Introduction

It is a pleasure to be back in Nigeria, the heart of Africa, in this great nation and among these good people. I am addressing you on behalf of the Commonwealth of Learning and am proud to be here with our Vice-President, Professor Asha Kanwar, who served with UNESCO here in West Africa and is the principal author of the remarks that I shall deliver.

First, we must acknowledge with deep gratitude the support that COL has had from Nigeria ever since the Commonwealth Heads of Government Meeting in Vancouver in 1987 that established us. India and Nigeria were key advocates for creating a Commonwealth of Learning at that meeting. Ever since then it has had a seat on our Board of Governors as a major donor. Since 2000 that seat has been held by the distinguished Professor of Adult Education and Ambassador to UNESCO, His Excellency Professor Michael Omolewa.

We like to think that COL has repaid the compliment by influencing events in Nigeria too. In September 2000 my distinguished predecessor, Tan Sri Dato Professor Raj Dhanarajan came here to take part in a national workshop charged with developing a national policy for distance education in Nigeria. The recommendations of the workshop were first to develop a robust national policy on ODL and, second, to re-establish the National Open University of Nigeria. Both of these have been done – which is why we are here today. COL is proud to have accompanied NOUN through its exciting renaissance. A major milestone has been the establishment in 2003 of RETRIDOL – the Research and Training Institute for Distance and Open Learning. This has since become a major resource for capacity building in distance education not just in Nigeria but for the entire West African region.

Another milestone has to be the enrolment and graduation of the former President of Nigeria, His Excellency Olusegun Obasanjo, at NOUN, continuing a long tradition of African heads of government becoming distance education students.

In the mid-1990s, as Vice-Chancellor of the UK Open University, it was my privilege to go to Addis Ababa to confer on the Prime Minister, The Honourable Meles Zenawi, the MBA degree with distinction.
We did this in the cabinet room in government house and several other ministers and the Mayor of Addis Ababa graduated with MBAs at the same time. We have seen in Ethiopia, and I am sure we shall see here, that when the head of government becomes convinced of the efficacy of open and distance learning it makes its implementation very much easier.

I should add that in supporting NOUN COL has not neglected the rest of Nigeria. In particular, we are proud of the way that we have helped the National Teachers Institute in Kaduna to become the world’s largest distance education institution for teachers. There have been reciprocal benefits because COL is now extremely fortunate to have Dr. Abdurrahman Umar, formerly Academic Director of NTI, as the leader of COL’s Teacher Education work. He is doing a tremendous job helping institutions, especially here in Africa, to expand teacher education at a distance while inculcating at the same time the pedagogical principles of UNICEF’s Child Friendly Schools.

Our title today is *Distance Education for the 21st Century*. We shall begin by outlining three key trends, move on to list three achievements, and conclude with four challenges.

**The Growth of Distance Education**

The first trend is the sheer growth of open and distance learning in the Commonwealth. So far this has been most marked in higher education – but watch out now for the burgeoning of open secondary schools.

Participation in higher education today is at a record high. Higher education has evolved from an elitist pursuit into a mass aspiration. Pundits say that by 2020, 40% of the global workforce will be knowledge workers, with a need for tertiary qualifications. In the 1980s and 1990s the World Bank pushed basic education and deprecated investment in higher education in Africa. In a major change of position the Bank now argues that for countries to achieve sustainable economic development, the Age Participation Rates (APRs) in higher education must be in the region of 40 to 50%. But APRs are less than 10% of the relevant age group in most of South Asia and Sub Saharan Africa.

Many developing countries have big ambitions for growth. Malaysia plans to raise its APRs to 40% by 2010. Trinidad and Tobago plans to have an APR of 60% by 2015, while Jamaica, more modestly, wants to raise it to 30% by the same date. India has announced the establishment of one new central university for each of its 28 states with the intention of lifting the APR to 15% by 2012 (Daniel, Kanwar, and Uvalic-Trumbic, 2006, pp. 17-23).

But can the existing institutions cater to the rising demand? Dhaka University, Bangladesh could only enroll 10,000 of the 80,000 applicants in 2000, while in Kenya only 9,000 of the 40,000 qualified students could be accommodated in the public university system (Kapur hand Crowley, 2008, p.16).

Building more brick and mortar institutions to cope with such demand is not a viable option for most countries. They need alternative approaches. In the last forty years distance education has emerged as a viable supplement and serious alternative to the formal system and shown phenomenal growth.

The University of South Africa (UNISA) started its distance education operations in 1946 and was inter-racial even during the apartheid years. It is highly – rated in South Africa and is one of the world’s mega-
universities – a word that I coined 15 years ago to designate distance teaching universities with over 100,000 students. But it was the establishment of the UK Open University in 1969 that led ODL to expand phenomenally in the seventies and eighties. It quickly became the largest university in Britain and set a global trend.

Canada created three open universities in the 1970s. Pakistan was quick off the mark. India followed with BRAOU and in 1986 established a national open university, IGNOU followed by numerous state open universities. Bangladesh is a more recent arrival in the open university club. Many of these open universities, along with some older institutions in China, France and Spain are mega-universities.

In 1994, when I introduced the term, there were eleven mega-universities in the world with a collective enrolment of about 3 million students (Daniel, 1996). Today the number of mega-universities has doubled and student enrolments have tripled. New mega-universities are on the horizon, including NOUN. Seven African countries are planning to establish open universities in the next three years. Ghana and Mauritius have already made substantial progress and are represented at this forum.

If we look just at the Commonwealth, we can see terrific growth in the number of open universities between 1988, when COL was created 20 years ago, and today.

But higher education at a distance is not just about open universities. In all countries conventional educational institutions, most notably at university level, are adding ODL activities to their face-to-face teaching and becoming ‘dual-mode’ institutions. Some countries, notably Australia have a long tradition of this in universities such as Queensland, New England, and Deakin with more recent converts such as Southern Queensland and Monash. The University of Delhi has a large Campus of Open Learning with student enrolments in the range of 150,000. The University of South Pacific and the University of West Indies are multi-modal institutions and cater to both face-to-face and distance students on a regional basis.

However, the situation is getting nicely mixed up as some institutions go the other way. Dedicated distance education institutions such as the Open University of Hong Kong are now offering face-to-face classes. In Canada, the single-mode ODL institutions in Québec and British Columbia, the Télé-université and the Open University of British Columbia, have been merged with conventional institutions. Eleven new schools in India’s IGNOU will offer face to face courses from July 2009. Are these isolated instances or is this an emerging trend? More importantly, can distance education thrive in a dual-mode set-up?

Call me a sceptic on this one. I was once president of a dual-mode university, Laurentian University in Ontario. I do not say that it is impossible to run a dual-mode university where the distance students are treated as well or better than the classroom students – but from my experience and my observation it is very hard.

Most conventional campus universities that become dual mode find very difficult to offer quality distance learning. That’s because the faculty naturally put more effort into teaching the students who are there in front of them than in tutoring students at a distance. To be successful at doing both well requires strong institutional will, policy and systems. Relatively few dual-mode universities have all three. The result is that the distance students usually get crummy service. We are not saying that all open universities are excellent, but if you focus on one task you usually do it better than if you try to do two different things at once.
I see a real risk that distance teaching universities which go in the other direction by adding classroom teaching may see the quality of their distance offerings deteriorating. It is too early to make a definitive judgement in Canada, but I do observe that the distance programmes have lost momentum in the dual-mode situations in Quebec and British Columbia whereas the single-mode Athabasca University goes from strength to strength.

Loss of momentum and quality would be particularly tragic, especially in countries where the open universities were set up in order to do quality distance education in contrast to the many dual mode universities offering correspondence courses of lamentable quality.

We leave you with that thought and move to the second trend.

ODL for Development

In the year 2000 the international community agreed on two set of development objectives: the Millennium Development Goals (MDGs) and the Dakar Goals of Education for All (EFA). In creating a framework for its own work COL adds the Commonwealth ideals of Peace, Democracy, Good Governance and the Rule of Law.

Let us now turn to the contribution that ODL can make in attaining these goals.

In this decade the main focus has been on the goal of achieving Universal Primary Education (MDG 2). Good progress is being made. Compared to 1999, 40 million more children are now in primary school. That is a great success. But it is generating a big headache for governments by challenging them in two ways.

Many African countries have launched major initiatives to introduce free primary education. But what happens when students graduate from elementary school? Can existing schools absorb the large numbers? When Kenya introduced free primary education in 2003, 1.5 million out-of-school children entered the 18,000 schools already bursting at the seams. While 73% survive elementary school, the Gross Enrolment Ratio (GER) at the secondary level is 48%. Even if one new secondary school were to be built in the developing world every working day for the next ten years, the demand for post-primary education could not be met.

COL believes that open schools can be a major part of the answer and this is a high priority for us in our Three-Year Plan for 2009-2012. The Open Schooling initiative is led by our excellent African colleague Frances Ferreira. Open schooling can address the challenges of increased demand by reaching out to diverse groups of learners with quality secondary education that offer both academic as well as technical and vocational options.

I am in the process of writing a book about open schooling, called Mega-Schools. As I research the topic I am realising that as well as absorbing part of the huge demand open schools could be an important integrating and synergistic element for the whole school system. The production of Open Educational Resources that we shall come to in a minute is just one element of this.
Meanwhile Frances Ferreira and Dominique Abrioux will publish a book of case studies on open schools through COL next month. For example, India has one national open school with an annual enrolment of 300,000 pupils and 14 state open schools that cater to over 2 million learners. Open schooling can not only reach large numbers but can also provide cost-effective education of quality with high retention rates of up to 90%.

Compared to ODL in higher education, open schooling is poorly researched and documented but two years ago Greville Rumble and Badri Koul did a careful study comparing the cost-effectiveness of the national open schools in India and Namibia (Rumble & Koul, 2007).

The second challenge is to achieve universal primary education in all countries. This requires many more teachers. Africa alone still needs to raise its current stock of teachers by 68% – from 2.4 to 4 million – by 2015 to reach that goal (UNESCO Institute for Statistics, 2006). India needs 5 million more. Once again the conventional approaches cannot cope with these huge numbers. Nigeria needs to increase teacher numbers from 580,000 to 706,000; Kenya from 150,000 to 192,000; and Malawi from 41,000 to 75,000; and, to move to Asia, Bangladesh must increase from 370,000 to 453,000. This is a pan-Commonwealth challenge. In addition, of course, many teachers are untrained or under-qualified: 44% in Nigeria, 42% in The Gambia and 63% in Uganda.

Existing teacher training institutions do not have the capacity to address these shortfalls, so it is critical to expand the use of ODL to teacher training. COL is proud of have helped to strengthen the National Teachers Institute, Kaduna which now trains thousands of teachers annually. Its former Academic Director is now leading on teacher education at COL, another priority in our new Three-Year Plan.

But ODL for development is not only, perhaps not mainly, about strengthening formal education. Of the 1.1 billion people living on less than $1 a day, 75% live in rural areas and rely on agriculture for food and income. 80% of the farm work is done by women. ODL can contribute to poverty reduction by the development of skills training packages for poor communities. COL has developed an initiative to promote Lifelong Learning for Farmers (L3F). The initiative links universities, research institutes, ICT kiosks and banks with rural communities in India, Sri Lanka and Kenya supporting farmers to learn and earn.

In one recent project in Theni district, India 582 women participants access distance learning audio-visual materials to learn the fundamentals of identifying a good cow, dairy and disease management as well as how to exercise credit and insurance options. Nearly 300 participants received credit worth over USD 15,000 with which two and a half thousand goats were bought. 25% of the loans have already been repaid in the first year of the project. So what happens when COL leaves? An earlier intervention shows that after COL completed the project, 50 women farmers continued to access information through the local ICT kiosk and have sold milk worth over USD 100,000, which has contributed to the prosperity of the village.

The ICT kiosk vendor encourages the women to use his facility to sustain his own business and the women continue to generate income through ongoing learning. 300 women have bought mobile phones and these devices would become a major feature of their learning and information sharing in the future.
Open Educational Resources

We come now to our third trend. A key trend today is eLearning. By 2006, in a typical American college or university, one fifth of all continuing and professional development courses were being conducted online (Kapur and Crowley 2008, pp 32-33). With 81% of face-to-face institutions in North America offering blended learning options it is clear that there is, at least on the surface, an increasing convergence of distance and face to face education.

The last ten years have seen tectonic shifts in how technology is being used in education. The Open Courseware movement was launched with the prestige of the Massachusetts Institute of Technology which, by sharing the lecture notes of its faculty online, expressed the principle that knowledge is our common wealth. The on-line course materials of the UK Open University were the second generation as existing self-instructional materials were made freely available in on-line format. The third generation is collaborative course development as exemplified by the WikiEducator, a course authoring tool being used to develop materials for the Virtual University for Small States of the Commonwealth (VUSSC) and many other projects.

In Africa, for example, one of the most successful collections of OERs is those developed and disseminated by the Teacher Education in Sub-Saharan Africa (TESSA) Consortium. It has 18 member-institutions in nine African countries. TESSA has developed a wide variety of audio and text materials (online and print) that provide support to primary school teachers and teacher educators in Africa.

Content development is resource-intensive and the OER movement provides a unique opportunity to developing countries to access global knowledge flows. Professor Bob Bernard of the Educational Technology group at Concordia University, Montreal, and his colleagues carried out a meta-analysis of hundreds of studies in which distance education students were treated in different ways. They distinguished three types of interaction: student – content; student – student; and student – teacher. They then analysed all the studies to find which type of interaction made the greatest difference to student performance when it was increased.

The results were very clear. Increasing student – content interaction had much the greatest effect; with student – student interaction coming next and student – teacher interaction last. Within this context, the importance of content cannot be underestimated. In the coming years, there will be a greater need to collaborate on free content development and sharing resources.

Achievements

So much for our section on trends: we come now to three achievements of ODL

**Breaking the iron triangle of access, quality and costs**

The first is to have broken open the iron triangle of access, quality and costs. Throughout history, education has been constrained by the iron triangle of quality, access and cost. If access is increased, there is the danger of lowering quality. If this is to be avoided, then the costs would have to be raised. ODL is revolutionary because it, allows us, through division of labour, specialization, and economies of scale, to
reconfigure the access-quality-cost triangle. Access can be increased, quality can be improved and costs can be cut, all at the same time.

Look at access, for example: Anadolu University in Turkey provides access to 40% of all entrants to higher education in that country and the government of India aspires to reach a similar percentage of ODL students by 2012. In South Africa 4 out of every 10 students enrolled in Higher Education study at a distance. Distance education has been particularly helpful for women. In South Africa they make up 61% of distance students as compared with 53% of contact students (Glennie, 1999).

In term of quality the case of the UK Open University’s says it all. Independent rankings of the quality of the teaching programmes in UK universities put the Open University in 5th place out of 100 institutions. Furthermore, cost studies conducted by the UK government show that whichever way the calculations were done, the total cost of the Open University degree is substantially less than in conventional institutions.

Collaboration

The second achievement that we must flag is collaboration. One of the UKOU’s early contributions to the practice of ODL was the team approach to course development. This meant that teams of subject experts, instructional designers, media producers, and editors worked together to create quality content. In a Web 2.0 world this has mutated into collaborative content development on wikis and basecamps.

At the institutional level, there is more collaboration with older institutions providing their content and resources to newer universities. In India, IGNOU has made its course materials available to the State Open Universities for further adoption and adaptation. As the pool of open educational resources grows, this type of collaboration will increase further.

Public Private Partnerships

A third achievement is partnerships between the public and private sectors. The changing character of higher education has led to the evolution of differentiated types of HEI’s. Many countries have ended the state monopoly on higher education by encouraging private providers to develop. This has resulted not only in the emergence of private distance education providers but also in increased partnerships between public and private institutions.

The Symbiosis Institute in India has over 100,000 students in its professional distance learning courses. The Whitney International University in the USA is a model which is bringing education to the masses by offering quality at a low price. It also works with public universities to expand their programmes. Look at the interesting case of the Open University of Malaysia (OUM), a private institution, which is a consortium of 11 public sector HEIs. This model promotes: i) collaboration among public-private institutions thereby pooling academic talent; ii) economies of scale which are critical to the cost-effectiveness of a DE operation; and iii) a win-win situation by making academics business partners in a joint enterprise.
Challenges

Those are our choice for three key trends and three key achievements in open and distance learning. Let us now look at the challenges. We see four in particular.

From the experience of the last decade, it is clear that ODL will be an important element of future education and training systems across the world irrespective of the stages of the economic, political and social developments within countries. While in the educationally advanced and resource-rich countries, ODL provides a more convenient learner-driven model of education, in the developing countries, challenged by inadequate resources, ODL is a cost-effective option and can reach out to larger numbers without major constraints of time and place. ODL is a good news story. But if it is to remain so the following issues must be addressed.

Graduation rates

The first challenge is graduation and completion rates. There are several instances of ODL systems that have taken off with great promise and potential. However, there have also been instances of a serious disconnect between promise and performance. Wider access is not synonymous with success. Success is reflected in the outcomes measured in terms of the ratio of graduates to enrolment, the time taken to complete a programme, the ratios of retention and dropout, and the response of the market to the graduates.

Graduation rates from some of the high-enrolment open universities are disproportionately low. It is very easy to become complacent once enrolments are high and we talked earlier about the dangers of ODL institutions taking their eye off the ball by falling back on classroom teaching. Our aim must be access to success.

Recognition of qualifications

Second, success in getting students to graduate is not enough. Their qualifications must be recognised and valued by society. Recognition of qualifications is just as important as the performance levels. ODL degrees and certificates need to enjoy the same status and recognition for the purposes of employment and further studies as conventional systems both within national jurisdictions as well as globally.

Provisions need to be made in the national policies for according the necessary equivalence to ODL qualifications and to ensure that students who have graduated from this system are treated at par with students from conventional institutions. Fortunately, sustained efforts are being made by international agencies to build a consensus among countries on the recognition of ODL qualifications. While research shows that there is ‘no significant difference’ between distance education and traditional classroom instruction in relation to student outcomes, there is still a perception barrier to be overcome, in order for this mode of education/training to be utilised to its fullest potential universally.

One of the problems is that many degree mills claim to operate through ODL. In some jurisdictions, as a way of attacking degree mills, there are blanket bans on ODL qualifications for the public service. Let me pay a tribute here to Nigeria’s Professor Peter Okebukola, who is a leading figure internationally in the
fight against degree mills. Nigeria has a particularly robust approach to degree mills and has been known to send in the riot police on occasion to shut them down.

**Research**

What is the nature of research that open universities conduct? There are open universities that are engaged in disciplinary research with considerable success. The UK Open University is rated among the top fifty British universities for excellence in research. But there are many open universities that struggle with a variety of challenges. Some of the more commonly reported impediments are inadequate technology infrastructures, lack of human capacity, deficiencies in planning and management and inadequacies of teaching and learning resources.

It would be worthwhile for ODL institutions to start their research work on ODL itself by systematically recording their experiences in all aspects of the implementation of their programmes and tracking the progress of their learners. Such an effort could also help develop a body of best practices, identify strategic issues, analyse learner response and experiences, design effective support systems and appropriate student assessment procedures and practices. Research into these aspects would give ODL institutions a leadership position in improving the quality of mainstream tertiary institutions.

**Technology and the developing world**

Finally, I need hardly tell you that the development of ICTs has been uneven across the globe. The increasingly symbiotic relationship between ODL and technology may disadvantage developing countries in the short term. While technologically advanced countries will benefit from advances in technology and develop more cost-effective pedagogies, developing countries will continue to use older technologies. There will be a need to focus on the ways to close this digital and pedagogic ‘divide’.

However, note that the rich countries run the danger of losing the cost and efficiency advantages of ODL by using technology as an add on and forgetting our comments about breaking the iron triangle.

**Conclusion**

Let us conclude. The world is in an economic crisis. Remember that the Chinese ideogram for crisis combines symbols for danger and opportunity. Crises often generate creativity and innovation. Innovations are not necessarily spectacular initiatives. They can be minor modifications or adaptations of known practices and methods to get over challenges and obstacles in specific situations.

It has now become possible to transform verbal information into visual communication. It is possible to study synchronously or asynchronously. The consequences of this transformation are more far-reaching in education than in most other areas of human endeavour. They impact the traditional notion of the classroom, the teaching profession, the pedagogy, the design of the curricula and the learning experience. Engaged as they are with every aspect of these emerging trends, the ODL systems can, through systematic and systemic research, provide valuable insights into the unfolding universe of a new, but emerging world order.

Thank you
References


