

Human Resource Development and Lifelong Learning for Open Universities



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It is a pleasure to be back in Hanoi and I'm very grateful to Dr Truong Tien Tung, President Hanoi Open University and Prof Melinda Bandalaria, Chancellor UPOU and President AAOU for the kind invitation. The Commonwealth of Learning has been a consistent supporter of AAOU and has watched it grow from strength to strength over the years. And its always a pleasure to meet old friends and make new ones at this very dynamic and lively forum. My topic today is 'Human Resource Development and Lifelong Learning for Open Universities' and I have prepared this presentation with my colleague Dr Sanjaya Mishra.

Let me first introduce my organisation the Commonwealth of Learning. COL is an intergovernmental organisation established by Commonwealth Heads of Government over thirty years ago, with headquarters in Metro Vancouver, Canada and a regional office in Delhi.

Our mission is to help the 53 Commonwealth Member States and institutions to use distance learning and technologies for expanding access to education and training.

COL believes that learning is the key to sustainable development. Learning must lead to opportunities for economic growth, social inclusion and environmental conservation.

Our strategy is to harness the potential of existing and new technologies to achieve development outcomes.

In this presentation, I will first review the context of higher education today and then look at the current status of human resource development in Asia. I will then explore the link between human resource development and lifelong learning. What is the role of open universities in offering lifelong learning opportunities for all? Finally, I will propose three ways in which open universities can contribute to human resource development in Asia.

First, the context.

In the decade between 2007 to 2017 we have seen a steady rise in Gross Enrolment Ratios in tertiary education worldwide from 25% to a global average of over 35 % today.

There has been an even faster increase in the GER of tertiary education in East Asia and the Pacific in the same period. Enrolments in the region are over 45%, substantially higher than the global average.

South and West Asia have also witnessed a growth during the same decade and we have gone from 10 to about 25 %. Why this great demand for higher education?

One reason could be that higher levels of education usually translate into better employment opportunities and higher earnings. “On average across OECD countries, those with a master’s, doctoral or equivalent degree earn twice as much as those with lower qualifications” (OECD, 2017)

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 number of people with degrees continues to grow. Interestingly, in South Korea, with 93% GER, we find that about 45 % of graduates are struggling to find jobs. There is then no simple equation between degrees and employability.

As Andreas Schleicher of OECD concludes ‘countries have skills shortages, not degree shortages’.

In countries such as Japan, Taiwan and Hong Kong, more than 70% employers report having difficulty filling jobs with people with the right skills.

In India and South Africa, the challenge of identifying the right talent for the right job has doubled in six years with more employers complaining of the lack of available talent. In Asia 28% employers had difficulty filling vacancies in 2006—by 2015 the number had doubled to 48%. What can be the reason?

Technology is having a great impact on the nature of jobs and as an Oxford University study found, 47% of today’s jobs could be automated in the next 20 years.

Developments in Artificial Intelligence and Robotics will result in changes that we may not be able to imagine today. Automation will have an even bigger impact in developing countries which provide human labour.

Multiple surveys in 2016 indicated that ‘soft skills’ such as critical thinking, communication, and leadership were what employers were looking for. We have been talking about these 21st century skills for nearly two decades, and one fifth of this century is nearly over: what have we done? To what extent have we integrated these skills into our curricula? AAOU provides an excellent opportunity to share our experiences and learn from each other.

Let us now look at the current status of human resource development in Asia to better understand what we can do as educators.

Experts estimate that economic growth will slow down in the Asia-Pacific to 1.9 % this year with the two exceptions being India and China. This will result in a general slowdown in the labour market where employers will find it hard to attract and retain talent. There will be more vacancies because of the mismatch between the skills required by industry and those of our graduates.

Even so the recent report from the World Bank shows that some Asian countries are doing very well in terms of their human capital index. The criteria for measuring human capital are: youth mortality, education and health. Singapore leads as it has universal healthcare, produces good results in education and has a high life expectancy. The other three countries in the top five are South Korea, Japan and Hong Kong. Why does it matter? Because improvements in education and health can double lifetime earnings for individuals.

Singapore, Japan, South Korea are also good examples of human capital success. Vietnam and Indonesia have made great progress in educational attainment and Malaysia is strong in capacity, development and know-how. What can we learn from them? All these countries invest in quality education. But the world of work is changing.

In fact, 65% of children entering primary school today will work in jobs that do not yet exist.

Experts estimate that changing 4 jobs by the age of 32 will be the new normal for millennials. So how do we prepare our young people for these frequent career changes? Globally, there is a deficit of 38% gap in human capital (knowledge and skills people have that enable them to create value in the global economy), which means this group is not prepared with the knowledge and skills for today's jobs. East Asia and the Pacific are slightly better with a 34% gap while South Asia, with its gap of 46% needs to do much more to invest in its young workforce.

By 2025, millennials will comprise three-quarters of the global workforce. Millennials look for a workplace culture which has purpose, provides them with opportunities for growth, is flexible enough to promote well-being and is built on trust. Staying at a job for a long time may not be in line with family and lifestyle goals. Millennials will transition between employment, study, sabbatical or running their own business. Are institutions preparing for these preferences and are organisations creating the environment for the millennials?

These developments have implications for our human resource development approaches. Traditionally human resource development meant training and upgrading skills, often in the same profession. The focus needs to shift towards strategic human resource development and to invest in people as capital for economic growth. Developing a proactive system to identify future needs and prepare graduates for the uncertain, complex future is a major challenge that educational institutions need to face boldly by developing linkages with the labour market and tailoring programmes accordingly.

As we move from a production economy to a knowledge economy we need to understand that human resources create value. Governments and industry need to invest in people for development. Instead of reacting to filling existing skill gaps, strategic human resources prepares people for the future.

As Forbes points out there is massive shift taking place in the world of work and new skills are required at a faster pace than ever before. Today average human knowledge is doubling every 13 months. IBM predicts that in the next few years the volume of information will double every 11 hours. What do we need to do to keep pace with these advances? Become lifelong learners?

A survey in the USA found that most workers see continuous training and retraining throughout their lives as essential to success. Which means that HRD can no longer be seen as occasional training for specific tasks but must be placed within the frame of lifelong learning.

What is lifelong learning? As we know, lifelong learning means learning from cradle to grave and includes formal, non-formal and informal learning.

Lifelong learning also means focusing on learner centric approaches, promoting autonomous learning and recognizing that learning can take place anywhere anytime.

As an educational concept, the operationalization of Lifelong Learning involves the integration of three approaches: pedagogy, andragogy and heutagogy. While these three approaches are not mutually exclusive, they differ in many respects.

In pedagogy, the learner depends on the teacher for what and how to learn, and the aim of the learning is to move up to the next level. Under andragogy, the adult learners are more independent, learn when they need to and use their own experiences. But what is learned is still determined by the teacher. The heutagogic approach applies to the independent learner, who determines what and how to learn and the learning can take place anywhere.

Blaschke (2012: 60) points out that the heutagogical approach can be viewed as a progression from pedagogy to andragogy to heutagogy, with learners progressing in maturity and autonomy. Based on this premise, Blaschke has offered a framework in the form of a pyramid which reflects the Lifelong Learning process. 'Engagement' indicates participation while 'cultivation' refers to autonomous and self-directed learning. 'Realisation' occurs when capacity is translated into capability. What does this mean? We may have capacity but if we don't use it, we lack capability.

One of the challenges in Lifelong Learning is operationalizing approaches such as heutagogy. Higher education has been reluctant to adopt heutagogy because it is impractical to implement it within existing educational arrangements. Heutagogy is difficult because it doesn't give enough priority to an educator who is an essential part of a credentialing institution.

However, there are some successful examples: Educators in the nursing, engineering and education have found heutagogy to be a credible response to the critical issues that the learners are faced with... and have designed their learning environments based on the approach. The University of Western Sydney has implemented the heutagogical approach in its teacher education programme resulting in improved teacher outcomes and more capable teachers.

How can we implement lifelong learning in our institutions? By involving the learner in defining outcomes, developing a flexible curriculum that can address the needs of different learners, making provision for the assessment of prior learning and promoting collaborative learning.

The SkillsFuture initiative in Singapore helps individuals make autonomous and well-informed choices regarding education, training and careers. Under this project every Singaporean aged 25 and above receives S\$500 credit for lifelong learning in designated courses for skills upgradation. This is an excellent example of how national policies can create an ecosystem for lifelong learning. What of open universities?

The mission statement of the Open University of Malaysia goes beyond widening access to quality education and aspires to provide lifelong learning opportunities at affordable costs.

Similarly, Sukhothai Thamathirat Open University echoes this aspiration to utilize the distance education system for providing lifelong learning for all.

The Open University of Sri Lanka seeks to enhance access, quality and affordability for lifelong learning. If we go back to our mission statements, we find that open universities are well-equipped to provide lifelong learning to those who would otherwise not have the opportunity.

As we can see, lifelong learning is essential for human resource development and for equipping our learners for an uncertain future.

Let us now consider the role of open universities in a changing world.

We speak of the fourth industrial revolution today—what has been the impact of these four revolutions on open and distance learning?

In the first industrial revolution when the steam engine was invented, higher education made a transition from being elite to one which anyone could aspire to. The second industrial revolution was marked by the assembly line and mass production, when it became possible to produce self-instructional booklets and offer correspondence courses. The rise of the computer and internet in the third revolution led to the rise of distance learning and open universities and today in the fourth revolution marked by AI and Robotics, we have OER, MOOCs, micro-credentials.

There are 31 open universities in the Commonwealth—the most recent being Botswana Open University. While open universities continue to grow in developing countries, there is an opposite trend in developed countries—in Canada for example of the three open universities, only one remains, that is Athabasca, the other two having merged into campus institutions.

Open universities have several strengths, as they have always focused on the social justice agenda, have expertise in technology and pedagogy. They also are open to innovations and new ideas that can cater to all levels of education, including non-formal learning. Thus, open universities have all the elements in place for implementing lifelong learning.

Of the 27 Open Universities COL surveyed in 2016, we found that they offer over 18,000 courses. Of these, over 26% courses are in social sciences and humanities. Other courses include Agriculture, Health Science, Computer Science, Engineering and Technology etc. The range of courses suggests that we are still trying to replicate what campus institutions offer.

Have ODL institutions focused on development? Prof Alan Tait looked at the mission statements of 12 major open universities and found that the emphasis was on development issues such as access, equity and social justice. However, while there was an emphasis on development, it was not clear how this would be achieved and what needs to be done in terms of curriculum reform and pedagogy to make this happen.

Can the new developments in technology help us to implement lifelong learning for development? MOOCs with their global reach are disrupting the traditional classroom lecture. Blockchain has the potential to challenge the authority of accreditation bodies. Micro-credentials call into question the relevance of full degrees and OER are disrupting business models built on intellectual property rights.

There are several MOOC initiatives in Asia with thousands of courses available in Chinese, Japanese, Korean and Thai. AAOU is leading a MOOC initiative for members in which several open universities are involved.

MOOC platforms allow us to offer free online courses to thousands of students around the world and are an important platform for lifelong learning. Can they help us make our learners more employable? A study of a Coursera MOOC platform published in Harvard Business Review indicates that MOOCs provide many tangible and intangible benefits. For example, 26% found a new job, 9% started their own business, and 62% improved their skills in current job roles.

Blockchain, a major development in the area of financial technology, is, in effect, an open source online register. A learner can have a distinct, persistent ID in this space. An agency that imparts learning can track progress and add scores making the entire set of records a block. It is important to note that the records cannot be modified at all. Many such blocks can be “chained” together. This diagram created at the Knowledge Media Institute of the Open University, UK shows how different stakeholders including the students participate in maintaining the Blockchain. The student acquires the profile, institutions add credit and status information, accreditors determine qualifications, while the employer can verify the credentials.

The University of Hyderabad, India offered a MOOC on Lifeskills for Engineers with COL support. Blockchain certificates were issued. As more people change jobs, there will be a need for different kinds of certificates to credential lifelong learning.

Blockchain will challenge paper credentials and paper certificates that are the norm today. Instead of the manual authentication of portfolios, institutions and employers will be able to carry out this process online. The verification can be carried out online and this will make it difficult for digital diploma mills to thrive.

Because of the near ubiquity of technologies, it is now possible to offer micro-credentials. As we seek to skill and reskill our learners for the changing nature of jobs, micro-credentials provide options for low-cost flexible learning. MIT has already introduced the MicroMasters programme which can prepare the learner for employment or further qualifications.

Micro-credentials are leading to unbundling of courses and programmes into shorter, just-in-time courses that allow lifelong learners to continue their learning journey as per their convenience. This is becoming more suitable for a scenario, where lifelong learning has become an imperative, and unbundling of higher education makes education cost-effective, both for the providers and the lifelong learners.

Micro-credentials will make us re-think our semester courses to develop shorter modules, which can be taken at one's own pace or time. The credentials can also be transferred from one institution to another.

Open Educational Resources are educational materials which are free and freely available, are suitable not just for higher education but for all levels including primary and secondary education. OER can be reused and repurposed to suit different needs and could be available in any medium, print, audio, video, digital. One key difference between OER and other educational resources is that OER have an open license, which allows adaptation and reuse without having to request the copyright holder. Several major Asian initiatives have emerged. Some of these are Vietnam's Open Courseware, the China Open Resources for Education Initiative, NPTEL, and Japan Open Courseware Consortium.

The rise of OER signals three shifts for institutions. Traditionally learners have had to bear the high costs of textbooks—the future could mean free content for all. There are course development teams within the university responsible for creating content. Now the teams will be dispersed around the globe and will adopt/adapt existing OER. The rise of OER will encourage the student to be a producer rather than simply the consumer of content. In the future where lifelong learning will be the norm, how can we use OER to reduce the costs of skilling and reskilling the learners?

As we can see, learners will need to move back and forth from academia to employment. This will give rise to the network of multi-varsities. Micro-qualifications will be as important as degrees. The faculty will also have to become lifelong learners to keep pace with these changes. The focus will be on acquiring knowledge and skills in new modes of delivery and pedagogy.

What then is the road ahead?

In 2015, the global community adopted the 17 SDGs of which SDG 4 is dedicated to education and aspires to ensure 'inclusive and equitable quality education and lifelong learning for all'. The ODL community cannot remain aloof from national and global goals. How can we prepare our learners?

The turn of the century gave rise to the digital natives who are technology-savvy learners, usually young school-leavers entering the higher education system.

Today, the learner in higher education is one who has the technological means to learn, is motivated and self-regulated.

What will the learner be in 2035? A typical learner may be using MindClock to remind her of upcoming events, use help from a Holographic Advisor Bot for critical thinking and design to plan for an assignment, use advanced communication tools to learn from multiple language materials on the Internet, take several micro-classes simultaneously, learn from home without attending physical lectures using tools that provide a virtual experience of real time events, and use teaching bots to prepare for assessments and exams. All activities will involve using technologies of the future. Some of these are still not invented. (Contact North, Insight paper, 2017)

What skills will our learners need to face the uncertainties of the future? A recent Economist report lists six key skills—interdisciplinary skills, the ability to be creative and analytical, skills for entrepreneurship and leadership, capacity in dealing with technologies and global citizenship. What do ODL institutions need to do? In order to be prepared for the future ODL institutions could target three areas.

First, open universities need to embrace lifelong learning and strengthen their outreach function to open up education to wider constituencies especially the unreached. Lifelong learning includes the whole spectrum of formal non-formal and informal learning. Simply reforming current education systems will not be enough. Countries will need to continually skill and reskill their workforce throughout their life, which needs a lifelong learning framework.

Second, open universities need to integrate employability. This will require a balance between theory and practice; a focus on hard as well as soft skills, a curriculum that addresses the needs of industry and society. The orientation will change to providing certification based on competence rather than the number of hours attended. This also means focusing more on blended learning opportunities that integrates workplace-based learning, certifying prior learning and accrediting a range of MOOCs for certification.

To create an 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 to suit lifelong learners at different stages of their life and learning.

Our host country has an interesting model of human resource development. Their 21 technical colleges partnered with UK colleges to introduce an international perspective. The focus was on offering quality training and they did this by adopting UK QA systems. The emphasis was on developing global skills and employability for livelihoods.

Third, invest in innovation. ODL was an innovation in higher education when it first started. As more and more campus institutions offer online and blended learning, what is our niche? Let us once again build on our strengths and become leaders in innovation. How can we prepare our learners to be innovators and entrepreneurs?

We could integrate three essential literacies in our curriculum as proposed by Robert Aoun. First, the 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 technology. 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. Are we ready to embrace the future?

Thank you for your attention.