

# Meeting the MDG challenge

## The role, potential and impact of open and distance learning



The Millennium Development Goals (MDGs) have become a universal framework for development, and a means for developing countries and their partners to work together in pursuit of a shared future for all. At just past the halfway mark towards the target date of 2015, what progress have we made towards achieving these goals? At no other time has the world been so prosperous, our mortality rates so low, or life expectancy so long. Never before have we achieved, on average, such levels of education. In contrast to this however, in absolute numbers, never before have so many people lived in such poverty, died from preventable diseases or needed and been denied access to education.

The MDGs state that by 2015 we will:

- Eradicate extreme poverty and hunger
- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Combat HIV/AIDS, malaria and other diseases
- Improve maternal health
- Ensure environmental sustainability, and
- Develop global partnerships for development.

*The Millennium Development Goals Report 2007* (UN) suggests that we have achieved some gains, and that success is still possible in most parts of the world. However, this report also identifies just how much remains to be done. Success in some countries demonstrates that rapid and large-scale progress towards the MDGs is feasible if it combines strong government leadership; good policies; and practical strategies for scaling up public investments in vital areas that are supported by adequate financial and technical assistance from the international community.

### Progress towards the MDGs

The following are some measures of the progress that has been achieved.

- The proportion of people living in extreme poverty fell from nearly a third to less than a fifth between 1990 and 2004. If the trend is sustained, the MDG poverty reduction target will be met for the world as a whole and for most regions.
- The number of extremely poor people in sub-Saharan Africa has levelled off, and the poverty rate has declined by nearly six

percentage points since 2000. Nevertheless, this region is not on track to reach the goal of halving poverty by 2015.

- Progress has been made in getting more children into school in the developing world. Enrolment in primary education grew from 80 per cent in 1991, to 88 per cent in 2005. Most of this development has occurred since 1999.
- Women's political participation has been growing slowly. In countries where previously only men were allowed to stand for political election, women now have a seat in parliament.
- Child mortality has declined globally, and there is evidence that the right life-saving interventions are proving effective in reducing the number of deaths due to the main causes such as measles.
- Key interventions to control malaria have been expanded. The tuberculosis epidemic finally appears on the verge of decline, although progress is not fast enough to halve prevalence and death rates by 2015.

*(The Millennium Development Goals Report 2007, United Nations)*

While much has been achieved, these results highlight how much remains to be done and the importance for all concerned of honouring their existing commitments. Currently, only one of the eight regional groups cited in the report is on track to achieve all the MDGs and the projected shortfalls are most severe in sub-Saharan Africa.

However, impressive results have been achieved in sub-Saharan Africa in areas such as raising agricultural productivity (for example in Malawi), boosting primary school enrolment (in Ghana, Kenya, Uganda and the United Republic of Tanzania), controlling malaria (in Niger, Togo, Zambia, Zanzibar), widening access to basic rural health services (Zambia), reforesting areas on a large scale (Niger), and increasing access to water and sanitation (Senegal and Uganda). The real challenge lies in replicating and scaling up these successes.

*The Millennium Development Goals Report 2007* also highlights disparities within countries, where particular groups of the population – often those living in rural areas, children of mothers with no formal education and the poorest households – are making insufficient progress to meet the targets, even in situations where the rest of the population is doing so. This is particularly evident in access to health services and education. In order to achieve the MDGs, countries will need to mobilise additional resources and target public investments that benefit the poor.



*Students at Kenyatta University, African Virtual University, Kenya*

## The role and contribution of open and distance learning

Open and distance learning (ODL) practices have a clear and substantial contribution to make to achieving universal primary education. They can be utilised effectively and at scale to provide education to distributed communities in a cost-effective and efficient way. Similarly, ODL can be used to educate communities about hygiene and health, in matters of agricultural practice, sustainable environmental development practices and disease prevention and treatment. And of course, by using ODL approaches, the number of teachers and health practitioners, agricultural and environmental experts who can be educated and trained can be increased significantly above the numbers who could be trained using conventional educational methods. ODL can increase the numbers of trained professionals in areas of need without expensive investment in bricks and mortar institutions. The scale of the challenge of upskilling, training and educating the professionals who will contribute to progress is illustrated by the following statistic – only 63 per cent of children who enrol, complete their primary schooling.

### Education and teacher training

The vital role that teachers play in society is widely recognised. However, the economic and social problems that have affected the continent have had a significant negative impact on the situation of teachers in most parts of sub-Saharan Africa. The scale of need for teachers is overwhelming. Successive reports have identified the

large numbers of unqualified teachers, and the difficulties associated with attracting new recruits. The decline in teachers' salaries relative to other comparable professions is well documented. Emergent knowledge economies offer alternative employment for those who provide the traditional pool of primary teachers. In addition, HIV/AIDS is impacting on the existing and potential teaching workforce. In 2000, UNICEF estimated that nearly one million children a year lose their teacher to AIDS. In Zambia, HIV/AIDS claims the lives of 2,000 teachers a year – exceeding the output of teacher training colleges.

The most recent UNESCO global monitoring report (2005) highlights the extent to which the quality of education systems is failing children in many parts of the world – in sub-Saharan Africa only 25 per cent of secondary-school age children are enrolled in secondary school. Teachers are a critical part of the global commitment to provide universal basic education by 2015. The percentages of trained teachers declined in more than a third of countries, including Bangladesh, Nepal and the Niger. Globally more than 18 million trained primary teachers are required, and the most urgent need for teachers is in sub-Saharan Africa where 3.8 million additional teachers are needed when retirement, resignation and loss are accounted for. Unqualified teachers currently comprise half of all primary teachers, and the quality of education is being compromised. The TESSA programme (Teacher Education in Sub-Saharan Africa) was developed to address these challenges and focuses on access to, and the quality of, education and training for teachers. In doing so it exploits the new technologies of open learning that Nelson Mandela acknowledged more than a decade ago.



# Kigali health Institute

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## Background

The Government of Rwanda, through the Ministry of Health in collaboration with the Ministry of Education, responded to the challenge of providing health services by establishing the Kigali Health Institute in 1996. In the case of Rwanda, the war and the genocide of 1994 created a critical shortage of health workers to deliver quality health care. Through an Act of Parliament, no 07/2002 of February 2002, the Institute became a semi-autonomous organisation with two Ministries as major stakeholders.

## Core values

In dealing with the public, collaborators, partners and stakeholders, the Institute established the following values as part of its corporate integrity and credibility when dealing with the public:

Healthy lifestyle • Equity and respect • Creativity and research • Professionalism • Accountability • Good governance • Quality assurance • Standardisation

## Quality of teaching

- Applied academics – relevance to the job market.
- Research and proposal writing, solicitation of funds.
- Student-centered learning approach
- Social commitment – social responsibility

## Community social responsibility

KHI is a centre for community oriented outreaches and an instrument for change through the involvement of the academic community in the public spheres of influence. Students graduating from KHI have a stronger and better:

- Work ethic
- Understanding of work and personal integrity
- Awareness of contributing to the greater Good
- Capacity to learn from others
- Capacity for moral and ethical reasoning.

## Social entrepreneurship

KHI encourages entrepreneurship and inventiveness, innovative solutions, new approaches and commitment. KHI focuses and encourages institutional staff to identify and develop a more coherent and pervasive institutional climate suitable for educating students for personal and social responsibility.

## Opportunities through partnerships and linkages

- **Institutional development initiatives:**  
To develop extension programmes that are motivated by the vision and mission of the Institution.
- **Department extension initiatives:**  
The institution empowers the various Faculties and supporting Centres to extend their research, instruction and policy to partner communities giving students the opportunity to apply their newly acquired knowledge and skills.
- **Linkaging initiatives:**  
Apart from ventures in community development and professional education, the institution is also looking after various institutions for continuous professional development.

## Mandate and functions

- Training a sufficient number of Nursing and Para-medical personnel;
- Providing training in curative medicine;
- Providing continuous and proficiency training for in-service personnel;
- Providing proficiency training for teachers who teach professional courses.

## Impact of services mandated:

The Institute has plans to rapidly increase enrolment in their drive to cope with the demand for trained professionals in the country.

## Administration and management:

The Academic wing is organised into three Faculties and respective Departments as follows:

- 1 Allied Health Services: Physiotherapy; Anaesthesia; Dentistry; Laboratory; Radiography; and clinical officer's ophthalmology.
- 2 Nursing Sciences: General Nursing; Midwifery; and Mental Health.
- 3 Community Health Development: Environment Health Sciences.

## Kigali Health Institute has 3 Centres

- 1 ICT centre
- 2 Language centre
- 3 Centre for continuing Medical Education (CEFOCK)

TESSA's key purpose is to create an Africa-wide consortium to improve access to, and raise the quality of, all aspects of teacher education. To achieve this, the TESSA consortium has developed an extensive range of high quality, multilingual open educational resources (OERs) and systems. The resources are designed to support all teachers, including those teachers who have little or no formal training. The programme includes an extensive range of audio and text materials (online and print) covering the core areas of primary, basic education teaching and are free to use, adapt and share with the TESSA community.

The Digital Education Enhancement Project (DEEP) (Leach, 2005) has worked with teachers to improve the teaching of literacy, numeracy and science through the use of mobile communication technologies. DEEP investigated the use of new technologies in primary schools in the Eastern Cape Province of South Africa and in Cairo, Egypt. Many of the schools involved serve greatly disadvantaged communities. Where technical support was scarce, teachers adopted communities of support to collaboratively solve problems, a fact the researchers have attributed largely to the high levels of motivation felt by the teachers.

### Healthcare and education

Generally across sub-Saharan Africa, health delivery systems are characterised by shortage, inadequate distribution and lack of necessary skill mix in its human resources for health. HIV/AIDS is threatening the workforce across various dimensions: increasing the workload and skill demands on health workers as health facilities are overwhelmed by patients; and health professionals are themselves affected personally by the virus. There is an urgent need for improvements in the performance of the health system, including significant strengthening of human resources for health.

Many of the health problems faced by people living in rural areas are related to a lack of adequate health education and prevention services. Health extension workers can be trained to deliver immunisation; basic health education in hygiene and safe disposal of waste; reproductive health; and HIV prevention and control. Investment in training traditional birth attendants to enhance their skills in assisting in deliveries and extend their education to take on other responsibilities could make a significant impact on high infant, child and maternal mortality rates.

The Health Education and Training (HEAT) programme in Africa builds on the TESSA model to deliver student-focused healthcare education and training for a range of different healthcare professionals across Africa – particularly those in shortage specialities and under-resourced rural areas. It is designed to maximise learning in the workplace for pre- and in-service practitioners.

The Christian Medical College in Vellore, South India, runs a highly successful ODLE course that trains rural physicians to manage patients with HIV/AIDS and to establish new services. This has supported a shift towards clinical care in addition to the ongoing focus on prevention of HIV/AIDS. The course aims to improve the skills and knowledge of physicians in HIV care and improve the availability, accessibility and quality of such care at the secondary hospital level. A distance learning centre has now been set up in Vellore that runs courses in family medicine.

Distance learning methods can be used to teach clinical problem-solving in a distributed learning environment. To date we have only limited examples of proven, sustainable and generalisable models of ethical, cost-effective and context-relevant upscaling in healthcare education in Africa. A proposed distance learning medical school in Ethiopia seeks to provide a mechanism for cost-effective and quality-assured scaling up in the production of doctors for the local healthcare system.

### Economics

Micro-finance is recognised as an effective development intervention in enhancing access to financial services for low-income and poverty-level individuals. While there is great demand for micro-finance services, the main constraint is not a lack of funds but a lack of capacity in operating a sustainable institution. The *Training of Trainers on Micro-finance* course, developed by the Asian Development Bank Institute (ADBI), the World Bank Tokyo Development Learning Centre (TDLC), and the United Nations Capital Development Fund, launched in 2005, offers localised capacity-building training programmes in micro-finance. This is an area that has already had a positive impact on the household budgets and quality of life of millions of people in developing countries. This programme is an attempt to address the gap between the large demand and limited supply of micro-finance services and expertise. Courses have been carried out at distance learning centres in more than thirteen Asian countries and made available to distributed participants around the world including Africa.

### Challenges

Issues of scalability and sustainability demand smarter systems for working at scale. Open and distance learning can assist but it should not attempt to replicate campus-based courses. New structures, new forms of curriculum, and different pedagogies will provide a sound basis for growth.

We need to be more clever and creative in the ways we embed new technologies. Rather than thinking of it as a process of adding more, it should be progressive: changing and adapting to integrate new technologies where they allow us to do something better or in ways that were not previously possible.

We need to develop, and prove generalisable, models of education and training delivery. It is not sustainable to develop customised models for each environment whether geographic or professional. By looking at the context and what has worked, it is possible to develop simple generalisable models that can be replicated and applied in a variety of contexts. There is substantial evidence that one of the key factors in ensuring sustainability relates to policy – small-scale, 'owned' innovations at community level may be more agile and responsive and appear to engender greater levels of ownership. However, well-designed national projects that seek to embed change have been remarkably successful in generating change on a wider scale. There is strong evidence to support a blended approach, allowing local ownership and decision-making within a centrally designed and supported framework.

Cost-effectiveness is a key criterion affecting the sustainability and uptake of any approach and we should be willing to build on

models that have demonstrated proven success. Finally, where many divides and disparities already exist, we need to ensure that new technologies do not further isolate and exclude those living in remote and isolated communities.

## Open and distance learning and the future

It is essential that any ODL initiatives are scaleable and sustainable. ODL can provide a realistic strategy for addressing issues of education, capacity building, and healthcare but it is not the only solution and cannot address the challenges on its own. ODL provides a successful educational approach in situations where practitioners are committed to existing heavy workloads, live in geographically distributed areas and are unable to travel to study centres or take time off work to attend training courses. There are real advantages that can accrue from embedding learning in the workplace, whether it is for in-service training of practitioners or the initial education and training of healthcare and education professionals.

If we are to successfully scale up, taking effective programs or policies and adapting and sustaining them across different locations and time, then we need to have a solid evidence base. We need to know what does and doesn't work, and in what conditions. We have to recognise that we need different approaches to curriculum design: where we begin with practice and allow theory to follow. Designers of open learning have a responsibility to design their curricula to recognise the realities of situations in which learners are living and working; and the urgency of the need for training in what matters now.

Existing bricks and mortar universities are insufficient to meet the educational needs of the 21st century. Professional education and training for teachers, healthcare workers and other professionals will increasingly occur in the workplace. Workplace-based education and training will need to be practice-based and focused on improving the day-to-day work of the learner involved, it cannot mimic the slow pace of a conventional on-campus university degree.

While a print-based model of ODL has the capacity for extensive reach at potentially low cost, we should not ignore the possibilities offered by ICT and the critical role that these play in building the skills and capabilities necessary to operate successfully in a global environment. The increased availability of OERs provides an abundance of course and subject materials on which ODL programmes can be based. The challenge is to develop approaches that exploit these resources.

New technologies and new forms of communication offer more than a glimmer of hope, they have the potential to transform professional learning and there is a need for policy-makers to recognise the urgency of this. Science, our ingenuity and imagination have brought us to a place where we have other means to deliver and support education. Cyber mules in Venezuela take laptops and projectors into remote mountain schools; while the Digital Study Hall project in India distributes DVDs via motorbike. We must learn to share our knowledge, technology and insights into learning to ensure that we do reach the people who need an education that is relevant to their needs and the world of today. For it is education that powers sustainable development, assists in preventing and treating disease, and is fundamental to the continuation of our planet.

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