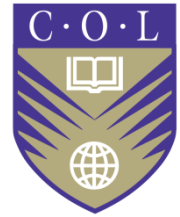


# *Three Generations of Open Education: Future Implications*

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*Inaugural Address, Institute of ODL, University of Mumbai, 24 February 2011, Three Generations of Open Education: Future Implications*

*Prepared by Prof. Asha Kanwar and Dr. Venkataraman Balaji, Commonwealth of Learning*

*Presented by Prof. Asha Kanwar*

## **Transcript**

I am delighted to be finally here at the Institute of ODL, University of Mumbai. I am grateful to the Dr Harchandan for inviting me. My special thanks go to the Hon Dr Rajan Welukar, Vice Chancellor, who has been a friend of COL since we first met him as Vice Chancellor of YCMOU. We admire his dynamism and congratulate all of you on having a leader who has the vision and creativity to transform this prestigious institution into a centre of learning fit for the twenty first century.

I represent the Commonwealth of Learning and bring to you greetings from my President Sir John Daniel and all colleagues at Vancouver and New Delhi. Our motto, 'learning for development'.

Our mission is to help Commonwealth Member States to harness the potential of distance education and technology to enhance access to learning which will contribute to development.

My topic today is 'Three Generations of Open Education: Future Implications' and I have prepared these remarks with my colleague Dr Balaji, Director IT & KM, COL. We will try to put Open Education Resources or OER in a historical context. As you know OER are educational resources that are freely available and can be used by educators and learners without having to pay license fees or royalties. I will return to what OER are later in the presentation.

I will first look at three generations of open education. I will then give you two examples of OER development that my organisation the Commonwealth of Learning supports and will finally raise some questions about the future implications of OER for the learner; for pedagogy and for higher education.

As Sir John Daniel reminds us, throughout history, education has been constrained by the iron triangle of quality, access and cost. If access is increased, there is the danger of lowering quality. If this is to be

avoided, then the costs would have to be raised. Is it possible to increase access, improve quality and cut costs, all at the same time?

Given the huge unmet demand for higher education, especially in the developing world, about 5% in sub-Saharan Africa and less than 15% in South Asia, governments are looking for alternative approaches. It is not possible to build the required number of brick and mortar institutions. Open and distance education becomes a viable option which allows us, through division of labour, specialisation, and economies of scale, to reconfigure the access-quality-cost triangle.

Forty years ago, the Open University, UK was launched to open up education to large numbers of people who would otherwise never have had the opportunity. The success of the British Open University led to a huge expansion in open universities, particularly in the developing world. Today, Asia alone has over 70 open universities and the numbers continue to grow.

The founding chancellor of the Open University of the UK, Lord Crowther's statement of openness in relation to people, places, methods and ideas forms the basis of the first generation of open education. Open education is a philosophic construct that advocates the removal of constraints and barriers to learning— Open education refers to policies and practices that allow entry to learning with no or minimum barriers with respect to age, gender, or time constraints. These policies need not be part of a distance education system, which refers to the separation of the teacher and learner. I will focus primarily on open education.

Open universities were oriented towards the massification of higher education. Many open universities do not insist on entry qualifications, allow learners to accumulate credits at their own pace and convenience and are flexible enough to allow learners to choose the courses they wish to study towards their qualification.

The principal technologies in this phase were print, radio and TV.

The second generation of open education was shaped by the emergence and use of the internet and the World Wide Web. The first electronic course was launched in 1984 and the use of web-based programmes allowed learners the choice to study on campus or at a distance.

Interactivity was a key aspect of the second generation with a higher level of personalisation through the use of ICTs. This led to more flexible and blended approaches. Many campus based institutions began to offer both face to face and distance learning programmes, thereby opening up access to newer constituencies.

The third generation of open education may be seen to commence at the turn of the century with the Open Education Resource movement which was based on the idea that knowledge was a public good and that technology could help share, use and reuse it. MIT's OpenCourseware initiative; Rice University's Connexions, the OpenLearn, of the Open University of the UK, among others initiated this movement.

More recently, many developing countries are investing in OER. Some of these initiatives are Sakshaat, the Indian Government's OER project, the China Open Resources for Education Initiative, Vietnam's Opencourseware and OER Africa.

We are referring to OER not as open access hardware or software but to content which is free and freely available. This is digital, reusable and available for all levels, not just tertiary level education.

OERs have many potential benefits. Some of these are:

1. Since course development is so resource intensive, OER help developing countries save both time and money.
2. Online collaborative OER development supports capacity building
3. The availability of high-quality OER can raise the quality of education at all levels.

The four freedoms—freedom to use, freedom to study, freedom to redistribute and freedom to modify—form the basic philosophy of the OER movement.

My own organisation, the Commonwealth of Learning has initiated several OER projects. The Virtual University for Small States of the Commonwealth (VUSSC) is one of them. It is a consortium of 32 small states of the Commonwealth which have come together to develop capacity in online course development, develop courses that are freely available and offer these courses through existing tertiary-level institutions in the participating countries. Several need-based courses on “Disaster Management”, “Tourism” ‘Entrepreneurship development’ have been completed and are available on COL’s website.

The OER for Open Schooling covers the secondary school curriculum of the 6 participating countries—course materials in 20 subjects have been developed by school teachers in both print and online format.

What makes these initiatives particularly important is that they focus not only on collaborative content development, but also on capacity building, and on creating communities of practice. It’s not simply about cutting costs but also about improving the quality and effectiveness of education.

So what implications do these developments have for learners? The ‘new learner’ was an expression that became popular in the 1980s to connote the adult learner who looked for new education, or skills for personal development, or enhanced job requirements.

More recently, Marc Prensky’s phrase ‘digital natives’ has become popular to describe the technology savvy learners.

We can foresee the emergence of a still *newer* learner that displays the features of both the ‘new learner’ of the 80’s and the ‘digital native’ of the 21<sup>st</sup> century – the ‘*ultimate learner*’ who has the mindset and motivation to learn in diverse circumstances and environments.

How can this learner become not just the consumer but also the producer of content? Can we already see a trend towards self-directed learning? What types of support will these learners require?

What do these ultimate learners want? Prensky interviewed over a 1000 American students and concluded that they did not want to be lectured to, wanted to work with peers with whom they would collaborate and compete and finally wanted education that was not just relevant but also real. What is relevant? For example if a reading is taken from a newspaper rather than an old textbook, we would consider this

relevant to the student's experience. Real means that students can see the connection between what they are learning and how they can use that learning to do something useful in the world.

Professor Bob Bernard of the Educational Technology group at Concordia University, Montreal, and his colleagues carried out a meta-analysis of hundreds of studies in which distance education students were treated in different ways. They distinguished three types of interaction: student – content; student – student; and student – teacher. They then analysed all the studies to find which type of interaction made the greatest difference to student performance when it was increased.

The results were very clear. Increasing *student – content* interaction had much the greatest effect; with *student – student* interaction coming next and *student – teacher* interaction last. This highlights the importance of content.

What implications does this have for pedagogy? In a recent paper Terry Anderson identifies the three generations of distance education pedagogy: the teacher student interaction in the first generation relied on behaviourist pedagogy; student-student interaction resulted in constructivist learning and the student-content relationship with the focus on networks and collaborative content development led to the term 'connectivism'.

Will students learn more effectively with a mix of all three approaches? What will be the role of the teacher? How will we assess the new ways of learning?

What is the role of the teacher in the 21<sup>st</sup> century? The teacher seems to have evolved from the sage on the stage to the guide on the side to a partner in learning with the student of today. The teacher expects to learn technology from the student while the student learns rigor quality and context from the teacher.

So what impact are OER having on universities? Let me first take the example of the university of southern queensland

This would open up opportunities to students who would never have been able to afford education as the costs of a credential would be only 20-25%.

IGNOU has launched a FlexiLearn portal by putting all its courses up for free, provide free tutorial services and would only charge for assessment. According to the VC, 37,000 students have already registered.

The OU UK is also keeping abreast of these developments by putting its materials on iTunesU

The London School of Business and Finance are offering a Facebook MBA at one quarter of the costs of a conventional MBA degree.

We have heard reference to the Khan Academy several times during this conference. This is a key example of the rise of social entrepreneurs.

What will be the implications for higher education? OER have the potential to transform education. It would seem that individuals rather than institutions will drive future developments with a bottom-up approach. It will be possible for learners to construct their own courses based entirely on free and freely

available resources. But who will provide the qualifications? Will we see the rise of new Degree Granting Bodies or Open Courseware Accreditation Agencies? How will the quality and credibility be ensured? Institutions are already grappling with these questions as they prepare to offer parallel pathways to making universal access to higher education a distinct possibility.

And with that, I thank you for your attention.