

Emerging Landscape of Higher Education: Global Trends



30 September 2021

Virtual Presentation

M.B. Buch Lecture Series, The Maharaja Sayajirao University
Baroda, India

Professor Asha Kanwar

President & CEO, Commonwealth of Learning (COL)

Vice Chancellor, Distinguished Colleagues, thank you for the invitation to deliver the Prof MB Buch Memorial Lecture in these turbulent times. My topic today is 'Emerging Landscape of Higher Education: Global Trends'. It is appropriate that Prof Mukhopadhyay, a former student of Prof Buch, is chairing this session.

It is an honour to dedicate this lecture to Prof Buch, the founder-director of the Centre of Advanced Study in Education—his vision and leadership shaped the Centre into a premier national organization that has made several invaluable contributions to the development of education in India. My former colleague Prof Mohan Menon recalls that he was an institution builder, motivator, mentor and visionary.

This research at CASE, revitalized Teacher Education in India and other Asian countries. Prof Buch edited the first series of Surveys of Research in Education which were subsequently taken up by the NCERT. An exemplary researcher and scholar, Prof Buch believed that 'research has value only when its results influence or promote action either directly or indirectly.' He believed that research should influence 'policy, programme and practice' with clear links between how educational systems can contribute to national development.

These ideas resonate well with us at the Commonwealth of Learning. As you know, COL is an intergovernmental organisation established by Commonwealth Heads of Government with headquarters in Canada. Our mission is to help Member States and institutions to use distance learning and technologies for expanding access to education and training. India is an important member of COL, and we are very grateful for its consistent financial and intellectual support.

In this presentation, I will look at the impact of covid 19 on higher education and why higher education is even more important than ever before. I will then focus on the emerging landscape of higher education and some of the international interventions that helped teachers and students find creative solutions to the challenges at this time. This will lead to a reflection on the implications for universities and how we can build on the momentum generated to take the road ahead into a better post-covid world.

As we know, Covid 19 has caused the biggest disruption of education in human history where over 95% students worldwide were impacted.

The closure of campuses affected more than 220 million HE students worldwide.

Most institutions had to pivot to emergency remote teaching. Many did not have adequate technology infrastructure. The mobility of international students plummeted with countries losing large revenues from student fees. Budget cuts were imposed by governments—research reliant on practical work and external collaborations suffered most.

Over 63 million teachers were impacted by the pandemic. Data from OECD countries indicates that only 60% of teachers had some training in ICTs.

And yet teachers rose to the occasion. A survey conducted in Europe found that most teachers live-streamed lectures synchronously. A large number of teachers also used asynchronous approaches by sending pre-recorded videos and audio lectures.

A study in the US and Canada revealed that over 50% of teachers required help with supporting remote students, needed access to digital materials and wanted assistance with technology. The situation was not much different in the developing Commonwealth.

Students too suffered in various ways--and half of them felt that their performance had declined. Many faced challenges relating to technology tools and connectivity and most felt an impact on their psychological well-being.

Regarding technology, in a survey conducted at Stanford University, 16% of the undergraduate students reported not having access to the internet for half the time and 60% of students from low-income homes did not have a private space for study.

Similarly, a survey conducted at the University of Hyderabad indicated that students had issues with connectivity, costs of data and inability to access online classes.

The vulnerable are most impacted in crisis situations, especially those on the other side of the digital divide. Existing inequalities were further exacerbated.

The pandemic has deepened the existing learning crisis. A study in the Netherlands, records a learning loss of about 3 percentile points with higher losses among students from less-educated homes.

But was it really a learning loss? It is true that learning was indeed lost as the curriculum could not be covered because of the disruption. As some suggest, the term 'learning loss' introduces a deficit mindset that demotivates the learners and does not appreciate the effort that teachers put in. Amidst this learning loss was a 'learning gain' where over and above the curriculum, both teachers and learners learnt to be resilient, managed their time better, acquired basic computer skills to learn and collaborated on various social media platforms. All these are relevant skills that will help students be better prepared for the future.

Another silver lining was the global acceptance of distance and online learning. It would have taken years of advocacy to achieve the overnight transition to remote learning. A recent study in the UK found that the majority of HE students rated the quality of online learning as excellent.

But as we know, crisis generates creativity and we have seen more flexible and blended approaches being implemented to address the needs of different constituencies. Is this perhaps the moment when the ugly duckling of distance education transforms into a beautiful swan?

Can distance education help us increase access to quality higher education?

Globally we have seen a steady rise in Gross Enrolment Ratios in tertiary education from 25% to an average of nearly 40 %.

Similarly, there has been a gradual increase in the GER of tertiary education in South Asia since 2005 which currently stands at 25%. But the average is well below the 40% mark, required for countries to achieve economic development.

Convinced that higher education leads to higher earnings and social mobility, policy makers have invested in this sector. Both developed and developing countries such as South Korea, Chile and UK have very high GER and the demand for degrees continues to grow worldwide.

Higher levels of education usually translate into better employment opportunities and higher earnings. Among tertiary-educated adults, the relative earning advantages increase with the level of tertiary education. On average across OECD countries, those with a master's, doctoral or equivalent degree earn twice as much as those with lower qualifications (OECD, 2021)

In addition to individual benefits higher education contributes to higher social returns on investment. A World Bank report shows that the private rate of return on higher education ranges from 12-26%, while social return on investment ranges from 9-13% amongst low-, middle- and high-income countries. It may be noted that countries with low per-capita income have highest private return on investment as well as highest social return on investment in higher education.

The GER in India is about 27% with women's participation marginally higher than that of men. About 11 % of all enrolments in HE are in distance learning programmes with a substantial percentage of women.

As the NEP states increased access, equity, and inclusion in higher education will be achieved through online education and Open and Distance Learning with a national target of 50% GER by 2035. The 19 open universities in the country are making a concrete contribution towards this goal.

As the Nobel laureates Stiglitz and Greenwald point out—what truly separates developed from less developed countries is not just a gap in resources or output but a gap in knowledge. Investments in higher education can contribute to a learning society ready for future disasters.

During this pandemic, we have seen a wide range of developments in higher education and lifelong learning.

One has been the phenomenal increase in MOOC enrolments not just of global brands such as Coursera and FutureLearn but also universities which had hesitated to offer online courses came forward to offer MOOCs especially for professional development. The COL-Coursera Workforce Recovery initiative skilled and reskilled over 150,000 Commonwealth citizens in the last eighteen months.

The pandemic has also seen the second coming of video learning where teachers made significant contributions often reaching their students through mobile devices. COL's video-on-demand service brought quality content in low-bandwidth contexts in the Pacific.

Formal assessments and proctoring systems suffered major setbacks during the pandemic — where institutions adopted innovative approaches to build flexible models and make assessments more authentic. UNISA developed App-based assessments; Griffith University Australia used oral assessments for the business programme and India introduced open book exams at scale.

Open Educational Resources were in high demand as teachers looked for quality digital content. In a North American study conducted during the pandemic, 44% of administrators were positive about faculty use of OER, while a quarter of teachers believed that OER could contribute significantly to teaching and learning. A study conducted by OER Foundation and COL in May 2020 found that over 75% of the respondents expressed high demand for OER-based online courses.

The mobility of international students plummeted with travel restrictions and the closure of borders. This led to new partnerships and the increased importance of hybrid models and branch campuses providing an opportunity for students to experience ‘internationalisation at home’.

Several institutions, particularly in Europe, came up with innovative solutions to help students — they deferred payment of fees and provided financial support for at-risk students.

The recent Educause Horizon report sums up six new trends in higher education: the widening of the digital divide; increased use of hybrid learning; demand for new skills; a focus on sustainable development and a decrease in funding.

Respondents were also asked to pick the top technology trends and practices. The results were not surprising with AI topping the list followed by blended course models, learning analytics, and micro credentials. OER and quality online learning were also considered very important. To what extent are we integrating these technologies and approaches in our own practice?

What implications do these developments have for higher education?

We believe that these changes signal the need for reform in three key areas: curriculum; teaching learning and assessment; openness and flexibility. How can universities reform the curriculum to be more relevant to the needs of our times?

In a study in the US, 36% of college graduates did not show any significant cognitive gains over four years of college. Half the employers surveyed, said that they had trouble finding qualified graduates to hire.

This June McKinsey released a report identifying 56 foundational skills that would help citizens prepare for the future of work. The four dimensions include: cognitive, interpersonal, self-leadership and digital skills. The future of work will depend on people with employable skills, that is, individuals i) who can add value beyond what can be done by automated systems, (ii) who work efficiently in a digital environment, and (iii) can demonstrate resilience to adapt to new ways of working and new occupations.

To create a higher education system that is responsive to the market needs and future requirements, it is necessary to look at the different stages of the employability pathway and re-imagine our policies and practices.

Whatever path we adopt, let us ensure that our graduates have the three literacies that will prepare them for the future. First, human literacy, prepares students to perform jobs that only human beings can do.

Human literacy will help them to make ethical choices, equip them for social engagement through effective communication. Second, data literacy is essential in a world driven by data. Learners must be able to find meaning in the flood of information around us. Third, technological literacy is essential if we are to understand machines and their uses. Learners must be able to deploy software and hardware in order to maximize their powers to achieve and create. If we can equip our learners with these three literacies, we will be preparing them for the uncertain future.

Developments in technology will continue to drive changes in the way we teach and learn, and technology adoption has been further accelerated due to the pandemic.

AI is being mainstreamed in education. Intelligent Tutoring Systems use AI techniques to simulate one-to-one human tutoring, provide timely feedback, all without the presence of a human teacher. Machine Learning helps to analyse and summarise the discussions in online courses so that a human tutor can guide the students towards fruitful collaboration. A popular example of AI in education is a Virtual Teaching Assistant that can offer personalized assistance to learners.

Chatbots are already being deployed as fairly effective teaching assistants—right from Georgia Tech to the Open University of Malaysia. But these have also served to highlight the need for human teachers and physical interaction.

Since there is more emphasis on learning outcomes, we need to invest more in learner support and technology can help us to a large extent. 24/7 online hubs and call centres can be very helpful, if run effectively. Learning analytics have helped to provide personalised learning and improvements in learning outcomes in many institutions. But as we increase our use of technology, we need to keep the human touch.

Assessment has been a challenge for many teachers. According to Professor Rose Luckin at the University College London, “stop and test” assessments do not rigorously evaluate a student’s understanding of a topic. AI-based assessment constantly provides feedback to learners, teachers and parents about how the students learn, the support they need and the progress they are making towards their learning goals. Micro-credentials are leading to shorter, just-in-time courses that can be taken at one’s own pace or time. The credentials can also be transferred from one institution to another. Since we are no longer testing only knowledge but also skills and competencies, we need new ways of assessing performance. Assessment has been a great challenge during the pandemic. The University of South Africa used mobile based assessments to reach those in the most remote shanties.

Today we have a vast resource of open content or OER that we can adopt or adapt according to our needs. More than 900 universities in the world are offering MOOCs. In the past it was open universities that we associated with achieving scale—today MOOCs are reaching millions—how can we use these technologies to provide flexible and open learning options to our students?

India and several Asian countries have launched MOOC initiatives. By allowing students to earn up to 40% of course credits towards their qualification, India is leading in this field.

India is also a leader in developing OER and has an OER policy in place since 2014. COL has shared some of the course materials available on the NPTEL platform with other Commonwealth countries.

Blended and hybrid modes provide opportunities for learning to those who cannot access purely online provision. ODL has always adopted a blended approach keeping in mind issues of social justice. The UGC (India) has issued a concept note on blended learning in May 2021 seeking inputs from stakeholders.

India's National Education Policy has elements of all these developments: multi-disciplinary education that provides employable skills; flexible pathways for entry and exit; a focus on formative assessments and an emphasis on integrating technology and investing in research. As you can see, there seems to be a close alignment between international and national priorities.

Within this context, what does the road ahead look like?

First, what kind of graduates are we developing? Are we producing lifelong learners who are employable in the changing job market? Do they have a positive mindset for working with others? Are they responsible global citizens?

Second, what kind of institutional culture have we developed? Institutional culture will depend on leadership and the extent to which we can motivate and inspire our staff to deliver results. Institutional leaders must encourage a spirit of inquiry and a culture of research. How can this be done?

Third, are we developing innovators? In their book *The Innovators' DNA*, Dyer, et al identify innovation skills that can be learned: questioning, observing, networking and experimenting. How can we ensure that these skills are acquired and reinforced?

The university management must develop enabling policies for mainstreaming distance and blended approaches while also investing in technology infrastructure and quality assurance. The quality of an institution was always measured by inputs, processes and outputs with student pass rates at the centre. With rising youth unemployment, the employability of graduates will be a key indicator of quality. Management must also develop policies that specifically ensure that no one is left behind.

Universities need to rethink the curriculum to make it more integrated with the world of work. Harnessing the potential of OER can be one way forward. More flexible and blended approaches can be implemented to address the needs of different constituencies. Creative ways of assessments and credentialling will be key. And research will provide the evidence of the efficiency and effectiveness of these approaches.

Both teachers and students will need support for making the transition to the new normal. Institutions will need to pay more attention to the well-being of their staff and students through expert counselling and guidance.

We have all been through this prolonged crisis and the only way forward is to look at the silver linings and the lessons learned. As Prof Buch once said: 'Every crisis is pregnant with an opportunity. Just look behind the crisis, opportunity will smile at you'.

In that spirit, let me thank you for your kind attention.