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DISTANCE EDUCATION: THREATS AND OPPORTUNITIES

*Selected speeches and website blogs of
Sir John Daniel and colleagues*

2009 – 2010

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Introduction

My COL colleagues and I give many presentations in the course of our work and all are available at www.col.org/ speeches. However, our stakeholders have welcomed occasional booklets of these addresses and tell us they find them interesting and useful.

This selection of speeches from 2009 and 2010 is entitled *Distance Education: Threats and Opportunities*. It also includes some entries from the blog that COL has introduced since the publication of the previous booklet.

Open, distance and technology-mediated learning (ODL) is becoming steadily more pervasive as traditional educational institutions adopt this approach for more of their course offerings. Paradoxically, however, the rising use of ODL has provoked threats to its development that I have summarised in a more recent speech: *Distance Education under Threat: An Opportunity?* (www.col.org/resources/speeches/2010presentation/Pages/2010-10-06.aspx).

These threats are of two types. The first are fraudulent operations, known as degree mills, which purport to offer instruction through ODL but merely offer credentials in exchange for payment. In 2008-2009 I was part of an international group convened by UNESCO and the US Council for Higher Education Accreditation that made proposals for combating this scourge. These are summarised in the first speech reproduced here (p. 4).

The second type of threat, sketched in the blogs on p. 30, comes in the form of regulations issued by governments and institutions that seek to restrict the offering of education by ODL and the use of qualifications obtained through it. While some of these initiatives claim to be a response to degree mills, most are really a rearguard action to prevent the erosion of traditional methods of instruction and the accompanying loss of institutional income.

This backlash against ODL will fail, as has similar opposition to the use of technology in other areas of life. Where technology can give better and less expensive products and services to more people, as ODL does, it will prevail. But we must take the threats seriously nevertheless.

Advancing technology and process innovations provide new opportunities for ODL to counter these threats and make it impossible to turn the clock back. For example, the speech on pp. 10-14 describes three technological developments, in the use of mobile phones, the efficient use of software, and a low-cost computing device, that all enable us to do more with less. Open Educational Resources (pp. 19-22) are an exciting development that COL takes very seriously because the sharing of learning materials as OERs makes it possible to combine world-class quality with local relevance.

I am grateful to the colleagues who have contributed to this booklet. Stamenka Uvalić-Trumbić is UNESCO's focal point for its productive joint work plan agreement with COL and it is a pleasure to present some of these activities with her. The innovations described here reflect the creativity and dedication of my colleagues Asha Kanwar, Paul West, Kodhandaraman Balasubramanian, John Lesperance and Ramamurthy Sreedher. It is a pleasure to work with them and also to thank Kathryn Romanow, Denise Tremblay and Dave Wilson for readying this booklet for publication.

Sir John Daniel
President & CEO, Commonwealth of Learning
October 2010

Combating Degree Mills

Council for Higher Education Accreditation
Annual Conference and International Seminar
Washington, DC – January 26-29, 2009

Sir John Daniel (Commonwealth of Learning) and Ms. Stamenka Uvalić-Trumbić (UNESCO)

“The integrity of the global higher education system is threatened by the multiplication of bogus operations known as degree mills.”

“Intergovernmental organisations with mandates in education, such as UNESCO and COL, are working in various ways to protect the integrity of international higher education....”

CHEA and UNESCO have been working together on an advisory statement on international practices to discourage and eliminate degree mills. What has been done and what are likely future actions?

Outline

The integrity of the global higher education system is threatened by the multiplication of bogus operations known as degree mills. They respond to the booming demand for advanced qualifications, particularly in the developing world, by offering spurious credentials. The internationalisation of higher education and the steady extension of the Internet both facilitate their operations and also make it easier for them to cover their tracks when authorities move against them.

The internationalisation of quality assurance has accompanied these trends and is gaining new momentum. Some manifestations of this are: the OECD's program on Assessing Higher Education Learning Outcomes (AHELO); the burgeoning business of international university rankings (e.g. the UK's *Times Higher*; Shanghai Jiaotong University); and the Bologna process with its European Standards and Guidelines.

Intergovernmental organisations with mandates in education, such as UNESCO and COL, are working in various ways to protect the integrity of international higher education and to promote capacity-building for quality assurance.

In that respect, UNESCO has created the *Global Forum for Quality Assurance and the Recognition of Qualifications in Higher Education* in order to give all stakeholders the opportunity to discuss emerging issues. UNESCO and the OECD have developed *Guidelines for Quality Assurance in Cross-Border Higher Education*, which are now being used by many countries in developing their own legislation and/or policies. To guide students through new HE spaces,

UNESCO has launched an Internet portal that will bring together lists, provided by national governments, of the higher education institutions that are officially recognised in their territories. This is now being expanded to include more countries. We encourage all governments to provide such “white lists” so that students and others concerned about the authenticity of institutions and credentials can check their status. Developing suggestions for effective practices to discourage degree mills is a continuation of this work and so UNESCO and COL partnered with CHEA to internationalise the debate.

Combating degree mills requires a multi-pronged attack. First, countries must want to protect the integrity of their higher education systems. This requires good communication within governments so that the education authorities are aware of all companies that register in order to conduct an educational business on their territories and can make judgements about their legitimacy. Second, quality assurance agencies must tackle the difficult challenge of bringing cross-border eLearning within their ambit. Third, all bodies granting financial aid to students, or defraying tuition fees, should ensure they are not inadvertently supporting degree mills. Fourth, employers, higher education admissions officers, immigration officials, etc. must check credentials presented to them. As with other forms of crime, the certainty of discovery is the strongest deterrent. Fifth, the media, including the Internet, should be used more aggressively to make the public aware of bogus educational institutions. Finally, it would be helpful to have an international network for information and alerts about degree mill activity, since spurious operators are internationally mobile and can quickly re-appear in a new jurisdiction when another closes them down.

Introduction

It is a pleasure for us to address you on Combating Degree Mills. All developments have their good and their bad sides. The emergence of the knowledge society and economy has many positive features. Living in a

society based on information and knowledge encourages people to pursue their education further and gives them opportunities for more interesting and satisfying jobs.

But there is a downside. We can think of credentials, especially the degrees and diplomas associated with higher education, as the passports to the knowledge society. Just as some crooks sell fake passports to illegal immigrants and others counterfeit money, so yet other crooks have seen the opportunity to market fake passports for knowledge workers in the form of counterfeit or valueless diploma and degree certificates. The organisations that sell these bogus credentials are usually called degree mills, which is the term we shall use today. Closely linked to them are accreditation mills that are created to give degree mills a spurious cover of legitimacy.

Three developments have made degree mills a more urgent problem for the global higher education community.

First, networks of legitimate higher education institutions are not expanding fast enough to satisfy the burgeoning demand in the developing world. Desperate students are turning to degree mills: some because they believe them to be legitimate institutions, others because, although they know them to be phoney, they believe they can pass their credentials off successfully to employers.

Second, the internationalisation of higher education leads students to look beyond their national borders. More students are going abroad to study and more are studying at a distance with foreign providers while remaining at home. Degree mills try to present themselves as legitimate cross-border providers.

Third, expanding connectivity makes the Internet accessible in all corners of the globe. The Web gives degree mills the opportunity to present themselves inexpensively, yet impressively, to a worldwide audience. For example, one degree mill reproduced a photo of Blenheim Palace, Winston Churchill's birthplace, on its website, implying that this was its campus.

In the first part of this session we shall inform you about what the global higher education community is doing, through its intergovernmental organisations, to make life more difficult for degree mills. This is a by-product of work that has been going on for many years, most notably at UNESCO, to put in place structures and processes in support of the internationalisation of higher education. This work has various aims, the most important of which is to help students find their way around in this new world.

In the second part of the session we will throw the challenge to you and ask what we can do together to clip the wings of degree mills. There is no magic bullet that will kill them, but by acting on a number of fronts

simultaneously we can make the operation of degree mills a less attractive criminal activity.

The Commonwealth of Learning has two particular concerns. First, COL helps developing countries to expand open, distance and eLearning. Degree mills often purport to use these approaches and therefore tend to bring all technology-mediated learning into disrepute and hinder the legitimate use of these modern approaches to teaching and learning in all institutions.

Second, two-thirds of the countries in the 53-member Commonwealth are small states, such as the Caribbean and Pacific islands. These states are particularly vulnerable to degree mills, which either use them as safe havens for their operations or take advantage of their students, who usually have limited higher education provision in their own countries.

The work of international organisations

We begin by describing what international organisations are doing and why UNESCO engages in these activities.

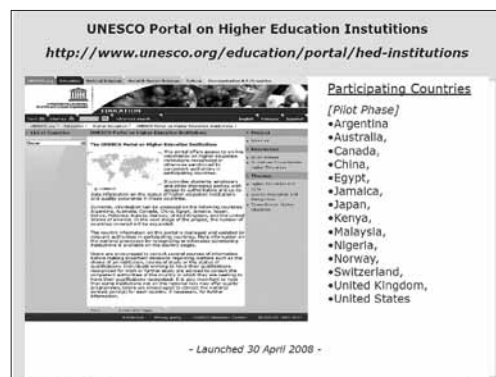
Higher Education is becoming increasingly international. Demand for it is constantly growing and there are now well over 125 million students enrolled in tertiary education worldwide. Some governments, however, can no longer respond to this growing demand by creating more state institutions, so a whole range of new providers are filling the gap: cross-border providers, private higher education institutions, and organisations offering eLearning through the Internet.

This growing variety of providers raises issues of quality and the recognition of qualifications. The internationalisation of quality assurance, which has accompanied these trends, is today gaining new momentum. Some manifestations of this are: the OECD's Feasibility Study involving a selected number of countries for a program on Assessing Higher Education Learning Outcomes (AHELO); the burgeoning business of international university rankings (e.g. the UK's *Times Higher*; Shanghai Jiaotong University); and the Bologna process with its European Standards and Guidelines.

Older international networks for Quality Assurance such as INQAAHE are repositioning themselves and regional QA networks, including some new ones, are being strengthened to provide more capacity and expertise in quality assurance at institutional and system level: ANQAHE, AfriQAN, APQN, CANQATE, RIACES.

“Degree mills tend to bring all technology-mediated learning into disrepute and hinder the legitimate use of these modern approaches to teaching and learning in all institutions.”

“Two-thirds of the countries in the Commonwealth are small states. These states are particularly vulnerable to degree mills.”



“Through its different functions UNESCO brings these new developments together at the global level. Its standard-setting instruments, which include six UNESCO Conventions for the Recognition of Degrees and Qualifications in Higher Education, are now being revised to meet the challenges of globalisation.”

Through its different functions UNESCO brings these new developments together at the global level. Its standard-setting instruments, which include six UNESCO Conventions for the Recognition of Degrees and Qualifications in Higher Education, are now being revised to meet the challenges of globalisation. Another example is the 2005 Guidelines for Quality Provision in Cross-Border Higher Education that were developed jointly with the OECD to address the quality issues that arise when higher education crosses national borders.

Capacity-Building activities were developed through UNESCO's Global Forum on Quality Assurance, Accreditation and the Recognition of Qualifications in Higher Education. Meetings held in 2002, 2004, and 2007 provided a platform for policy debate and generated regional capacity-building initiatives. More recently, a UNESCO-World Bank Global Initiative for Quality Assurance Capacity, GIQAC, was launched.

Finally, an important strand of activity, especially designed to help students, occurs through UNESCO's Clearinghouse functions. Examples are the publication *Study Abroad* and the newly launched Portal on recognised higher education institutions. Our involvement in developing effective international practices to combat degree mills builds on this previous work. We will briefly elaborate on some of them.

UNESCO partnered with the OECD to develop Guidelines for Quality Assurance in Cross-Border Higher Education that were adopted by both organisations in 2005 and published by both organisations. The texts are identical but some say that they are implementing “the OECD guidelines, not the UNESCO ones!” We believe in giving people a choice!

Through its global outreach UNESCO has made the Guidelines available in the six UN languages to help with the regulation of quality in CBHE by involving six groups of stakeholders (governments, student bodies, HEIs, recognition bodies, quality assurance bodies and professional bodies). One strong recommendation is better dialogue and collaboration between sending and receiving countries.

A new partnership between UNESCO and the World Bank was created in late 2007 to develop capacity-building in quality assurance in developing and transition countries. Formally launched in January 2008, it covers a wide range of institutions through one international and four regional networks of quality assurance bodies through training, information dissemination, developments of glossaries, staff exchanges. It covers networks in Africa, the Arab states, Asia and the Pacific, Latin America and the Caribbean as well as the international network INQAHE.

As part of its clearinghouse function UNESCO launched a Portal on recognised higher education institutions in

April 2008. Presently it includes data on 23 countries and he hope to increase this to 60 this year. This Portal is a logical follow up to the UNESCO/OECD Guidelines for Quality Provision in Cross-border Higher Education. It aims to help students, employers, and other interested parties (e.g. credential evaluators) by giving them access to authoritative and up-to-date information on the status of HEIs and QA in participating countries. You could call it a white list of recognised institutions. As well as listing the recognised institutions, each country's entry gives useful information on the organisation of its higher education system.

International organisations and degree mills

What about degree mills? How do they operate? How does quality assurance relate to them?

A particular concern is that some Degree Mills misuse UNESCO's name. There are examples of different levels of abuse and use. The claims that these bogus operators make may range from 100% false to not quite untrue. They use a multitude of tricks, all of which try to establish a false connection or misrepresent a real link with UNESCO to give the impression that their outfit is an internationally



recognised provider of higher education. One institution may use several different tricks. These institutions mutate rapidly. We will give a few examples to illustrate this.

This degree mill invites you to verify its bona fides by corresponding with the Embassy of Liberia here in Washington. Or you can call a phone number which happens to be that of the Director of Higher Education at UNESCO.

Here this body calling itself the Educational Accreditation Association says that its accredited institutions accept and adopt *The Recommendations of the World Conference on Higher Education*, sponsored by UNESCO and the applicable sections of the *UNESCO Guidelines for Quality Provision in Cross-Border Higher Education*. You will also notice web links to UNESCO and WHO.

So how do we tackle the problem?

The Council on Higher Education Accreditation (CHEA) has had a long involvement in UNESCO's activities, in particular the CBHE Guidelines and the Portal on recognised higher education institutions. It was therefore a natural development for the two organisations to set up an expert group in November 2008 to develop suggestions for international effective practice on degree mills. UNESCO and COL are alerting the developing countries to the threat of degree mills. The UNESCO Portal will publicise the statement on international effective practices once the work is finalised.

We have set the stage by informing you of the range of international initiatives that are putting some structure and order into the rapidly growing field of international education. You will have noticed that the focus has been on helping institutions and students to know what is legitimate and also to establish traditions of good practice when legitimate institutions spread their wings across borders.

We are now going to suggest how to address the problem of degree mills more directly. Much of what we shall say is inspired by two meetings on degree mills that have been convened by CHEA and UNESCO. These brought together an impressive range of expertise from various countries and organisations and we shall draw heavily on the conclusions of our discussions.

What is a degree mill?

The lawyers in our group were very keen that we should develop a crisp definition of a degree mill, arguing that you have to charge the criminal with a crime. However, the majority thought that impossible. The most watertight definition is: "A degree mill offers a credential purely in exchange for payment and nothing else".

But this definition misses a host of operations that do require something else: like sending a CV or answering a skill-testing question such as "in which country would you find New York City?"

The way to identify a wider range of degree mills is to run them through a number of filter statements. If any one of the statements applies to an operation further questions are in order. Here is a list:

The operation:

- Does not have legal authority to award degrees in its home jurisdiction.
- Requires little attendance, either in classrooms or online.
- Requires little, if any, coursework or assignments.
- Limits its contact information to a phone number or an e-mail address.

- Makes false claims about external quality assurance or accreditation.
- Issues degrees that are not accepted for licensing or graduate admission in the home jurisdiction.
- Does not provide verifiable faculty lists, or lists faculty with credentials from degree mills.
- Features websites that copy or imitate material from legitimate organisations.
- Has a website with internet domain registration obscured by a privacy service.

Moving into attack mode

How do we close down degree mills? In Nigeria our colleague Peter Okebukola moved in with the riot police on a slew of bogus operations simultaneously, but you may not have enough clout for that.

This list of features of dodgy operations helps us develop strategies to combat them. We recommend seven steps by different actors.

Step one is to help the buyer beware. We have described what UNESCO is doing to help students become savvy consumers. The task is to make them aware of the danger signals we have just listed and encourage them to consult the white lists on UNESCO's portal.

Step two is to make governments want to protect the integrity of their higher education systems. Happily there are incentives for this. Now that international higher education is big business (it is Australia's third most valuable export after coal and iron ore), countries want to protect the legitimacy of their systems. The UK has closed down hundreds of bogus colleges in recent years. In the US the number of states banning or restricting the use of unaccredited degrees has risen from 2 to 11 in ten years. The number of states still regarded as safe havens for degree mills is now small.

An important step is to protect, through legislation, the use of terms like "university" and "accreditation".

A similar dynamic operates in small states. Last year, when Seychelles introduced legislation to set up a National University of the Seychelles it discovered and closed down several degree mills operating from its territory. A particular challenge for small states is offshore medical schools. Most of these are not out-and-out degree mills but operate in a twilight zone offering students the early years of a medical curriculum from which they can, in theory, move to a medical school with a complete programme. These operations are of considerable economic significance for some small states, which are not eager to create difficulties for them

“UNESCO partnered with the OECD to develop Guidelines for Quality Assurance in Cross-Border Higher Education.”

“A degree mill offers a credential purely in exchange for payment and nothing else.”

unless they undermine the credibility of all the credentials offered by the country's tertiary institutions.

However, as small states like Seychelles become more committed to providing legitimate higher education on their territories, they are taking a closer interest in such offshore operations. Legislation will prevent this medical school from calling itself the University of the Seychelles.

Governments should be more active in prosecuting degree mill operators. All fraudulent credentials are a danger to the public, yet authorities do not yet treat the issuing of phoney degree certificates as seriously as they would the counterfeiting of currency or passports. National HE communities should assist the police and the courts in this regard, as has happened to good effect in Nigeria, where the police closed down dozens of degree mills in a major operation.

Step three is for governments to set up transparent structures and processes in support of their legitimate higher education networks. This usually means agencies with responsibilities for quality assurance, accreditation and qualifications frameworks. Depending on national governance traditions these may be public bodies or private bodies (e.g. trade associations) operating with state approval. A number of functions need to be performed.

First, the country should have a list of its accredited/recognised degree awarding bodies and a mechanism for updating it. We hope there will be a snowball effect whereby more and more countries contribute these lists to the UNESCO portal. Once a critical mass of countries is reached, students will be wary of enrolling in institutions based in countries that do not appear on the portal. It will also make it easier for national authorities to make decisions about recognising the credentials issued by cross-border providers operating in their country. If an institution and its degrees are not recognised or accepted in its home country it is a fair assumption that it is a degree mill.

Second, a quality assurance agency can be very helpful in raising the general level of performance of institutions and reminding the public that the correlation between quality and institutional longevity is not perfect. New institutions sometimes outperform old ones. In the interests of widening access to higher education it is important to encourage low quality institutions operating in the grey zone between out-and-out degree mills and respected institutions to raise their game and become respected. External quality assurance can help with this.

Third, we have been surprised that even small states have a strong interest in qualifications frameworks. The Commonwealth of Learning is helping 32 small states to collaborate on the development and delivery of eLearning through the Virtual University for Small

States of the Commonwealth. The Transnational Qualifications Framework that was developed to facilitate this has attracted great interest. Simply that having a qualifications framework against which to benchmark cross-border programmes also discourages fly-by-night operations.

Step four is related to step three but goes slightly wider. We presume that if governments are aware of the distinction between recognised and non-recognised institutions in their jurisdiction they will not give public funds to those that are not recognised – or to the students that enrol in them. However, the term 'recognised' can be ambiguous. The government department that gives licenses for companies to operate must have a mechanism for bringing companies that offer educational credentials to the attention of the education department so that degree mills cannot imply that they are 'accredited' simply on the basis of a licence to operate a business.

The issue becomes more complex when governments, foundations or companies fund students to take courses overseas. Such bodies should verify that they are not inadvertently supporting degree mills. Here again, the development of UNESCO's portal of white lists of accredited institutions will be an invaluable tool.

Step five is for everyone to raise their game in checking credentials presented to them. In recent years passport technology and verification has become more sophisticated and similar sophistication needs to be brought to the passports to the knowledge society known as academic credentials. George Gollin estimates that some 200,000 phoney credentials are sold each year in the US alone, including both documents issued by degree mills and counterfeit certificates and transcripts bearing the names of reputable institutions. While some of the people buying these products are gullible and think they are getting the real thing, many know that the qualifications they are buying are phoney but calculate that they can pass them off successfully with employers and others.

The most effective deterrent to crime is the certainty of being discovered and brought to justice. Were the checking of credentials by employers, admissions officers, immigration officials, etc. to become the norm, degree mills would soon be out of business.

Back in 1860 between one-third and one-half of the currency in circulation in the United States was counterfeit. On the last day of his life President Abraham Lincoln ordered that this problem be addressed and the Secret Service was created. We are not suggesting that the higher education community create an international secret service to close down degree mills, but it would not be difficult, in principle, to be much more effective in protecting the integrity of academic certification.

Public-key cryptography, the mechanism for conducting secure financial transactions over non-secure communications networks, can provide a technical solution to the challenge of authenticating academic documents such as transcripts and diplomas. It would need an appropriate system to manage universities' public keys so that only legitimate universities are issued keys by a "certificate authority". This technology coupled with reliable portals – such as the UNESCO portal – could drive most counterfeiters and degree mills out of business.

Step six is for international organisations, particularly UNESCO and the World Health Organisation (WHO) to take more assertive action against those who misuse their names or logos. We have shown you some slides of phoney degree certificates that claim non-existent relationships with UNESCO. The World Health Organization has a similar problem with medical schools whose website does not make clear what the claimed recognition by the WHO actually means.

The web is a tool of choice for degree mills. Obviously, to take the real example that we gave, it is cheaper to put on your website a picture of Blenheim Palace, Winston Churchill's birthplace, and imply that it is your campus, than to build a real facility. Let us hope that with the development of Web 2.0, degree mills will be hoisted with their own petard as people use blogs, etc. to expose fraudulent operations.

This should be combined with consistent use of other media. They should be discouraged from carrying advertisements from degree mills and give publicity to court cases involving their prosecution.

Step seven is for the international HE community to set up an informal system of alerts and black lists. Such a system is best kept informal for two reasons. First, some degree mill operators are audaciously litigious and try to scare off investigators and suppress unfavourable publicity by instigating large lawsuits. Second, the Internet has made it very easy, if investigators are in hot pursuit, to close a degree mill and restart it with a new name in a different jurisdiction.

Such informal information networks already exist to a considerable extent. Most college registrars usually have a set of documents in a locked drawer that help them make judgements about institutions.

Conclusion

We conclude by reaffirming that degree mills are a significant threat to the integrity of higher education systems. They present problems to students, employers, legitimate higher education providers, quality assurance agencies and governments. They will pose a particular

danger to the expansion of international education if the higher education community does not combine to fight degree mills on a global basis.

We have informed you of what is being done and what you can do to help combat this particular manifestation of academic fraud.

www.col.org/speeches09

Creativity in advancing distance learning: models and technologies

Commonwealth Heads of Government Meeting
People's Forum, Theme: Creativity and Innovation
Port of Spain, Trinidad – 23-29 November 2009

Sir John Daniel, Professor Asha Kanwar, Mr. Paul West, Dr. Kodhandaraman Balasubramanian, Mr. John Lesperance and Dr. Ramamurthy Sreedher (Commonwealth of Learning)

“Models are very important to COL because the application of technology to learning for development is very context specific.”

It is a pleasure to be with you. Our original intention was that the Vice-President of the Commonwealth of Learning, Asha Kanwar, would address you today but she was called away to India for an urgent family matter at the weekend so I am standing in for her with my colleague Paul West. Other colleagues, who lead the initiatives that we shall describe, have contributed to this short paper. They are Kodhandaraman Balasubramanian and John Lesperance at COL in Vancouver, and Ramamurthy Sreedher, who heads our Commonwealth Educational Media Centre for Asia in Delhi.

Today's theme is *Creativity and Innovation*. This is a particularly appropriate theme for the Commonwealth of Learning to address in the context of CHOGM. COL, as everyone calls it, is celebrating what you might call its 11th CHOGM birthday this year.

We were set up in 1987 when Heads of Government met in Vancouver. They believed that a communications revolution was underway and that the mass media, information technology and new developments in telecommunications had much to contribute to the advancement of education, training and learning. COL was created to help countries to secure that contribution. Our slogan, and the title of our Three-Year Plan, is *Learning for Development*. We focus on the use of educational technology in general and of open and distance education in particular, to advance learning in support of development.

Today, rather than simply outline our work programme we shall focus on the notions of creativity and innovation as applied to the development of distance learning. Our title is *Creativity in advancing distance learning: models and technologies* and we shall flag three models and three technical developments.

The models have either already shown their worth in some Commonwealth countries and over the coming three years we shall apply them more widely in other countries. Let us begin with a few words about models then comment on the technical developments.

Models are very important to COL because the application of technology to learning for development is very context specific. Countries have different development priorities and technological and communications infrastructures vary widely. Just because an approach was successful in one country does not mean it can readily be transferred to the different circumstances of another, even if the new country seeks the same outcome. In order to maximise the likelihood of successful transfer we analyse carefully the elements that made the model successful in country A in order to be able to check whether those key elements of the model can be reproduced in country B.

The technical initiatives that we shall describe are in the development stage. COL does not do basic research on educational technology. However, we do occasionally take readily available technologies and try to apply them in new ways to solve development challenges at low cost. Those are the types of technical developments we shall describe here. Our aim is always to scale up learning for development at the lowest possible cost commensurate with fostering quality learning that makes a difference.

Model # 1: Lifelong Learning for Farmers

The first model we call Lifelong Learning for Farmers (L3F). This is aimed at one of the most crucial and urgent development priorities, which is to improve the prosperity of farmers and the rural population generally. This is being implemented by our colleague Dr Kodhandaraman Balasubramanian.

The model has four elements. It is a grassroots model because we start with the farmers and villagers in a rural community and get them to tell us how they think they might best improve their economic future. This means that step one is to mobilise the farmers to define their vision. We call this process of helping them to identify promising avenues to greater prosperity the creation of

structural social capital – essentially having them organise to work together. From this might come a decision that the preferred route to greater prosperity is growing a different crop, which was the case in Hambantota in southern Sri Lanka, or improving dairy production, an example from western Tamil Nadu in India.

Step two is to link the village with those who have useful information about how to effect the desired change. In India we get a group of tertiary institutions together to work as a consortium to answer the questions – often simple – that the farmers have. For example, how do you tell the difference between a good milk cow and a poor milk cow? In Sri Lanka the model is implemented a little differently: the community develops a strong link with a particular university that applies its expertise to the change desired.

Step three is to ensure a communications link between the farmers, the sources of information and the wider world. In India we use the commercial ICT kiosks that are present in many villages, but in other places the link might be through community radio. This is an example of the usefulness of models. Having determined that a communications link is essential, we look for an appropriate local link that can feed the process of lifelong learning that is at the heart of the model.

Finally, new ventures require money. COL is not a donor agency and, in any case, both sustainability of the initiative and its potential for replication require that funds be local. So step four is to involve the local banks in the enterprise and, through them, local businesses – such as a dairy company for the village that decided to improve milk production. In a group of villages in India, the L3F process helped 282 poor women to obtain US\$ 255,000- worth of goats and sheep through credit from the bank and within a year, through capacity building and appropriate management, their assets grew to US\$ 625,000.

The slides show examples of the model at work. This Sri Lankan farmer has changed from rice paddy to growing sour bananas. With him in his plot is Kshanika Hirumburegama, the botanist from the University of Colombo (and now the Vice-Chancellor of the University) who guides the project. As a result of the change the farmer increased his income by a factor of six and moved his family from the thatched house on the left to the white house on the right.

Another feature of the project is that girls passing out of the local school have been taught how to grow tissue cultures for the bananas in a sterile laboratory and these are sold to the farmers who wish to grow them.

In a similar way five Sri Lankan universities are helping to transform agriculture in different ways in different regions. Not far from the banana project in southern Sri

Lanka, Ruhuna University is helping farmers switch to mushroom cultivation, which has significantly increased their incomes.

The next pictures show the farmers in Tamil Nadu, mostly women, who are getting loans from the banks to improve their dairying, learning how to test the quality of the milk to satisfy the standards of the dairy company that will buy it, and using the village ICT kiosk as part of their ongoing search for useful information. The decision to improve a particular aspect of their farming leads to a whole programme of informal learning, always focused directly on making a success of the change desired.

Having identified the key elements of the Lifelong Learning for Farmers model in India and Sri Lanka it is now being applied in Jamaica, Papua New Guinea, Kenya, Uganda and Mauritius.

Technical Development #1: LIVES

Describing the Lifelong Learning for Farmers programme leads naturally to the first technical development we shall describe. LIVES stands for *Learning through Interactive Voice Educational System*. It is a joint project of COL and the University of British Columbia. The aim is to use mobile phones at scale in rural development.

The LIVES system automates voicemail-based learning materials to reach thousands of farmers in their local language or dialect. It has been enthusiastically adopted by COL, which is in discussions with IKSL-Airtel group in India for a wider roll-out widely in the coming year. By linking a learning management system to the mobile phone network, LIVES has strong feedback and performance tracking features, can accumulate a large data base of audio learning materials in various languages, and can reach more than 1,000 farmers at a time. The slides show a schematic diagram of the system and a woman goat farmer who, along with hundreds of other women, has been provided with a mobile phone along with her loan from the bank and is learning more about goat rearing through several short lessons each day on a prototype of LIVES.

Model #2: The Virtual University for Small States of the Commonwealth

Model #3: Transnational Qualifications Framework

Our second and third models are closely linked. The idea of a Virtual University for Small States of the

“Having identified the key elements of the Lifelong Learning for Farmers model in India and Sri Lanka it is now being applied in Jamaica, Papua New Guinea, Kenya, Uganda and Mauritius.”

“The LIVES system automates voicemail-based learning materials to reach thousands of farmers in their local language or dialect.”

“Another important feature of the VUSSC is the ownership and management of the programme by the member countries themselves.”

Commonwealth began with the Education Ministers of the Small States of the Commonwealth when they met in 2000 amid all the excitement of the dotcom frenzy. They judged that many of their countries did not have the critical mass of trained people or ICT infrastructure to launch confidently into the eWorld. So they decided to work together and called their collaborative venture the Virtual University for Small States of the Commonwealth (VUSSC).

It is really a misnomer, because this is indeed a collaborative network, not a new tertiary institution. Furthermore, because donors were not interested in funding the organisational infrastructure for a new international body, it has to be created as a bootstrap operation from the bottom up. Our colleagues Paul West and now John Lesperance have worked with 32 small states to develop a model that is now gaining real traction and allowing these countries to enrich and expand their tertiary institutions in just the way they hoped back in 2000.

There are two key elements of the model. The first element is the collaborative production of eLearning materials in a range of practical subjects of special relevance to small states. The second element, capacity building, is a requirement for achieving this. Lack of personnel trained in applying ICTs to learning was a major stimulus to the creation of the VUSSC. The VUSSC pursues these two elements simultaneously by organising a three-week course development workshop to initiate the creation of eLearning materials in each new subject. This picture shows the first such workshop, held in Mauritius in 2006. The subjects were ecotourism and small business and experts on these topics attended from 14 small states. They spent three weeks acquiring the skills necessary to develop eLearning material by collaboration online while beginning the process of creating such materials for these subjects.

The participants had two obligations when they got home. The first was to share their ICT training by passing on the skills they had acquired to five other colleagues. The second was to continue to work online with the other workshop participants to complete the development of the course. Since that first workshop six others have been held. The seventh, on the subject of Port Management and Stevedoring, is being held in Samoa at this moment and has attracted experts from sixteen countries. Earlier similar events had been held in Singapore on Teacher Education; in Trinidad & Tobago on Life Skills; in Samoa on Disaster Management; in Seychelles on Fisheries; and in The Bahamas on Construction Safety. It is fair to say these workshops have become progressively more effective and efficient at both their training and their course development functions.

An important feature of the model is the creation of learning materials in the form of Open Educational

Resources that can be freely shared, adapted and re-used. In this respect the VUSSC is part of an exciting worldwide movement to assert that knowledge is the common wealth of humankind and must be shared as freely as possible. The OER movement gained momentum when the Massachusetts Institute of Technology made its faculty's lecture notes freely available on the web. In a second development the UK Open University offered a large selection of its self-learning course materials in the same way. The VUSSC, in which academics and experts work collaboratively to create courses for everyone to use, might be considered the third generation of the OER project.

Another important feature of the VUSSC is the ownership and management of the programme by the member countries themselves. A Management Committee chaired by Dr Emma Kruse Vaai from Samoa sets the overall strategy of development, which COL then supports.

A sub-committee of the VUSSC Management Committee looks after the Transnational Qualifications Framework that has been developed as part of the programme. We have identified this Transnational Qualifications Framework, or TQF, as our third model in this paper. Through international collaboration the VUSSC is developing courses that will be used all over the world. It is necessary both to ensure that the courses are credible and to show how they fit into the qualifications frameworks in use in different countries. The VUSSC TQF, which was developed with the help of the South African Qualifications Authority, can be thought of as a conversion table that allows people to see how a course from one region fits into the qualification framework of another.

To ensure credibility a course is only accepted for listing on the VUSSC portal if it has been approved by an accredited institution in the originating country – and by the regional accreditation mechanism if one exists. These precautions are particularly important for courses and qualifications emanating from small states since, regrettably, some of these jurisdictions are home to degree mills and bogus colleges that make other countries doubt the validity of any qualification coming from them.

In summary therefore, the Virtual University for Small States of the Commonwealth, itself a new model for international collaboration for the development of learning material, has other models nested within it like a Russian doll. Open Educational Resources and the Transnational Qualifications Framework are the most striking, but you could also call the format of the course development workshops a model. Furthermore, the use of wikis in course development, which we have not explored in this paper, has also yielded a new model of wiki that attempts to combine open content with the use of public domain material that may have some rights reserved.

Technical Development #2: Easy Now

The second technical development we shall describe is the brainchild of Dr Ramamurthy Sreedher and his team at CEMCA in New Delhi. 'Now' sounds like the Hindi word for nine, and Easy Now Uses open source and ICT tools to create multiple media educational content in nine formats at low cost. Very important is its ease of use by teachers and it is already being used in a number of tertiary institutions in India, Sri Lanka and other Asian countries. It also enables a high degree of compression of materials, so that complex multi-media programmes can be carried on a simple data stick.

This slide shows the nine ways in which learning materials can be configured using Easy Now:

- Text magnification
- Conversion to Braille
- Slide shows
- Web-based Open and Distance Learning
- Text to audio delivery
- Audio streaming
- Audio CD
- Video streaming
- Video CD

The following slides show the four examples of Web-based ODL, an audio CD, a video programme and the Braille version of the courseware.

Interest in using Easy Now is growing steadily in South Asia as teachers discover its ease of use and flexibility.

Technical Development #3: Edu-Frame low-cost educational computing device

The *EduFrame* is an exciting technical development. It is the creation of a really low-cost educational computing device. Given that the pursuit of a cheap laptop for education has created a number of false dawns we make this announcement somewhat hesitantly. A "\$100 laptop" was announced with some fanfare at the Davos World Economic Summit in 2005. However, the "One Laptop per Child" project of Nicholas Negroponte has still not come close to the \$100 price point and, partly for that reason, fewer than a million of the machines are in circulation rather than the tens of millions forecast. A wider issue

is that no one has yet come up with an effective model for putting together children, computers, classrooms and teachers in a way that contributes to the important goal of expanding access to education while at the same time lowering its cost and improving its quality.

However, many governments, such as India's, are determined to put more computers into schools and seek a machine with a price point of \$50 to facilitate this. Dr. Sreedher and his team have taken up the challenge and now have working prototype that costs \$75 to put together with parts purchased retail. With further refinements in the coming months this machine should be capable of being produced in volume for \$50 a unit. COL and CEMCA intend to make the design freely available and encourage firms to manufacture it and continue refining it.

We call the machine *EduFrame* and the prototype is shown being put through its paces in these slides. Technically you could say that it is a blend of a netbook and a digital photo frame. The team is experimenting with a various types of motherboard and software in order to get the best combination of low cost and useful functionality. Already the *EduFrame* can handle all the applications that make useful contributions to education and we hope that the low cost of the machine will lead to wide distribution and the development of many new applications.

The *EduFrame* owes its origins to the widely available digital photo frame, a storage device used primarily to display photos such as a digital photo album. These digital photo frames also have a radio as well a movie button for browsing. The idea of using digital photo frames as a technology for educational purposes was the brain child of the CEMCA IT Consultant, Mr Krishna Moorthy.

The *EduFrame* is neither a low cost lap top nor an upgraded digital photo frame, it borrows from the technology of the Digital Photo frame and makes use of the EasyNow streaming technology to provide not only ready made, customised course ware to learners but also to allow for internet surfing, documentation and office organisation and presentation functions. The *EduFrame* is a computing device that also serves as a teacher/facilitator to remote learners without internet access. It enables teachers/facilitators to upload material/content on the *EduFrame* as well as on the net, while allowing learners the facility of easy download. It consumes less power (around 10 watts) and is being designed to run on alternative sources of energy apart from electricity. This design would enable even the most remote learner to have access to quality education at their doorstep.

When the prototype is released, it is envisaged that the technical specifications will be as follows:

“Easy Now Uses open source and ICT tools to create multiple media educational content in nine formats at low cost.”

“We call the machine EduFrame... Technically you could say that it is a blend of a netbook and a digital photo frame.”

“COL is not primarily an organisation that works on technical development as its core business. However, when we see new technologies, new hardware and new software that is crying out to be used to improve education we like to work with partners to make that happen.”

8.9 inches WXGA TVT – Touch Screen
X BURST 400 MHZ CPU 32 Bit LINUX Support, Office,
media, photo, support
256 MB RAM
2 GB NAND Flash
10/100 MB Ethernet Access 802.11 b/g
Key Board, Mouse

Conclusions

We hope that this brief account of the advancement of the use of open and distance learning by the Commonwealth of Learning through three models and three technical developments has shown that there is enormous room for creativity in enhancing the reach and impact of educational technology.

By taking as its goal learning for development COL has had to go beyond the well-trodden paths of formal ODL. The three models we have outlined, Lifelong Learning for Farmers, the Virtual University for Small States of the Commonwealth and its Transnational Qualifications Framework are all making education, training and learning available to new audiences.

COL is not primarily an organisation that works on technical development as its core business. However, when we see new technologies, new hardware and new software that is crying out to be used to improve education we like to work with partners to make that happen. We have no intention of getting into the equipment or software manufacturing business. Just as we do in facilitating the development of Open Educational Resources, our aim is to demonstrate where new low-cost applications of technology are possible and to let the market take care of the rest.

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Challenges of success and failure in the campaign for Universal Primary Education: The secondary surge and the teacher shortage

ACU Conference of Executive Heads "Universities and the Millennium Development Goals"
Cape Town, South Africa – 25–27 April 2010

Sir John Daniel

Introduction

This conference is about *Universities and the Millennium Development Goals*.

I shall concentrate on one of those goals, number 2, which is to achieve Universal Primary Education, and touch implicitly on number 3, which is to promote gender equality and empower women.

My title is *Challenges of success and failure in the campaign for Universal Primary Education: The secondary surge and the teacher shortage* and what I will say today is a summary of a book I have just published (Daniel, 2010). Its title is *Mega-Schools, Technology and Teachers: Achieving Education for All*. The book argues that the report card on the 20-year global campaign to achieve Universal Primary Education (UPE), which is the keystone of the overall goal of providing Education for All, is a blend of success and failure. Both have consequences and implications.

The success is that we are now making rapid progress towards UPE and many countries have achieved it.

SUCCESS!

Many countries have achieved UPE

CONSEQUENCE

Many children seeking secondary school

FAILURE!

Big gaps – 50 million still out by 2015

CONSEQUENCE

Millions of new teachers need training

The consequence is that there is now a massive surge of children towards secondary school for which many countries are unprepared.

The failure is that there are still some big gaps in the achievement of UPE. Estimates suggest that by 2015, the target date for achievement of the MDGs, there will still be 50 million children, (give or take), still not in primary school. The exact figure will depend on how badly the current economic downturn impacts school budgets and parental attitudes. The particular consequence on which I shall focus is that the millions of new teachers need to be recruited and trained to complete the drive to UPE.

Let me take success and failure in turn, starting with success.

The Secondary Surge

After a period when universities complained that the World Bank and other development agencies were only interested in primary education it is good news that post-basic education is attracting more attention. Tertiary education is already expanding at a dizzy rate in many countries and that will continue.

However, I believe that the secondary surge poses a bigger headache for governments and policy makers for two reasons. First, this is a challenge of scale. There are 400 million children between the ages of 12 and 17 not receiving secondary education (Binder, 2006). Second, giving girls a secondary education may well be the most effective action we can take against devastating climate change.

Since the industrial revolution the world's population has grown by a factor of seven and the demands that each human makes on the earth's resources have also increased by a factor of seven. That represents a fifty-fold increase in the impact of humankind on the planet in two centuries.

“What I will say today is a summary of a book I have just published... Mega-Schools, Technology and Teachers: Achieving Education for All.”

“Very importantly, open schooling cuts costs drastically, whereas no one has yet demonstrated a cheaper schooling system based on computers, which tend simply to add costs.”

Slowing population growth is one way of limiting that impact. Women with secondary education have, on average, 1.5 fewer children than those without. A difference of one child per woman means 3 billion more or fewer people on the planet by 2050. Secondary education for girls must be a priority (Cohen, 2008).

OBSTACLES TO EXPANDING SECONDARY EDUCATION

However, the expansion of secondary education faces two related challenges in the developing world. The first is that conventional approaches cost too much and the second is that even if their cost could be brought down it is hard to see where the money would come from. Let's start with the cost.

After devoting much of his career to research on the costs of education, Professor Keith Lewin has concluded that a country will never achieve universal secondary education if the unit costs of secondary education are more than double those of primary education (Lewin, 2008). The problem is that in countries facing the challenge of expanding secondary education the spread of costs is far greater than two, ranging from factors of 3 to 6 and beyond in most African countries compared to between 1.5 and 2 in the Organisation for Economic Co-operation and Development (OECD) countries.

Barring radically new approaches to providing secondary education, the policies required to get these ratios down include paying teachers less and having them teach a fuller timetable. Introducing such policies is not an attractive proposition for hard-pressed ministers of education.

But even if the costs of conventional schooling can be reduced a bit, where would the money would come from? Estimates for the additional cost of getting all children into secondary school range from \$22 billion to \$45 billion annually (Binder, 2006). To put these figures in perspective, note that despite heroic efforts the multi-donor Fast-Track Initiative for Universal Primary Education has raised only a few billion dollars since its inception. To achieve such figures low-income countries would need to double their education budgets to bring them to nearly half of total government spending, which is simply not realistic.

OPEN SCHOOLING: PART OF THE SOLUTION

This means that we need radically new approaches to providing secondary education. All credible avenues must be explored. In my new book I review three of them: private schooling for the very poor, which is far more extensive than we tend to think (Tooley, 2009); computers for children; and open schooling.

The Secondary Surge

Radically new approaches needed:

- Private schools for the very poor
- Computers for children
- Open schooling

Open schooling is by far the most promising of these options at present. It already exists in some countries and enrolls millions of secondary pupils worldwide. I have coined the term mega-schools for open schools that enrol over 10,000 pupils. Some, such as India's National Institute for Open Schooling are much bigger than this, with over one million pupils. But even in a small country like neighbouring Namibia, with a total population of two million, the Namibian College of Open Learning, with 28,000 pupils, accounts for nearly half of all children taking the Grade 12 examinations.

Very importantly, open schooling cuts costs drastically, whereas no one has yet demonstrated a cheaper schooling system based on computers, which tend simply to add costs.

What is the link to universities? Simply that some open universities already run open schools within their corporate structures. This approach could be expanded. The only proviso is that those universities must take the task seriously and do open schooling well.

Recruiting and Training Teachers

So much for the success of the campaign for Universal Primary Education and the secondary surge that accompanies it. Let me now turn to the failure: the projection that by 2015 fifty million children will still not get into primary school.

To address that problem will require action on various fronts. We shall focus on the requirement for recruiting and training teachers. UNESCO calculated in 2008 that the world needs to recruit and train some 10 million teachers by 2015 to meet the goals of Education for All and replace large numbers of retiring teachers. China, India, Indonesia, Nigeria and Pakistan need to recruit, between them, some 5.7 million primary teachers by 2015 and fifteen other countries will each need at least 100,000 new teachers (UNESCO, 2006; 2008).

The supply of trained teachers is increasing, but not fast enough to meet these requirements. One of the consequences is that countries are now recruiting people and sending them into the classroom with

minimal training. This is not just a developing country phenomenon. California, for example, employs thousands of untrained teachers to staff its schools.

SWITCH FROM PRE-SERVICE TO IN-SERVICE TEACHER EDUCATION

I argue that we can make a virtue of necessity by standing the conventional approach to teacher education on its head. By moving the emphasis from long pre-service training programmes to regular in-service programmes we could achieve several desirable goals.

First, people keen to enter the teaching profession would be able to do so quickly, while their enthusiasm was high. There are two projects, Teach for America in the US and Teach First in the UK, that send top graduates into tough secondary schools with little training as teachers. These people are keen to undertake a challenge. Moreover, they consider the standard pre-service teacher education programmes boring and would not have gone into teaching if that were the only route in. Once they have gained experience however, they do appreciate learning more of educational theory through continuing professional development courses.

Many developing countries also send large numbers of untrained people into the schools as teachers. However, they do not benefit from a structured professional development framework like those in the Teach for America or Teach First programmes but are left to fend for themselves, sometimes labelled as para-teachers.

Second, switching most of the human and financial resources now devoted to pre-service training to in-service training would not only allow these untrained teachers to make their way into the profession with much greater motivation. It would also provide the opportunity to use teacher education to improve the quality of education provided – a vital proviso – that it is conducted with a focus on the classroom.

Teachers' comments on the value of their pre-service training are often unflattering. However, the problem of relevance to classroom practice is not solved simply by providing that training in service.

Lewin (2002) has argued that since much continuing professional development is carried out without reference to school needs – often without the knowledge of the school principal – it encourages teachers to move to other jobs rather than improving their effectiveness in their schools. Furthermore, another study (DFID, 1999) found that even providing teachers with in-service training in local teacher resource centres did not have much impact on their subsequent classroom teaching.

It appears that to be effective in-service teacher education must take place in the schools and be

resolutely focused on the classroom. This principle has guided programmes like the UK Open University Post-Graduate Certificate of Education Programme. In the words of Leach and Moon (2000, p. 114): "No activity, reading or observation could be set that did not relate directly to experience in schools" and "the link had to be explicit".

To reach teachers in their schools universities engaged in teacher education must employ the approaches and technologies of open and distance learning. Many have been doing this for decades.

In my new book I give profiles of eight large-scale in-service education programmes for teachers that operate at a distance. One of these is TESSA, a programme for Teacher Education in Sub-Saharan Africa, which operates in nine African countries and is run by a consortium of 13 universities and five international organisations. It creates classroom-focused teacher education materials in the form of open educational resources.

Devereux and Amos (2005) have given a moving account of how TESSA materials have enabled the University of Fort Hare to run a very successful classroom-focused in-service programme in the Eastern Cape Province here in South Africa. I am pleased that representatives of Fort Hare are here at this conference to share their experience. Half-a-million teachers across Africa used TESSA materials last year and, since they are focused on classroom practice, millions of children benefited directly as well.

The 20-year campaign to achieve
UNIVERSAL PRIMARY EDUCATION (UPE)
is a blend of
SUCCESS
and
FAILURE

Putting it all together

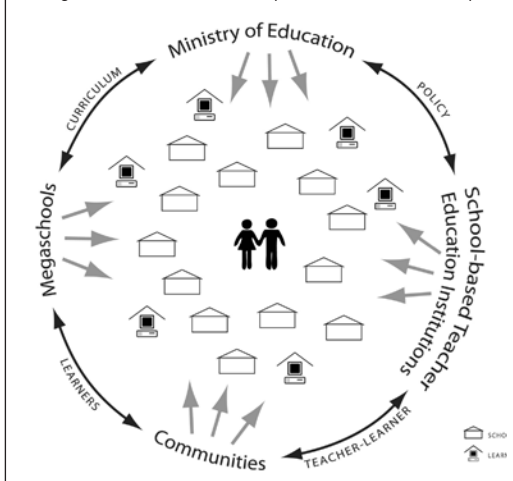
Now let me pull all this together.

Governments and international agencies often talk about adopting "a whole-sector and multisectoral approach to achieving education goals", to quote a concept note for the World Bank's 2020 education strategy (World Bank, 2010). Too often, however, education systems are tightly compartmentalised by level and function. I suggest that large open schools and school-based in-service teacher education programmes could act as integrating factors in making the whole-sector approach a reality.

"I argue that we can make a virtue of necessity by standing the conventional approach to teacher education on its head. By moving the emphasis from long pre-service training programmes to regular in-service programmes we could achieve several desirable goals."

In the educational ecosystem fit for the 21st century shown in Figure 1 there is a national school system, including public and private schools and a network of local learning hubs, under the authority of the ministry of education. The ministry is also linked to the open schooling sub-system, particularly through its curriculum and examinations function, and this sub-system also relates to the schools, notably as a source of learning materials, and to the learning hubs where it locates its study centres.

Figure 1. An Educational Ecosystem for the 21st century



Also linked to the ministry, through its teacher education unit in particular, is the teacher-education institution sub-system. All teacher education institutions have links with the schools and these are particularly strong for school-based teacher education. They will also relate to a national higher education system and to international groupings such as TESSA.

The learning hubs act as resource centres for teachers, giving them access to a richer ICT infrastructure than they have in their schools. Finally, intersecting

with all these systems and subsystems is the community system, which has a highly complex set of sub-systems of its own.

Such an ecosystem would exploit the synergies of open schooling and teacher education with the wider school system, governments and communities and make possible reductions in the cost of schooling and training. For a more detailed discussion of this I refer you to my book.

Conclusion

I conclude where I started. The long campaign to achieve universal primary education has both succeeded and failed. Its success creates a huge task for post-basic education. Its failure challenges universities to train teachers in new ways.

We have a considerable agenda in front of us.

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“Such an ecosystem would exploit the synergies of open schooling and teacher education with the wider school system, governments and communities and make possible reductions in the cost of schooling and training.”

Quality Assurance and Open Educational Resources

International Network of Quality Assurance Agencies in Higher Education

UNESCO-COL Workshop on Open Education Resources

Welcome and Introductory Remarks

Windhoek, Namibia – 3 May 2010

Sir John Daniel (Commonwealth of Learning), and Ms. Stamenka Uvalić-Trumbić (UNESCO)

Welcome: John Daniel

On behalf of the organisers of this workshop, UNESCO and the Commonwealth of Learning, it is a pleasure to welcome you and to thank you for adding a day to your schedule in Windhoek for the INQAAHE Forum to attend this event. We hope that by the end of the day you will be pleased with your decision to come early.

This workshop is part of a joint project between UNESCO and COL whose aim is to spread awareness and understanding of Open Educational Resources, or OERs, beyond the community of practice that has already grown up around them. It is coordinated by our colleagues Zeynep Varoglu at UNESCO and Trudi van Wyk at COL.

We are doing this because UNESCO and COL believe that OERs have considerable potential to widen access to higher education – both numerically and geographically – and to improve the quality of curricula and teaching. Very importantly, in these austere times, OERs can help to achieve these goals at low cost.

For this reason we thought it important to start our project by bringing the concept of OERs to the executive heads of universities, which we did at the Conference of Executive Heads of Commonwealth Universities in Cape Town last week, and also to senior representatives of quality assurance agencies. This is what brings us to this Forum of the International Network of Quality Assurance Agencies in Higher Education. Getting your views on the QA implications of Open Educational Resources is an important aim of our project. The feedback from both these workshops will give us invaluable guidance for taking the rest of the project forward.

I am delighted that Ms Stamenka Uvalić-Trumbić, Chief of the Section for Reform, Innovation and Quality in UNESCO's Division of Higher Education is here with us for the workshop. Stamenka was also the Executive Secretary for the World Conference on Higher Education that UNESCO convened in Paris last July.

Over several days the 1,500 participants in that World Conference identified the most salient trends in higher education and drew up an agenda of change for the decade.

Stamenka will begin our proceedings by recalling some of the conclusions of the World Conference and suggesting how OERS might help us take some of its recommendations forward. After she has spoken I will come back with some brief remarks, based on my 17 years of service as an executive head in two universities, about how OERs can help to advance the scholarship of teaching. We shall then move into our first plenary session.

Introductory Remarks: Stamenka Uvalić-Trumbić

UNESCO is delighted to collaborate with the Commonwealth of Learning in organising this workshop, the second one of three, within our joint project on *Taking OERs beyond the OER Community: Capacity Building for Developing Countries*.

We thank INQAAHE for giving us this opportunity to address the quality assurance experts that you are. We believe that OERs will play an increasing role in teaching and learning processes and it is important that quality assurance frameworks can embrace this new approach. More widely, we hope that higher education will see the greater use of OERs as means of improving access to quality higher education, perceiving them as a legitimate alternative to costly books and a way of expanding distance education.

Let me start by clarifying terms, which I shall do by quoting the helpful definitions of Open CourseWare (OCW) and Open Educational Resources (OERs) given by my COL colleague Paul West:

“Open CourseWare refers to publicly available materials that are either a part of or a complete

“UNESCO and COL believe that OERs have considerable potential to widen access to higher education – both numerically and geographically – and to improve the quality of curricula and teaching. ... OERS can help to achieve these goals at low cost.”

“Open CourseWare refers to publicly available materials that are either a part of or a complete course, usually from a higher-education institution such as a university or college.”

“Open Educational Resources are publicly available resources that may be used for educational purposes.”

course, usually from a higher-education institution such as a university or college.”

And

“Open Educational Resources are publicly available resources that may be used for educational purposes. The range in types of material is much broader than that for Open CourseWare, from suitability for children to college students to professionals. These materials are more often smaller modules rather than complete lesson plans or complete courses.”

In addressing you today my main point of reference is UNESCO's 2009 World Conference on Higher Education.

To achieve global coverage this World Conference was preceded by six regional conferences and many publications were commissioned to set the stage. We were indebted to COL for a paper on *ICTs in Higher Education*. The Conference was a major event that attracted over 1,500 participants from governments, institutions, student associations, civil society, and the private sector.

From the political sphere it brought together leaders from countries big and small. It also attracted many university leaders, professors, quality assurance specialists and scholars, no doubt including some of you. The broad HE community was well represented by students, who were vocal in all the political and professional debates, both as individuals and through their associations.

The recommendations of the World Conference will determine UNESCO's agenda in higher education for the next decade. We shall carry out the work under the guidance of our new Director-General, Irina Bokova from Bulgaria; who is the first woman ever elected to head UNESCO.

The title of the World Conference was *The New Dynamics of Higher Education and Research for Societal Change and Development*. Let me share the three most significant new dynamics in higher education that emerged from the

Conference and which have particular relevance to today's topic.

The first is *growing demand for access* to higher education. Higher education's role as the foundation of the knowledge society is now acknowledged by all. University degrees and diplomas are seen as passports to a good future.

This dominant trend is now called the “massification” of higher education. Worldwide, age participation rates

have grown from 19% in 2000 to 26% in 2007. There were 150.6 million students enrolled in tertiary education

globally in 2007, which represents a 53% increase over 2000. However, in low income countries age participation rates are still small and rose from 5% in 2000 to a modest 7% in 2007. We can expect to see continuing rapid growth in access to higher education in those countries. At the same time we are aware that traditional institutions are no longer sufficient to respond to this growing demand which gives rise to a diversification of new providers of higher education.

The second trend is the role of new technologies in providing opportunities to expand access to quality learning and to facilitate the tasks of teachers. In particular, the emergence of a growing corpus of Open Educational Resources means that academics and students will be able to draw on a worldwide pool of excellent teaching and learning material that can be fully adapted to local needs.

The third trend is the internationalisation of quality assurance. It is vital to maintain quality as higher education diversifies through greater use of ICTs, more private provision, cross-border delivery and other new approaches.

Allow me now to be more specific what the WCHE had to say about OERs

Drawing on a session on OERs and the outcomes of the conference debates, the 2009 WCHE Communiqué (article 13) states that:

“ODL approaches and ICTs present opportunities to widen access to quality education, particularly when Open Educational Resources are readily shared by many countries and higher education institutions.”

The WCHE session demonstrated that OERs may be used by instructors and learners in formal classroom settings, as well as by independent learners in the context of lifelong learning. To ensure that the OER movement gives rise to a true “global knowledge commons” and to mitigate the risk that OERs be perceived as a “neo-colonial” threat, it is imperative that all academics and their institutions, whether in developed or developing countries, be enabled to contribute resources.

This will require continuing improvement of infrastructure and bandwidth in developing countries, as well as broadening modes of delivery, particularly through the use of handheld devices and other appropriate – often low-tech – technologies.

However, if OERs are to promote access to quality higher education, including them in quality assurance processes is vital. It is also necessary to include the full range of diverse emerging providers within quality assurance frameworks. Another new dynamic identified by WCHE is the internationalisation of quality assurance.

Massification

- Globally, age participation rates grown from 19% in 2000 to 26% in 2007
- 150.6 million tertiary students globally in 2007, 53% increase over 2000
- Low income countries: from 5% in 2000 to 7% in 2007

Inability to meet growing demand in developing countries

The Indian Minister of Human Resource Development, to quote his speech at the WCHE, expressed his approach to internationalising quality assurance rather well:

“The globalisation of higher education has added newer challenges in terms of quality assurance system, issues of mutual recognition and equivalence of degrees and transparency in the regulatory structures of national systems of higher education. (...) Quality Assurance Systems should encourage effective learning processes which are adapted to the needs of various categories of learners. The systems should encompass not merely conventional programmes in higher education but also the borderless, private and continuing education.”

The aim of this workshop is to explore how quality assurance should address OERs. We were most encouraged by the outcome of the Cape Town last week. It engaged some 30 institutional leaders in a dynamic discussion of OERs and all those present agreed that OERs are an important development in higher that they will be promoting in their universities. We hope to convince you that OERs can be an important element of quality in developing learning and teaching materials in higher education.

We therefore look forward to the presentations of Dr Antony Stella and Jenny Glennie that will put OERs in context.

Introductory Remarks: Sir John Daniel

Stamenka has recalled the themes and conclusions of last year's World Conference on Higher Education and suggested how Open Educational Resources can help us implement some of its recommendations.

As she mentioned, the Conference Communiqué talked explicitly about the importance of OERs for the future of higher education. Later speakers will elaborate on the simple description of OERs that she quoted.

Before calling on David Woodhouse and moving to our keynote addresses I conclude these welcoming remarks by suggesting that OERs are entirely consistent with the best academic traditions. I start by shooting down the idea that using OERs is just a fancy form of plagiarism – an opportunity for academics to use others' teaching materials because they cannot be bothered to prepare their own.

I ask you to reflect on the contrast between the way that academics conduct research and how they prepare for teaching. When we engage in research we assume that

we will build on the research of others. We cite previous work as background to our own, or to apply it to a new situation, or sometimes to challenge it. We publish our research results so that others can scrutinise our work and build on it in their turn.

Contrast this to the way we prepare for teaching. We usually scan current scholarship to ensure that our teaching is up to date. However, apart from recommending textbooks, we rarely make much use of others' teaching materials, even if we could access them.

Furthermore, whereas we treat research as a public activity, until quite recently most academics considered teaching to be a private activity – except, of course, for the students present.

Department heads were shy of attending their colleagues' lectures and academics took time to accept student evaluations of their teaching.

These attitudes began to change 20 years ago, thanks in part to the great American educationist, Ernie Boyer, and his book *Scholarship Reconsidered*. Starting from Aristotle's dictum that teaching is the highest form of understanding, Boyer insisted that knowing and learning are communal acts.

He distinguished four types of scholarship: the scholarship of discovery, which we usually call research; the scholarship of integration, that throws bridges between disciplines; the scholarship of application, that uses knowledge to solve real problems; and the scholarship of teaching – whose role, like research, is to transform and extend knowledge.

As a result of Boyer's work, the way that academics are evaluated for promotion and tenure has evolved from an almost exclusive focus on published research towards a more holistic conception of their work. I took part in this transition when I was vice-chancellor of the UK Open University in the 1990s. We developed a system whereby colleagues aspiring to be promoted to a Chair – i.e. to Full Professor – had to show excellence in two of the three functions of research, teaching and service to the academic community.

How do OERs fit into this evolutionary process? I return to the statements that teaching is the highest form

Open Educational Resources

Do they encourage neo-colonialism?

Obstacles to sharing:

- Not invented here or by me!
- ~~Adaptation tiresome~~
- ~~Intellectual property~~

“Last year half a million African teachers in ten countries adapted and used these OERs, which are available in Arabic, English, French and Kiswahili.”

of understanding and that knowing and learning are communal acts. Open Educational Resources place teaching in the public domain. OERs can be developed by individuals – what my Vancouver colleague Professor Tony Bates calls the ‘Lone Ranger’ approach – but more often they are developed by teachers working as a community.

I think of the OERs on the UK Open University’s *OpenLearn* website, which derive from courses developed by teams. The Virtual University of Small States of the Commonwealth is an extreme international example. It is a collaborative mechanism through which academics from up to twenty countries work together online to develop teaching and learning materials as OERs, which are then adapted and used by all to support both classroom teaching and distance learning.

OERs offer special advantages for distance learning – and I suspect that there are few universities in the jurisdictions that you represent which are not now engaged in distance learning in some way.

The possibility of sharing teaching and learning materials has long been hailed as an advantage of distance education. Until recently, however, such sharing has encountered three obstacles which OERs now surmount.

First, institutions and their academic staff are prone to the “not invented here” and the “not invented by me” syndromes. The rich resources of the Internet, Google and social software are steadily curing that syndrome.

Second, until the academic world went digital sharing materials was tiresome. They always needed adaptation, and this meant re-keying large amounts of text and changing illustrations.

Third, intellectual property rights were a nightmare. Copyrighted material was often buried in learning materials that claimed to be free of restrictions, and a conscientious institution had to proceed very circumspectly.

OERs are now removing the last two of these obstacles. First, they are almost invariably developed in digital format even if, here in Africa for instance, they often reach students in the form of print. That makes them easy to change and adapt.

Second, the various licences under which OERs are shared, with which you will become familiar at this workshop, mean that you can proceed with confidence both to develop and use OERs.

My final comment is that OERs can facilitate intellectual exchanges that are genuinely multi-directional and multi-national. I am delighted that we are holding this workshop in Africa and you will hear about the impressive work of OER Africa.

There are concerns for us to discuss. At the session on OERs at last years World Conference that Stamenka mentioned, the distinguished Vice-Chancellor of the University of South Africa, Professor Barney Pitso, said he feared that OERs would promote a form of intellectual neo-colonialism whereby the rich north rams its OERs down the throats of the poorer south.

That does not have to happen – indeed, it is not happening. At the ACU conference in Cape Town last week we heard about a programme for Teacher Education in Sub-Saharan Africa (TESSA) through which thirteen African universities are working together to produce and use OERs for in-service teacher education. Last year half a million African teachers in ten countries adapted and used these OERs, which are available in Arabic, English, French and Kiswahili.

Coming back to Stamenka’s remarks, I can think of no better example than TESSA of how OERs are making it possible to expand access, raise quality and cut costs. They represent a revolution in higher education.

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Confessions of a Part-time Extramural Student

Massey University
Extra-mural Students' Society Dinner
Wellington, New Zealand – 13 May 2010

After-dinner remarks by Sir John Daniel

Thank you for inviting me to speak to you tonight. I shall simply add to your own moving accounts of your studies at Massey by sharing my own experiences as a part-time extramural student for 25 years.

I start with some background. I did my full-time university studies in medieval universities with walls. They also had cloisters – a word derived from Latin, meaning closed. Four years of undergraduate work at Oxford University and four years for a doctorate at the University of Paris led me to an appointment as assistant professor of metallurgical engineering at the University of Montreal.

Seeing that my long immersion in intra-mural study had led me into a career as a university teacher I thought that I ought to learn something about education. Before I realised that this was a peculiar idea for an eager young engineering academic, I had enrolled in a part-time master's programme in Educational Technology at another university in Montreal. It required coursework, a research thesis and an internship.

All aspects of the programme were very stimulating, but the internship changed my life. We had to spend three months in an organisation that was using educational technology. When I started thinking about where to do this in 1971, the press was full of reports about an amazing innovation, by the Brits of all people, called the Open University. It was using educational technology at scale and they agreed to take me on for my internship.

That summer of 1972 in the UK was a conversion experience. I saw the future of higher education and wanted to be part of it. Everything was hugely impressive and stimulating.

First there was the scale: the Open University already had 40,000 students in its second year of operation.

Second came the idealism: here were people who walked the talk on access and student-centred pedagogy.

Third, there was palpable love of learning: the students were unbelievably motivated by the opportunity presented to them. I went to one of the residential

summer schools where students spent a full day in labs, seminars and field trips and then most of the night in the bar; continuing the academic discourse.

Fourth, I was captivated by the media and technology: my key task was to help develop computer-marked assignments that tested advanced cognitive skills, but I spent every spare moment viewing the brilliant BBC television programmes.

This exposure to the future of higher education infected me with the virus of open and distance learning. I was thrilled by the vision of openness articulated by Geoffrey Crowther, speaking as the Open University's first chancellor at the inauguration ceremony that took place in the week of the first landing on the moon in 1969. I quote:

"This is the *Open* University. We are open, first, as to *people*. Wherever there is an unprovided need for higher education... there is our constituency. There are no limits on persons.

We are open as to *places*. This University has no cloisters – a word meaning closed. There are no boundaries of space.

We are open as to *methods*. The world is caught in a communications revolution, the effects of which will go beyond those of the industrial revolution of two centuries ago. There is no restriction on techniques.

We are open, finally, as to *ideas*. It has been said that there are two aspects of education, both necessary. One regards the individual human mind as a vessel, of varying capacity, into which is to be poured as much it will hold of the knowledge and experience by which human society lives and moves. But the other regards the human mind rather as a fire which has to set alight and blown with the divine afflatus. This also we take as our ambition."

That is a powerful statement about opening up higher education. It is hard to believe that it was penned – not word-processed – over four decades ago.

“That summer of 1972 in the UK was a conversion experience. I saw the future of higher education and wanted to be part of it. Everything was hugely impressive and stimulating.”

“Seeing that my long immersion in intra-mural study had led me into a career as a university teacher I thought that I ought to learn something about education.”

“This exposure to the future of higher education infected me with the virus of open and distance learning. I was thrilled by the vision of openness articulated by Geoffrey Crowther.”

“I don't know if taking 25 years to get a degree is a record, but I hope it encourages those of you who think your degrees took a long time to complete.”

For me the direct result of the internship was a move from Montreal to a post at the Télé-université, an open university being set up in Quebec City. Four years later I moved to another new open university: Athabasca University in Alberta.

However, at that time I dropped out of my Master's programme in Educational Technology because doing the thesis no longer seemed very important. But I did continue as an extramural student. I took distance courses in history and information technology from the Télé-université and courses in ancient history and management from Athabasca.

Apart from the interest of the courses themselves, taking them gave me the opportunity to find out directly whether the service to our students was as good as we claimed.

Some years later I found myself president of Laurentian University in Ontario and I enrolled as an extramural student there, taking five years to complete a diploma in theology.

By the time I finished that diploma I had moved to the UK Open University as vice-chancellor and I thought of enrolling for a law degree. At this point my long-suffering wife sat me down and suggested rather robustly that if I wanted to become a student again I should first finish the Master's in Educational Technology that I had abandoned nearly twenty years earlier.

That seemed like a great idea. The university took a little persuading to let me back into the programme after nearly 20 years, but they did. I wrote a thesis on mega-universities and 25 years after my first registration I received my degree at convocation in Montreal in 1996.

I don't know if taking 25 years to get a degree is a record, but I hope it encourages those of you who think your degrees took a long time to complete.

Later I took a couple of distance learning courses in IT and international development from the UK Open University when I was vice-chancellor there. I'm not taking any courses at the moment but I'm sure I will once the pressure of work lets up a bit.

I share two conclusions from my long experience as an extramural student. The first is that it has been a wonderfully varied and enriching part of my life. The second is that my extramural studies have had a greater impact on my career than my original degrees as a full-time student. They are the reason that I am with you tonight.

Thank you.

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Small, Successful and not in London: Introducing COL

Commonwealth of Learning

Presentation to Commonwealth Eminent Persons Group (EPG)

Audio-conference between Vancouver and London – 19 July 2010

Sir John Daniel

Greetings and Introduction

Good afternoon to you in London and good morning to colleagues here in Vancouver.

I am John Daniel, President of the Commonwealth of Learning, which everyone simply calls COL, and it is a pleasure to greet you.

Although COL's mission is technology, today we are using a simple phone link. Adding video sometimes complicates things unhelpfully.

My international professional colleagues here in Vancouver join me in congratulating the Eminent Persons Group on its appointment and wishing you well.

We hope to interact with you during your work. I already know Senator Segal from the 1980s when his brother and I were both university presidents in Ontario. We warmly invite him to come to Vancouver and assess COL for himself.

I shall speak for ten minutes to give some background for our discussion.

The Commonwealth Conversation

The Commonwealth Conversation must be an important starting point for your work; so let me begin with the only two references to COL in its reports.

First, the interim report, *Common What?* has the following statement:

(I quote) "Official Commonwealth Institutions: It is quite clear that the Commonwealth needs modernisation and reform at the institutional level. With the exception of the Commonwealth of Learning (a small intergovernmental outfit focused on distance learning based in Vancouver, that received considerable praise from those who knew

it), we have heard frustrations about the way that these institutions work at every turn." (Unquote)

Then, the very last paragraph of the tenth recommendation of the final report reads:

(I quote again) "Finally, reaching more people could involve making the Commonwealth more polycentric. The vast majority of its intergovernmental and most prominent nongovernmental institutions are based in London, the Commonwealth of Learning in Vancouver and the Commonwealth Human Rights Initiative in New Delhi being two notable and successful exceptions. This not only adds fuel to the fire of colonial myths which surround the Commonwealth. It perpetuates an insular outlook and a limited sphere of direct influence." (Unquote)

Both quotes make three points: COL is small, it is not based in London, and it is successful. Let's take them in turn.

Small

First, we are small. COL has 35 staff in Vancouver and seven at our Commonwealth Educational Media Centre for Asia in New Delhi. 42 people cannot represent all 54 Commonwealth countries but we do pretty well. My ten international professional colleagues come from seven countries from India to Seychelles. Our local staff members in Canada reflect the multinational nature of Vancouver and bring links to another ten countries. So we are small but diverse and we punch above our weight.

Based in Vancouver and New Delhi

Second, we are not in London. COL was created at the 1987 CHOGM and Canada then bid successfully to host it. We have been in Vancouver ever since, which gives us several advantages. COL demonstrates daily that the Commonwealth need not be London-centric; we are a window for the Commonwealth to expertise in Canada

“42 people cannot represent all 54 Commonwealth countries but we do pretty well.”

“COL demonstrates daily that the Commonwealth need not be London-centric; we are a window for the Commonwealth.”

“Member Governments fund COL on a voluntary basis – which is a good way of keeping an organisation responsive and honest.”

“We believe that giving people the chance to learn is the fundamental route to achieving the international development agenda of the Millennium Development Goals; the Campaign for Education for All; and the Commonwealth values of peace, equality, democracy and good governance.”

“We help to expand the informal learning that is essential for improving livelihoods.”

and North America; and Vancouver and New Delhi are productive places to work partly because, unlike organisations based in London, Paris or New York, we attract only those visitors who really want to do business with us!

Successful

Third, people say we are successful. One measure of success is the number of countries that fund us. I stress that Member Governments fund COL on a *voluntary* basis – which is a good way of keeping an organisation responsive and honest.

In the last five years the number of Commonwealth countries making voluntary contributions to COL has risen from 20 to 40. That must mean that most Commonwealth countries like what we do. Thankfully those financial contributions have not slackened off during the economic downturn.

You will also be pleased to know that, with the sad exception of Australia, all the countries represented on your group are making financial contributions to COL. Australia backed out in 2004 but we hope it will soon return. Vanuatu is the only other country in the South Pacific that does not contribute to COL.

But the real test of success is that as well as governments, our hundreds of partner institutions and the hundreds of thousands of individuals affected by our work also value our impact. We invite you, as the Eminent Persons Group, to ask people and institutions about COL and judge for yourselves.

What does COL do?

What does COL actually do? We were created 20 years ago because Heads of Government believed that media and technology, particularly Open and Distance Learning, had an important role in advancing education, training and learning generally. Everything that has happened since indicates that they were correct. Today, millions of people around the Commonwealth are involved in all kinds of technology-mediated learning.

The rapid spread of learning technology does not, of course, prove COL's continuing relevance, but we think we are riding the tiger pretty well.

Our mission is *Learning for Development*. We believe that giving people the chance to learn is the fundamental route to achieving the international development agenda of the Millennium Development Goals; the Campaign for Education for All; and the Commonwealth values of peace, equality, democracy and good governance.

However, the challenge of learning at all levels is so massive that traditional educational methods

cannot cope. Technology has helped respond to other development challenges and is now essential for expanding learning.

COL is increasing opportunities for learning on two fronts.

In the first, we help countries to expand formal education. That means using distance learning technology in four areas: first, to expand secondary schooling because 400 million children between 12 and 17 are not in school; second to expand and improve teacher education, because 10 million new teachers are needed; third to improve the quality of higher education and, fourth, to help the Commonwealth's 32 Small States provide postsecondary skills for their people. That last is an exciting programme, called the Virtual University for Small States of the Commonwealth, which was initiated by and is managed by those countries.

On the second front we help to expand the informal learning that is essential for improving livelihoods. That also has four areas: informal approaches to skills development; lifelong learning for better farming; helping communities improve health by using local media; and integrating eLearning wherever appropriate.

We believe this eight-point programme subsumes all important development priorities, such as climate change, and we can explain that later.

How does COL work?

That is what we do. How do we do it? Technology advances relentlessly so innovation is our watchword and scale is our mantra. We help countries and organisations achieve impact by articulating policies, creating partnerships, refining models for technology use, building capacity and developing learning materials.

I give you just one example. This very day thousands of women in India, who have been equipped with mobile phones by their local cell provider, will each receive several short audio messages giving them tips on how better to rear and feed the goats on which their livelihoods depend. The result is goats that are healthier on every dimension, which means more income for the women and their families.

Our third obsession, after innovation and scale, is country focus. We have an individual action plan for each Commonwealth country, and when we report to them at meetings of Education Ministers and Foreign Ministers, each country gets a separate report detailing what we have done to help that country. This is one reason why countries appear to support us with enthusiasm.

Finally, because my ten minutes is up. COL is highly focussed. We doubt that any of the world's

intergovernmental agencies applies results-based management better than COL. But results-based management can easily degenerate into an obsession with process. We are obsessed with outcomes and impacts and we can demonstrate those to you.

Conclusion

That's my short introduction to COL. We are well-known and appreciated by our thousands of stakeholders around the Commonwealth. But COL is both distant from and different from the organisations in London. We do not recognise ourselves in some of the comments made about the intergovernmental Commonwealth in the reports of the Commonwealth Conversation.

But we are indebted to the Secretary-General for making COL an integral part of his discourse about the Commonwealth. We hope that you, the Eminent Persons Group, will also come to see us as an exemplar for an effective Commonwealth of the future.

Thank you.

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“In my view the genius of technology, in education as in other areas of life, is to allow us to achieve scale, quality and low cost simultaneously. We must not turn our backs on that revolution.”

“However, we now find ourselves unprepared for a tsunami of children emerging from primary school and wanting to continue their schooling.”

Learning Management Systems and eLearning

COL Blog – 14 March 2010

Sir John Daniel

The other day a colleague made the remark “the glory days of Learning Management Systems are over”. I think he was making the point that with today’s social software it is possible to organise eLearning in more informal ways, without having recourse to highly structured systems. Is this true and, if it is, is it a good thing? The nub of my own anxiety is the issue of scale. I have devoted my career to the proposition that the more students you can educate, the better. Although the world is still strongly influenced by the insidious assumption that quality and exclusiveness are two sides of the educational coin, we have been making great progress, thanks mainly to the multi-media systems of distance learning that have made possible the emergence of mega-universities and mega-schools. I have a growing worry that the shift to eLearning may erode these gains because of its tendency to take us back to the cottage-industry style of course development that preceded the organisation of learning at scale. I was reassured, however, that the use of Learning Management Systems did encourage the ambition of operating at scale and made it possible to manage scale operations, not least by linking pedagogical activities to student records. Are the newer generations of web technologies reinforcing the return to cottage industry methods or am I missing something? In my view the genius of technology, in education as in other areas of life, is to allow us to achieve scale, quality and low cost simultaneously. We must not turn our backs on that revolution.

What is the world’s greatest educational challenge?

COL Blog – 31 March 2010

Sir John Daniel

You might think there would be wide agreement on the answer to this question but I find that it evokes many different responses. My own answer is “expanding secondary education”. Melissa Binder estimated in 2006 that there were 400 million children between the ages of 12 and 17 in developing countries who were not in secondary school. I doubt that those numbers have decreased by much in the last four years.

People have been slow to appreciate the seriousness of this challenge. There was no mention of secondary education in the Dakar Goals of *Education for All* that were articulated in 2000. One understandable reason for this reticence was that development agencies did not want countries and donors to take their eye off the ball of achieving Universal Primary Education (UPE). However, we now find ourselves unprepared for a tsunami of children emerging from primary school and wanting to continue their schooling. Most countries consider that they have now achieved UPE even though they admit that quality is wanting and too many children drop out. All the same, the eyes of many ministers of education glaze over when you berate them about the importance of UPE today. They feel they have been there and done that – and now see other tough challenges looming.

Secondary education is the largest of these challenges. In future blog entries I shall ask why secondary education is so important, describe it as a complex reality, suggest that our concepts of formal and non-formal education are outdated, and argue that most countries will never achieve universal secondary education without radically new approaches.

(See: www.col.org/mega-schools)

Why is secondary education important?

COL Blog – 1 April 2010

Sir John Daniel

Many are surprised when you suggest that secondary education is the most powerful weapon against climate change, but this has been argued strongly by Joel Cohen and his colleagues. They argue that educating girls to secondary level is the most promising way of reducing population growth. Since the industrial revolution the world's population has grown by a factor of seven and each person's impact on the environment is now, on average, seven times greater than it was two centuries ago. This means that the impact of the human population on the planet has grown by a factor of fifty. Curbing population growth is the fastest way to reduce it.

Cohen estimates that giving children, especially girls, 10 to 12 years of quality education could well reduce fertility rates sufficiently to make a population scenario of 7.8 billion people by 2050 more likely than the 12 billion projected from current rates of growth. Women with secondary education have, on average, 1.5 fewer children than those with only primary schooling. A one-child difference per woman represents three billion more or fewer people on the planet by the middle of the century.

A second reason for its importance is that secondary education is essential for creating the pool of people with the cognitive skills to become the teachers, nurses and health workers on which society depends. Third, parents realise that primary schooling is only a foundation and that the real benefits to their children accrue from continuing their education at secondary level and beyond. There could even be a "knock-back" effect if secondary education does not become available. Without the possibility of progression to that level, parents might be less keen to send their children to primary school, putting at risk the gains already made. (See: www.col.org/mega-schools)

Universal Secondary Education: Mission Impossible?

COL Blog – 4 April 2010

Sir John Daniel

I have argued that expanding secondary education is the world's greatest educational challenge. Even though it is a complex conceptual mess, post-primary education is vital to the future of humankind. Yet it will be impossible to achieve universal secondary education without new approaches.

The key to understanding this dilemma has been provided by Keith Lewin, who has spent much of his career studying the costs of education. From his research on the economics of the expansion of public secondary schooling he concluded that no country has achieved universal secondary schooling if the cost per pupil of secondary schooling is much more than double that of primary schooling. In the OECD countries that have achieved universal secondary education (ignoring the growing problem of drop-out) the primary to secondary cost ratio is around 1:1.5. However, in the countries that now aspire to expand secondary schooling the ratios are far greater than this. In much of sub-Saharan Africa unit costs of lower secondary education are three times those of primary, a factor that increases to six for upper secondary and to ten or more for specialised technical and vocational education.

Lewin has analysed the options for getting these ratios down and making the expansion of secondary schooling affordable. Some of the approaches with most economic leverage are: reducing teacher salaries; increasing pupil-teacher ratios and class-teacher ratios; and increasing teachers' time on task. Inevitably, such policy reforms are most pressing in those countries with the lowest enrolments. The least one can say is that such policy reforms will take time to promulgate and implement. So what can be done? Watch this space! (See: www.col.org/mega-schools)

“Cohen estimates that giving children, especially girls, 10 to 12 years of quality education could well reduce fertility rates sufficiently to make a population scenario of 7.8 billion people by 2050 more likely than the 12 billion projected from current rates of growth.”

“Yet it will be impossible to achieve universal secondary education without new approaches.”

Resistance to distance education

COL Blog – 2 June 2010

Sir John Daniel

“China professes to be an egalitarian society it keeps ODL in a very subservient role in its hierarchy of higher education, despite having some very large providers like STVU.”

“The irony, of course, is that conventional universities are egging legislators on in campaigns against ODL at the same time as they are expanding their own distance offerings in attempts to cut costs and boost enrolments.”

Yesterday I had a most interesting chat with Dr. Frits Pannekoek: a wise observer of the global distance education scene from his twin vantage points as President of Athabasca University and President of the International Council of Open and Distance Education (ICDE). Like me Frits had recently returned from China, where he is developing partnership agreements. I had been there for the 50th anniversary celebrations of the Shanghai TV University (STVU), to take part in a forum organised by the UNESCO Institute for Lifelong Learning, and to launch the Chinese version of my new book *Mega-Schools, Technology and Teachers: Achieving Education for All*. (www.col.org/mega-schools)

Comparing notes on our trips to China, we noted the paradox that although China professes to be an egalitarian society it keeps ODL in a very subservient role in its hierarchy of higher education, despite having some very large providers like STVU.

Many of the world's distance teaching universities combine open or liberal admissions policies with more demanding standards than conventional universities when they examine students' knowledge and competence as they progress through their programmes. But China still places major importance on entrance exams to higher education, which determine which programmes and institutions students can enter. The TV universities simply provide a safety valve for the students who do less well in these exams and they are largely confined to non-degree study in these institutions. The official view seems to be that "real" universities are places where you sit in classrooms at the feet of masters and absorb what they say.

This is a curious waste of potential assets, both institutions and people, in a country that still has a long way to go to achieve developed-country participation rates in higher education.

Legislative barriers to distance education

COL Blog – 2 June 2010

Sir John Daniel

My conversation yesterday with Dr. Frits Pannekoek (Athabasca University and ICDE) took us beyond the situation in China to discuss wider hindrances to distance learning. He detects a rising tide of anti-ODL legislation around the world. The ICDE is in the process of mapping this in order to propose counter measures.

Some of the legislation, such as the prohibition of federal loans for US students taking distance learning courses from foreign providers, appeals for its justification to the dangers of degree mills. This seems to be a spurious pretext for what is really a protectionist measure to favour local providers, since plenty of degree mills are alive and well in the US.

China applies a rather different restriction on cross-border study by maintaining a list of foreign universities whose graduates are eligible for graduate study in China. Distance teaching universities are absent from this list, as are other reputable universities that have displeased China in other ways.

The irony, of course, is that conventional universities are egging legislators on in campaigns against ODL at the same time as they are expanding their own distance offerings in attempts to cut costs and boost enrolments. They risk being hoisted by their own petard as they are then obliged to present their ODL courses as face-to-face instruction in order to get around any restrictions. Yet one imagines that students who elect face-to-face teaching will not be best pleased to find themselves in large halls looking at video screens or taking seminars that meet twice in a classroom and then on the web for the rest of the semester.

I'm sure ICDE would welcome information about restrictions on ODL in readers' jurisdictions.
E-mail: icde@icde.org

How much openness?

COL Blog – 9 July 2010

Sir John Daniel

I am grateful for the thoughtful response from Rolf Reinhardt to my pithy blog of 4 June about open educational practices and also for being invited to get closer to the OPAL project. My thinking about openness – like my views on distance education generally – was strongly influenced by Walter Perry, the founding Vice-Chancellor of the UK Open University. His book *The Open University*, which describes the challenge of setting up the UKOU in the late 1960s and early 1970s, contains much wisdom. In those days there was no map to guide the setting up an open university and, although the planners visited various institutions overseas and picked up ideas from them, Perry and his team had to invent many of the OU's systems on the basis of common sense and hunch. Those systems have stood the test of time amazingly well.

Perry's team also needed courage. At one point Perry was personally liable for the cost of hundreds of thousands of dollars worth of steel that he had pre-ordered to ensure supply in advance of the approval of a campus building. He also simply ignored advice from civil servants to begin with a pilot project of 300 students and opened instead with a first intake of 25,000. He knew that a small pilot would be the kiss of death to a project that depended for its success on economies of scale.

But he did not throw caution to the winds. He realised that to innovate in too many ways at once would undermine the credibility of the new University. Eliminating all academic pre-requisites for entry was such a radical step, in 1960s Britain, that he chose to be fairly conservative in other ways, for example by operating a paced system rather than letting students come and go as they pleased. He did, however, introduce the credit system to England, another major element of openness.

We should think of openness much as engineers aim for structures that are tough. Make them too rigid and they will break; make them too flexible and they will fall down. Make everything in a study programme open and the winds will simply

blow through it. Button it all down and the intellectual streams will simply flow around it. As so often, the trick is to get the balance right.

Feeding and weighing goats – measuring development success

COL Blog – 11 July 2010

Sir John Daniel

There's a famous development quote, which I haven't been able to find again, that reminds us that it's important to feed the goat as well as weighing it constantly. It's a warning to us not to get so carried away by results-based management that we lose sight of the overall objective of development, which is to increase health and prosperity.

I've just been reading a splendid report commissioned from Dr. Henry Francis by my COL colleague Dr. K. Balasubramanian. It set out to measure the impact of an exciting new development in our Lifelong Learning for Farmers (L3F) initiative, which is the use of audio messages on cell phones to help rural women in India improve their goat rearing skills.

COL had already measured the (very positive) financial impact of L3F. In one region of Tamil Nadu a very small input of resources by COL (\$ 50k) had generated \$ 1.7 million of economic activity and increased the prosperity of the villagers markedly.

In assessing the impact of learning by cell phone on thousands of illiterate and semi-literate women involved in goat rearing, my colleagues decided to look directly at the effect on the goats.

Dr. Francis, a Veterinary Surgeon and retired banker, compared the health of the goats owned by L3F participants and non-L3F participants, selecting 15 households in each category in the same region through random sampling. Most of the non-L3F households had better economic status than the L3F respondents. Interestingly, it took some time to convince the participants, particularly the non-L3F households, that the outsider studying their goats would not cast an evil eye on the animals.

In each household, animals of same age were selected and studied. Data was collected on physical

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“Meanwhile, the announcement of the \$35 laptop has been received with a mixture of scepticism and hostility.”

parameters, reproduction details, morbidity, and mortality parameters. On all measures the goats in the L3F sample were bigger, healthier and more fertile, with statistically significant differences on most measures. Dr. Francis attributed the differences to better feed management and health management by the women in the L3F group. He believes that voicemail based learning has contributed substantially to this process – though the statistical significance of this contribution needs further study.

I find this a fascinating vindication of a new and inexpensive application of technology in learning for development. The use of cell phones in rural development has a great future.

Educational Technology: never a dull moment!

COL Blog – 5 August 2010

Sir John Daniel

Educational technology has few dull moments and nowhere is this truer than in India. The intriguing history of India's love-hate relationship with the one-laptop-per-child idea now has a new chapter with the announcement of a \$35 laptop by the Minister of Human Resource Development, Kapil Sibal.

In 2006 the late Sudeep Banerjee, then Education Secretary, said categorically that India disapproved of Negroponte's one-laptop-per-child (OLPC) project. Calling it “pedagogically suspect” he urged that the money be spent on universal secondary education instead. “The OLPC may actually be detrimental to the growth of creative and analytical abilities of the child”, he said, “we need classrooms and teachers more than fancy tools”.

Yet in the same year that it rejected Negroponte's American OLPC, the Indian Government claimed that it began working with its high-powered institutes of science and technology on a road map leading to a \$10 laptop. It seems that by following this map they have now reached the milestone of the \$35 laptop.

I am proud to say that COL, through my colleagues Ramamurthy Sreedher and V. Krishnamoorthy of our Commonwealth Educational Media Centre for Asia (CEMCA) in New Delhi, has travelled part of the way with the Government of India on this journey. I report on our own functional cheap laptop in another blog.

Meanwhile, the announcement of the \$35 laptop has been received with a mixture of scepticism and hostility. Criticisms come from three perspectives:

- Sour grapes from the original Negroponte “\$100-dollar laptop” (OLPC) project;
- Questions about the functionality of the machine – what is really “under the hood” for that price? Just as stone soup requires more ingredients to make a nourishing meal, critics suspect that this machine needs more features – and more money spent – to be useful;
- Observations that the issue in computing for children is not the price of the hardware but rather the thought and infrastructure required to make it educationally effective at scale.

These laptop projects follow a similar pattern. In the early days of OLPC, Negroponte insisted that it was “about (constructivist) learning, not laptops”; yet today his project is engaged in a desperate effort to sell the machines. Similarly, India seems to have forgotten Sudeep Banerjee's doubts about pedagogy.

As the World Bank's Mike Trucano, a wise observer of the educational technology scene, has noted:

“A disconnection is apparent between the rationales most often presented to advance the use of ICT in education (to introduce new teaching and learning practices and to foster ‘21st century thinking and learning skills’), and their actual implementation (predominantly for use in computer literacy and dissemination of learning materials)”.

The COL-CEMCA EduFrame netbook

COL Blog – 5 August 2010

Sir John Daniel

Former US President Ronald Reagan used to say that you can achieve anything provided you don't mind who takes the credit. The Commonwealth of Learning, through its Commonwealth Educational Media Centre for Asia (CEMCA) in New Delhi, is pleased to have had an unacknowledged background role in the recent announcement of a \$35 laptop by India's Minister for Human Resource Development.

With the encouragement of the Government of India my CEMCA colleagues Ramamurthy Sreedher and V. Krishnamoorthy have been working on the development of an inexpensive educational computing device for the last year. COL and CEMCA have no intention of entering the computer marketing business, but we develop hardware and software in the same spirit that we create Open Educational Resources – in order to share developments that promote learning.

Given our open attitude to intellectual property my colleagues were unconcerned at sharing prototypes and ideas with notoriously 'leaky' Chinese designers and manufacturers. It has been interesting to see several very similar 'laptops' with price points of around \$65 hitting the market at the same time.

Our device, which we call *EduFrame* and is marketed by M/S Orbit Peripherals Pte Ltd, Singapore as the Datamini Netbook, is available at US \$73.80 ex Hong Kong (plus customs duty and other charges). The plans for the device, which are freely available to anyone who wants to take this further can be obtained at www.cemca.org/eduframe/eduframereport.pdf.

Design began by merging a Netbook with a digital photo frame and has proceeded from there. 55 sets (copies) of the current machine have recently been manufactured at a unit cost of US\$73.80. The functionality and capabilities of the machine are: Internet browsing, e-mail, reading texts, working on spread sheets, almost all of Office functions, watching CDs/ DVDs. The main catch is that the memory is sufficient only

for booting the machine. However, memory can be incorporated via an external hard drive/ a flash drive/ SD Card.

COL's and CEMCA's aims are educational and 30 of these *EduFrame* machines are now being used by Grade 3 primary school children on one of the atolls (Villigille) in the Republic of Maldives. Thirteen courses have been scanned and are available on pen drives for the students to use. The Republic of Maldives has a special challenge. Since the country is composed of many atolls and islands, the student population is scattered as are the teachers. In some islands there may be only ten pupils and it is not cost-effective to appoint a teacher for them. The Ministry of Education came up with the idea of using the *EduFrame* to impart quality education to students in remote atolls after seeing the demonstration of a digital photo frame in May 2009.

We consider this a pilot research project to test the ICT skills of the students as well as the user friendliness of the *EduFrame*, while also making quality education available to students across the country. The 13 courses on the machines are: Arabic 1, 2 and 3; English 1, 2, 3, 4, and 5, Environmental Studies 3 A, 3 B, Primary Maths 3 A, 3 B, and the New English Pupils' Book.

I look forward to giving an update on this pilot in due course.

Transnational Qualifications Framework – Gaining Traction

COL Blog – 6 August 2010

Sir John Daniel

In a previous blog entry (June 4), I wrote about the Transnational Qualifications Framework (TQF) that has been developed for the Virtual University for Small States of the Commonwealth (VUSSC). This initiative is steadily gaining traction – so much so that those managing it now worry about it being appropriated more widely. The TQF reflects the collective efforts of 32 countries, which must make it the most international instrument of its kind and therefore of interest to other, larger states. This is not a problem in principle, but the VUSSC group wants the TQF to

“Design began by merging a Netbook with a digital photo frame and has proceeded from there.”

“The TQF reflects the collective efforts of 32 countries, which must make it the most international instrument of its kind and therefore of interest to other, larger states.”

preserve its essential simplicity, which is one of its virtues and something that other attempts to develop similar instruments have found it difficult to achieve.

My colleague John Lesperance, who facilitates the VUSSC project for the 32 small states from COL, is doing a nice job ensuring that the TQF is owned and managed by the states themselves. In February 2008, senior officials from qualifications authorities and quality assurance agencies in the small states came to a first TQF consultation meeting in Singapore to discuss a proposed transnational qualifications framework for the VUSSC based on a draft concept document developed by the South African Qualifications Authority. They agreed that when the work on the TQF was completed a meeting for senior officials designated by their ministers would meet again to discuss its implementation.

That meeting of senior officials – 27 of them from 26 countries – took place in Kuala Lumpur in July. COL is indebted to the Open University of Malaysia, which takes a close interest in this work even though Malaysia is not a small state, for hosting the meeting. During the three-day meeting the officials learned how to reference their national qualifications frameworks to the TQF, discussed its regional implications, agreed on the TQF portal, and talked about the process for registering both VUSSC and non-VUSSC courses on the TQF. One of the first courses to be registered that was developed outside the VUSSC framework is the Commonwealth Computer Navigators Certificate, a free course covering the content of the International Computer Driving Licence.

This meeting was very well timed. The VUSSC is now taking off as a variety of courses, developed collectively or by individual institutions, are becoming available. The TQF will facilitate their offering around the world.

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