

# ODL and ICTs for teacher development

## Sir John Daniel and Mohan Menon

The essence of work by the Commonwealth of Learning (COL) is the application of technology to learning for purposes of development. Achieving the Millennium Development Goals (MDGs) will be challenging for many African countries, because their attainment requires many different types of intervention. However, a common requirement for progress to all the eight goals is a massive increase in learning. COL is increasingly using the framework of the MDGs to define its work, which is leading us to try to contribute to the fight against poverty and hunger through lifelong learning for farmers and to the struggle against disease by helping the masses to learn how to live healthy lives.

But the MDG that stands out, because it provides the foundation for progress to all the others, is the goal of basic education for all. It is in this context that COL is engaged in helping countries to train and develop their teachers. However good we are at using technology to support schooling, children need teachers. They are fundamental to school development.

## The challenge of teacher training in Africa

There is a severe shortage of teachers at all levels of the education system. UNESCO's Education Sector plan for 2005-07 predicts that in sub-Saharan Africa (SSA), at a conservative estimate, four million additional teachers will be needed by 2015 to meet the Universal Primary Education goal alone. This is in addition to the needs of literacy and health education in the non-formal systems. In some SSA countries, the majority of primary education teachers have only a lower secondary qualification, often without any professional training. These personnel enter the profession reluctantly, and leave quickly, and they include large numbers of so-called parateachers.

This tells us that Africa faces a massive need to train teachers both before service and during their service. The pre-service and in-service training of teachers is the key to increasing access to schooling and to improving the outputs of schooling. It is now clear that conventional methods of teacher education can neither scale up to meet the numerical challenge nor supply the consistency of training necessary to ensure quality.

## The advantages of Open and Distance Learning (ODL)

ODL and appropriate information and communications technologies (ICTs) provide some of the answers to this challenge.

- ODL provides opportunities for learning that are flexible and relatively free of constraints on the time and place of study.
- ODL can be carried out at scale with consistent quality, which makes for more cost-effective systems.
- ODL is a more learner-centred approach with options for greater interaction between learners and resource materials, tutors and lecturers or teachers.
- There are many examples of ODL's capacity to deliver both quality learning resources and to operate effective systems of student support.
- ODL can provide opportunities for professional development and upgrading without taking the teacher away from the workplace.
- ODL materials can be customised to local needs and priorities, combining the benefits of scale with the attraction of cultural relevance.
- There is now a deep pool of experience in Africa on the use of ODL for teacher development.

## COL and teacher education in the 1990s

COL has been helping countries use ODL in teacher education since its creation. Its first major activity was a Round Table on Teacher Education in Vancouver in 1992. An expert group of 22 experienced teacher educators from 13 Commonwealth countries discussed critical aspects of teacher training for science, mathematics and technical/vocational subjects. The papers presented at the Round Table became a publication whose recommendations gave direction to COL's work in teacher education for the rest of the decade. That work included advocacy and consultative meetings, training workshops and training material development. Training material development was a particular priority. It inspired two major projects in the late 1990s: the Science, Technology And Mathematics Programme (STAMP 2000+); and Training Materials for Women Education Managers.



More generally, during the period 1990-95, COL organised 15 regional workshops and over 25 national workshops aimed at improving and expanding the professionalism of distance education. These were organised with the help of local institutions and involved several hundred participants from 35 Commonwealth countries. While the main focus of this work was capacity building in ODL and communication technology generally, some of the workshops focused specifically on the application of ODL to teacher training.

## Recent initiatives for teacher development in sub-Saharan Africa

COL has maintained the momentum of its work on teacher development into this new century. Its present three-year plan, covering the period 2006-09, identifies three sectors of activity – Education, Learning for Livelihoods and Human Environment. Teacher Development is one of the key initiatives in the Education sector. COL is working to expand teacher education in seven areas:

### Advocacy and policy

Firstly, and very importantly, COL advocates and facilitates policy formulation through dialogues, consultations and meetings - both formal and informal - with policy makers and senior administrators in governments and institutions. The aim is always to familiarise these decision makers with ODL and ICT. In recent years, COL has had several gatherings with a specific focus on the use of ODL/ICT for teacher development.

In July 2001 COL held an African Policy Dialogue in Teacher Education in Namibia that involved 234 participants representing Ministries of Education, teacher education institutions and other organisations from across Africa. This dialogue resulted in a series of recommendations for African governments with regard to ODL, ICTs and teacher development.

Those recommendations sound very good but that was five years ago. Have we made progress? In my travels throughout Africa's Commonwealth countries, I have found evidence that we are making good progress. In Nigeria and Ghana, Presidents Obasanjo and Kufuor are themselves taking a direct hand in promoting the development of ODL. Everywhere I have been in Southern Africa I find ministers convinced that greater use of ODL at all levels, and especially for teacher training, is the only way to achieve the objectives of Education for All.

COL convened an Education for All consultative meeting in Abuja, Nigeria in 2003 that included Ministry of Education officials, teacher educators, education administrators and non-governmental agencies from West Africa. COL also supports the organisation of regional and national forums for advocacy of ODL and ICT for human resource development in all sectors of development. Three such forums were organised in the last two years in Kenya, Cameroon, Sierra Leone and The Gambia. Using ODL/ICT for teacher development has been one of the major areas of focus in these forums.

### Training materials development

COL works in co-operation with institutions to develop teacher training materials. Apart from the materials themselves, this work increases capacity for materials development and creates networks of institutions. Here are some examples in sub-Saharan Africa.

**STAMP 2000+** – a joint initiative: Following the call for large numbers of better trained teachers at the 1997 Conference of Commonwealth Education Ministers held in Gaborone, COL responded by bringing together eight southern African countries - Botswana, Malawi, Mozambique, Namibia, South Africa, the United Republic of Tanzania, Zambia and Zimbabwe - to collaborate on a five-year distance education project to train upper primary and junior secondary teachers and administrators. The STAMP 2000+ was designed to facilitate in-service training and upgrading for teachers in participating countries. The 46 modules in four subject areas are sufficiently generic to adapt to the specific needs of existing in-country teacher training programmes.

Close to 300 education professionals, including administrative and technical staff, have received hands-on training related to instructional design, course writing and management. COL has made the 46 modules available on a single CD and the entire package has been uploaded to the World Space Satellite to allow distribution of the modules all over Africa. STAMP 2000+ CDs are freely available for all Commonwealth countries.

The development of training material for women education managers in South Africa is another COL project, carried out in Kwazulu Natal province of South Africa in 2000-01. The programme contained ten modules of self-learning print materials. As a follow-up, a meeting was organised in August 2002 to review the possibility of developing materials for other media to support the print materials. The material is available for use in South Africa and other countries.

### Capacity building in ODL/ICT for teacher development

COL's third major concern is to strengthen the capacity of teacher training institutions in ODL and ICT. Instead of one-off training workshops in various aspects of ODL, COL prefers to have long-term associations with institutions or countries in order to have greater impact. Here are some examples.

COL started working with Nigeria's National Teachers' Institute (NTI) in 2002 to assist internal and external capacity building. Internal interventions reviewed and strengthened the capacity of personnel and systems within the Institute. External intervention forged links between NTI and agencies and institutions within Nigeria and abroad.

Thanks to the internal work, NTI now has adequate capacity for developing effective self-learning print material, for producing course-based video programmes and for using radio broadcasts. In the external work COL familiarised some 60 heads of teacher education colleges with the use of ODL and ICT for teacher training. This has given them a better appreciation of NTI and its crucial role in teacher training.

Phase II of COL-NTI collaboration has begun with a review of the learner support system. NTI has identified further areas for COL cooperation including development of a handbook for training tutors, a workshop for training trainers, the design of monitoring and evaluation and a quality assurance mechanism.

With support from the World Bank, COL also helped to build capacity in the Lesotho College of Education. Phase I of the Distance Teacher Education Programme trained the academics of the Lesotho College of Education (LCE) in instructional design and self-instructional materials development. It included developing 18 modules of course material for Year 1 of the programme, designing the learner support system and defining the administrative arrangements. About 30 faculty members of LCE had received training by March 2002.

### **Networking and consortium building**

Since early 2002 COL has worked with the various organisations managing and implementing primary teacher development in Nigeria. These include the National Commission for Colleges of Education (NCCE), National Teachers' Institute (NTI), National Open University of Nigeria (NOUN), Universal Basic Education Programme (UBE), Colleges of Teacher Education (CTEs) and the National Commission for Nomadic Education (NCNE).

The idea is that each of these organisations has an important role to play in the application of ODL and ICTs to teacher development. This was a shift in mind-set from the earlier assumption that ODL implementation would rely only on specialised ODL institutions. The hope is that such a network can underpin a cost-effective and sustainable programme of teacher development using ODL. Each organisation has its place in the network consistent with its own mandate but all contribute positively to the overall quality and efficiency of the ODL system.

In a second example, COL along with UNESCO's Regional Office for Education in Africa, BREDA, helped create a Teacher Education Consortium in West Africa. Ministers of Education from Cameroon, The Gambia, Ghana, Nigeria and Sierra Leone signed an agreement in November 2002 to adopt and use ODL materials and systems for in-service-teacher training in their countries. There followed a workshop in February 2003 in which participants from their teacher education colleges met in Kaduna, Nigeria and reviewed the STAMP 2000+ teacher training materials.

They selected modules from STAMP 2000+ for their use and then continued to interact, to share materials and services and to organise joint workshops and training programmes with COL. COL is now attempting to create such a consortium in East Africa.

The Regional Training and Research Institute for Open and Distance Learning (RETRIDAL) has been created in NOUN with COL's support and is now identifying and strengthening expertise in ODL and ICT in the region.

### **Quality assurance in teacher education**

COL has been working with accrediting agencies and teacher education institutions in Africa and South Asia to facilitate quality assurance in teacher education. The institutions are working on a package of quality indicators that is available for testing in selected Commonwealth countries in sub-Saharan Africa and

south Asia this year. It will then be offered for use Commonwealth wide.

COL has also brought together accrediting agencies and teacher education providers using different modes to discuss issues of quality and its enhancement in teacher development. A Round Table on Quality issues in the use of ICT for teacher development was organised by COL and the National Commission for Colleges of Education (NCCE), Nigeria in April 2005.

### **Facilitating eLearning for teacher training**

In 2004 SchoolNet Africa (SNA) commissioned a study of eLearning in partnership with COL, the International Institute for Communication and Development and the Open Society Initiative of Southern Africa. It is the most extensive examination yet conducted of teacher training using ICTs in African countries for both pre-service and in-service. The findings flag significant challenges in integrating ICTs into teacher training including lack of ICT capabilities, government policy, lack of resources and materials shortages.

### **Professional development of teacher educators/administrators**

COL's final area of interest is the professional development of the leaders, managers and administrators of teacher education. The task is to develop management capacity and inculcate a better understanding of the potential of ODL and ICT in teacher training among institutional heads and administrators from sub-Saharan Africa.

COL and the Ministry of Foreign Affairs of Singapore have jointly organised five workshops focused on professional development of teacher education administrators. COL and the Indian National Council for Educational Research and Training (NCERT) held similar workshops in 2003 and 2004, focusing on helping heads of Teacher Training Colleges address the challenges of training teachers for achieving Education For All. Delegates from India and Africa took part, allowing the sharing of ideas between these two regions.

### **Conclusion**

Teacher development using ODL and ICT continues to be a priority for COL in our current 3-year plan for 2006–09. Capacity building, quality assurance and consortium and network building are important themes. Most of COL activity will happen in the 18 countries of sub-Saharan Africa with a special focus on the poorer countries and those losing large numbers of teachers for various reasons. COL will work closely with UNESCO's programmes in the region and will be involved in major regional projects. This focus on the region will also include fostering South-South cooperation, especially through links with South Asia.

*Excerpted from ODL and ICTs for Teacher Development in sub-Saharan Africa: the Experience of the Commonwealth of Learning, a speech given to a workshop at the Botswana College of Distance and Open Learning, Gaborone, Botswana, 1 September 2005.*



## Biographical notes

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