Lifelong Learning and Widening Participation in HE in Developing Countries – The Challenge for e-Learning

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Introduction

Ever since the publication by UNESCO of Faure's 'Learning to be – the world of today and tomorrow' (1972), in which lifelong learning was proposed as a 'master concept', nations both within and beyond Europe have been striving to promote the concept, with varying degrees of success (Smith, 2002). In 2001 the concept again gained prominence with the European Commission's declaration: 'Making a European area of lifelong learning a reality'. With e-learning and the move to digitise knowledge becoming ever more prevalent, so at last the prospect of lifelong learning and widening participation can become a reality.

However, whilst these days it is the norm in the Northern and industrialised nations of the world for households to have computers and virtually unlimited access to the internet, it is a quite different story in the developing countries of the world. With poor infrastructure, connectivity and bandwidth problems, many countries are finding it difficult to prosper in this new e-learning age. Yet it is precisely such countries which stand to benefit most in terms of wider accessibility to knowledge. If this 'digital divide' is not to become insurmountable, strategies need to be put in place to maximise the available technology for widening participation.

> As UNESCO (2005) state *'Everyone should have the necessary skills to benefit fully from the information society.'*

With education being a central strand in the international community's drive to achieve the Millennium Development Goals (MDGs), donor community projects can be seen as a means to bridge the digital divide. In the UK for example, a range of initiatives have recently been introduced, largely funded through the Department for International Development (DFID), to address issues related to the MDGs. The link between such initiatives; education and the MDGs, will be discussed later, but essentially these initiatives involve establishing educational partnerships between UK educational institutions and educational institutions in developing countries to develop innovative strategies that seek to address the MDGs. As UNESCO (2005) again state: *' ICTs can contribute to achieving universal education worldwide, through delivery of education and training of teachers, and offering improved conditions for lifelong learning…'* With organisations such as the 'African Virtual University' ; the 'Global Development Learning Network'; and 'Open Learning Systems Education Trust', for example, having recently been established, principally serving African nations, it is clear that technology is now becoming even more synonymous with education. But education is not *just* about technology, and as far as lifelong learning is concerned, there must be another dimension. In order for learners or indeed knowledge itself to 'make a difference', particularly in developing countries, learners need to be part of a wider professional group, either in the same workplace or in related organisations. The technology can act as an enabler for groups of working professionals to gain, exchange and develop knowledge not only for personal development but for the greater good of the organisation, community and region. However the role that technology plays must be seen as part of a wider learning and experiential strategy.

The University of Bolton (UoB) has several years experience of delivering 'traditional' programmes off-campus in developing countries. However it now has new programmes scheduled for delivery, under the initiatives described above, that will significantly increase the use of e-methods for programme delivery. Under one such initiative, our intention is to create cadres of 'learning professionals' in the workplace who can, by their proximity and roles, act as change agents within their respective institutions. Although the learners will be work-based and use on-line tools for some programme delivery, cadres from different organisations will come together for a series of residential sessions in which knowledge and experiences will be shared through the medium of a range of modular programme inputs. This paper seeks to explore some of the practical issues that are likely to be faced

when incorporating a blended learning / e-learning approach into a Masters distance programme. By reflecting on past experience the authors will also suggest ways in which an optimum learning outcome can be achieved using a combination of these approaches in a developing country.

Background

As one of the pioneering four original specialist technical and vocational teacher training colleges in the UK, the Education Department (now Arts, Media and Education Department – AMED) has a long history of working on educational development projects in the developing world. Although much of this work was channelled through the British Council or from donor community agencies directly, overseas governments also frequently contacted Bolton directly (and continue to do so). It was through this latter arrangement that Bolton first became involved in delivering a Bachelors Degree in Technical and Vocational Education, B.Ed. (TVE) off campus, in Zambia.

In 1998, as part of what was then Zambia's Department of Technical Education and Vocational Training's (DTEVT) human resources capacity building initiative at higher levels, under the Ministry of Science, Technology and Vocational Training (MSTVT), donor funding was secured to provide degree level training for key teachers and managers within the technical education and vocational education and training (TEVET) system. However, the lack of degree level courses designed for TEVET personnel at both of Zambia's universities prevented progress. This situation has disadvantaged TEVET staff and for years has limited their professional development. To address this, a pilot project involving a British HE Institution delivering a degree programme, in-country and in-service (part-time) was proposed by senior DTEVT staff. Uniquely, it was funded by the Finnish government through its development arm FINNIDA (Finnish International Development Agency), who were active in the region at the time (Smith, 2006).

The contract to deliver the degree programme was awarded to Bolton after a selective tendering process. Essentially, the programme was the same as the one offered in Bolton, the only key differences being the addition of an optional module on competency based training at the request of Bolton's in-country partners, which at that time was the DTEVT. Apart from the fact that it was off-campus, the delivery was more or less traditional in the sense that it was face-to-face. The only concession at that time to ICT was a module that incorporated basic IT skills.

The Zambia – Bolton B.Ed. and the rise in prominence of ICTs

Around the turn of the millennium, the basic IT skills module was dropped on the UK programme. This was largely due to the fact that with increased access and use of computers, most course members were already computer literate. However, in response to our Zambian clients, the IT skills module was retained for the B.Ed. in Zambia. Apart from basic word processing skills, essential for assignment work, course members in Zambia were also required to master use of e-mail and the internet. Several years later and 3 cohorts down the line, surprisingly, the only real developments on the programme in terms of ICT applications have been the introduction of a module concentrating on 'Technology change in education' in which the possibilities of ICT are explored in more detail. Also, the use of e-mail communication and the internet has become an increasingly important tool for research, submission of assignment drafts and general communication. However things are now about to change.

It is almost 2 years since the last cohort of the B.Ed. finished. In that time there have been a significant number of developments both in the UK and in Zambia that have necessitated a fresh approach to our programme. Quite apart from developments in ICT applications, as far as the UoB is concerned, the catalyst for a new approach to our off-campus programmes has been the latest drive to achieve the UN's Millennium development Goals (MDG).


http://www.un.org/millenniumgoals/

The Millennium Development Goals; Education and ICT

As part of the UK government's strategy to contribute to achieving the MDGs, a range of initiatives were launched, largely in the wake of the G8 summit at Gleneagles in 2005. One specific area which the UK was keen to develop, was establishing meaningful partnerships between UK educational

institutions (mainly in HE) and equivalent institutions in developing countries. One such initiative, Developing Partnerships in Higher Education (DelPHE), provides funding to establish such partnerships.

The overall goal of DelPHE is to enable HEIs to act as catalysts for poverty reduction and sustainable development. DelPHE aims to achieve this by building and strengthening the capacity of HEIs to contribute towards the MDGs and promote science and technology related knowledge and skills.
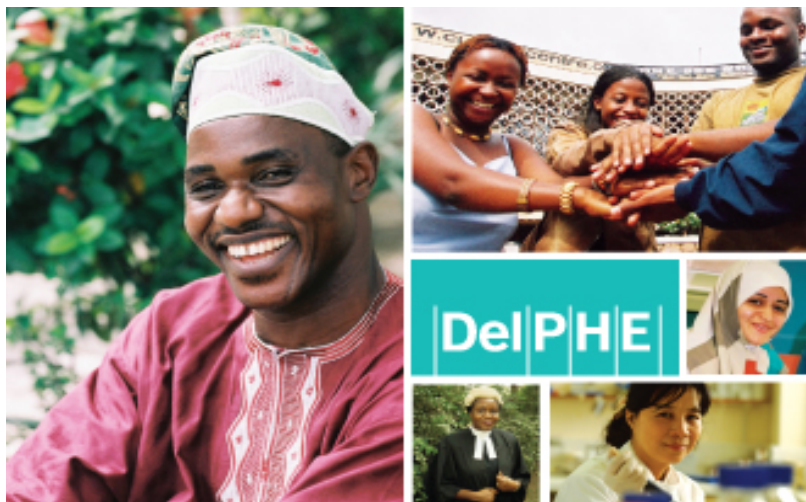
www.britishcouncil.org/learning-delphe.htm).

Few people could argue the logic that puts education in the forefront against the fight for poverty reduction, however, the rhetoric is not always matched by sound educational initiatives. There are also differences in opinion as to exactly *how* education can contribute. For example Bhola (2006 p242) argues: *" While formal education – ultimately – contributes to both the modernization and democratization of societies, its effects on poverty reduction are indirect, diffused, and distant."* This may be because education can rarely be seen to offer a quick fix. He goes on to state: *"For poverty reduction now, priority must be given to adult education (Ibid).* Whilst the DelPHE initiative targets Africa and Asia, a separate initiative, England Africa Partnerships (EAP), as the name suggests, concentrates on Africa. The main focus is on Southern African countries, and in particular South Africa.

With both of these initiatives grounded in HE, this may give scope to support Bhola's stance. However this paper is not solely concerned with the target learners, nor necessarily with the projects themselves – it is also concerned with the project delivery mechanisms and application of the technologies used. Whilst the above initiatives have attracted a number of bids related to ICT, including various eLearning applications, they are not exclusively focused on such projects. However, yet another initiative, and central to this paper, is very much focused on such technology. Towards the end of 2006, The Commonwealth Scholarships Commission (CSC) invited bids for funding distance learning scholarships, at Masters level, in developing countries. It had always been the UoB's intention to offer a Masters programme in Zambia, but more or less based on our B.Ed. model. The question was whether such a programme could be classed as a 'distance' programme to qualify? In any event, as Daniel, (in Harry, 2000 p292) states: *"there is a conceptual fuzziness that is endemic in open and distance learning…"* In the interests of programme development and making effective use of ICTs, a 'mixed economy' model where a combination of approaches would be used was decided upon. Preliminary enquiries with the CSC indicated that a 'blended' approach would be considered under these proposals. Thus Bolton submitted a proposal which was accepted by the commission. Under the proposal the CSC are to fund up to 20 distance learning scholarships in Zambia for Bolton's M.Ed (TVE).

COMMONWEALTH SCHOLARSHIPS

The Bolton Zambian Masters Programme – Delivering Knowledge and Skills Using ICT

As indicated above, the UoB has been successfully delivering a B.Ed. programme in Zambia for some years. The enthusiasm and commitment that has existed among education officials and learners in Zambia has been impressive. However, whilst some institutions in Zambia have adequate resources, many institutions do not. Despite the support of many international organisations, a large numbers of primary, secondary and vocational schools lack even some of the most basic requirements, including textbooks. However, even in such difficult circumstances, access to and use of the latest ICTs, supported by appropriate infrastructure, can help to give learners at all levels a dramatically enhanced educational experience. Consequently, Zambian officials have invested time and effort, with the help of the donor community, to make sure that as many institutions as possible, particularly in the vocational sector, get the basic IT infrastructure to promote learning and engage in a new 'African revolutionary teaching and learning curve'.

Over recent years Bolton has witnessed how ICT has evolved in a range of Zambian educational institutions and how teachers and learners have developed their skills using the technology. When the development of a Masters programme was considered by Bolton and her Zambian partners, the issue of using ICT to promote collaboration and enhance communication and networking with teachers, peer learners and resources was one of the key areas to explore.

In drafting the first approach of a blended learning model for the Masters, AMED mapped a number of things before deciding on its blended strategy, they included:

- the potential ICT resources available for both tutors and learners
- the available infrastructure including technical support
- the estimated level of IT skills of both tutors and learners
- the efficiency and effectiveness (value added) of using ICT in each of the selected modules
- the additional e-resources available for the programme
- the possibility of embedding ICT within the masters program.

The outcome was a strategic delivery model that embraces a combination of ICT uses within the program by blended learning. There are 6 modules plus a dissertation on the programme. Each module consists of 45 'teaching' hours, and 200 'notional or learning' hours (learners spending time

reading, researching, preparing reports, etc). It was identified that 1 out of the 6 modules, due to its specific focus on ICT and related aims, could potentially be delivered by a fully online approach using a Virtual Learning Platform (VLP) such as WebCT, with interactive content, intensive use of the discussion board and e-resources. The other 5 modules would have a minimum 33% (of the 45 'teaching' hours) of delivery through ICT using the VLP and its facilities, including the Internet and Interactive library resources available for all UoB students. This leaves 66% of these 5 modules to be delivered in a more 'traditional' face-to-face classroom and workshop mode in a residential, in-country setting. The remaining 200 notional hours for each module will also have a strong e-supported focus as described above

The main aim of using a blended learning approach in the new Zambia Masters programme is not only to promote the use of the UoB's e-resources and ICT tools, available to all Bolton students, but to encourage collaboration and develop an efficient community of learners that will be able to support each other face-to-face or remotely using the technology available (the use of in-country mobile phone - m-technology – will also be considered in the near future due to the easy availability of this communication channel in Zambia). But as pointed out earlier, although technology can be a great enabler, it is but one dimension. The AMED at Bolton has other reasons for going down the blended route, and it is not necessarily due to the available technology.

Issues and Challenges

For anyone attending the 1st International Conference on ICT for Development, Education and Training at the UNCC in Addis Ababa in 2006, ('eLearning Africa'), they could be forgiven for thinking that the continent is fully 'interconnected and enabled'. Indeed earlier in this paper the authors refer to some recently established organizations which provide on-line educational services on the continent. Whilst there is undoubtedly a growing capability in this respect, there are still areas where access is limited and a combination of poor infrastructure; the vagaries of climatic conditions; bandwidth restrictions; and even theft of cables are the reality for many potential learners (Smith, 2006). As far as the Zambian M.Ed. is concerned, for the residential delivery the UoB's in-country partners have switched the venue to a more central location in the capital Lusaka where such problems will be fewer. Applicants must also have access to internet in the workplace and / or at home. In this respect, and after carrying out an institutional appraisal of the delivery venue, we anticipate few problems during residential periods. Moreover, with the intention for course members to be drawn from a limited number of institutions, in the first place, small groups of professionals in the same workplace will be able to support each other outside of the residential periods.

One particular challenge lies in the use of asynchronous on-line communication. From experience, any form of e-communication with Zambian colleagues does not have the immediacy of response that one normally experiences with colleagues in, for example. some European countries. Use of e-mail in some African countries appears to be seen as a rather impersonal form of communication. Thus there is the potential for this cultural construct to transfer to some degree in on-line activities. At this stage this is only speculation but something that will be monitored. In a similar way, the cultural importance attached to feelings of openness and trust and friendship, often displayed in a very tactile way, can not be replicated through the medium of a VLP. This is also something that could potentially compromise effective on-line exchange. Although these are real challenges, the 'Zambia – Bolton' model of delivery is capable of addressing such issues due to the blended nature of the programme.

AMED's decision to use a blended or 'mixed economy' model rather than a pure distance model was to retain the very qualities for which previous in-country programmes had been applauded for (through external examiner reports; course member evaluations etc.) The level of face-to-face interaction not only during timetabled learning sessions but outside of this, in a social setting, created a level of trust, understanding and exchange that frankly, no amount of ICT could replace. Further reason for retaining a more 'traditional' residential component as part of the 'blend' is the strong group bonding that takes place. This in turn led to increased commitment and motivation on the part of course members on the programme, and is something that AMED does not wish to compromise on future programmes such as the M.Ed. Such a value-added dimension cannot be underestimated in terms of its importance to the overall success of the programme (Smith, 2006).

So in conclusion, whilst valuing and retaining the very real and proven benefits associated with some of the more 'traditional' teaching / learning encounters, particularly given the context and culture in which delivery is to take place, AMED is now committed to and is about to embark on a new and potentially exciting path, illuminated by the computer screen…Although in comparison to programmes offered by other institutions, even other Departments at the UoB, these are small steps, they are significant and are expected to lead to further increases in ICT applications on future off-campus programmes.

Discussion points

- **How can ICT ever make a *real* difference to those communities in the developing world where the most important issue is where their next meal is coming from?**

- **Do you think the global community is going to achieve its MDG targets by 2015 and what role can ICT play?**
- **Is lifelong learning and widening participation in developing countries an essentially humanitarian endeavour or is it largely an industry / commercial construct?**
- **Complete on-line delivery or blended delivery: what are the cost-benefit issues?**
- **Can e-learning cross both geographical and cultural boundaries?**
- **How important is traditional face-to-face, 'close proximity' teaching/learning in a developing world context?**
- **What can we expect from the next generation of ICTs and how can they help developing countries?**
- **Are we overplaying the importance of the traditional and 'real' personal tutor/student interaction?**
- **Have the weaknesses of distance education using ICTs been underplayed?**
- **What is the virtual equivalent of going out for a drink with your students at the end of the class/semester/programme.....?**

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