**Introduction**

There are 31 open universities across the Commonwealth, contributing to over 4.4 million learners, offering more than 18,000 courses in almost all domains of knowledge and at all educational levels\(^1\) (as per The International Standard Classification of Education). The open university is a 20th century innovation that disrupted the ivory towers of higher education and facilitated learners at the bottom of the pyramid in accessing quality education at low cost and at their convenience. Open and distance learning (ODL), as an innovation, now manifests itself as online and blended learning. The boundaries have begun to blur between campus and ODL institutions leading to a convergence of educational delivery. According to the Distance Education Enrolment Report 2017, about 30% of students in higher education in the USA are taking at least one distance education course\(^2\). The emergence of massive open online courses (MOOCs), another form of distance education, has been embraced even by top-tier research universities. This adoption shows that ODL, the initial disruptor, has been mainstreamed.

The open universities are primarily dependent on media and technology for the delivery of their operations, and we have not kept pace with the rapid growth of technologies for teaching and learning in the 21st century. We now see Commonwealth open universities at different generations\(^3\): (i) correspondence model, (ii) multimedia model, (iii) tele-learning model, (iv) flexible learning model, and (v) intelligent flexible learning model. With society moving towards the fourth industrial revolution\(^4\), many face-to-face teaching institutions have started adopting the practices of open universities to meet the needs of Millennials\(^5\), who form the core of the learners in higher education today. Thus, it is necessary to rethink the operations and practices of open universities to make these relevant to the requirements of today.

...it is necessary to rethink the operations and practices of open universities to make these relevant to the requirements of today.

**Open Universities**

The open universities have the social mission of democratising higher education. The founding chancellor of the Open University of the UK, Lord Crowther, defined openness in relation to people, places, methods and ideas\(^6\). 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, thereby meeting the diverse needs of learners today. However, as universities, they are also expected to perform research and extension functions along with teaching large numbers of learners. The ability of open universities to achieve scale reduces costs while at the same time maintaining quality. As policy makers try to achieve the targets of SDG 4, which aspires to provide quality education and lifelong learning for all by 2030, open universities become more important than ever before.

A 2016 COL study indicated that while about half of the sample institutions continued to grow strongly in terms of enrollment, the other half suffered a decline in enrollments, loss of market share and financial difficulties\(^7\). This report also highlighted the gap between the theory and praxis of ODL in learner support that is so crucial for the learners, and often results in low completion rates. Another COL study reveals that on average only 15% of learners graduate out of the programmes enrolled\(^8\).

We need to go beyond the ‘Founding Father Syndrome’ and the archaic thinking about legacy models\(^9\). We need to align our mindset to changing realities, and focus on innovations and new models that will make us relevant to contemporary needs.

In this concept note, we highlight some of the key issues and challenges that need to be addressed by the institutional leaders/vice chancellors to meet the goals of the open universities that are typically inscribed in their mission and vision statements. These indicative and not exhaustive issues are meant to trigger ideas and approaches that will work in different contexts.
**Changing Profile of Learners**

Historically, open universities provided second chance opportunities to those who missed access to higher education due to a variety of reasons. These individuals were often adult and mature learners with jobs and social responsibilities in the 25-40 age group. However, this scenario has been changing towards enrollments of younger students and we will increasingly see more learners of the ‘third age’ as is already the case in Japan. A recent report indicated that there has been a spike in the number of 17 to 25-year-olds registering for degrees at The Open University in UK. As the profile of learners in open universities is moving largely towards millennials, there is a need to focus on the characteristics typically identified with this age demographic:

- Prefer group activities
- Spend less time watching TV
- Fascinated by new technologies
- Undertake multiple tasks simultaneously
- Prefer goal orientation, experiential activities and structure.

These characteristics have implications for designing learning environments in open universities.

**Skills Development and Employability**

Youth (persons under 30) comprise 60% of the population in Commonwealth countries. Skills development is therefore a priority for COL and educational institutions in the Commonwealth. A McKinsey report in 2012 points out that “employers, education providers and youth live in parallel universes” and very often these do not meet. Over 50% of the youth surveyed did not believe that their secondary education would lead to employment. Similarly, about 50% of the employers did not think that the new graduates had the skills to be hired even at the entry level.

There is a disconnect between what universities teach and what is required by the job market. The global skills gap as reported by employers in 2018 stands at 45%, with India and Singapore amongst the countries experiencing the most difficulty in hiring.

Technology will have a significant impact on the future of the job market. A study at Oxford University 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 are largely depending on manual labour-based manufacturing and provide the workforce to many developed countries.

It is important that universities, especially open universities, focus on developing skills-based courses to increase employability of graduates. In an increasingly competitive market, open universities must show that they can produce high-quality graduates for the labour market or entrepreneurs, thereby offering a good return on investment. Curricular reforms to include employable skills that are required by employers, industry and society are essential. In general, it has been found that non-cognitive skills are as essential as cognitive and technical skills. Multiple surveys in 2016 indicated the demand for ‘soft skills’ such as critical thinking, communication and leadership were what employers were looking for.
Some of the questions that need to be addressed are:

1. Is there an appropriate policy environment to offer skills development courses in open universities to address the skills gap?

2. Are we preparing learners for the jobs of the future by including soft skills in the curricula?

3. What are the examples of new models for offering skills courses in open universities?

4. How can we leverage technology to offer skills courses at scale?

Harnessing Technology

ODL systems around the world use media and technology extensively for teaching and learning. Starting from the earliest correspondence model that used print as a technology, the current models use the web, multimedia and virtual reality to offer courses and programmes. While there are many different approaches to course development in open universities, the course team approach has been predominant due to the need for various experts such as a content writer, instructional designer, and media experts to develop high quality learning materials in print, audio, video, multimedia and web formats.

Recent developments in Augmented Reality and Virtual Reality (AR/VR), MOOCs, OER and Artificial Intelligence offer new opportunities for the development of learning materials that are highly interactive and engaging. The use of AR/VR can make the teaching of practical skills-oriented courses more effective. Similarly, the availability of OER in a wide range of subjects allows the reuse and remix of existing materials to develop contextualized content relevant to an institutional requirement. The OER Global Report 2017 lists over 100 open repositories in almost all disciplines that can be used by open universities to develop courses.

The emergence of MOOCs in 2008 has opened new possibilities to offer courses to learners anywhere in the world. While not all MOOCs are necessarily “open,” they bring in new opportunities for “unbundling” courses and programmes to offer micro-credentials and digital badges.

Some of the questions that need to be addressed are:

1. Is the pedagogy followed by open universities appropriate to a technology-enabled environment?

2. What types of changes are required in the systems and processes of open universities to use OER efficiently?

3. How can “unbundling” help develop relevant curriculum?

4. What skills are required for the faculty to use new technologies for course development?

Learner Support

Many open universities are already using a range of technologies to deliver educational programmes. From the delivery of printed texts, to the use of learning management systems (LMS) and MOOC platforms, there have been many educational innovations in practice such as use of open repositories, e-Portfolios, YouTube, asynchronous discussion forums, synchronous video conferences, online quizzes and tests. While in some countries, online delivery is treated as a different mode, it is actually “the new generation in the evolutionary growth of open, flexible and distance learning.” Most of the processes of the student life-cycle in the open universities could be automated from admission to certification. Two-way didactic communication plays a critical role in the learning process in the ODL system. Of the three types of interaction proposed by Michael Moore, learner-teacher and learner-learner interaction could be organised more effectively using the different types of technologies available to support learners.
Collaborative online interaction amongst students helps in better understanding of course content and decreases feelings of isolation. Also, the use of interactive technologies to develop learning materials increases learner-content interaction.

Research shows that students who interact more in online courses perceive greater benefits. Collaborative online interaction amongst students helps in better understanding of course content and decreases feelings of isolation. Similarly, teacher-student interactions encourage timely feedback and enhance student engagement. The use of learning analytics can assist both learners and teachers in improving the teaching and learning outcomes. Teachers can monitor the progress of learners in real-time and provide personal feedback, identify at-risk learners who may drop out of the course, and identify the difficulties that learners face. Appropriate use of technologies can enhance the learner support services, reduce dropout rates, improve student learning and enable success.

Appropriate deployment of technology in course delivery and learner support will also help open universities provide individual and personalised attention to learners.

Some questions to be addressed to improve course delivery and learner support are:

1. What are the current problems that teachers in open universities face when performing their role?
2. How can technology be effectively used to improve support services?
3. What are the different models of course delivery in the online environment?
4. How can we manage the challenges of privacy and ethics in using technologies for learner support?

Assessment of Competencies

Assessment of competencies is not just about measuring learning outcomes. It is also about the credibility of the assessment system and how it encourages lifelong learning. Broadly, open universities around the world use both continuous and summative evaluation practice to measure student learning. However, the use of technology for student assessment is limited. In the summative evaluation, there is use of both objective and essay type tests as assignments. Particularly, the essay type assignments provide two-way communication between the teacher and learner.

Assessment systems provide a framework for recognition of prior learning (RPL) in open universities. RPL has gained importance in the context of skills development to provide certification to already skilled people and improve their professional standards by allowing them to upgrade their knowledge and skills.

In the technology-enabled learning environment, especially in open universities, a variety of assessment techniques are used. These include the use of assessment tools integrated within LMSs (such as quizzes, discussion forums, assignments, wikis and blogs), and alternative assessments such as ePortfolios, term papers, journaling, group work and project-based assessment. Digital technologies also facilitate peer assessment. A triad approach (self-reflection, peer feedback and internal/external expert evaluation) to assessment is a recommended practice in the digital environment.

Use of digital badges and micro-credentials allows learners to share their achievements with prospective employers online. The use of blockchain technology allows the distribution of permanent tamper proof digital credentials online to anyone, anywhere. A blockchain enabled transcript can show the trajectory of learner competencies, covering information on course content, types of examination taken, projects completed, internships and extracurricular activities.
There are several implications for open universities to adopt new technologies for student assessment.

### Some of the questions that need to be addressed are:

1. What are the ways to integrate RPL in the teaching and learning system?
2. How can we integrate alternative assessments in a digital environment?
3. What are the technological options available for using blockchain?
4. What systemic changes are required to use new technologies for assessment in open universities?

### Quality Assurance

Quality in higher education is a much-debated topic. Today, most countries have national quality assurance agencies for higher education. Many develop regulations for assuring quality in ODL systems as well. Adrianna J. Kezar states, “No topic has received so much attention in the last decade as technology and possibly no topic is as misunderstood or has received as little attention as distance education. In fact, people see distance education not only as subordinate but also at some level a threat to traditional practices of teaching and learning.”

Interestingly, ODL practitioners have been leaders in quality assurance (QA) from the very beginning. For example, the course development practice at the Open University, UK has been a benchmark for many other open universities around the Commonwealth. In India, the quality assurance agency for ODL was established in 1991 (DEC), whereas, the QA agency for higher education was established only in 1994!

There have been many robust systems for assessing the quality of ODL, including COL’s Review and Improvement Model, which has been implemented in many universities. While the operations of open universities are different from that of the face-to-face universities, there is often discussion on whether the criteria for QA can be the same for both. It is important to note some of the specific aspects of ODL to be considered within any QA framework:

- **Products:** the learning materials used, graduate outputs, pass rates, graduate destination, performance of competencies or practical skills;
- **Services:** interface with the university services including registration and advisory services, tutoring and counselling, feedback and guidance on learning (assignments), support for progress as a learner, career advice, provision and management of study centres;
- **Processes, procedures and policies:** delivery systems, record keeping, scheduling, warehousing and stock control, quality assurance procedures, technology infrastructure, etc;
- **General philosophy:** policy and mission statements, ethos and culture of the organisation, attitudes of staff and levels of commitment, culture of quality, etc.

However, with the developments of new technologies, system wide quality assurance is possible and blockchain technology is potentially one of the tools that can be deployed. At the same time, QA agencies need to consider new opportunities to improve quality by using LMS, OER and other interactive tools.

### In view of these, some of the questions that need to be addressed are:

1. Are the current QA systems adequate to accommodate the needs of open universities today?
2. How can new technologies help to assure internal as well as external quality assurance?
3. Can QA agencies use alternative systems of quality assurance using user rating and social media?
4. What is the realignment needed to keep QA systems and practices suitable for the 21st century?
Staff Development

When there are phenomenal changes in the work environment, teachers and staff in the open university need to change accordingly. It is the competencies of teachers and staff that determines the quality of learner experience. If open universities are to leverage the power of technology, it is important to provide continuous staff development opportunities.

There are many different approaches to staff development, including in-house workshops, external training, participation in seminars and conferences, online training, participation in MOOCs and so on.

To focus on the key issue of staff development, some of the questions that need to be addressed are:

1. Do open universities provide the ecosystem for staff development?
2. Is there visionary leadership in open universities that allows for adoption/adaptation to changes?
3. Is there a policy for staff development in place? What are the incentives provided?
4. How do research and development feed into policy and practice?

References

5. Those born between early 1980s to mid-1990s.

Expectations of the Roundtable

The roundtable of the Vice Chancellors of Open Universities in Asia and Africa will provide a platform for deliberation on the above issues and challenges facing the open and distance education system, in general, and the single mode open universities, in particular. Therefore, the objectives of the roundtable are to:

- Discuss key developments that are affecting the operations of single mode open universities;
- Critically examine the appropriateness of the existing models and approaches adopted by open universities in the context of the 21st century; and
- Develop recommendations for the open universities to follow up and implement to remain relevant to the national development goals and aspirations of the society.