My topic today is Three Generations of Open Education: Future Implications’. I have prepared these remarks with my colleague Dr Balaji and 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 first look at three generations of open education. I will then give you one example 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, governments were looking for alternative approaches. It was 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, specialization, 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. Asia alone has over 70 open universities and the numbers continue to grow.[1]
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 online 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. The assumption is that

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.

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’ “Linux for IT Managers” have been completed and are available on COL’s website
What makes VUSCC particularly important is that it focuses 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 higher 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
canny learners.

It should not be difficult to 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 21st 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?

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 3
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 will be the implications for higher education? OER have the potential to open up access, improve
quality and reduce costs to all levels of education. 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.