, OUHK hopes to be able to provide places for AD graduates from other institutions to complete their degree studies either by full time study or by distance education or by a combination of the two to allow students total flexibility. The number of second year degree places available in the conventional sector is likely to be limited due to restrictions on funding in the UGC sector institutions.

The Li Ka Shing Institute of Professional and Continuing Education of the OUHK has a great deal of experience in the development and delivery of face-to-face courses, giving the University a competitive advantage in developing and delivering such blended learning opportunities.

CONCLUSION

As a mature institution in an increasingly competitive environment the Open University of Hong Kong has had to re-examine its methods for the development and delivery of courses. In addition to making appropriate use of ICTs in teaching and learning we are also harnessing them to our administrative and student support operations. In this way we hope to be able to maintain academic quality and cater for the needs of our, mostly, adult working students.

It seems that the most suitable path for us to take is one towards a blended teaching environment where students can choose between text-based distance education materials supported by a tutor, various models of online learning and

even traditionally taught face-to-face courses and programmes. This environment is emerging in many institutions around the world. Most institutions are arriving at this point starting from a traditional model of delivery (so called bricks to clicks). For the OUHK we are taking the reverse direction to arrive at the same point (from clicks to mortar?).

In this way, we can give students the ultimate flexibility to choose the blend of learning delivery that best suits their own particular needs. These needs may shift over time – for instance a school leaver who starts studying in full-time mode may get a job and need to finish their studies by distance education. A new student may have their confidence boosted by being able to successfully complete a courselet in distance mode and be inspired to carry on and study for a full degree. A distance education student may lose their job and wish to commence studying full-time in order to speed up their pace of completion. By responding creatively to the new challenges and employing the judicious use of ICTs to provide both teaching content and student support, we can build on our strengths and experience in the development and delivery of distance education courses. In such a blended environment the promise of flexible delivery can finally be fulfilled.

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