Learning & Living with technology

THE COMMONWEALTH OF LEARNING AND THE MILLENNIUM DEVELOPMENT GOALS
The Millennium Development Goals (MDGs)

World leaders, meeting at the United Nations in 2000, set eight Millennium Development Goals (MDGs) that aim to transform the condition of humankind in the 21st century. These Goals now guide the policies of Governments and the priorities of development agencies. www.developmentgoals.org

Achieving the MDGs will require a massive expansion of human learning. Traditional methods of education and training cannot address the scope and scale of the task. Technology has already revolutionised other areas of human life and the world must now harness it to learning and teaching.

Commonwealth of Learning (COL)

The Commonwealth of Learning (COL) is the only international intergovernmental agency that focuses exclusively on using technology to expand the scope and scale of human learning. It operates on the premise that knowledge is the key to individual freedom and to cultural, social and economic development.

COL helps Governments to develop policies that make innovation sustainable and to build systems or applications that expand learning. It works in partnership with other international and bilateral organisations working on the MDGs. These include: the Canadian International Development Agency (CIDA), the UK’s Department for International Development (DFID), New Zealand’s Agency for International Development (NZAID), the Food and Agriculture Organization of the UN (FAO), the World Health Organization (WHO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the New Partnership for African Development (NEPAD), the African Virtual University (AVU), the regional Development Banks and The World Bank.

COL is a small agency. It achieves high impact through effective networking, its focus on technology; and its special emphasis on the proven effectiveness of open and distance learning (ODL). www.col.org

Open and Distance Learning (ODL)

Open learning describes policies and practices that permit entry to learning with no barriers or minimal barriers of age, gender or time while recognising prior learning. Distance education is the delivery of learning or training to learners who are separated, mostly by time and space, from those who are teaching and training. Conceptually distinct, yet complementary, these two phenomena come together in the term open and distance learning (ODL). ODL can be integrated with traditional approaches to education to create flexible learning but can also operate independently. Online learning, eLearning and virtual education emerged as new terms in recent years. At first they assumed that learners were connected to computers but now they refer more generally to ODL that uses various media and information/communication technologies (ICTs).

ODL is capable of reaching marginalised and under-represented groups; whether their barriers to education are social, political or geographical. ODL can be conducted at scale with consistency. It becomes possible to widen access to education and raise its quality at the same time. This explains the powerful potential of ODL for the achievement of the MDGs.
COL’s contribution to the MDGs

To maximise its impact COL tackles some of the most critical obstacles to the attainment of the Goals. For example:

- Fighting hunger and sustaining a liveable environment means empowering millions of farmers and smallholders and giving rural people more control over their lives.

- The bottleneck to achieving primary education and gender parity is the training and retraining of millions of teachers. Success at primary level will create huge pressure at secondary level.

- To improve the health of mothers and children and arrest the spread of disease, ordinary people want information that connects with their lives.

COL addresses these barriers to development by leveraging its expertise in a multiplicity of partnerships and networks.
COL targets poverty and hunger on various dimensions:

- Lifelong Learning for Farmers
- Media Empowerment and Innovation
- Innovation through COL-PROTEIN
- Basic Skills for Small Island States
- Better Care for Children at Risk

COUNTRIES INVOLVED IN COL’S WORK ON POVERTY AND HUNGER INCLUDE:
Botswana, Bangladesh, Barbados, Cameroon, Canada, Dominica, Fiji, Ghana, Grenada,
Guyana, India, Jamaica, Maldives, Mozambique, Namibia, Nepal, New Zealand,
Nigeria, Pakistan, Samoa, South Africa, Sri Lanka, St. Kitts & Nevis, Swaziland,
Tanzania, Trinidad & Tobago, Uganda, United Kingdom, Vanuatu and Zambia.

Lifelong Learning for Farmers

Many organisations conduct research on agriculture and try to share the results. Bridging the “last mile” to the farming communities is their major challenge. Step one towards better communication is to mobilise and enable the farmers to define their own needs. Step two is to link farmers with all who are relevant to their needs, including educators, researchers, extension workers, financial services providers, and market professionals.

COL is facilitating public-private-poor partnerships involving banking and private sectors to empower farmers to gain control of their learning and development processes. We are convinced that such partnerships and processes will foster a self-replicating model for the lifelong learning concept. Experience in Asia and in Africa supports the view that technology-mediated open and distance education (Tech-MODE) can scale up these processes.

COL works in partnership with many national agricultural research and extension systems (NARES) in Africa, Asia and the Caribbean and collaborates with international organisations such as the Consultative Group on International Agricultural Research (CGIAR), the FAO, Forum for Agricultural Research in Africa (FARA), International Network on Bamboo & Rattan (INBAR), the African Virtual University (AVU) and the International Society for Horticultural Sciences (ISHS). Action research projects respond to the needs of smallholder communities.
TARGET FOR 2015: HALVE THE PROPORTION OF PEOPLE LIVING ON LESS THAN A DOLLAR A DAY AND THOSE WHO SUFFER FROM HUNGER

by optimising the use of open and distance learning (ODL).

COL is deploying ICT with the CGIAR institutions in new ways for sharing information and knowledge. For example, the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is spearheading the Virtual Academy for the Semi-Arid Tropics (VASAT) to empower farming communities to mitigate and manage drought. COL has been participating in discussions with the International Food Policy Research Institute (IFPRI, a CGIAR Institute) with the aim of developing The Global Open Food and Agriculture University (GO-FAU) for open and distance learning and capacity strengthening through universities in developing and developed countries.

**Media Empowerment and Innovation**

Conventional mass media are expensive and distant for rural people. COL’s Media Empowerment programme enables them to use low-cost media under their own control. They use print, radio, television, video and audio production as tools for the creation and delivery of distance learning materials. Activities focus on capacity building and developing new competencies that allow local groups to become providers of skills to others rather than only receivers of training. Thus empowered, they can integrate the local cultural and linguistic context as they customise training on topical issues of health, agriculture and the environment. This enhances non-formal and technical/vocational education in Asia, Africa, the Pacific and the Caribbean.

In the Caribbean, for instance, the focus is on agricultural/environmental training. Video and audio productions, distributed via radio, television, workshops and field days, are used to train farmers. Extension officers in agriculture, forestry and fisheries have been taught camera and production skills. The aim is to encourage crop diversification among small plot farmers who have been sidelined by mass-produced food products from developed countries. In traditionally agrarian economies the marginalisation of these farmers has increased inflation, unemployment and youth crime as agriculture has become an unattractive career.
Innovation through COL-PROTEIN

Through COL-PROTEIN (Poverty Reduction Outcomes Through Education, Innovation and Networks) COL achieves impressive results by giving small grants for the implementation of innovative approaches generated by grassroots organisations. Two notable examples of how contextually relevant models could be developed efficiently and cost effectively are a mobile Internet educational unit in a boat that has trained thousands of farmers living in the remotest riverside areas in Bangladesh and a radio series that has linked agricultural research and rural radio broadcasters in several African countries.

Basic Trades Skills for Small Island States

Many Commonwealth countries are small island states. They face particular challenges in equipping their people to earn livelihoods in dispersed communities with narrow economic bases. Under COL’s leadership, Pacific countries are working together through the Pacific Association for Technical and Vocational Education and Training (PATVET) to create and share open and distance learning materials for trades such as Concrete, Timber and Small Engines. With PATVET, COL has implemented multimedia production systems and training at the technical/vocational institutions, making it possible for those institutions to deliver flexible learning to remote islands and atolls. They can now promote their courses to disadvantaged groups throughout the region. Some of the courses have helped young persons in the tourism industry. Courses on entrepreneurship and small business, developed with UNESCO, are now being adapted to the needs of small states in West Africa.

Better Care for Children at Risk (Street Children, Orphans, Dropouts, Child Labourers)

Various trends, especially the spread of HIV/AIDS, are contributing to an alarming growth in the number of orphans and vulnerable children. Improving the care that these children receive during their formative years will lessen the chance that they spend the rest of their lives in poverty. COL is strengthening the institutions, day-care centres and agencies that help these children by working with staff to develop self-instructional materials on the skills and knowledge that underpin quality care.
Of all the Millennium Development Goals this is the most fundamental. Having most people complete a good quality basic education is the platform for sustained and sustainable development. COL is working with Governments to maximise the contribution that ODL can make to basic education. The worldwide drive to achieve Education for All (EFA) and its core campaign for Universal Primary Education (UPE) involve COL at several levels:

- Teacher Development
- School Networks
- Open Schooling
- Sharing Content

IN THE DRIVE TO EDUCATION FOR ALL COL IS WORKING WITH: Australia, Bangladesh, Botswana, Brunei Darussalam, Cameroon, Fiji, The Gambia, India, Jamaica, Kenya, Kiribati, Lesotho, Malawi, Malaysia, Mauritius, Mozambique, Namibia, Nauru, Nigeria, Papua New Guinea, Samoa, Solomon Islands, Sierra Leone, Singapore, South Africa, Swaziland, Tanzania, Tonga, Trinidad & Tobago, Uganda, United Kingdom, and Zambia.

Teacher Development
The Commonwealth now has 20 million teachers. Many of them need further training to be fully effective. Millions of new teachers must also be recruited and trained as countries seek to expand education with a teaching force that is shrinking through retirement, migration and disease (notably HIV/AIDS). Training, retraining and ongoing professional development of teachers is the major bottleneck to the achievement of UPE but conventional teacher training methods cannot expand to meet the challenge.

Many countries have already discovered the effectiveness of open and distance learning (ODL) in teacher training. COL therefore helps Governments develop policies to use ODL for national priorities. It is also strengthening – sometimes transforming – teacher training institutions to work through ODL. COL has helped to strengthen the ODL systems at the National Teachers’ Institute, Nigeria, and is helping to transform the Centre for Environment Education, India, into a dual-mode institution.
Expanding teacher training also involves facilitating the development of courses (Master’s, Diplomas) for upgrading teacher educators and organising management development opportunities for them. COL facilitated the development of the Master of Arts in Teacher Education Programme by the Open University of Sri Lanka and a Post Graduate Diploma in Guidance and Counselling by the National Council for Educational Research and Training (NCERT) in India. COL along with the Ministry of Foreign Affairs, Singapore has been organising management development workshops for teacher education administrators from Sub-Saharan Africa. COL has been encouraging national/international links and south-south co-operation among teacher training institutions and has stimulated regional consortia, such as the West African Consortia for Teacher Education by Distance (WACTED) and the South Asian Consortium for Teacher Education and Development (SACTED).

In collaboration with the National Assessment and Accreditation Council, India, COL has helped teacher education institutions in different regions to address quality assurance issues including the formulation of pan-Commonwealth quality assurance indicators. COL is a member of the new teacher education in Sub-Saharan Africa consortium (TESSA) which will provide a suite of teacher education resources and intends to produce teacher training modules for in-service teacher training throughout the continent. COL has also launched a new initiative to create electronic platforms for e-content development by teacher educators.

**School Networks**

The electronic networking of schools and teacher education colleges is a powerful tool for teacher development and for raising school quality. COL is fully involved in Schoolnets in Africa and Asia. Observing the practical operation of Schoolnets is a good way to discover what ODL and ICTs can best achieve, this knowledge being essential for the development of effective national policies. Schoolnets are also a vehicle for COL to provide focused collections of resources to teachers and learners, in particular through the million documents in its Knowledge Finder (www.col.org/kf).

COL works with the African Virtual University, NEPAD and SchoolNet Africa to cultivate eLearning skills in support of the training of African teachers. COL is also working with Trinidad & Tobago to assist in the establishment of a Schoolnet in that country.
Open Schooling
As countries approach the goal of universal primary education they face massive new demands on their secondary systems. Inspired by the success of open universities, open schooling is now growing rapidly at the secondary level with India leading the way. COL is helping India’s National Institute of Open Schooling (NIOS) to develop a training strategy for the 50,000 teacher-facilitators who support more than a quarter of a million learners in its 3000 study centres. It also assists in the establishment of new open schools by helping countries develop polices and build capacity for this purpose. In Mozambique, for example, COL worked with the Ministry of Education to demonstrate the effectiveness of an open schooling system in remote and rural areas, and in Sri Lanka and Nigeria, COL is working with Ministries of Education to assist in the establishment of new open schools. In India, COL and the NIOS are promoting the development of new state open schools.

COL is also working to strengthen existing open schools through quality assurance support and increased and expanded course offerings.

COL organises international training institutes at open schools and holds advocacy meetings to raise awareness. Open schooling has particular importance for marginalised populations, such as women and girls, who cannot attend school because of family commitments, domestic labour, unsafe surroundings or cultural taboos.

Sharing Content
ODL allows materials to be shared across borders. Self-instructional teacher training materials in upper primary and junior secondary Science, Technology and Mathematics (STAMP 2000+), developed co-operatively with COL’s assistance in Southern Africa, are being used throughout Africa. In partnership with eight sub-Saharan countries COL has also developed print-based ODL learning materials covering the junior secondary curriculum in English and Science.

Learning object repositories are increasing the ability of schools and colleges to access content. COL helps organisations to create repositories and share content with others on an open source basis.
COL looks beyond the arithmetical target of gender parity (equal numbers of males and females in school) to the more challenging goal of gender equality (i.e. equality of outcomes). Its work includes:

- Gender Mainstreaming
- Women and ICTs
- Gender Resources
- Boys Underachievement

**Gender Mainstreaming**
To underpin the Commonwealth’s drive to gender mainstreaming COL developed a Gender Management System Toolkit with the Commonwealth Secretariat. The Toolkit boosts the impact of the Secretariat manuals that show how to incorporate gender equality in government policies and programmes in specific areas (e.g. finance, development planning, poverty reduction strategy and response to HIV/AIDS). The Toolkit converts the manuals to user-friendly packages and includes a change-management briefing for those trying to effect gender equality through institutional change. A CD-ROM brings together the Toolkit and the Manuals.

**Women and ICTs**
As the only intergovernmental agency specialising in the application of technology to education, COL has a special interest in gender equality in the use of ICTs. It has convened regional meetings in various Commonwealth countries to examine the barriers that women face in accessing and using technology. These culminated in a conference held in Malaysia in collaboration with the International Telecommunications Union, the Global Knowledge Partnership and UNESCO that produced a statement for the 2003 World Summit on the Information Society about equitable access for women to ICTs. This will support the development of policies that focus on the empowerment of women.
**Gender Resources**

COL maintains a virtual library of resources and documents on gender equity ([www.colfinder.org/dev](http://www.colfinder.org/dev)). It has joined with the Nairobi-based Forum for African Women Educationalists (FAWE) to build a large bank of information to support practitioners working for gender equality. This Internet-based resource will provide all the open source full-text documents in the field that are available electronically.

**Boys Underachievement**

While a number of Commonwealth countries have achieved gender parity, gender equality remains a concern. Some Commonwealth countries are faced with the challenge of poor achievement of girls, especially in subjects like Science and Mathematics, while others are concerned with the underachievement of boys. At their meeting in Edinburgh in 2003, Commonwealth Ministers of Education recommended that a “stock-taking of progress to date of evidence-based best practices available at country level would be a useful starting for this initiative”. Ministers requested the Commonwealth Secretariat, in partnership with other Commonwealth agencies such as COL, to assist member countries faced with the challenge of boys’ underachievement, suggesting that a close review of policies, cultural practices and curricula in Commonwealth countries would assist in addressing all gender-related areas.

Accordingly, the Secretariat and COL have begun research to understand the nature and extent of the problem of boys’ underachievement across the Commonwealth. This research is examining root causes and possible strategies that could be employed to address the situation. Potential strategies examined include policy changes and the application of open, distance and technology-mediated learning methodologies.
COL works in partnership to increase the reach and impact of health information that can save lives:

- Partnership with the World Health Organization
- Radio Programming

COL HAS WORKED ON HEALTH IN: The Gambia, South Africa and Sri Lanka and is extending its activities to Malawi, Nigeria, Sierra Leone and Solomon Islands.

**Partnership with the World Health Organization**

COL’s contribution to improving health grew out of the earlier success of its Media Empowerment programme. Its role in a series of TV advertisements in Zambia about vitamin deficiency and its use of a solar-powered radio unit in Uganda to get information about an outbreak of ebola to rural areas led to a partnership with the World Health Organization.

COL’s work in health is now aligned with WHO priorities, notably communicable diseases with a special emphasis on HIV/AIDS. Its expertise in distance education and training has brought a valuable element to WHO’s work by reaching greater numbers of disadvantaged people with health information and training. An example is a partnership between COL, WHO and the Valley...
Trust NGO in Kwazulu Natal Province, South Africa, that addresses the problem of HIV/AIDS stigma.

COL developed the Valley Trust’s capacity to adapt and create effective information and training and deliver it to groups in rural areas. As a result the Trust now creates cost-effective video-based information on a host of health issues and reaches far more people with stigma information than would be possible with traditional face-to-face methods. It also helps to train community health workers.

In The Gambia, Sierra Leone, Solomon Islands, Sri Lanka, Swaziland and Tanzania COL used its expertise in a similar fashion to help deliver information about HIV/AIDS and malaria via radio and television using mobile units that travel with a projector and generator to the villages. Issues to do with maternal health and infant mortality are also being addressed in these activities.

At another level of the partnership COL is improving the writing skills of WHO staff and showing its local representatives and National Professional Officers how to use the techniques of distance education.

Radio Programming
COL is creating a series of radio programmes that will be available as open source content for radio stations. Initially in English, but then expanding to include other major Commonwealth languages, the programmes will cover important topics for poor people such as the filtering of domestic water and growing food in the cramped conditions of urban poverty. Through partnerships with other organisations the series will include aspects of health such as living with HIV in the family.

COL is also working with the Open Learning Systems Education Trust (OLSET) of South Africa to provide training for staff in organisations that are planning to use radio to reach those that are difficult to reach, such as nomadic populations in Nigeria.
Ensure environmental sustainability

TARGETS:

• INTEGRATE THE PRINCIPLES OF SUSTAINABLE DEVELOPMENT INTO COUNTRY POLICIES AND PROGRAMMES AND REVERSE THE LOSS OF ENVIRONMENTAL RESOURCES

• BY 2015, REDUCE BY HALF THE PROPORTION OF PEOPLE WITHOUT ACCESS TO SAFE DRINKING WATER

• BY 2020 ACHIEVE SIGNIFICANT IMPROVEMENT IN THE LIVES OF AT LEAST 100 MILLION SLUM DWELLERS

COL’s work concentrates on enhancing education for sustainable development.

Education for Sustainable Development

Environmental sustainability is both a global and a local concern. COL is addressing it at the local level by helping institutions to improve the quality and impact of environmental education. COL maintains a library of resources and documents on the environment to support educators and practitioners (www.colfinder.org/dev) and is helping institutions to develop specialised courses in ODL format.

In India, for example, the Centre for Environment Education (CEE), in partnership with COL, developed Green Teacher, a one-year distance education diploma course in environmental education. It is now being piloted with 50 trainees. Institutions in South Asia and Africa are showing interest in adapting this course for their use. Some open universities and teacher education institutions in India have decided to develop a consortium for working together in the use of ODL for education and training needs in sustainable development.

Likewise, COL has partnered with the Indian Institute of Science, which has piloted a continuing professional education programme in environmental engineering that deals with the issues targeted by this MDG, such as air pollution, municipal water and waste water management, environmental management, ground water and soil pollution and solid waste management. These courses are being revised by the Karnataka State Open University to be offered at certificate, diploma and degree levels, in English and the Indian regional language, Kannada. COL will make these programmes available to other developing countries.
Develop a global partnership for development

THE TARGETS FOR THIS GOAL ARE WIDE-RANGING AND INCLUDE:

- A COMMITMENT TO GOOD GOVERNANCE, DEVELOPMENT AND POVERTY REDUCTION
- THE SPECIAL NEEDS OF LANDLOCKED AND SMALL ISLAND DEVELOPING STATES
- DEVELOPING DECENT AND PRODUCTIVE WORK FOR YOUTH
- MAKING AVAILABLE THE BENEFITS OF NEW TECHNOLOGIES – ESPECIALLY INFORMATION AND COMMUNICATIONS TECHNOLOGIES

COL is working in each of these areas:

- Good Governance
- Small States, Youth and Technology
- Virtual University for Small States

THE SMALL STATES OF THE COMMONWEALTH ARE: Antigua and Barbuda, Bahamas, Barbados, Belize, Botswana, Brunei Darussalam, Cyprus, Dominica, Fiji, The Gambia, Grenada, Guyana, Jamaica, Kiribati, Lesotho, Maldives, Malta, Mauritius, Namibia, Nauru, Papua New Guinea, Samoa, Seychelles, Solomon Islands, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Swaziland, Tonga, Trinidad & Tobago, Tuvalu and Vanuatu.

Good Governance

COL contributes to good governance both nationally and locally. At the national level COL emphasises the importance of effective policy frameworks (e.g. for using ICTs in schools) and helps Governments to put them in place. The Certificate in Legislative Drafting and the Commonwealth Executive Masters Programmes in Public Administration and Business Administration are COL programmes that directly improve the quality of government by increasing the skills of public servants.

COL is in dialogue with the Commonwealth Secretariat to work with the University of South Africa on training for election officials, political party officials and others involved in all levels of government. Using ODL and ICT to train such officials will help to make elections better run and more democratic.

By extension, COL’s contribution to good governance at the local level proposes to focus on the development of ODL materials for the training of the thousands of members of local councils that now have significant development responsibilities in many countries following decentralisation of government responsibilities.

NGOs are vital players in development. To help these organisations become more effective COL is working with the Rajiv Gandhi Foundation and the Indira Gandhi National Open University to develop a Diploma in Management for NGO staff.
Small States, Youth and Technology
Small island and landlocked states are the majority among Commonwealth members and COL has a long history of working with them. It has contributed substantially to the use of ODL and ICTs in the Caribbean in higher education and is now focussing, both there and in the Pacific islands, on assisting states in the provision of technical and vocational education and training for youth. A particular challenge is to use ICTs to attract young male drop-outs to complete their education. COL’s new Learning and Livelihoods programme focuses on the life skills, both generic and occupational, that equip people to be productive citizens.

COL’s core mission is to alert Governments to the potential of new technologies for their national development and to help them create systems and applications that use them effectively. At the request of Commonwealth Ministers of Education COL is developing a Virtual University for Small States of the Commonwealth. It will first help interested Governments to extend their use of media and technology for the education and training of youth and adults in a range of areas. As this occurs COL will create synergy by networking between countries. To support this initiative COL is helping institutions to assess and use open source software, training their staff in the skills of developing eLearning content and contributing to the development of learning object repositories.

All this work is backed up by the COL Knowledge Finder, which provides the most extensive collection of freely available, full-text documents on the application of open and distance learning to development (www.col.org/kf). To nourish this resource COL works with six partners, including The World Bank, to co-ordinate the Global Distance Education Network (GDENet), which publishes or re-publishes documents of high value to practitioners in ODL (www.col.org/disted).

COL co-operates with the Development Gateway of the World Bank to support an eLearning community of thousands of people (www.developmentgateway.org/e-learning). It also works with the Global Gateway of the British Council (www.globalgateway.org.uk) to support the thrust to internationalise schools by helping them obtain good input and content from around the world.

COL, with funding from the Government of Canada’s Young Professionals International programme, places young Canadian graduates with host organisations throughout the Commonwealth for a period of six to twelve months. Part of COL’s objective in participating in the programme is to strengthen the linkages between the agency and the host organisations to promote, advance, support and enrich the practice of open, distance and technology-mediated learning throughout the Commonwealth.
Conclusion

COL starts from the premise that the use of human reason, and the knowledge that flows from it, is the key to enabling all people to enjoy healthy and decent lives. As a world leader in the new field of knowledge management, COL has a special mission to help people access and use knowledge that can help them.

The achievement of the Millennium Development Goals does not depend on knowledge and learning alone. Political decisions, for example to make trading arrangements more equitable for developing countries, also have a vital role. However, ready access to usable knowledge can enable people in developing countries, from farmers to academics, to take rapid advantage of favourable changes.

Development depends on the creation, dissemination and application of knowledge by everyone. COL believes that technology can greatly facilitate these processes. The techniques of open and distance learning give farmers the know-how to improve their livelihoods and rural women the knowledge to raise a healthy family. Schoolnets create communities of practice among teachers and give children access to the best materials. eLearning and the knowledge media are gradually enriching the curriculum for all universities.

COL is an effective partner in combining knowledge and technology to advance development.

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