

Building African higher education capacity through openness



OER in Developing Countries: Towards Meaningful Partnership

OpenLearning 2009 - Key Note by Catherine Ngugi

The focus of this address is that OER presents an opportunity to overhaul how we think about and practice higher education - and how education as a collaborative endeavour - a cornerstone of the OER movement - is far more likely to result in success than going it alone.

[Show Cover Slide]

Salutation

Good morning everybody. It's a pleasure to be here at the University of Nottingham, which is such a lovely venue for this *Open Learning* Conference. I must confess though, that the change in weather from Nairobi to here has been somewhat traumatic — but the sheer beauty of the Nottingham landscape just about makes up for it! I thank the Open Learning conference organisers for inviting me here and for the privilege of being asked to give this Key Note address to such an experienced gathering of educationalists.

This morning, I would like to speak with you about Open Educational Resources in the developing countries in which we, as OER Africa, work. Whilst the concept of OER may indeed mean different things to different people, it is clearly underpinned by the notion of collaboration, or partnering, or inclusivity — a concept of providing an open welcome to others and simultaneously, of opening oneself to others. Given that, I felt it would be important, then, to also speak a little about how our understanding of these sorts of terms tempers our working relationships and indeed our expectations of what an effective OER collaboration *should* be.

Finally, although I lived and studied in the UK for a number of years, — and it is good to be back —I never had the opportunity to visit Nottingham before. So in accepting this invitation, it clearly behoved me to find out a little bit about the university which is hosting this *OpenLearning* Conference and about the partnerships and the relationships that have made what it is today.

[Show Slide 1 – Visiting Notts]

Partnerships at Nottingham

Many of you will know that Nottingham University is one of the highest ranking higher education institutions in the country and ranks amongst the top 1% of all universities in the world. This achievement clearly did not happen overnight. In the 1920s, lecturers here at Nottingham included such luminaries as Mahatma Ghandi, Albert Einstein and H. G. Wells. More recently, Nottingham has produced at least two Nobel Prize winners, firmly cementing its standing as a research-led institution.

In terms of infrastructure, the 1920s was a great time for the university, when the largesse of wealthy individuals like Sir Jesse Boot, the First Baron Trent, resulted in land and buildings for the then university college. Not even he could probably have envisaged that one day, Nottingham would have campuses as far afield as Ningbo, China and Kuala Lumpur, Malaysia — as well as plethora of campuses across Nottingham.

Since its inception as a place of adult learning over 150 years ago, Nottingham has grown to its current incarnation as a public research university with an enviable reputation for not only attracting the brightest and best of students (like my niece Sanyu Awori), but also as a great employer.

But why would I bother to speak to an audience comprised predominantly of Nottingham faculty and students about the history of their own institution?

Well, this brief and somewhat patchy history I've just given of the university is indicative of some of the points I will be exploring with regard to partnerships or working relationships.

Of Gifts and Endowments

How educational institutions or individuals within or across such institutions choose to work with one another is described in all sorts of ways. We speak of linking or Link Agreements; we spell out Memoranda of Understanding to describe what we mean by linking; we talk of partnerships and of collaborations but at the heart of all this is a desire to work with another and a need, therefore, to fully understand the implications of so doing.

[Show Slide 3 – Partnerships]

In Nottingham's past — both the city and university — are gifts of land and of lidos. On the one hand, the givers may well have been recognised for their largesse by receipt of a peerage, but they would also have had the satisfaction of seeing their hard earned money put to use for the benefit of future generations. The university and the city, on the other hand, gained space within which to grow, buildings in which to educate and be educated; recreational spaces for city folks who most certainly would not have been in a position to have access to a private swimming pool. Of this particular

relationship between benefactor and recipients, this tidily answers the question many might be too sensitive to ask — What's In It For Me? A gift or an endowment that is not only pleasing but useful to both the giver and the recipient is a mark of successful partnering.

In today's world however, we are keen for the word partnership to go beyond social responsibility and into the realms of equity, sustainability, and mutual self-interest. As I introduce to you some of the OER projects ongoing in Africa, I hope you will see how critical it is for partners to have a common understanding of these terms.

Introducing OER Africa

Let me start then, by telling you a little about *OER Africa*, the initiative which I lead.

[show slide4 - Introducing OER Africa]

OER Africa was launched in February 2008, with seed funding from the Hewlett Foundation as an initiative of the South African Institute for Distance (SAIDE),

OER Africa provides SAIDE with a framework under which we are able to deploy African experts and expertise, to harness the concept of OER to the benefit of education systems on the continent and around the world.

We are -

- Headquartered in Nairobi, Kenya
- Current funding comes from the Wil & Flo Hewlett Foundation, the Bill and Melinda Gates Foundation and from various other partnerships and projects across Africa.

There are compelling reasons for our desire to bring to African HEIs, the concept and practice of Open Educational Resources. These reasons are numerous and varied and I will try to put them within some sort of context.

[show slide 5 – African Sovereignty]

Open, Distance and Quality Education - the new movements

Since the 1960s, a period in which many African countries – and therefore many African universities – gained independence from colonial rule, social and developmental changes across the world, have had a dramatic impact on educational practice globally. Within the higher education realm in which *OER Africa* primarily operates, this is very apparent.

In Africa, as in any developing region of the world faced with the need to educate a greater cadre of professionals, mid-level managers, teachers, doctors, nurses, technicians and so forth, **distance education**, once perceived by some as a poor relative to face to face education, has taken on new meanings. Print-based Distance Education coupled with good tutorial and assessment feedback systems remains critical in Africa. That said, in order to meet the ever growing demand for higher education, pedagogy has evolved, and technology has enabled the morphing of the paper-based correspondence course into synchronousⁱⁱ and asynchronousⁱⁱⁱ online distance education.

Despite its many successes, educators and potential students alike, quite properly in some cases, maintain mixed feelings about the **quality** of education possible at a distance. The concept, however and indeed the demand for **access** to life-long learning is now a widely accepted precept.

Regarding access to education, then, the notion of *opening* education has spurred not only the universal growth of open and distance education institutions, but also, that of "movements" — (for lack of an alternative term) — such as the open courseware and open educational resources movements, which are central to today's gathering.

The OER Concept

Slide 6 – The OER Concept

At *OER Africa*, we define Open Educational Resources primarily as educational resources that can be used without the need to pay royalties or licence fees.

The need to **pay** for educational resources then brings us to the choices faced by educational institutions that grapple with extremely limited funding and infrastructure amidst the competing priorities of identifying, retaining and remunerating aptly skilled faculty, providing adequate student support, funding research and innovation, fulfilling the social responsibility expected of public institutions — which many African universities are — and the possible impact therefore, of open educational resources upon this paradigm.

Slide 7 – Problem / Theory of Action

As is the case elsewhere, HEIs in Africa are expected to produce Research, Publications and provide Service. Teaching is implicit, but rarely foregrounded in terms of policy.

Whilst a university is expected to offer a broad domain of expertise, the reality is that most HEI's specialise in / are known for particular strengths.

Whereas faculty with the skills to teach in a broad spectrum of subjects may exist, the time they have to re-visit and modify curriculum on a regular and systematic basis is constrained.

Slide 8- Problem / Theory of Action (2)

In the developing world, publications produced by the universities (via journals, books, or digital formats), are an infrequent occurrence, partly because of lack of finances — and partly because research grants are few and fiercely competitive.

The cost of contemporary, copy-righted texts — are prohibitive and so the library stacks are mainly filled with outdated texts.

Slide 9- Problem / Theory of Action (3)

As elsewhere in the world, subject matter experts are not necessarily great teachers. Opportunities for peer interaction and observation via lecture exchange programs are few — and in a competition, seniority will usually win over genuine passion.

Technology too, is often a challenge: it is not always the case that faculty have access to a personal lap top — although this is increasingly common. We have often found that Faculty are not supported in making the best use of what IT is available. This could be related to the absence of appropriate institutional policies or because those with the IT skills needed to enable use of new technologies are frequently poached from Higher Education Institutions by industry (such as the mobile phone companies).

Insufficient and costly bandwidth makes a mockery of the notion of browsing the internet for content. Access is limited not only by cost and erratic power supplies, but also, in some cases, location, - whereby hotspots — and often cable-based Internet access, may be situated nowhere near faculty offices, rendering moot the notion of using the internet to participate in interinstitutional collaborations or indeed to access content created elsewhere.

The impact of all of this is an increasingly frustrated faculty and student body. When we speak to faculty about the possibilities of OER, they remind us that chronic under-funding means:

- That some are lecturing 200 students in classrooms designed for 50; one professor ironically described this phenomenon as a very special example of distance education.
- They remind us that many barely have enough time in the day (week, month or year), to write up their class notes; deliver their lectures; write exams; create marking schemes; mark exams; conduct any meaningful research; follow through to get that research published; either complete their own PhDs or have an entire conversation with their spouse.
- And as we listen, we see that faculty are growing older and there is scant evidence of clear succession policies being in place.

Yet even as we accept that faculty in Africa are thinly stretched, we must also recognise that many of our very best intellectuals are teaching outside of the continent — and that the very best of those who remain — or return — work extremely hard to fill that void.

A conference concerned with opening learning, is clearly supportive of the OER Africa vision for higher education in Africa, one comprised of

[Slide 10- A Vision for Higher Education in Africa]

Vibrant, sustainable African higher education institutions that play a critical role in building and sustaining African societies and economies, by producing the continent's future intellectual leaders through free and open development and sharing of common intellectual capital.

In other words, a vision in which Africa plays an active role as a producer of knowledge within this global economy.

- If Africa's HEI's are neither vibrant, nor sustainable, we may continue
 to be faced with the sort of leadership that exacerbates our economic
 and societal challenges.
- There is so much we can learn from each other, that open development and sharing between our HEI's of all our intellectual capital can only be to the benefit of the entire world.
- This is a vision then, of African higher education institutions which
 fulfil their purpose to develop the future intellectual leadership of the
 continent a leadership both willing and able to direct the much
 needed social and political checks and balances missing from so many
 of our societies.

What then is the role - if any - of open educational resources either in bridging or amplifying the chasm between those who benefit from this new knowledge economy and those whose educational fate may have been signified by its arrival?

Is it to provide content which may or may not be fit for purpose?

Slide 11– Why do we exist?

Or might the role of Open Educational Resources be that old adage about teaching a man to fish?

Well, at OER Africa, we believe that...

Slide 12 – Key Assumptions

OER provide a bridge to improving and enriching the landscape of higher education.

They present us with the potential to access affordable, high quality resources and adapt them to specific needs and specific contexts.

As **educators** create and adapt OER, they have the opportunity to re-examine the ways in which they teach, to rethink they ways in which their students learn — to consider and to re-consider the art or science of pedagogy.

As educators **share** their resources with others, they open the door to have others share with them: collaborative development of educational materials results in a far richer product than a single mind, however beautifully trained, might have created on its own.

As **students** gain access to OER, whatever their format – paper or electronic – they are empowered to study on their own, to seek out alternative ways of learning, to play a part in how and what they learn.

At the same time, just because content exists or is accessible, does not mean that it is relevant, or even that it is factually correct! Meaningful participation in this OER movement demands of educators as of students, rigorous standards of discernment if we are to sort the wheat from the chaff

Slide 13 – Key Assumptions (con'td)

As institutions are faced with educators and students who are thinking about education in a different way than in the past, they are obliged to review their policies — policies pertaining to remuneration and promotion; policies pertaining to quality and to licensing; policies pertaining to the frequency with which an institution should review its curriculum offering, *if* it is to remain true to its mandate.

In engaging with the concept and the practice of OER, institutions then come to realise that *their* potential to revolutionise teaching and learning, is worthy of considerable attention.

This then is [**Show Slide 14– OER in Action**] OER in Action

Our approach to OER collaboration is:

[Show Slide 15 – Our Approach]

As far as possible to avoid replication of existing efforts and try wherever possible to ensure that we engage with networks that have identified a common problem or goal and may require different kinds of support or expertise in reaching that end.

[Show Slide 16— Working with Partners]

Where that end may be to bridge gaps identified in existing curriculum, the choice may be to import content from elsewhere – with all the inherent challenges we have already discussed; to adapt existing content which whilst time-consuming may generate useful pedagogical skills; or to create new content from scratch; or to do a mixture of all three!

A great example of this practical approach is the Health OER network that began as a partnership between the University of Ghana and the University of Michigan and now comprises:

Slide 17 – Health OER Network

- ➤ Partnership between KNUST, UG, UCW, UCT, UM & OER Africa
- Objective was to bridge identified gaps and to digitise existing content so that it could be shared with others
- ➤ Materials produced to date range from videos to PDFs (boils and knives)
- ➤ Results of collaboration include cross institutional transfer of knowledge, skills and expertise

For myself, I learned just how much medical practitioners love knives and boils, to talk about them, to video them and to engage one in discussion about their colouring, size and other distinctive merits!

Impact on staff – they were inspired!; they created; they were proud of their work; they showed off that it had been "copied" by their students; they were energised to do more;

(the before & after of it all)

- Impact on students:

 they had something to look at before and after class; they came to class prepared to ask questions and not needing to elbow each other aside for a better view of whatever blood and gore was at hand that day;
- Impact on institution unexpected collaborations and harnessing of latent institutional talent; e.g. College of Health Sciences + Faculty of Fine Arts learning together about creative commons licensing!
 - e.g. Michigan Univ students having first-hand access to videos and lectures about Buruli ulcers

The Health OER Network is a good example then of a successful collaboration in which "...teams that work collaboratively ...obtain greater resources, recognition and reward when facing competition for finite resources." iv

[Show Slide 18- growing an African Health Network]

Over the next two years, we are planning to grow Health OER into a broader and more vibrant African Health OER Network, designed to strengthen the intellectual and policy infrastructure within and between African institutions. Amongst the things we aim to achieve in this next phase are to:

- 1. Ensure that the OER infrastructure model, successfully deployed during the design phase, maintains momentum with current participants and begins growing the Network.
- 2. Aggregate a critical mass of African-produced health open educational resources available to the all through institutional and regional (oerafrica.org) repositories.

[Show Slide 19- Rwanda]

["We in Rwanda have not the luxury to wait until our pain is over to make a nation." Bishop John Rucyahana, Rwanda. http://elliscose.com/articles/the-lessons-of-rwanda/]

At a much newer stage of existence is the Rwanda distance learning pilot project. Something you may not know about Rwanda is that the pace of work there is extremely brisk! I discovered this after a serendipitous meeting with the Rector of the National University of Rwanda, in August this year.

Anecdote about visit to Rwanda:

At a conference in Accra this past August, I bumped into Prof. Silas Lwakabamba, Rector of NUR...

- Honoured his request to visit Rwanda ASAP and help them fulfil their President's desire to see distance education accessible to all who need it;
- Did not know quite what to expect but found;
 - Country emerging from crisis
 - ➤ Need to overcome both language and technological challenges
 - ➤ Need to provide education at the point where people are not merely in Butare where NUR is located or in the capital where KIST is located

Also found that the energy and the speed with which things unfold – and are expected to unfold – left a Nairobi and Jo'burg native slightly out of breath!

[Show Slide 20 - Rusizi Pilot]

The university is seeking to deliver a new degree effectively – for the students – and efficiently – for them, in terms of cost – to the distant Rusizi campus. Whilst distance is always relative, through this pilot, the university hopes to find a model that will, amongst other things:

- increase their presence in remote areas and thereby make them a truly National University;
- widen their scope for tailored and targeted outreach/professional development/updating courses;
- provide more useful evening/part-time programmes than they currently offer;
- improve the quality of their masters programmes whilst recognising that the product range they can deliver face to face is always necessarily limited and variable:
- Finally, anything produced for these new programs would inevitably also provide materials/resources for use as part of the main campus undergraduate day programmes.

In the course of tomorrow, my colleague Neil Butcher will be talking in greater detail to those of you who are interested in learning more about how you might contribute to this new initiative in Rwanda as well as about another new potentially OER driven project.

[Show slide 21 – KU EMBA]

This is the Executive MBA program which is being developed as we speak at the Kenyatta University in Kenya. The Kenyatta University School of Business proposes to respond to market demand whilst simultaneously taking advantage of the recent launch of the Under-sea Fibre Optic Cable to combine traditional face-to-face and e-learning modes of content delivery of a one year Executive Master's Programme in Business Administration (EMBA).

This too is one of those instances where the right Open Educational Resources might make all the difference to the university's ability to deliver a quality and cost-effective product within a relatively short time-span.

[Show slide 22 - In Summary]

Some conclusions

Collaborative energy is a wonderful thing and in creating, using and adapting OER, we need not always be high-tech. What perhaps is key is a shared understanding that if an OER collaboration is to be effective, however creative its participants may be, however innovative the idea or ideal that brought them together, however practical the objective the partnership seeks to meet, for the collaboration to be effective, it has been noted by Moran and Mugridge (1993) v that the following must be in place:

- Willingness to change: where all partners are prepared "... to accommodate different institutional cultures and practises by adapting one's own practice to harmonise with partners... [This] requires especial sensitivity to different assumptions about curriculum and pedagogy";
- 2) *Building of sustained relationships*: this highlights the need for trust and shared values that are ... "embedded in the inter-institutional relationships as well as in the interpersonal ones";

3) *Synergy:* where "...all partners perceive the mutuality of benefits involved..." even when these may differ for each institution or individual – and accordingly, put in place the necessary practices and resources to manage change effectively;

It has also been noted that "Successful partnership takes time to achieve, and can be difficult." $^{\rm vi}$

A case in point is our host institution: about 150 years ago, Nottingham University was a small college of adult education existing in one cramped building. Through gifts and endowments, through collaborative research projects, through sheer determination in some instances, it forms today "...part of the Russell Groupvii, a collaboration of twenty UK universities that together receive two-thirds of the research grant and contract funding in the United Kingdom."

This is a relationship in which each member works with the others to the mutual benefit of all. And by all, I mean the institutions concerned as well as the faculty and students associated with so prestigious a network.

In conclusion then, none of us would be here if we did not know just how effective collaborative energy can be in addressing the wonderfully varied challenges of delivering cost-effective, timely and relevant teaching and learning experience. Yet OER debates continue to range around "how to cross the chasm from early adopter to early majority adoption." We might quibble with the question — suggest that it is a morass rather than a chasm or even that a movement can never transform higher education — neither in Europe nor in Africa.

When it comes to OER partnerships:

There is a need for sensitisation about what OER is and what it is not –
and for dispelling some myths – which may appear self-evident but are
not always so:

Slide 23 – Dispelling Some Myths

There is a need:

Slide 24 – OER Africa Activities

To work systematically with partners to enhance institutional capacity in higher education to design, develop, and deliver quality higher education programs and materials;

There is a need:

To advocate the merits of collaboratively creating and sharing intellectual capital in higher education as a mechanism to improve quality and enhance long-term cost-effectiveness;

There is a need:

To help higher education institutions establish policy frameworks that support openness in the development, adaptation, and use of educational resources, and convert this into sustainable business models:

In short, we at OER Africa see Open Educational Resources not as a panacea, but as one possible incremental step to improving the quality of higher education in Africa – a bridge to improving and enriching the landscape of higher education.

Thank you.

End Notes

i See: http://en.wikipedia.org/wiki/University_of_Nottingham#History (accessed 13th November, 2009)

- ii Synchronous learning: Learning where people are online at the same time and interaction occurs without a time delay (real-time) and which requires them to attend at specific times.
- iii **Asynchronous Learning:** learning where people are *not* online at the same time and interaction may occur with a time delay, allowing people to participate on their schedules. Examples are email, discussion groups, and self-paced courses delivered via Internet or CD-ROM.
- iv Source: http://en.wikipedia.org/wiki/Collaboration
- ^v Higher Education Through Open and Distance learning, Editor Keith Harry, (Routledge, 2000) Ch. 5, Flexible learning and university change, Louise Moran and Brittmarie Myringer. (p.68)
- vi For more on Smarter Partnerships, see: http://www.lgpartnerships.com/diggingdeeper/leadership.asp
- vii For more on the Russell Group, see http://www.russellgroup.ac.uk/