Open Universities: Old Concepts and Contemporary Challenges

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Abstract

Background to this analysis is provided by Prasad's (2018) identification of the disconnect between the social purposes that open universities proclaim, and how well they fulfil them. The first section then revisits the 1990s concept of the 'iron triangle' of access, cost and quality and asks how it applies to distance education with today's technologies, while the second part examines the contemporary implications of a 1970s distinction between independent and interactive learning activities. A number of open university executive heads from around the world met in 2017 to discuss the environment in which they now operate. Their discussion sets the stage for the final section, which reflects on the current challenges facing open universities. How should they rise to the challenges of an era when online offerings from campus institutions are expanding rapidly? We look at economic models, the use of technology, governance and management arrangements, and teaching. The successful approaches developed by the UK Open University in the late 1960s stimulated the creation of open universities the world over. How should they be updated for a new era?

Introduction

Open universities were the most significant innovation in higher education in the last three decades of the 20th century. The UK Open University's founding chancellor, Lord Geoffrey Crowther, captured the public imagination with his articulation of its vision, which was to be: 'open as to people, open as to places, open as to methods and open as to ideas' (Crowther, 1969).

By operating at scale with low costs, raising the quality of teaching materials and introducing newer communications technologies into higher education, open and distance learning seemed poised to transform universities generally. But in the event this wider mutation occurred rather slowly. Not until the second decade of the 21st century, as the Internet became all-pervasive and elite US universities began offering Massive Open Online Courses (MOOCs), did most campus universities begin to take distance learning technologies seriously.

By this time some 50 open universities had been created around the world. The Commonwealth countries alone count 27 open universities (Mishra, 2017). The fortunes of individual open universities inevitably reflect the unique character of the economies and politics of their home jurisdictions, as well as the massive changes that have taken place in higher education worldwide in the last half-century. Some open universities have forged ahead, others have struggled to get off the ground, while yet others have encountered serious difficulties after decades of successful operation (see e.g. The Guardian, 2018).

This paper presents a personal view of the current situations and future prospects of open universities. It is couched in rather abstract terms since, with only a few exceptions, I did not

think it appropriate to reference individual institutions – not least because their situations can change quickly.

Part of the article draws on two concepts that I found useful during many years as a scholar-practitioner in open and distance learning (ODL) from 1971 onwards. I also recall with admiration the elements of the teaching and learning system developed for the UK Open University by Walter Perry and his colleagues in the late 1960s. These caught the imagination of higher education policy makers worldwide and stimulated many countries to adapt them to their own circumstances.

Before applying older concepts to the current situation of open universities I first summarise Prasad's distinction between the *dharma* (social purposes) and the *karma* (actual practice) of distance learning and his analysis of this tension in India (Prasad, 2018, p.6). Later, the penultimate section of the paper recalls some of the conclusions of a roundtable of open university vice-chancellors that took place in the margins of the ICDE World Conference on Online Learning in October 2017 (Daniel & Tait, 2017). This provides a lead-in to our concluding remarks, which reflect on the challenges facing open universities today. How should they evolve in an era when online learning offerings from campus universities are exploding?

Dharma and *Karma* of Distance Learning

In his recent book on open and distance learning (ODL) in higher education in India, Prasad (2018, p.6) uses the Sanskrit words *dharma* and *karma* to distinguish between the 'principles that guide us to do the right things' (*dharma*) and present practices (*karma*). The two words are used in the secular sense of right conduct and actual practice. An important theme of his book is the disconnect that he perceives between *dharma* and *karma* in ODL in India and how it might be repaired. Similar disconnects can be observed in open universities elsewhere.

For Prasad, the essential elements of the *dharma* of ODL include:

- *An instrument for the democratisation of education.*
  This means opening access to all and allowing learners to manage their own learning. For example, open admission policies are based on the assumption that it is the exit standards, not the entry standards, that matter.

- *A means for social justice.*
  Distance education can offer opportunities to people living in resource-poor areas, including geographies that would otherwise be excluded. It is a more inclusive form of education, notably for women for whom independent movement (e.g. to attend campus classes) is less possible.

- *A means for development.*
  'Learning for Sustainable Development' is the mission of the Commonwealth of Learning (Commonwealth of Learning, 2018). It helps governments expand the scale, efficiency and quality of learning by using appropriate technologies, particularly those that support open and distance learning (ODL). ODL is used extensively in many countries for capacity building and the development of the skills and professional competence of the working population.

- *Mediating education with technology.*
  Although ODL systems are at different stages in their use of newer media, they are being revolutionised by interactive technologies in general and open educational resources in particular.

- *Quality as an imperative.*
  Quality is essential for achieving other elements of *dharma* in distance education. The quality of learning materials, student support services, student evaluation and administrative services are critical to system effectiveness and to ensuring legitimacy and credibility in a competitive environment. The visibility of ODL systems makes their quality more amenable to public scrutiny.

- *The teacher as a facilitator.*
  The focus of teaching in ODL is facilitative rather than expositional. This makes the identity of academics in these systems more complex and inclusive, because there is often division of labour between the two teaching functions of materials preparation and student support in particular.

- *The institution teaches.*
  In conventional education the teacher teaches, whereas in distance education the institution teaches (Keegan, 1996). Good logistics along with quality learning materials and effective student support services are important requirements for a successful ODL system.

Prasad addresses the *karma* of distance education in the context of India, which he describes as "one system, many models". Since this description also applies to the global network of open universities, the trends that he observes in India have wider relevance. They include:

- *Large student numbers.*
  The capacity to expand enrolments at low marginal cost is an important feature of distance education. China, as well as India, has distance teaching institutions with over one million students and they also number in the hundreds of thousands in open universities in various countries. An important question is how large can such systems grow before they become so difficult to manage that quality and effectiveness suffer.

- *Diversity of programmes.*
  Almost any subject that is taught by conventional universities can be found in an open university somewhere. While subjects with a significant practical component require special arrangements, these can be designed and implemented to high quality standards. The former scepticism of professional associations about distance education is steadily receding because its flexibility enables institutions to offer skills development and professional development programmes to meet many needs of markets and employers. Short-duration specialised ODL programmes addressing the needs of particular employment categories are becoming very popular.

- *Involvement of the private sector.*
  Major players in industry are using ODL for developing human resources, particularly

in professional and vocational fields, while numerous private providers offer education and training programmes at a distance.

- *The profit motive.*
Because of their capacity to add enrolments at low marginal cost, ODL systems that charge tuition fees can generate significant surpluses once the break-even threshold is reached. Distance education in both private and public sectors therefore suffers from the temptation to skimp on learning materials, support services, evaluation systems and administrative arrangements in order to maximise profits.

- *Use of technology.*
There is huge variety in the use of technology in ODL systems. Open universities in developing countries often apply technology in sophisticated ways to their admissions and administrative systems before they attempt to use it in the teaching function. One danger, related to the temptation to maximise profits, is to use technology to replace as many human interventions in the teaching process as possible, with likely loss of quality.

- *Quality and regulation.*
Prasad's comments on quality assurance and regulation apply specifically to India. Practice in these two areas varies greatly around the world, but most open universities are subject to quality assurance regimes that are similar to those for conventional universities. The regulation of distance education varies widely by jurisdiction, from highly restrictive to rather lax.

The disconnect between *Dharma* and *Karma* in distance education – how to address it

Prasad's analysis of the disconnect between *dharma* (principle) and *karma* (practice) in India – and how to mitigate it – also has broader relevance to open universities around the world. We particularly note the following:

- *Distortion of the goals of open and distance learning.*
The tendency to chase the surpluses that distance education at scale readily generates can easily compromise the social goals of these systems. This is true in both the public and private sectors. Although dual-mode universities that teach both on campus and at a distance are particularly prone to use the surpluses issuing from their distance programmes to subsidise campus operations, open universities are not immune from the temptation to invest these 'profits' in activities with dubious direct benefit to their students.
Prasad comments: "This amounts to gross violation of academic norms. The money-making orientations in most of the cases result in compromise with quality. It is distressing to observe the attitude of some dual-mode universities which accept ODL students, but exhibit no sense of ownership or pride in them. Their usefulness is measured in terms of surplus generation. It is sickening to listen to some vice-chancellors boasting of their achievements in terms of surpluses generated through distance mode." He adds: "publicly identified for-profit institutions are preferable to

the hypocrisy of publicly-funded institutions making money through ODL and using it for other purposes."

- *External constraints on the dharma of distance education.*
  The unethical practices mentioned above partly explain why some regulators have restrictive approaches to distance education programmes. In some jurisdictions, only programmes that are already in the curricula of conventional universities can be offered at distance. Such policies are misguided because they do not take into account the different target groups for distance programmes and the particular social needs to which they seek to respond. Open education is too often constrained by the rigidities of the conventional system, which defeats its purpose. Prasad calls distance education in India "an ineffectively over-regulated system".

- *Slow adoption of interactive technologies.*
  Interaction is the essence of education, but Prasad argues that the expansion of its use in developing countries like India is constrained by the attitudes of ODL institutions themselves as much as by delays in the roll-out of the technology needed to support interactive software.

- *Lack of professionalism in management and leadership.*
  Large open universities have as much in common with industrial enterprises as they do with campus universities. Too often this difference is not reflected in the leadership and management of these systems, which fail to meet the simple expectations of students: to receive their learning materials on time, to be able to call on professional student support and to have examinations conducted as scheduled.

- *The role of teachers in ODL.*
  Ambiguity in the definitions of the roles of teachers is a challenge for most open universities. Teachers' roles are equally important in distance learning and conventional systems, and may be more complex and difficult in distance education because of the use of multiple technologies for teaching and learning. We return to this issue in a later section but a final comment from Prasad is apposite: "there is a constant debate in ODL circles about the roles, responsibilities and relationships (of teachers) with others in the system. Teacher identity is not satisfactorily addressed in ODL systems. The relationships between the multiple players engaged in teaching and learning in ODL are constant sources of irritation. There is a feeling that teachers in ODL are engaged more in management activities than in academic activities. This may not be a satisfying situation for serious academics. The strengthening of ODL system management may relieve teachers from some of the administrative responsibilities and enable them to make meaningful academic contributions."

Before leaving Prasad's analysis of the disconnect between *dharma* (principle) and *karma* (practice) in ODL in India we make two observations. First, this disconnect is not peculiar to India, although the sheer size of India's ODL sector throws up more examples of it. Second, it is ironic that some open universities appear to be struggling at a time when the wider higher education systems that surround them are beginning to copy their missions (*dharma*). This is a new phenomenon. Until recently conventional universities did not espouse the

democratisation of higher education and social justice as their goals – save in occasional rhetorical flourishes in the speeches of their presidents or vice-chancellors!

While it is encouraging to see the wider higher education sector espousing inclusiveness, most of its institutions are far less prepared than open universities, both philosophically and practically, to follow this orientation. What should open universities do to recover their pre-eminence in implementing the contemporary agenda, as expressed, for example, in the UN Sustainable Development Goals (United Nations, 2018)?

Distance education has the potential to achieve, in practice, the ambitious goals that Prasad sets out for it, because it applies technology to the educational process. We shall now draw on concepts developed in the late 20th century to explore the role of technology more deeply.

Revisiting older concepts

Our first older concept is the 'iron triangle' (Daniel, 2010). This holds that distance education – and technology-based learning generally – have the potential to break away from constraints that classroom education faces in trying to create a balance between access, quality and cost. The extent to which an open university exploits this potential determines its ability to expand student numbers, cut costs and develop a reputation for quality – and to do all this simultaneously.

Our second 20th century concept presents the challenge of teaching at a distance as the achievement of a cost-effective balance between learners' independent study and their interaction with other human beings (Daniel & Marquis, 1979). This is an important practical implication of the constraints of the iron triangle. It is usually cheaper – certainly if an open university operates at scale – to prepare and offer materials for independent study than to provide personal support and tutoring. But most students need some direct human interaction in order to succeed. Providing such interaction is more expensive – and more difficult to scale up – than distributing materials for independent study, especially if those materials can be distributed electronically.

Open universities and the iron triangle

Technology's revolutionary contribution to education to make it possible to increase student numbers, cut costs and improve quality – all at the same time. Open universities are the most powerful expression of this revolution.

Daniel (2010, p. 51) has expressed this graphically as the 'iron triangle'. This representation highlights the fundamental constraints inherent in education by classroom teaching. Attempts to increase access by putting more students in each classroom attracts accusations of lowering quality, while adding more teachers increases costs. Similarly, trying to improve quality by reducing student numbers or providing better learning materials also increases costs, while direct cost-cutting results either in lower student numbers or poorer quality (or both). These constraints have been the bugbear of attempts to expand education throughout history, which explains why educational quality is often equated with exclusivity of access.

The use of technology allows us to break out of these constraints. We understand technology in the broad sense, meaning not only machines and electronics but also the basic

organisational technologies of specialisation and division of labour promoted by Adam Smith in the 18th century (Smith, 1776). Wedemeyer (1974, p. 4) captured the essential contribution of technology to distance education nearly 50 years ago:

"As an operating principle the system is capable, after reaching a critical minimum of aggregation, of accommodating increased numbers of learners without a *commensurate* increase in the cost of the basic learning experiences: i.e. costs must not be directly and rigidly volume sensitive. After reaching the necessary level of aggregation, unit costs should show a diminishing relationship to total system costs."

Access

This means that open universities are uniquely equipped to expand access to higher education by increasing student numbers. They should, in principle, be well positioned to take advantage of the goal of serving much wider populations that has been legitimised by the United Nations Sustainable Development Goals (SDGs) for 2030. Whereas the Millennium Development Goals of 2000 limited their scope to basic education, the SDGs for 2030 also have higher education as a target: "by 2030, ensure equal access for all to affordable and quality technical, vocational and tertiary education including university education" (UNESCO, 2018).

Whether open universities can actually respond to this UN policy depends on the size of the pools of potential learners on which they can draw and the obstacles that might prevent such people from enrolling. On these criteria, open universities across the world are a picture of feast and famine. Although overall enrolments in higher education are forecast to increase by tens of millions in the coming decades (UNESCO, 2015), many of these potential students are in Asia and Africa, where the open universities are already under great enrolment pressures.

Meanwhile, open universities in richer countries face challenges related both to shrinking pools of potential learners and also to the obstacles that stand in the way of their enrolment. Most of these institutions – the UK Open University (UKOU) is a perfect example – began operations when the availability of places in higher education was severely limited and access to part-time study was virtually non-existent. At its launch in 1969 the UKOU could draw on a huge pool of eager applicants – many of them school teachers – who were keen to obtain degrees. Although the profile of applicants evolved over the years, the UKOU was able to sustain high enrolments for several decades, reaching over 200,000 in the early years of the 21st century.

Although the pool of potential applicants may have become smaller in absolute terms, the decline in student numbers at the UKOU since 2010 owed more to the obstacles that would-be students faced in enrolling. The massive expansion of conventional UK higher education institutions – including much wider provision of part-time and distance study opportunities – cannot really be considered an 'obstacle' to enrolment at the UKOU, but it lost the quasi monopoly on part-time and distance learning of its early years long ago.

Much more significant for the UKOU, however, was loss of state funding, both for particular programmes and across the piece. Around the world, most rich-country governments are

cutting their financial support to higher education. In the UK, where the governing elites have almost no personal experience of part-time or distance study, state funding for these modes of learning has been practically wiped out. This has placed the UKOU in a quandary. Because of its social mission (*dharma*) the students it attracts are mostly less able to cope with steep increases in tuition fees than their counterparts in campus universities. Moreover, these older students, who may already have mortgages and loans for other purposes, are less likely to take state-supported loans for higher education, even where these are made available to part-time students.

Open universities in other rich countries have not faced as severe a squeeze in government funding as the UKOU, but several have experienced diminished government support in various ways. The smaller ones inevitably have more difficulty in attracting political support and attention than campus universities, not least because most legislatures are territorially based, which assures campuses of vociferous local support. The Toronto Roundtable of open university heads concluded: "Most OUs have been the darling of their government at some stage in their development, but it is impossible to retain this status for decades as governments and their political ideologies change" (Daniel & Tait, 2017).

Costs

This analysis of the issue of access shows that open universities around the world face very different challenges in the area of cost. The large open universities in Asia and Africa, which can generate surpluses from relatively low tuition fees, have the challenges of adapting the economic structure of their institutions to changing technologies and, more generally, of avoiding the temptation, noted in our earlier quotation from Prasad (2018), to spend their surpluses in ways that do not advance the teaching and student support functions of their institutions.

In richer countries open universities may, on top of the task of integrating new technologies into the teaching and student support functions, face the necessity to cut costs generally to compensate for loss of state funding that cannot be made up by raising tuition fees.

The costing of distance education is well-tilled academic territory. Snowden and Daniel (1980) argued that with careful design, management and cost control, distance teaching institutions could be economically viable with fairly low student numbers. Rumble (1992) warned of the competitive vulnerability of distance teaching universities 25 years ago and Bates (see, e.g. Bates, 2017) has revisited the costs of distance teaching regularly as teaching and student support technologies have evolved over the five decades.

Because of their scale and scope, the challenge for open universities in adapting cost structures to changing technologies and resources lies as much in implementing cost-cutting measures as in conceiving them. Like oil tankers, open universities cannot change direction quickly. New approaches to teaching and tutorial support must be thoroughly pilot tested before being rolled out at scale.

Quality

From its beginnings, the UKOU demonstrated that in addition to economies of scale, distance education could achieve 'quality of scale'. In principle, given their large student numbers,

open universities can afford to make the considerable investments in learning materials, student support and administrative systems needed to ensure very high quality. Although today's learning media and support systems are different, better integrated and more diverse than the printed materials, broadcasts and face-to-face tutorials that the UKOU pioneered in the 1970s, open universities are still able to enjoy economies and qualities of scale. Contemporary technologies allow students to get more rapid feedback on their work and teachers to update and revise learning materials more frequently.

In summary, open universities continue to be less constrained by the 'iron triangle' of access cost, and quality than campus institutions. It is still possible, with judicious design and management, to increase numbers, improve quality and cut costs *all at the same time.*

Independence and interaction: getting the mixture right

Another quotation from Prasad (2018, p.78-79) flags a vital question facing all open universities. He writes: "it is time to rethink the current model of support services provided to distance learners by using available ICTs effectively. Many specialised agencies are also in operation in the field, providing tutorial services and conducting free tutorial services under the open tutorial system. The social media are also extensively used by some OUs for support services. The OUs should revisit their systems of support services to make them more flexible and reflective of needs through technology enabled direct-to-home services. The learner support in OUs should be based on the principles of engagement, two-way interaction and building the sense of community and belongingness amongst the learners."

Each open university has its own challenges in providing student support. But it seems that in many institutions the 'original' UKOU tutoring model requires rethinking. This model called for teams of full-time academics to concentrate on course development, which meant designing materials for largely independent study, while a much larger group of part-time tutors mediated, either locally or electronically, the interaction between the course materials and the students. Although this model served the UKOU brilliantly for many years, some of its weaknesses were apparent from the start. One writer in the 1970s talked of the creation of "a large teaching proletariat and a small academic ruling class", while another lamented that "part-time tutors and the students face similar problems on the outside rim of the Open University wheel" (Daniel & Marquis, 1979). Decades of development in open universities and in higher education generally have exacerbated these issues.

First, most of the UKOU's early part-time tutors embarked with enthusiasm on a radically novel project. Most were academics with full-time posts in other universities. Some found that they enjoyed teaching the older UKOU students more than their own younger students on campus and elected to continue as UKOU tutors for many years. Today the casualisation of the academic profession has largely swept away such idealism among new recruits. In 2018 Québec's TÉLUQ found that more than a third of its part-time tutors were also teaching for other institutions.

Second, some open universities find that their full-time academics are becoming somewhat disconnected from the reality of students' learning in the courses they had designed. In earlier days, open university courses might run for several years without significant revisions by the

original development team. Today, with courses being presented more interactively through electronic platforms, revisions are made more frequently, which requires course team members to stay closely in touch with the reception of the course by students.

Accordingly, some open universities are insisting that all full-time professors be substantively involved in tutoring their courses, as well as developing them. As a corollary, the management of full-time and part-time academic staff is becoming more integrated. In some institutions, such as the UKOU, the terms and conditions under which part-time tutors are hired have improved substantially over the years, thus enhancing their status and self-esteem.

In making such changes open university leaders must remain alert to their impact on institutional economics. The industrial principles of specialisation and division of labour continue to be key to operating at scale, so open universities must avoid falling back into the 'cottage industry' approach to the teaching function still prevalent at most campus universities.

What do open university executive heads think?

In October 2017, the International Council for Open and Distance Education (ICDE) worked with Ontario's Contact North | Contact Nord (CN) to convene a world conference on online learning in Toronto. The president of CN, Maxim Jean-Louis, convened a closed roundtable of the world's open university executive heads (vice-chancellors or presidents) alongside the ICDE conference in order that they could share views on the opportunities and challenges facing their institutions. Professor Alan Tait and the author facilitated the event, where the executive heads shared their views on the following questions (Daniel & Tait, 2017).

- *Open Universities have made openness and access a mainstream concern across higher education (HE) generally. How should they now innovate in their own missions to strengthen their reputations and social relevance?*
  Participants agreed that the publication of the UN's Sustainable Development Goals had legitimised this goal of serving wider populations. The challenge is that the really big numbers of new students will be in Asia and Africa, where the OUs are already under great enrolment pressure. Two of the OUs represented had face-to-face teaching streams on campus, accounting in one case for half the student enrolment. These on-campus cohorts bring the OU to the attention of parents and a wider population.

- *How are Open University student demographics shifting? What innovations are needed now?*
  The demographics of OU student bodies are changing in different ways – some towards older students, some towards younger students. While some OUs are seeing the median and average ages of their student body increase, and are having to adapt to the habits and attitudes of older learners, the general trend is in the opposite direction. Most OUs are seeing increasing numbers of younger students, though not usually school leavers. These younger students are not always more technologically savvy than older students and they usually have less money to spend.

- *Technologies are expanding the options for ODL – which ones hold most promise?*
  Some of the OUs present were now teaching entirely online, whereas others were using printed materials. All have plans to increase their online teaching, but the main conclusion was that IT was proving most useful in the administrative and student support functions. By speeding up processes, these have positive impacts on student progression and retention. In the majority of countries, governments now authorise all HE institutions to offer online and distance learning, putting considerable competitive pressure on the OUs. It is now rare for an OU to have a national monopoly on offering higher education at a distance.

- *OUs should operate at scale – what are the implications?*
  The OUs present at the Roundtable operated at very different scales – not always related to the overall size of the country's population. Some of the smaller OUs may have made life more difficult for themselves by adopting too fully the division of labour and specialisation of functions of the industrial model used by the larger OUs. With the notable exception of the UKOU and its creation of FutureLearn, the OUs generally have not engaged intensely with MOOCs (Massive Open Online Courses).

- *Are there opportunities for collaboration among OUs?*
  Most of the OUs represented already had the partnerships they needed. There was, for example, extensive course sharing between the state OUs in India. Partnerships need close attention and management, even when the original agreements are clear, and the challenges of partnerships are several times greater when they are offshore.

- *The fundamental challenge for OUs is blending flexibility, quality and scale. How do they achieve it?*
  Flexibility is good, but so is structure. One OU had improved its completion and retention rates dramatically simply by tightening up the regulations about start dates and completion deadlines.

- *How do OUs sustain good government relations?*
  This vital aspect of OU management came up repeatedly. Most OUs have been favourites of their government at some stage, but this status can prove fragile as governments and their political complexions change. Success in government relations came from using the considerable scale, power and reach of an OU to help the government achieve its own education and training goals. The smaller OUs have special challenges, and the near-death experiences of both the Canadian OUs emphasised the absolute importance of nurturing the link between an OU and its government's priorities.

- *What terms to use?*
  A refrain throughout the roundtable was that whereas most of the OUs felt that the quality of their teaching and support was at least as good as that of the campus universities in their jurisdictions, they – and ODL generally – still had a poor reputation with the public. Some heads felt that using the term 'distance education' and even the term 'open' was not helpful.

Rising to current challenges

Most campus universities now offer courses online or plan to do so. How can open universities retain their competitiveness within higher education? Can they also position themselves to respond to the UN Sustainable Development Goals, namely, "by 2030, to ensure equal access for all to affordable and quality technical, vocational and tertiary education including university education" (UNESCO, 2018)? Addressing both challenges is a tall order. At a minimum, it requires that open university programmes must be:

- affordable to all students (open as to people);

- offered ubiquitously at scale (open as to places);

- well-governed and managed (open as to methods);

- effective at teaching (open as to ideas).

These criteria take us back to the four elements of the founding slogan of the UK Open University. How should open universities adapt to meet these requirements today?

Open as to people: affordability and economics

A harsh lesson of recent decades is that open universities need economic models that rely on student fees for most of the resources needed for their operations. Institutions relying on state funding for their regular programmes will become increasingly fragile as governments continue to reduce financial support for higher education. This, of course, also affects campus universities, where state funding is eroding too. Most campus universities, however, unlike open universities, do not seek to be affordable to all and can usually set their fees as high as their chosen markets will bear.

One exception to this warning against reliance on public funds is that open universities are well-placed to bid for state funding for specific time-limited programmes that governments themselves wish to implement in order to retrain large numbers of learners across their jurisdictions. The author's first work in ODL, in the 1970s, was on such a programme. The Quebec Government wanted to retrain all its secondary school mathematics teachers in the space of a few years and gave the task to the TÉLUQ, Quebec's open university (TÉLUQ, 2009).

In their quest for affordability open universities have two advantages. By operating at scale and using technology intelligently they can, after reaching a critical mass of enrolments, see their "unit costs show a diminishing relationship to total system costs" (Wedemeyer, 1974). The larger open universities, mostly in Asia and Africa, have already reached the point where student fees support their operations. The challenge now is to govern and manage their huge organisations effectively. The smaller open universities need to become more skilled at using technology efficiently to cut costs, thereby attracting more students through lower fees.

Correspondence education, which had its heyday from the middle of the 19th until the late 20th century, was mostly offered by the private, for-profit sector and entirely supported by student fees. Modern communications technology should enable open universities to re-create

aspects of that economy, whilst teaching more effectively than correspondence education was able to do a century ago.

Some private-sector distance educators are again showing the way. A contemporary example is the French company Open Classrooms (2018), created by its 12- and 13-year old founders in 1999. It now reaches over 2 million learners per month with a range of job-related courses and several degree programmes recognised by the French government. Open Classrooms' 'Freemium' economic model means that viewing the content is free, but payment is required for mentoring and assessment (https://en.wikipedia.org/wiki/OpenClassrooms).

Some institutions are developing MOOCs (Massive Open Online Courses) in a similar way. Much of the content is available free, but students pay for assessment leading to degrees and diplomas (see e.g. Deakin University, 2018).

Open universities should be leaders, not laggards, in such developments.

Open as to places: ubiquity

The founding slogan of the UK Open University implied that it would make its courses available everywhere through distance education. Today, most universities that offer courses online boast about the diversity of countries from which they attract enrolments, even though their numbers are usually dwarfed by those from the home jurisdiction.

The UKOU and other open universities were rather slow to recruit learners globally, for three good reasons. First, they had a sophisticated awareness of variations in copyright legislation across the world, which limited their right to distribute their learning materials in certain places (see e.g. Open Learn (2018)). Second, they aimed to offer all their learners a similar experience which, if their teaching and learning systems involved mentoring or tutorials, was difficult in some jurisdictions. Third, setting fees and collecting them were not straightforward.

While the expansion of the Internet has changed the nature of these constraints, it should also make all universities, particularly open universities, more sensitive to the possible perception that they are engaged in a neo-colonialist project. Such perceptions could be a serious barrier for open universities seeking to contribute to the attainment of the UN Sustainable Development Goals outside their home jurisdictions. For this reason, as well as for greater reach and sustainability, open universities do better to operate overseas through partnerships or consortia. Examples are the UKOU's joint programmes in Africa in teacher education, TESSA (Open University, 2018a) and health education, HEAT (Open University, 2018b); OU Malaysia's programme in Ghana (Ghana News, 2018); and the University of South Africa's work in Ethiopia (UNISA, 2016).

Such programmes may also provide opportunities for open universities to secure some time-limited funding from the international development arms of their home governments.

Open as to methods: governance and management

Ritzen (2016) summarises contemporary research on the links between governance and effectiveness in higher education in the statement: "university autonomy, specifically in reference to academic approach, staffing, internal decision-making, and financial practices, in

combination with proper funding, is likely to enable universities to produce graduates with better competencies."

Securing sufficient autonomy to ensure effectiveness is a key to success for an open university. For some it has been a challenge. Fortunately, prime minister Harold Wilson's original proposal that the UK Open University be established as a consortium of Oxbridge colleges was abandoned during the planning and implementation process in favour of a royal charter that gave it similar autonomy to the UK's older universities (Perry, 1977). Some other open universities, however, have governance structures that give campus universities – often rivals – considerable control over their programming and operations.

OU Malaysia, for example, is owned by a consortium of 11 Malaysian public universities (Open University Malaysia, 2018). Fortunately, as a private university it pays dividends to its owners, so oversight by these public universities has been relatively benign. In Canada, the TÉLUQ was not so lucky. It was set up as the distance teaching component of the Université du Québec network of regional campus institutions, which were strongly represented on its governing board. Subsequent inter-institutional rivalries within the network led to no less than seven attempts to close the TÉLUQ down (Umbriaco, 2018). Its survival and present success is a tribute to the attractiveness of ODL to students!

Once an open university has sufficient governance autonomy to set its own priorities and strategies, the challenge is managing their effective implementation. We noted earlier that open universities are large and complex operations that require competent academic and administrative leadership. In jurisdictions where external political input into the appointment of university executive heads is the norm, nepotism in these nominations makes effective management unlikely. We must hope that, as open universities play an increasing role in achieving governments' own objectives such as the UN Sustainable Development Goals, officials and politicians will realise that appointing cronies to lead these institutions is a short-sighted policy.

Open as to ideas: teaching effectively

One reason that the infant UK Open University caught the imagination of the public and captured the allegiance of its students so quickly was the originality of its major courses. They not only brought together different disciplines, but created new paradigms for the teaching some subjects. These academic breakthroughs were largely due to the development of courses by teams, which Perry (1977) considered to be the UKOU's most important innovation in higher education. As well as producing some highly imaginative and exciting courses, it also made the UKOU an attractive working environment for academics who enjoyed the robust intellectual arguments that were a staple of course team work.

But course teams are expensive. Today, some open universities save money by going to the other extreme: commissioning course materials from outside 'content experts' and having them worked over by internal editors and instructional designers before being released to students. This process is much cheaper than constituting a course team to rethink the subject *ab initio* but does risk simply presenting current academic orthodoxy in a dull way. A compromise is for open universities to operate a mixed economy in course development,

using cheaper methods for more advanced subjects but setting special resources aside to excite new students with some 'blockbuster' courses.

Some campus universities already implement a similar approach by allocating extra resources to celebrated faculty members for them to create exciting MOOCs that will attract learners to their regular programmes. This may not always work. An Australian academic who took a MOOC on 'Xi Jinping Thought' from the elite Tsinghua University wrote that it gave: "an unprecedented opportunity to observe the poverty of Chinese state-enforced ideology" (Carrico, 2018)!

For open universities, however, teaching means not only developing courses, but also supporting students by mediating between them and the course content. There is no single approach to these functions of tutoring and mentoring that can fit all situations. An open university's size and the communications infrastructure on which it can draw are just two of the factors that will determine how it provides support. Earlier we quoted Prasad's (2018) conclusion that this is a special challenge for open universities because it is easy to create the "feeling that teachers in ODL are engaged more in management activities than in academic activities".

This is currently the most vibrant area of research and development in ODL. Open universities can take advantage of the large volume of action research on online teaching generated by campus institutions that are entering the field. The Contact North newsletter Online Learning News is a rich resource for this topic (Contact North, 2018).

Conclusions

Prasad's (2018) identification of the disconnect between the purposes (*dharma*) that OUs claim to espouse and their actual practices (*karma*) in fulfilling them set the stage for this article. Whereas higher education was absent from the Millennium Development Goals, its inclusion in the UN's Sustainable Development Goals for 2030 emphasises that the purposes of open universities are as relevant as ever. Yet, although open universities have attracted tens of millions of new students in recent decades, some have found it difficult to adapt to changing environments, particularly decreasing financial support from governments and evolving communications technologies.

In revisiting the iron triangle of access, cost and quality we concluded that ODL can still enjoy advantages over classroom teaching in all three areas, although these advantages may be more challenging to achieve with contemporary interactive systems. These systems also require a rebalancing of the role of part-time and full-time staff in providing independent and interactive learning opportunities for students.

A roundtable discussion among the executive heads of open universities concluded that despite decades of success, the advantages of 'open' and 'distance' education still need to be promoted assertively. Bringing advanced education to resource-poor communities should be made more newsworthy than yet another report on world rankings of research-focused universities in rich countries!

The original slogan of the UK Open University, 'open as to people, open as to places, open to methods and open as to ideas' still provides an inspiring vision for all open universities. The challenge is how to implement each of its four elements in a new era.

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