

Trends and New Developments in Open Education



Lecture, Open University of Tanzania, 6 August 2013

*Presented by Professor Asha Kanwar
Commonwealth of Learning*

Transcript

Distinguished Colleagues,

It is a pleasure and an honour to be at the Open University of Tanzania, which has always been a valued and valuable partner of the Commonwealth of Learning. I am very grateful to the Vice Chancellor Prof Tolly Mbwette for the opportunity to speak to you. Prof Mbwette is the COL Chair in ODL and an Honorary COL Advisor. My topic today is ‘Trends and new Developments in Open Education’

But first a word about the Commonwealth of Learning. As you know, the Commonwealth of Learning is an intergovernmental organization established by the Commonwealth Heads of Government to serve the 54 Member States that span all regions of the globe. Our headquarters are in Vancouver and we have a regional office in New Delhi. Our motto, is ‘learning for development’.

COL’s mission is to help Commonwealth Member States to harness the potential of distance education and technology to enhance access to quality learning which contributes to development.

In my presentation, I will first look at the context of higher education, then trace three generations of ‘open education’ and conclude with the implications that two recent developments, Open Education Resources or OER and Massive Open Online Courses or MOOCs have on the future role of ODL.

Let us first look at the context.

In the previous decade we have seen an unprecedented demand for higher education. There has been a phenomenal growth in the different types of HE providers. Globalisation has given rise to large numbers of students crossing borders and boundaries. The rising costs of HE have presented the world with new challenges and opportunities. And the rapid pace of ICT developments have changed the entire paradigm of how we teach and learn.

First, let us review the trends in the massification of HE. In 2007, there were 150 million tertiary students globally, a 53% increase over 2000. We find that the number has increased to 165 million in 2012 with an estimate that this is expected to rise to 263 million in 2025.

In spite of this huge expansion in Higher Education, the APRs in the developing world, that is, the participation of the 18-24 year olds, are far below those in the OECD countries. For example, in South Asia, the APRs remain at about 15% while in much of sub Saharan Africa, the figure falls below 10%.

Experts estimate that in order to accommodate the number of the children who will be seeking enrolment in higher education by 2025, we will need to establish 4 new universities that can cater to 30,000 every single week.

As demand increases, we have seen a huge growth in private provision, which is the fastest growing sector of HE with the global average at 46%.

But if you take the case of Asia, you will note that in Indonesia, Japan and South Korea, private provision of HE accounts for over 70%, way above the global average.

The impact of globalization on HE has meant that more students and universities are crossing borders today than ever before. In the decade starting in 2000, the number of international students has grown from 2 to 3.6 million, an increase of nearly 80%.

Fourth, the costs of HE have risen exponentially. An article in *The Economist* asks whether higher education is still worth it? The costs of higher education have risen way above inflation rates in the past three decades, making HE increasingly unaffordable.

Fifth, there is an increasing trend towards online learning. In 2010, 6.1 million students were taking at least one online course accounting for 31% of all US Higher Education students. This Slide gives you an idea of this increasing trend. As technologies become more accessible both developing and developed countries will move towards more online and distance provision.

But for the present, there is a clear digital divide across the Commonwealth, if you look at the proportion of households with access to computers and the internet. With less than 10% in sub-Saharan Africa and South Asia, it is nearly over 80% in Europe and North America.

This divide can be turned into a dividend because of the phenomenal growth of mobile devices, which are more affordable, accessible and available.

As you can see from this chart, the growth of mobiles in developing countries has far exceeded the development of mobiles in developed countries in the last five years. There is nearly four times increase in the growth of mobiles in developing countries during this period.

In 2006, less than 1 per 100 persons had access to mobile broadband, whereas by 2011, this number has increased to over 8 per hundred. This is an eight-fold increase in the last five years. This is bound to keep increasing at this pace. What implications does this technology have for Open Education?

How can the growing demand for Higher Education be met? Let us look at the past and how open and distance learning emerged as a solution to address the challenge of access to quality education in a cost-effective manner. I will look at the three generations of 'open education'

Forty years ago, the Open University, UK was launched to open up education to large numbers of people. That was when the term ‘open education’ became popular and the model captured the imagination of policy makers around the world. The success of the British Open University led to a huge expansion in open universities, particularly in Asia.

The founding chancellor of the Open University of the UK, Lord Crowther’s statement of openness in relation to people, places, methods and ideas forms the basis of the first generation of open education. Open education is a philosophic construct that advocates the removal of constraints and barriers to learning— Open education refers to policies and practices that allow entry to learning with no or minimum barriers with respect to age, gender, or time constraints. These policies need not be part of a distance education system, which refers to the separation of the teacher and learner.

Open universities were oriented towards the massification of higher education. Many open universities do not insist on entry qualifications, allow learners to accumulate credits at their own pace and convenience and are flexible enough to allow learners to choose the courses they wish to study towards their qualification.

The principal technologies in this phase were print, radio and TV. Telephone and teleconferencing were being introduced as more emphasis was given to tutorial support. In many developing countries such as India, many open universities continue to follow this model.

The second generation of open education was shaped by the emergence and use of the internet and the world wide web. The first online course was launched in 1984 and the use of web-based programmes allowed learners the choice to study on campus or at a distance.

Interactivity was a key aspect of the second generation with a higher level of personalisation through the use of ICTs. This led to more flexible and blended approaches. Many campus based institutions began to offer both face to face and distance learning programmes, thereby opening up access to newer constituencies. In this phase we see a convergence of face to face and distance education provision.

Let us look at the growth of open universities which cover these two generations. In 1988, when COL began its operations, there were only 10 open universities in the Commonwealth—3 in Canada and only one in Africa, that is UNISA, which also happens to be the oldest distance learning provider in the world, having started in 1946.

Twenty years later, that is in 2008, the number of open universities in the Commonwealth increased to 27. You can see that only one remained in Canada, the other two having merged with campus universities to become dual-mode,. Mauritius is the most recent addition to the list of Commonwealth open universities.

Asia alone has 70 open universities that cater to the largest number of adult learners in the world.

The third generation of open education came at the turn of the century with the Open Education Resource movement which was based on the idea that knowledge was a public good and that technology could help share, use and reuse it. MIT’s OpenCourseware initiative; Rice University’s Connexions, the OpenLearn, of the Open University of the UK, among others initiated this movement.

Soon, many Asian countries were investing in OER. Some of these initiatives are the Japan Open Courseware Consortium, the China Open Resources for Education, NPTEL, the Indian Government's OER project, and the Vietnam Foundation. There is OER Africa which is active in several countries

What are OER? As we know, OER are educational materials that are free and freely available, suitable for all levels of education: primary secondary and tertiary, are reusable without having to seek the permission of the original author and available in multiple formats including print, though the reuse is easier in digital format. Let me take just one example.

In open universities, course authoring can take up to 80% of an academic's time.

Collaboration can help academics save both course-authoring time and money

As you can see, the first generation takes us over 2 decades from 1969 to 1990 and we can see a gradual growth. The second generation, again started in 1984 and reached its high point in 2005. The third generation has taken off in the last ten years and can lead to major changes in the ways we teach and learn.

We have seen the evolution of ODL over the last forty years. What is the future role of ODL within the context of changing societies? What are the implications of the recent development of OER and Massive Open Online Courses or MOOCs for ODL? Can ODL help us address the global development challenges?

Let us take OER first. OER are beginning to capture the imagination of governments and policy makers around the world, just as the advent of first generation ODL did forty years ago. In June this year, COL and UNESCO with substantial support from the William and Flora Hewlett Foundation, organized the 2012 World OER Congress in Paris to mark the tenth anniversary of when the term OER was first coined at a UNESCO meeting in Paris in 2002.

The global community adopted the Paris OER Declaration, which makes 10 recommendations. Let me just refer to three that may be of interest to you:

- Foster awareness and use of OER
- Encourage the development and adaptation of OER in a variety of languages and cultural contexts
- Encourage research on OER

This is an important development as governments tend to take such internationally-agreed documents led by UNESCO seriously and the Paris Declaration could have a major role in enlarging the circle to include policy makers.

Last August, the Commonwealth Education Ministers met in Mauritius for their triennial conference. Here again OER are reflected in the Communique. This is an influential document that is taken seriously by policy makers across the 54 Commonwealth Member States. Ministers recommend that *'a common platform for OER materials be set up for ease of access'* and *'the development and use of OER in providing quality teaching and learning for all'* be promoted.

Can OER increase access, improve quality and cut costs as the ministers recommend?

First, the issue of access. The students of Bunda College of Agriculture, Malawi, had no text book on Communications Skills and were entirely dependent on lecturers. Now they have a textbook, 75 % of which is based on OER harvested from the web and supplemented with locally relevant activities, examples and assignments. A lecturer at the University of Jos, Nigeria discovered this textbook and has adopted it, a nice instance of south-south collaboration.

Second, the issue of costs. So what impact are OER having on universities? Let me first take the example of the OERU, a consortium of 18 universities which includes the University of Southern Queensland, Otago Polytechnic and Athabasca, among others. The consortium is using OER to open up education to anyone anywhere in the world.

The participating universities are putting a percentage of their courses on their websites as OER so students anywhere in the world can access them. They will then recruit retired teachers and volunteers on the lines of Doctors without Borders, who will provide free tutorial support to the students. Students pay only if they wish to take exams towards a qualification. This will cost students only 20-25% of what they would normally pay thus making higher education more affordable and accessible to anyone in the world.

Third, the question of quality. The premier Indian Institutes of Technology or IITs, in partnership with the government, have made their engineering and technology courses available as OER. These are being used in over 600 institutions, most of them in remote locations with very limited resources. Both teachers and students are using the free IIT resources to improve the quality of their teaching and learning.

Access to OER can improve quality of course content

The reputations of open universities were built by the quality of the content they offered. Now that high quality content is available as part of the global OER movement, the emphasis can shift to providing quality support services. This will be the key differentiator between the best and the rest

OER can help us open up our business models from providing full services to services that the learner can choose from, reducing costs and increasing flexibility

Let us now come to the second major development emerging out of the use of free content or OER. This is the phenomenon of the Massive Open Online Courses or MOOCs. Started at the University of Manitoba in 2008, this has spread like wild fire in the ivy league institutions of the United States. What is a MOOC? According to the evolving definition on Wikipedia ... *a MOOC is a type of online course aimed at large scale participation ...MOOCs are a recent development in the area of distance education, and a progression of the kind of open education ideals suggested by OER*

The big three MOOC companies in the US are Coursera, edX and Udacity. The Open University of the UK is leading a consortium of universities under a MOOC company called FutureLearn

The Observatory of Borderless Higher Education report sums up that MOOCs are usually free of charge; designed for large numbers; designed to encourage peer to peer learning and meant to award completion certificates rather than course credits.

Stanford University offered a free course in artificial intelligence last year which registered 160,000 students from nearly all countries of the world, of which 23,000 completed the course. Pass rates continue to be around 10%.

If you look at the origins of students in the 3 big MOOCs, you will find that the maximum are from the US followed by India and Brazil. African participants do not yet constitute a significant number.

What are the popular MOOC subjects? The majority are still related to science, technology and engineering even though business and humanities are also being offered.

MOOCs offer content in small chunks and encourage interactivity, something that open universities are already doing. In addition MOOCs promote peer to peer learning, and follow the flipped classroom model that means that students study the materials on their own and come together to discuss problems. Learning analytics provide data on how each student learns and this could result in improved teaching.

If ODL institutions were to offer MOOCs, what would be the advantages?

Would offering MOOCs attract potential learners to join? Or would this make the institution a global player in certain niche areas? Students who have completed a MOOC may wish to translate the certificate of completion into a qualification. Would ODL institutions have the flexible frameworks for credit transfers, and recognition of qualifications within this scenario?

The core interest for ODL institutions may be to extensively test the viability and usefulness of select MOOC technologies for learner profile and data management and basic delivery and assessment techniques. MOOCs can become a viable option as connectivity increases and open source platforms are adapted and deployed. Second, developing world institutions can modify the MOOC model to offer more blended approaches and better learner support services towards degrees and diplomas. Third, the research results from the pioneers in MOOCs will provide excellent data for developing world institutions to review their teaching learning practices for better quality and outcomes.

ODL institutions have always been known for their flexibility, openness, modular approach and curricular offerings linked to the labour market. There are many exciting developments, as we have seen—OER, MOOCs. Will MOOCs transform ODL and give it the status that we have sought over the past four decades? As societies change, ODL will need to continually reinvent itself to cater to changing needs. Developing countries need to provide lifelong learning opportunities to all its citizens. ODL will have an even more important role as we go forward.

Thank you for your kind attention.