# Can OER Transform Education? A Developing World Perspective



Video Presentation

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By Professor Asha Kanwar, Commonwealth of Learning

# Transcript

Good Day to all of you. It is an honour to be invited to this conference on Open Education Resources. I am very grateful to the Ministry of Education, Science and Culture, and the University of Iceland, School of Education, for giving me this opportunity to bring to you some perspectives on how Open Education Resources (OER) can transform education by increasing access, improving quality and cutting the costs of education, particularly in the developing world.

#### SLIDE 1

My topic today is 'Can OER transform education? a developing world perspective' But first, let me set the context by telling you the story of a visit to a small West African country. Ministry colleagues announced that they had improved the quality of education in the country. When I asked what was the evidence, they were very clear. Until two years ago they could provide only one text book for six students. Now they were able to give one textbook per student. This example helps illustrate the dire needs of many developing countries.

OER penetration in the developing world has been slower than in the industrialized countries. Yet there are emergent examples which give an indication of how OER are being used in low-resource contexts.

#### SLIDE 2

First, the issue of availability. The students of Bunda College of Agriculture, Malawi, had no text book on Communications Skills and were entirely dependent on lecturers. Now they have a textbook, 75 % of which is based on OER harvested from the web and supplemented with locally relevant activities, examples and assignments. A lecturer at the University of Jos, Nigeria discovered this textbook and has adopted it, a nice instance of south-south collaboration.

#### SLIDE 3

Second the question of quality. Many of you may have heard of the Indian Institutes of Technology or IITs. These premier institutes, in partnership with the government, have made their engineering and technology courses available as OER. These are being used in over 500 institutions, most of them in remote locations with very limited resources. Both teachers and students are using the free IIT resources to improve the quality of their teaching and learning.

#### SLIDE 4

Third, the issue of costs. The Teacher Education in Sub Saharan Africa, a partnership between the Open University UK and 18 institutions in 12 African countries has developed OER for teacher training in four languages: English, Kiswahili, Arabic and French. These were used by 320,000 teachers last year alone, and the free materials as well as the sheer numbers of users can radically reduce the costs of providing quality teacher training.

#### SLIDE 5

My oganisation the Commonwealth of Learning has initiated a six-country partnership to develop 20 sets of course materials in print and online formats, based on the secondary curricula of Botswana, Lesotho, Namibia, Seychelles, Trinidad & Tobago and Zambia with support from the William and Flora Hewlett Foundation. This has not only established communities of practice but has helped teachers and institutions save time and money by collaborating on the content development.

## SLIDE 6

The Virtual University for Small States of the Commonwealth (VUSSC) is a consortium of 32 small states which have come together to develop capacity in online course development. Several need-based courses on "Disaster Management", "Tourism" 'Entrepreneurship' 'Fisheries' etc have been completed and are available on COL's website. Teachers who had never developed online courses are now training other colleagues.

#### SLIDE 7

Access can be opened up to new constituencies through translations. China Open Resources for Education (CORE) has translated MIT OCW materials into Chinese. COL's Instructional Design template, an OER, has been translated and adapted by the Open University of China. Materials from COL's website have been translated into Ukrainian.

## SLIDE 8

We have usually seen a one-way flow of knowledge from the developed to the developing world. OER can provide for a global exchange of knowledge. A lecturer at the University of Ghana, Medical College developed a simple procedure for a Caesarian section and video-taped it. It is now being used in the Netherlands. Similarly a lecturer at the Kwame Nkrumah University of Science and Technology, Ghana, who also happens to be a world authority on the buruli ulcer has developed an OER module which is being used by the World Health Organisation and the University of Michigan.

While we can see the benefits emerge, several challenges remain.

#### SLIDE 9

This Slide gives you an indication of the digital divide across the world. While in North America, there are over 80 computer and internet users per 100 persons, in Africa, the number of computer and internet users is less than 10 per 100 persons. So if we look at OER as 'technology' we certainly start with a very major disadvantage. Can we shift the discussion to the social domain? The present debates in OER are *too focused on technology* and there is rarely any discussion on issues such as stakeholder engagement and the politics of power.

#### SLIDE 10

As Manuel Castells (2009:50) put it:

....there is a fundamental form of exercising power that is common to all networks; exclusion from the network....However, because the key, strategic networks are global, there is one form of exclusion—thus, of power—that is pervasive...: to include everything valuable in the global while excluding the devalued local

Castells (2009) explains that the *network-making power* operates on the basis of two mechanisms: i) the ability to constitute, program and reprogram networks and ii) the ability to connect and ensure cooperation. Many important stakeholders of education in Africa, South Asia and Latin America may be far beyond this network-making power due to regional, gender, class and ethnic factors. They are therefore excluded from these networks. Is it perhaps because of these inequalities that institutions and individuals from the resource-poor communities have had a limited role in the OER movement?

#### SLIDE 11

What is the situation at the institutional level? Many educational institutions have traditional governance structures and teacher-centred pedagogic models. The OER initiative requires a learner-centred and decentralised approach. There is then a basic contradiction between the centralised institutional and decentralised OER approaches. Will OER thrive in closed educational settings? What would institutions need to do to benefit from this emergent phenomenon?

#### SLIDE 12

A recent survey of how OER are being used in 13 Asian countries, sum up the key challenges that different constituencies face.

**Teachers** felt they did not have either the time or the capacity to locate, adapt, and re-purpose OER material relevant to their work.

**Learners** felt that OER should be fully open, half-open didnt help and materials should be accessible on alternative technologies such as mobile devices.

**Technical support personnel** said there were no standard practices in the packaging and re-use of OER.

**Management** was concerned about the challenges relating to intellectual property and copyright issues. Concerns regarding competition and revenues were also raised.

How can we address these challenges?

#### SLIDE 13

One major barrier is awareness. If you ask teachers in remote schools in India if they've heard of OER, the answer is no. How can we reach them in farflung and marginalized communities? It is these communities that need most help to improve the quality of education. Many of them have not heard of OERs. How can we make them partners in this movement?

#### SLIDE 14

In order to raise awareness, COL has developed a 'Basic Guide to OER' developed jointly with UNESCO.

This month, UNESCO and COL also launched the International Guidelines for the use of OER. These are meant for five constituencies: governments, institutions, teachers, students and quality assurance bodies. These two documents are available at our respective websites.

#### SLIDE 15

Localisation is at the heart of the OER process. A PhD thesis submitted this year examines how OER are being used in 12 Community Technology Centres in remote regions in Nepal for providing non-formal education. The study concludes that the successful adoption of OER depends on effective localization and proposes 4 principles:

First, it is important to involve the locals and cast the OER into the language of the select constituency-for example, a housewife speaks differently from a shopkeeper. Second, a community of practice is essential as it bolsters localisation. The community interacts through group conversations, or through social media and learn from each other. Third, the localization must be done in appropriate formats, which could be audio, text, video, wall newspaper etc. The fourth principle is that effective localization is proportional to the understanding of local contexts. While these principles have emerged from a non-formal educational project, how can we adapt them to the formal education sector to address the issue of effective use?

# SLIDE 16

Policy makers are concerned about the financial viability of using OER. Let me highlight three different models currently in use:

TESSA: This was initially funded by donors, but by involving the local insitutions at every stage of the process, these partners have now taken on the responsibility of committing their own financial resources to develop, duplicate and distribute the resources to their staff and students.

CONNEXIONS: Funded by donors initially, it is now a consortium of 20 for-profit and non-profit entities. For example the for-profit QOOP shares revenues from books printed using Connexions materials

NPTEL is a state funded initiative and is sustainable for that reason.

#### SLIDE 17

The general trend in the developing world is to use OER to address certain core needs.

One, there is a tremendous demand for qualifications at all levels, secondary as well as post-secondary. OER are not simply seen as a value-add to existing educational provision but also as a route to earning credentials

The only way to reach the unreached constituencies in remote and distant locations is through the use of appropriate technologies rather than computers alone.

In many developing countries such as India China Vietnam, it is primarily the state rather than philanthropic organizations which has come forward to support OER initiatives.

#### SLIDE 18

Keeping these developments in mind, my colleagues Dr Bala, Dr Abdurrahman and I attempted to redefine OER, in a paper published in the American Journal of Distance Education. We placed the emphasis on the stakeholder rather than on technology and on process rather than product.

The phenomenon of OER is an empowerment process, facilitated by technology in which various types of stakeholders are able to interact, collaborate, create and use materials and processes, that are freely available, for enhancing access, reducing costs and improving the quality of education at all levels.

#### SLIDE 19

The emphasis is on empowerment. The OER movement can help transform education by:

- 1. Involving all kinds of stakeholders to participate, collaborate, create and share;
- 2. Encouraging consumers to become the producers of knowledge;
- 3. Enabling us to harness the wealth of tacit knowledge across the globe to address the great development challenges of our time.

On that note let me thank you for your kind attention.