

A model of ODL to address educational needs of health workers in Africa

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Abstract

Achieving development goals in health is confounded by shortage of health care staff in poorer countries due to migration to richer countries, and to HIV. Zambia for example has a 48% shortfall of nurses; 2000 Zambian nurses work in the UK alone. Retention is problematic – salaries are low, conditions poor, and professional updating is lacking. Health workers attending overseas universities may be less likely to return home. One response is to improve course provision and professional updating opportunities in-country. Leeds Metropolitan University, with funding from the Commonwealth Scholarships Commission under their distance learning initiative, runs a tailor-made MSc Public Health (Environmental Health and Health Promotion) in Zambia, for nurse tutors, clinical officers and environmental health workers. Using locally relevant curricula, with community-based, student centred, problem-solving approaches, retention may be improved. Greater cost-effectiveness and wider participation are achieved. The paper will discuss how the course is delivered in Zambia, how the partnership developed such as to enable effective delivery of the course, and how sustainable learning can be achieved in a developing country in partnership with a UK University.

Introduction

The aim of this paper is to discuss an initiative in Lusaka, Zambia whose objective has been to strengthen the public health workforce by enabling Masters level education to take place in-country and at a fraction of the cost of sending students to the UK to gain a similar qualification.

The project was conceived within the framework of '**Achieving Development Goals**' given that the shortages in health staff in Zambia are causing serious problems in health care delivery, and indices of health show declines rather than gains. (For example, life expectancy for men is now 33 and for women 32; one in six children die before their fifth birthday and three-quarters of the population live below the World Bank's poverty threshold of \$1 a day). Early evaluation indicates that the provision is indeed having an impact on development goals.

The paper highlights how **Collaboration** is essential to the success of the project. The paper also relates to the other conference themes, considering how **Learning** takes place which is locally relevant and can be applied immediately in the workplace; considering aspects of **Foundations**, especially tutoring and learning support in a resource-poor situation, issues of access and equity; and considering aspects of **Innovation**. Although the course has not been able to utilise the latest technology, (given the level of IT provision in the partner college), the project has been influential in developing the wherewithal to enable the use of more IT in Zambia. What is innovative about the project is the practice of 'off-site' delivery i.e. taking a course from the host university setting to deliver it in-country, supported by open and distance learning.

In a nutshell, the MSc Public Health (Environmental Health and Health Promotion) is delivered by the Health Promotion staff from Leeds Metropolitan University, UK, to health care staff and educators working across Zambia, using the site of Chainama College of Health Sciences in Lusaka. The first cohort started in January 2003, supported by 17 scholarships from the Commonwealth Scholarships Commission (CSC). Three further students with other funding gave a total class of 20. This cohort is currently working on final dissertations, ready for graduation in April 2007. A further successful application to the CSC resulted in a second cohort starting in November

2005. This provided 20 CSC funded places, five funded from elsewhere and four students joining from Tanzania funded by their Ministry of Health, totalling 29.

This initiative would not have been possible without the precursor of a previous project started at Manchester University by Mary Green (who subsequently moved to Leeds Met.) This project enabled 18 students to graduate with a Masters in Education for Primary Health Care and developed the foundation of partnership working with Chainama College. This initiative emerged from needs identified by staff at Chainama to which Manchester University responded, but funding was always problematic. However, if the initiative had not forged ahead even in the absence of all conditions being in place, the subsequent initiatives would not have been possible.

How does the course operate?

The Health Promotion staff at Leeds Met have many years of experience running Masters level courses for overseas students (from Africa in the main but also from Asia and Latin America), as well as providing postgraduate courses using adult learning principles for UK students. Staff also have experience of living and working overseas, again principally in Africa.

The MSc Health Promotion and later the MSc Public Health – Health Promotion attracts students from overseas and is an international course addressing the needs of health professionals working in developing countries. Scholarships to attend the course in the UK are difficult to secure, can be open to favouritism and influence, take up considerable funds (i.e. approx £12,000 for fees and £10,000 for living costs and air fares), deny opportunities to those unable or unwilling to leave their home country for up to twelve months, and may not provide learning opportunities of direct relevance to the home country. Undoubtedly studying abroad has many advantages which are well known, but it has increasingly become apparent that students are tempted to prioritise opportunities to earn money (through changed rules allowing them to work), and so affecting the quality of their study, and also to prolong their stay in the UK, or not to return to the home country. A Masters may be seen as a stepping-stone to work overseas or into the NGO sector. Employers lose a worker for an extended period of time, usually with no backfill, meaning that work plans are disrupted, and risk the employee not returning at all.

Delivering the course in Zambia became feasible due to the partnership already existing with Chainama College, funding from the CSC, and the willingness of Leeds Met to enable off-site delivery. A preliminary visit to Chainama by three Leeds Met staff enabled collaboration on the type of course required in terms of content and delivery, and on the recruitment and selection process. It was agreed that face-to-face delivery was the only viable option at the time given the level of IT resources. A model emerged of teaching modules in blocks of two weeks, with eight blocks over two years followed by a period collecting data and writing a dissertation.

The course was initially designed to enable staff teaching at Chainama College the opportunity to gain a masters qualification; some of these staff are tutors working in remote rural areas. All are essential to the training of the health workforce in Zambia, as they teach the frontline workers – clinical officers, nurses, environmental health officers. The second cohort was widened to include a proportion working in other health sectors in Zambia.

Tutors from Leeds Met fly to Lusaka for the two-week blocks, providing an intensive workshop style student experience. A key issue is how to support students both personally and academically in the interim months, and a well thought through process of local support was established employing local staff (some of whom are graduates from the Manchester Masters). This provides professional experience, a small income and kudos as well as meeting the needs of students.

The course is 'owned' entirely by Leeds Met and conforms to its quality assurance processes, with senior staff at Chainama providing administrative support and advice.

Loan of college facilities, paid for by Leeds Met, has enabled a flow of income to a relatively resource-poor college, which has in turn been able to upgrade its premises. There have been intangible benefits to the college in terms of increased confidence and morale, and tangible benefits in being able to attract other development funds, staff capacity building and spin-off into other projects including research and additional partnerships.

This thumbnail sketch of the provision may make the project look simple, but cannot detail the large amount of work that has gone into planning, logistics, relationship building etc. Underpinning the project are staff with excellent interpersonal and cross-cultural skills, a political commitment to working with partners in 'the South' and with imagination and creativity to overcome obstacles. The ingredients of successful partners can perhaps be a discussion point (at the conference); the process of partnership building, the development of respect and trust such that all parties are comfortable to allow partners to speak on the other's behalf, can be intangible and difficult to document.

Partnership extended beyond our two educational establishments, to include the Ministry of Health and the Central Board of Health in Zambia, whose backing was vital. It was important for the educational programme to cohere with the workforce development plan for the country, and for the appropriate selection of candidates to be made.

What difference has the course made?

The course has widened participation by enabling those unable to secure scholarships overseas or unwilling to depart the country. Women often fall into these categories. One comments: 'this is a convenient package for those who are working and can still be with their families while taking up studies'. (Comments in this section were intended for a third party, i.e. minimising the bias which might have occurred if the students were giving feedback to us).

Local options for continuing professional development (CPD) are limited. The use of APEL/APL is widespread in the UK, whereas:

"My country has only two Universities which are rigid about doing a masters degree only when one has done a first degree. They don't recognise the achievements gained during one's working experience."

Examples of skills identified by students as having increased are IT skills, team building, management and planning, and research, analytical skills and report writing.

'Before this course a computer was not of much significance but now most of my work is computer dependent'.

'My IT skills have improved greatly'.

By the end of 2004, computer and web access facilities had improved greatly at the College, partly assisted by Leeds Met and also due to input from other donor agencies. Initially all students were provided with CDROMs on to which we had placed several hundred key texts and papers relevant to the course and the Zambian context. This was new technology to most. Accessing the internet was also new to many. The first problem to overcome was simply to help Chainama College pay its phone bill, which indicates the practical nature of the help which can be required.

As the students have a key training role, there is a multiplier effect:

'The people that will benefit from the knowledge and skills I have acquired on this course are the students, clinical officers, environmental health technologists and nurses...and those students who come for short courses. Other organisations which will benefit are the breast-feeding mothers support groups...'

Modelling of participative learning to those more used to didactic methods has been revelatory: 'The IT skills and other teaching/training skills such as participatory training has helped me to become a better trainer. I feel I am now more useful to my students and employer than ever before.'

'because of the skills I gained... I have promoted the use of computers among my students...'

'We are introducing research methodology to our students so that they can carry out some minor studies...'

Many participants on the course also have a health management or clinical role and applicability of skills gained have been described by one student:

'for example, assessment skills are very essential to health facilities. It is only the results of a quick assessment [i.e. rapid appraisal methodology] which could inform management on how to improve health services. Research helps to establish baseline data and also to evaluate programmes. Both government and non-government organisations could benefit from such skills. The results from research would help to lobby and advocate for change of policy for the betterment of development.'

All students agree that the course has enabled a broader view of public health and more understanding outside their often narrow specialism. The 'holistic approach' of the course has been welcomed. Many also have specific examples of the effect of the course, for example one carried out a survey to discover which households disposed of rubbish indiscriminately, and this led the council to improve effectiveness of garbage collection. Another activity, preparing a proper budget plan, led to increased funding for the student's organisation. Several have specific examples of where their increased confidence has led them to be asked to undertake leadership roles.

An identified disadvantage of in-country training can be the potential for distraction away from the course by professional and personal demands. Students also struggled with the differing expectations of them as University students (of Leeds Met), compared with what they might expect from in-country training courses. For example, we did not offer any per diems and students were expected to provide their own materials (paper, pens etc), travelling expenses and any living expenses (except for fieldwork), all of which go against usual local practice.

Discussion

It has been argued that 'Africa, unlike other continents, faces a severe human resources crisis in the health sector' (Dovlo 2005 p1) due to direct wastage - migration to richer countries, deaths from HIV/AIDS, loss to other sectors - and indirect wastage such as underutilisation and misutilisation of skills, absenteeism and low morale, lack of professional updating. The causes and possible solutions relating to health care management have been discussed elsewhere (Dovlo 2005, Dovlo 2003, WHO 2006, Huddart and Picazo 2003), but education and training may also be part of the solution. Dovlo suggests five training strategies to stem the outflow of health professionals:

- Profiled selection of training candidates (selecting candidates using criteria such as locale rather than only using academic merit);
- Community based training styles (student-centred, problem solving approaches which are locally applicable)
- Locally relevant curricula (rather than training on conditions and technology not locally available, which has been shown to increase dissatisfaction)
- Using local language training (i.e. mother tongue rather than a European language)
- Expanding training capacity (whilst recognising that this might not 'seal the leak' and that teaching capacity also needs to be increased).

The project addresses each of these five points. Candidates were selected such that they came from across Zambia, with approximately half working in distant areas. These students have a real commitment to their rural locations and provide essential services. Motivation and morale are key factors in wastage, and those remote from capital cities can be overlooked. The course enables workers in that position to meet with peers and also provides access to resources not otherwise available.

The course was tailor-made for Zambia, allowing the use of pertinent materials, case studies etc. In contrast to students studying overseas, field trips enable students to increase understanding of local conditions and they are able to apply learning to their communities immediately. According to one student, 'field work spiced up the already excellent facilitation by the lecturers'. Fieldwork has been a real revelation for those students brought up in urban areas (Zambia is unusual in the proportion of its population which is urban; many had not travelled to rural communities ever before). Naidu comments that 'learning and cognition are most potent when situated within a meaningful context, and within the culture and community within which learners live.' (Naidu 2006 p1), which resonates with the student comments above. When asked which aspects of the course are most practical in relation to work, students mentioned 'carrying out community needs assessment', 'writing a health promotion report on health setting of my choice' and some simply said 'All modules have been most practical in relation to my work'.

Whilst the medium of instruction is English, students can discuss issues in their own languages, and also discuss how concepts can be translated for local applicability. Finally, the course has expanded training capacity. In a situation such as in Zambia, the loss of even one or two key professionals could mean the closure of a unit or a total lack of senior staff (e.g. there is no qualified psychiatrist at Chainama Hospital, the main mental health facility in the country. The subsequent effect on morale of the rest of the staff has been tremendous.) There needs to be a critical mass of trained staff in order to 'carry' a service, to account for natural wastage and to provide an appropriate amount of energy to innovate.

Facilitating the course in Zambia has been a hugely gratifying experience for Leeds Met staff. When students make such comments as: 'I have been a changed person in terms of knowledge, skills and attitudes since taking up this course', it can make being in the teaching profession worthwhile. The depth of appreciation of opportunities for learning have been extraordinary to witness. Possibly the real test of successful collaboration however, is that all partners learn valuable lessons from involvement in their 'learning community' or 'community of practice' (Alluri & Balasubramanian 2006). We have taken various and sometimes unexpected lessons back to the UK. The experience in Zambia has affected our course developments at Leeds Met, made us think more imaginatively about open learning and how we can incorporate more web based teaching for UK based students. It has provided valuable real life case study material, and profound experiences particularly for those staff not experienced in developing countries. Opportunities have been provided for staff outwith the Health Promotion team to visit Chainama drawing on the existing partnership and ease of practical considerations. For example, the head of the Mental Health Group at Leeds Met undertook a two week study tour during a scheduled teaching module, making connections with local user groups and health professionals. There is now a collaboration developing between Chainama Hospital and one of the mental health trusts in Leeds. This has added to the boost in morale to a health sector (psychiatry) which is sorely neglected.

Conclusions

The Leeds Met – Chainama partnership has developed over time into a healthy North-South relationship which has tried to avoid being based on the exploitation and patronage which can characterise relations between the UK and other Commonwealth countries. The project, to bring additional M level education for the public health workforce to Zambia, has made a strong contribution to capacity building and is part of the robust attempt to tackle the health care crisis in Africa.

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