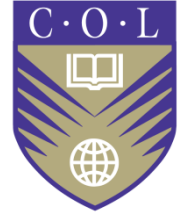


# *eLearning: Open or Closed?*

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*Hamdan Bin Mohammed eUniversity, Dubai – Annual Congress 2011*

*Theme: Being at the Leading Edge – How to give the Quest for Excellence a New Meaning*

*Keynote address: eLearning: Open or Closed?*

*Sir John Daniel, Commonwealth of Learning*

## **Introduction**

It is a great pleasure finally to be here, more than a year after you kindly invited me to become an associate of the Hamdan Bin Mohammed eUniversity as a member of an advisory committee. I see from the number of appearances that I have on the programme that you are making up for lost time so I hope that I do not wear out your welcome mat.

My title this morning is *eLearning: Open or Closed?* It is a title that can be interpreted in various ways and I shall explore some of them.

Open and distance learning is still a relatively new phenomenon in this part of the world so I shall begin with some simple statements about how, by applying technology through open and distance learning, we can achieve a revolution in education.

Open and distance learning has long been viewed with suspicion in the Arab world. In the second part of this talk I shall address that issue head on and suggest what we can do to lessen the hostility.

Third, I shall talk about eLearning as a modern expression of open and distance learning, explore its advantages and disadvantages and make a recommendation for improving its quality.

## **Technology is the Answer: What was the Question?**

I call this first section *Technology is the Answer: What was the Question?* It is easy to get excited about all the new technologies that have developed in recent years. They must have some useful applications in education and training. But what are they? To date by far the most successful application of technology in formal education is distance learning.

So I start by looking at the purposes of distance education. Why is distance education, long regarded as second rate, and still regarded with suspicion in this part of the world, now of such wide interest? I shall argue that it is not only of interest, but that it contains the seeds of a revolution that can sweep away the

biggest obstacle that education has faced throughout human history. If we implement eLearning effectively we can really exploit and embed the distance education revolution.

However, the issue is not technology but what we do with it. Technology may be an answer, but what is the question? What is the educational challenge that technology can solve?

## The Challenges Facing Education

Ministers of Education will tell you that their challenge is to pursue three goals simultaneously. They want to widen access so that education and training can be available to all citizens that aspire to it. Second, that education must be of good quality. There is no point in widening access unless education makes a difference to people's capabilities. Third, the cost must be as low as possible. Governments and individuals never have enough money. It is morally wrong to make education more expensive than necessary, because low cost enables more people to take advantage of it.

The challenge of achieving these outcomes simultaneously becomes clear when you create a triangle of vectors. With traditional methods of face-to-face teaching this is an iron triangle. This iron triangle symbolises the closed system of classroom teaching. You want to stretch the triangle to give greater access, higher quality and lower costs.

But you can't!

Try extending access by packing more students into each classroom and you will be accused of damaging quality. Try improving quality by providing more and better learning resources and the cost will go up. Try cutting costs and you will endanger both access and quality.

This iron triangle has hindered the expansion of education throughout history. It has created in the public mind – and probably in your own thinking – an insidious link between quality and exclusivity. This link still drives the admission policies of many universities, which define their quality by the people they exclude.

But today there is good news. Thanks to globalisation successive waves of technology are sweeping the world – and technology can transform the iron triangle into a flexible triangle.

## The Revolution of Technology

By using the technology of distance education you can achieve wider access, higher quality and lower cost *all at the same time*. This is a revolution – it has never happened before. This is what educational technology can achieve if used properly.

What is technology? We can define it as the application of scientific and other organized knowledge to practical tasks by organizations consisting of people and machines, so it draws on non-scientific knowledge as well as applied science. Technology is about practical tasks rather than theory and always involves people and their social systems. Expanding and improving education is a very practical task. People and their social systems are at the heart of it.

But how does technology work? The fundamental principles of technology, articulated two centuries ago by the economist Adam Smith, are division of labour, specialisation, economies of scale, and the use of machines and communications media. I shall argue later that we are in danger of forgetting these principles when we do eLearning – yet we forget them at our peril.

## An Example: the UK Open University

Let me make this real by showing how the application of technology to higher education has achieved remarkable success. I take the example of the UK Open University.

With 260,000 students in award-bearing programmes the UKOU has clearly expanded access. Furthermore, this is not just in the UK since 60,000 of its students are overseas, and there are a million students around the world taking parts of UKOU courses embedded within local programmes.

Many of these course components derive from the Open Educational Resources on the UKOU's OpenLearn website, which has 11 million users. I shall talk later about Open Educational Resources. The Open University has done a brilliant job in making some of its materials freely available so that anyone can use them and the numbers are huge.

28 million people – 300,000 every week – download these materials and 80% of them are outside the UK. Then there were over 200 million viewers who watched Open University BBC television programmes last year. Many of them, and the Open University has tracked 6,000 cases, make their way from informal study into formal courses. That expansion of informal learning is also helping to increase the potential clientele for the Hamdan bin Mohammed eUniversity.

More surprising to you no doubt – and more embarrassing for some of the UK's other top universities – is the UKOU's performance in national comparative assessments of teaching quality. The Open University places above Oxford, where I once studied. Moreover, the government now conducts annual national surveys of student satisfaction with a very large sample of students and the Open University placed third out of a hundred institutions last year and has come first in earlier years.

Finally, the last time costs were compared, the cost per graduate of the UKOU was 60-80% that of conventional universities depending on the subject.

So the Open University has achieved the technological revolution of wider access, higher quality and lower cost. It has stretched the iron triangle.

How has this been achieved?

It has been done through the combination of Adam Smith's technological principles. In the category 'Machines and ICTs' the UKOU offers a multi-media system of distance learning with strong student support. This multi-media system includes some of the world's largest deployments of eLearning but the key issue is not the eLearning or any of the other media, but the focus on division of labour, specialisation and economies of scale.

You could say that the UKOU divides the distance learning process into its three constituent parts, gets different people to specialise in doing each part as well as possible, and then puts it all back together again into an integrated system.

## Distance Learning: Why the Hostility?

So far, so good! But so why do we have to defend distance and eLearning against attack so often?

There has always been hostility to the methods of distance education. Education is a conservative area of human activity and many people, both in universities and among the wider public, do not regard education as legitimate unless a live teacher faces a live class. Classroom are closed, eLearning is more open: that is a threat to traditional thinking.

This derives from more discreet opposition to two of the values implicit in open and distance learning. The first contested value is openness to people. Many still consider that quality in education is synonymous with exclusivity. They define the quality of their institution by the numbers of people they *exclude* from it. To such a mindset the notion of an open university or an eUniversity, that measures its success by the number and variety of people that it *includes*, is deeply threatening.

The second contested value is openness to ideas. It is generally true that open and distance learning encourages people to think for themselves. They reach their own conclusions about an issue after studying course materials that present a variety of perspectives. It is an approach to learning that is more open intellectually. Independent thinking derives naturally from independent study, and that is threatening to those who would limit debate and constrain thought. They consider face-to-face instruction less risky.

This paradox is strange but simple. Globally, open and distance learning has grown by leaps and bounds since the creation of the first open universities forty years ago. Most importantly, this growth is not only, indeed not mainly, through the multiplication and growth of open universities. The number of mega-universities with over 100,000 enrolled students has indeed grown steadily since I wrote my book, *Mega-universities*, in 1996. But even more dramatic has been the growth of distance learning and eLearning programmes within conventional campus universities.

Indeed, there are now very few universities which do not offer some programmes at a distance – or at least, if they want to avoid the ‘d’ word, through forms of what they call flexible or blended learning. It is now impossible to calculate how many of the world’s students are now learning at a distance, but they number in the tens of millions.

The paradox is that at the moment when open and distance education seems to have found its place in the sun by being adopted throughout higher education, opposition to it is emerging all over the globe. But we should see this as an opportunity – not just to reassert the importance of our values and the effectiveness of our methods but also to clean house. We must accept that the opposition to ODL is not solely an expression of bad will or fear of change. Some hostility is a reaction to abuses, which we must address.

Let me reassure you, however, that the opposition we face, although determined, vicious and multi-pronged, will not prevail. As evidence I cite the conclusions of last year's UNESCO World Conference on Higher Education.

## The New Dynamics of Higher Education

The conference title was *The New Dynamics of Higher Education and Research for Societal Change and Development* and it brought together over a thousand government and institutional delegates from most countries of the world.

What are these new dynamics in higher education? They were identified in the conference communiqué that the delegates approved. Since then they have been articulated by the Executive-Secretary of the Conference, UNESCO's Stamenka Uvalić-Trumbić, in many presentations.

The new dynamics are:

- 1) Rising demand and massification
- 2) Diversification of providers and methods
- 3) Private provision
- 4) Distance education
- 5) Cross-border higher education
- 6) Quality assurance
- 7) Teacher education
- 8) Challenges to the academic profession

The striking feature about this list is that all these new dynamics relate more or less directly to open, distance and eLearning. Take the first, rising demand and massification.

Today there is a revolution in higher education as countries use the technology of distance education to achieve something completely new: education of higher quality at lower cost. Education can now be scaled up to achieve even lower costs without loss of quality – an important response to massification.

Take the next four new dynamics: diversification of methods, private provision, distance learning and cross-border provision. All these are related to the use of distance learning technologies; Furthermore, technology requires new approaches to quality assurance and only the massive use of distance learning will address the challenge of training ten million new teachers in this decade.

Finally, the last 'new dynamic' on the list is challenges to the academic profession.

They may still be a minority, but here in Dubai young and dynamic academics are now introducing a new generation of technology to ensure that university education is accessible and cost-effective. All over the world, in open and campus institutions, academics are learning new skills and adapting to new realities as they offer courses in open, distance and technology-mediated formats.

So my message today is that the current wave of opposition to ODL will not prevail against it. Open, distance and technology-mediated education is now intimately bound up with the future of higher education generally. The clock will not be turned back.

The knowledge that ODL will win the battle should give us the confidence us to see today's threats as an opportunity to do more and better tomorrow. But how should we address this opposition?

## Addressing the Opposition to Distance Learning

Circumstances require that we act on four fronts.

Most governments still wish to increase participation in higher education but, not least because of the current economic climate, they have less money to spend on it. Expanding distance learning must be a major part of the solution to this dilemma.

In the United States enrolments in eLearning courses rose by 21% from 2009 to 2010 compared to 2% for campus enrolments. Many governments have got the message and currently a number of new open universities being created across Africa. This is a time when distance learning can get the ear of government as never before.

We must make two other points while we have the ear of government. First, there is much talk nowadays about the 21<sup>st</sup> century skills that we want our graduates to have. One important skill is to be a self-directed learner. eLearning and independent study are more likely to cultivate self directed learning than being spoon fed in a classroom.

The second point for government is that distance learning is an effective mechanism for making the use of ICTs effective in higher education. Letting a thousand flowers bloom is pretty, but governments need to be reminded that distance learning institutions like the Hamdan bin Mohammed eUniversity have the muscle to innovate cost-effectively at scale. It is not an accident that the materials of the UK Open University, which operates at scale with 260,000 formally enrolled students, are among the most frequently downloaded from iTunes.

But fourth and finally, we must clean up our act and remove the bad apples from of the barrel. One of the new dynamics of higher education is the internationalisation of quality assurance. We should campaign for our countries to maintain strong and independent quality assurance agencies that have all higher education under their purview, public and private, classroom and distance. What matters is the quality of the output of higher education, not how it was offered or under what corporate structure. I am proud to be on the steering committee of the Global Initiative for Quality Assurance Capacity, which is supporting the Arab Network for Quality Assurance in Higher Education in its training work.

One area where there is already good international collaboration is the fight against degree mills. We know what needs to be done to discourage degree mills – let’s do it. And let us encourage our governments to participate actively in UNESCO’s portal of recognised higher education institutions, so that students around the world can avoid being hoodwinked by scams and crooks.

## eLearning: What’s Next?

This brings me to the third and final part of this address. eLearning is the most recent expression of open and distance learning. What are its advantages and disadvantages how can we improve its quality and impact?

The key question is: what does the incorporation of a digital culture add to distance learning – and is it scalable? The aim is increased access, better quality and lower costs. The digital culture has not yet had a giant intellect like Adam Smith to clarify its essential nature for us but, appropriately perhaps for something essentially unstructured, the concepts of networks, connectedness, collaboration and community capture elements of it.

The advantages of eLearning, compared to conventional distance learning, are easy access to diverse learning content and rapidity of feedback and communication. The snags are that most of the world’s population is not yet well connected and, since eLearning tends to stimulate more interaction with tutors, without good organisation it is less scalable than traditional ODL at comparable costs.

In an important survey of eLearning in North America, just published, Professor Tony Bates finds that in general eLearning there is not stretching the iron triangle. Instead of cutting costs, investment in technology and support staff is increasing costs without replacing other activities. Instead of increasing quality, eLearning fails to meet quality standards in some institutions and there is no evidence of improved learning outcomes. In my language, much of eLearning in North America is not open.

This is a serious challenge for you. Can you do better than North America and really reap the advantages of technology? We are entering a new era. A key feature of digital distance learning is that you can find content for learning everywhere. But education is not a do-it-yourself construction kit. In order for education to work within the larger structures of society, clear outcomes are still needed. Learners need guidance to digest the chaotic and ambiguous information climate created by networks.

Most of those who write about digital education have jumped straight to it from the cottage industry style of classroom teaching without experiencing the technology culture of traditional ODL. They talk about the change from teachers ‘controlling a classroom’ to ‘influencing a network’, They leapfrog over ‘technology-culture ODL’ in which learners are not controlled and reach their own conclusions from learning materials developed by teams that present multiple perspectives.

## Open Educational Resources

What can we do to incorporate some of the scale advantages of technology-culture ODL into digital ODL?

Time only allows me to identify one very important mechanism, which is Open Educational Resources or OERs. OERs are learning materials, of variable length, which are freely available for adaptation and use. The possibility of adaptation is vital. Content from elsewhere is never totally suitable for our own needs, but if we can adapt it to suit those needs then we can have the best of both worlds, content of world-class quality mapped on to local needs.

There is a splendid example of this in a programme for Teacher Education in Sub-Saharan Africa called TESSA. A consortium of 12 African universities, the UK Open University and international organisations, including COL, has produced a huge range of materials on classroom-focused in-service teacher education. They are available in Arabic, English, French and Kiswahili and were used by hundreds of thousands of teachers all over Africa last year, with a beneficial impact on the many millions of children they teach.

OERs are a beautiful synthesis of the technology culture and the digital culture. Their production relies on specialisation and division of labour across Africa, but because of their digital format and their adaptability they also achieve huge economies of scale.

We are pleased to say that COL is now facilitating a similar process of OER creation for the senior secondary curriculum. One hundred teachers from Botswana, Lesotho, Namibia, Seychelles, Trinidad & Tobago and Zambia have divided up the last two years of the secondary curriculum with each country team working on a particular subject. The OERs will be available in both print and eLearning formats to the whole world, including Dubai.

We don't pretend that it has been easy, because connectivity is a constant problem for the master teachers creating the materials in these countries. But we are getting there and since these are OERs the materials will, of course, be available to open schools and conventional schools all over the world, not just in the six countries directly involved.

## Conclusion

It is time to conclude.

There are many other things to say about how eLearning can allow digital ODL to be more open and achieve some of the scale advantages of technology-culture ODL. One aim should be to automate the interaction between students and tutors as much as possible, for example by referring students to a website of frequently asked questions rather than dealing with each individually. Another approach is simply a matter of discipline. eLearning tempts teachers to revise material constantly, which has a dire impact on scalability and economics. Most courses do not need changing every few months and teachers would do well to adopt the principle of technology-culture ODL: do a really good job of developing the course and let it run for a while rather than doing a skimpy job and revising it constantly. Use the interactive tutorial system to address new developments in the subject.

If you exploit technology in these and other ways you will succeed in stretching the iron triangle and creating the long-awaited revolution in education. I wish you well in that vital endeavour.