Open Education for Sustainable Development

Distinguished Colleagues, thank you for the invitation to be part of this conversation on 'Reimagining Open Education'. I will reflect on 'Open Education for Sustainable Development' drawing upon the work that the Commonwealth of Learning has done over the years but will particularly focus on our response to keeping the doors of learning open during the pandemic.

As you know, COL is an intergovernmental organisation with headquarters in Canada and a regional office, the Commonwealth Educational Media Centre for Asia, in New Delhi.

COL works in 54 Commonwealth countries which span all regions of the world.

Our mission is to help Commonwealth member states and institutions to use distance learning and technologies for expanding access to education and training.

I will begin by outlining the context and share our understanding of what we mean by Open Education. I will then give you some highlights of COL's work in opening up education especially during the pandemic and conclude with the ways in which we can harness open education for sustainable development.

But first the context.

Sustainable Development Goal 4, which aspires to ensure equitable access to quality education and lifelong learning for all by 2030, is more important than ever before because of the huge disruptions and setbacks that education has experienced this year.

Universal secondary education is far from achieved, with the global average at 76%. And if anything, it is expected to get worse, especially for girls and persons with disabilities.

Access to tertiary education is below 40% globally and in some developing Commonwealth countries has yet to reach even 10%.

Youth unemployment is already high and likely to get worse in a post pandemic world.

An increase in unemployment results has increased demands for higher education. In the US, a one percentage point increase in the unemployment rate is associated with a 1.6 % increase in university enrolments. In the last decade we have already seen an unprecedented demand for higher education. But what of costs?

In a recent study on access to learning materials in the Commonwealth, we found that learners are finding it hard to afford textbooks. For example, in Saint Lucia, the average spending on textbooks is higher than

average at over $338. A COL survey in Malaysia found that 76% students did not buy textbooks because of high costs. In Bangladesh, students managed by photocopying content.

In many developing countries, several students have to share a single textbook for reading and maths. Does it matter? A study in 22 SSA countries shows that providing one textbook to each child can improve learning outcomes.

The existing learning crisis is already showing signs of further deterioration. A study in the Netherlands, records a learning loss of about 3%, with higher losses among students from less-educated homes during the pandemic.

In another survey conducted by Tony Bates, even in a resource-rich institution such as Stanford, 16% of the undergraduate students did not have access to the internet for half the time and 60% of students from low-income homes did not have a private space for study. What was the situation in the Commonwealth?

During the pandemic, we found the greatest need was for quality content, especially at the school level, which has the greatest number of displaced learners. Second, there was an urgent need for teacher training in distance and online education to ensure a smooth transition. Thirdly, countries require enhancements to their digital infrastructure to provide an enabling ecosystem that leaves no one behind.

COL responded swiftly using a multi-pronged approach—providing guidelines and resources, building the capacity of teachers, providing tailored responses to requests from Member States and promoting collaboration for increased impact.

As an organisation established to promote learning through the use of technologies, COL has been promoting open education from the very beginning.

To us, open education describes policies and practices that permit entry to learning with as few barriers as possible. The founding chancellor of the Open University of the UK, Lord Crowther defined openness in relation to people, places, methods and ideas. This is the basic philosophy of open education.

Put into practice this meant that institutions have flexible entry requirements, allow learners to choose the courses they wish to study and accumulate credits at their own pace and convenience. Charles Wedemeyer was a visionary, who described openness in terms of access, curriculum, participation and accreditation way back in 1973!

In Asia, when we speak of open education, we usually refer to the massification and democratisation of education for those hitherto kept outside its purview. And because women have traditionally been denied the opportunities for education, opening up education also means reaching the unreached. Globally, the concept of open education has a wider and more contemporary connotation. As Tony Bates tells us, open education refers to opening access to courses and programmes, and includes OER, open access research, open textbooks and open data.

Using Christensen's disruptive innovation model in higher education, open and distance learning (ODL) was the real innovation at the bottom of the pyramid that challenged mainstream face-to-face higher education. For over fifty years now, ODL has integrated the social justice agenda in its policy and practice. But it took the pandemic to move open and distance learning from margins to mainstream.

Let me outline some of the ways in which COL has been contributing to opening up education so that no one is left behind.

When COL started operations in 1987, it was tasked with the responsibility of assisting the acquisition and delivery of teaching materials and more generally facilitating access to them. In 1999, COL built the capacity of 140 teachers in 8 African countries to develop 46 teacher training modules that were available free for use and adaptation. COL as a signatory to the Cape Town Declaration agrees that open education is not limited to OER and includes open technologies and open sharing of teaching practices to empower educators. COL was the first intergovernmental organisation to adopt an OER policy and mobilise governmental commitment to OER. It partnered with UNESCO for the two World Conferences on OER with valuable support from the Hewlett Foundation.

COL believes that if the child cannot go to school, the school must come to the child. We have been promoting open schools which provide flexible learning opportunities for secondary education.

The issue of access and equity in secondary education can be addressed by establishing open schools. In India, the National Institute of Open Schooling has a cumulative enrolment of 2.7 million students, 31% being female. The Bangladesh Open School enrolled 165,000 students, 40% of whom are female. In Namibia, over 80,000 students, 65% being female, enrolled at the Namibia College of Open Learning. High quality education is being provided at substantially lower costs as per COL studies.

Countries with open schools, such as Botswana and Namibia, had a head start during the pandemic as they were able to share the self-instructional materials with students of all schools in the country.

COL has developed guidelines for building resilient schools that are able to withstand future disasters.

COL believes that distance learning can keep the doors of tertiary education open even when campus institutions had to close.

There has been a huge growth of open universities in the developing Commonwealth, with 33 open universities opening up access to over five million learners annually. The record growth has been in Asia and we'll see the next wave in Africa.

It's not just new open universities—during the pandemic COL provided support to campus institutions in Nigeria to go dual mode. COL provided support for integrating TEL in higher education institutions in three countries. We have responded to requests from a university in Zambia to integrate employability into the curriculum, and the University of Rwanda is developing online security and privacy policies. These examples give you an idea of what institutions are prioritising as a result of the pandemic.

As most countries pivoted to distance learning, COL developed and disseminated guidelines for distance learning to Commonwealth ministers of education.

COL has been promoting access to quality content through the use of OER.

During the pandemic, COL partnered with OER Foundation, ICDE and OEG to launch OER4COVID which attracted participants from 89 countries. A survey was conducted which indicates that people did not simply want access to repositories or general capacity building but rather sought help with curated content aligned to the curriculum.

COL has responded by developing a video-on-demand service for STEM subjects aligned to the curriculum in Fiji, Nauru and Samoa.

As teachers make the difficult transition from classroom teaching to online provision, they need capacity building. In partnership with the Ministry of Education in Trinidad and Tobago, COL offered a MOOC on using OER for online learning, which attracted over 8,000 teachers in the country.

The content of all COL MOOCs and courses is OER—A set of 12 videos recorded with Tony Bates on Teaching in a Digital Age became a crash course for both policy makers and practitioners and is being widely used.

Since less than half the world has access to the Internet, how can the digital divide be transformed into a digital dividend?

COL's mobiMOOCs help us reach the bottom billion by providing simple technology solutions, such as basic mobile phone interface, social media integration and delivery in low bandwidth situations. You can see from this photo, how these illiterate women in India learnt corporate finance through their basic mobile phones even during lockdown.

COL's Aptus is a low-cost, offline virtual classroom that provides learners in remote locations with access to digital resources. It's a server that works with a solar charger and a wireless router, costing approximately $150. This was recently sent to The Bahamas for deployment in two islands.

COL is providing support to countries for deploying MOOKit, a platform that works in low bandwidth situations and integrates open source video conferencing.

 Unemployment rates have touched a new high globally with the urgent need to provide opportunities for skilling and reskilling.

A recent report on the future of jobs showed that 43% of businesses surveyed indicated that they were set to reduce their workforce due to technology integration. Companies estimate that around 40% of workers will require reskilling of six months or less and 94% of business leaders report that they expect employees to pick up new skills on the job.

In collaboration with COURSERA, COL offered free training opportunities to over 115,000 persons from 49 Commonwealth countries. The greatest uptake has been in the Caribbean—with over 30,000 enrolled in Guyana alone. Even though connectivity was often a challenge, learners used mobile devices or library facilities in what has been a life-changing experience for thousands.

The participation of women and girls was particularly encouraged. These students from Fatima Jinnah Women's University, Pakistan have successfully completed several work force recovery programmes from some 200 top institutions in the world.

In India, the training of 7,000 women artisans and weavers was disrupted due to the pandemic but thanks to the smartphones that the majority possessed, capacity building in e-commerce continued, using WhatsApp.

COL developed 'Strategies for blended TVSD during COVID 19' to ensure that institutions integrate blended approaches for more accessible and affordable skills development.

These are just some examples of how COL promoted open education for sustainable development. What did we learn?

Even though countries were forced to close borders, the future lies in collaboration. COL's call for a partnership attracted more than 60 organisations, institutions and associations, including OEG. Open Door has become a vibrant platform where partners have shared over 200 courses.

There is a greater acceptance of open education today, and we can build on these foundations to raise awareness about how inequalities can be addressed. We need to invest in more OER for Persons with Disabilities and for the development of assistive technologies that are affordable and available.

Governments and institutions still need support with policy development and implementation plans to build resilient eco-systems that can face future challenges. There are more OER policies, especially at the institutional level. Governments are supportive but this does not always translate into explicit policies. This is a long-term process and will need our continued support.

There are many more repositories today than there were five years ago but limited use of these repositories suggests that they must be more widely publicised and user-friendly. Building the awareness and capacity of teachers, especially at the school level, can accelerate the transformation of closed systems into more open ones.

As we have seen, openness is an evolving concept that means different things to different people. How do we define open education for sustainable development?

*We mean the use of flexible learning (**anytime, anywhere, any resource**) facilitated by a range of **affordable** and **accessible** technologies that **empower** learners to **access** quality educational opportunities for **economic growth, participate** in the process of effecting **social change**, and contribute to **environmental conservation**.*

With that let me thank you for your attention.