Chapter 14 The State of Open and Distance Education



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This book is the second of two volumes. However, these books do not represent an exhaustive portrait of the state of open and distance education (ODE) in the world. Important ODE developments in Indonesia, France, Spain, Mexico, Argentina, Nigeria, Tanzania and many other countries are not covered. However, Australia, Brazil, Canada, China, Germany, India, Russia, South Africa, South Korea, Turkey, United Kingdom, and the United States represent 51% of the world's population. As such, the two volumes about these 12 countries provide a portrait of open and distance education in a large part of the world today. The books also provide an opportunity to compare the trends, challenges and opportunities in ODE based on common points of reference (Raivola, 1985). In this chapter, we compare and analyze ODE enrollments, the relationship of ODE to higher education systems, the growing competition within ODE, the acceptance of ODE, the use of ICTs, and important barriers, challenges and opportunities in these twelve countries.

Growing Enrollments

The overall trend is one of continued growth in ODE enrollments for higher education students. Based on the data provided by the authors, there are over 23 million higher education students taking a distance education course from institutions in the twelve countries (see Table 14.1). This is likely low calculation of total enrollments. It has been hard to tally the precise number of students enrolled in ODE, as countries count

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Table 14.1 Enrollment in pen and distance education	Country	Enrollment in ODE	
	Australia	261,000	
	Brazil	1,341,800	
	Canada	361,000	
	China	6,450,000	
	Germany	154,300	
	India ^a	4,200,000	
	Russia	2,475,500	
	South Africa	337,900	
	South Korea	298,600	

Turkey

Total

United Kingdom

United States

Ta op

1,374,300

5,828,800

23,257,100

173,900

ODE differently. In Turkey, for example, there is precise data for open education enrollments. Open education is mainly self-paced learning using educational media. But open education is a specified, if dominant, form of DE in the country. However, there is also DE in Turkey that is delivered via synchronous ICTs. In Australia and the UK, the data does not consistently include ODE enrollments on conventional campus-based institutions.

The year over year enrollments in distance education have been growing in most countries. Enrollment has been growing most rapidly in emerging economies. In Brazil, China, and Turkey, ODE enrollments have been increasing dramatically. In Brazil, ODE enrollments grew at 63.8% per year from 2003 to 2009, before tempering to average annual growth rate of 9.9% from 2009 to 2014. In China, ODE enrollments have grown by an average of 8.8% per year from 2004 to 2016. In Turkey, open education enrollments have grown by 20.1% from 2008 to 2014. In these countries, ODE growth is important to meet the increased demand for education that is occurring in tertiary education, and likely all levels of education.

There has been steady growth in ODE enrollments in Australia, Canada, Germany, India and United States for many years. Demand for ODE is growing because of conventional higher education students seeking more flexibility, and adult learners regularly returning to higher education. In South Africa and South Korea enrollment levels have been fluctuating. In South Africa, enrollments at the University of South Africa, by far the biggest DE provider, have been mainly increasing for most of this decade, with the exception of 2014. In South Korea, enrollment numbers have been

^aFor India as for other countries, there are different enrollment numbers provided. The ones included here are a more conservative calculation provided by the Government of India's post hoc five-year plan analysis

steady but flat for the past six years from the 17 cyber-universities, while enrollment has been declining at the Korean National Open University.

ODE enrollment numbers have been declining for several years in Russia and the United Kingdom, but for different reasons. Earlier in this book, Zawacki-Richter et al., state that in Russia, ODE enrollments have bifurcated. Demand for online education is growing while demand for correspondence education is declining. Online education includes e-learning, blended learning and flexible learning. It is called distantsionnoe obrazovanie to distinguish modern ODE from correspondence education. The latter still connotes the Soviet system of DE and sometimes has a negative image. Educational institutions are growing their offerings distantsionnoe obrazovanie and moving away from correspondence education. Despite the growth in distantsionnoe obrazovanie, the overall enrollments in all DE formats have been declining in Russia. The substantial ongoing decrease in the country's population has resulted in less demand for education at all levels. Correspondence education seems to be particularly affected by this population decline. In the United Kingdom, a decrease in distance education enrollments is likely attributable to government economic austerity policies in 2011 and 2012 that resulted in increased fees for students since 2012. Gaskell points out, in volume 1, that since those policies, fewer adult students and part-time students, important ODE constituents, have been enrolling. Across the world, there may be other cases like Russia and the UK. But overall, the trend seems to be more ODE enrollment growth than decline.

ODE Growth as Part of Education Growth at All Levels

Education as a sector has seen increased demand for decades (see Fig. 14.1). In primary, secondary and tertiary (or higher) education the number of people enrolled has continued to increase for 50 years. This is due to several factors including: global population growth (in 1965 the global population was 3.3 billion and by 2014 was 7.2 billion people); international efforts encouraging educational participation, like the Millennium Development Goals in 2000 and Sustainable Development Goals from 2015; government educational policies; and a growing general belief that education is important for the (knowledge) economy. However, tertiary education has been growing especially quickly in the past twenty years.

In 1995, only 12.5% of students who finished primary education persisted to higher education (see Table 14.2). Two decades later nearly 30% of people who enroll in primary education enroll in higher education. It is not just that education enrollments are growing but students in education are persisting to higher levels of education.

This has led to increased demand for higher education in countries. In 1992, five countries had more than 50% of their student-aged population attending university. By 2012, 54 countries had more than 50% of their student-aged population attending university (The Economist, 2015). This does not include the demand for higher education by adult learners. This global growth in tertiary education has put pressure

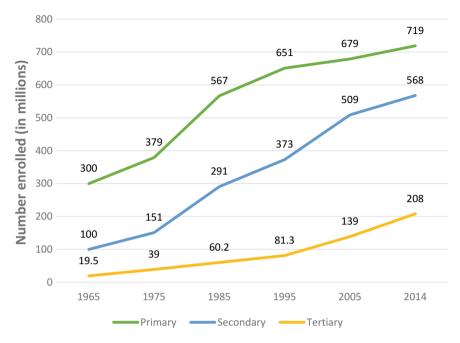


Fig. 14.1 Global gross education enrollment

Table 14.2 Gross education enrollment growth 1965–2014

Year	Primary (millions)	Secondary (millions)	Tertiary (millions)	Primary persisting to secondary (%)	Secondary persisting to tertiary (%)	Primary persisting to tertiary (%)
1965	299.9	100.5	19.5	33.3	19.5	6.5
1975	379.4	151.3	39.0	39.8	25.8	10.3
1985	567.6	291.1	60.2	51.3	20.7	10.6
1995	650.9	373.2	81.3	57.3	21.8	12.5
2005	678.9	509.1	139.3	75.0	27.3	20.5
2014	719.1	568.0	207.5	79.0	36.6	28.9

Source Figures from, and calculations based on, UNESCO Statistical Yearbook 1979, 1998, 2016

on educational providers to keep pace with demand as more of the world wants to go to university. DE is seen as a way to meet demand for higher education more quickly while requiring less physical infrastructure and less cost. DE is growing perhaps as an alternative to face-to-face education, but also because education as a whole is growing. DE may have a bigger share of the education pie, but the pie itself is getting bigger.

Globally, enrollments in higher education have been growing faster than any other level of education. From 1995 to 2014, enrollments have grown in primary education by 9.5%, in secondary education by 34.3% and in higher education by 60.9% (UNESCO, 2016). This is partly because of the success of primary and secondary education. For the past two decades, there has been a global push to have more students enter and complete education (e.g. Universal Primary Education initiative, the second goal in the United Nations Millennium Development Goal from the year 2000). This has led to an upward push in persistence, completion and demand in education. As more people complete primary education, the demand for secondary education and later tertiary education has increased. Combined with the growing economic and social importance of higher education credentials, demand is so robust, many countries cannot build conventional tertiary education spaces quickly enough to keep apace. In countries like China and India, distance education offerings are expanding to meet this growing demand.

ODE as Part of Higher Education

It is not just the enrollment figures that matter. In several countries, ODE enrollments are a sizable portion of higher education. Figure 14.2 indicates the percentage of higher education students enrolled in open, online and distance education courses. The percentage ranges from 5.5% of higher education students in Germany taking ODE courses to nearly 50% of all higher education students in Russia taking ODE courses. An average of 21.3% of higher education students were taking ODE courses among the 12 countries.

On the demand side, these figures suggest that open and distance education is increasingly a part of higher education in most countries. In Australia, Brazil, Canada, China, India, Russia, South Africa, Turkey and the United States nearly one fifth or more of all higher education students are taking some online or distance education courses and programs. In the United States, the only growth in higher education enrollments is due to growth in distance education enrollments. On the supply side, distance education is not only being offered by open access, or low-selectivity institutions. In Australia, Brazil, Canada, China, Russia, South Korea the United Kingdom and the United States, high profile institutions are offering distance education. They are providing distance education not only for adult learners, but for younger conventional higher education students wanting flexibility. Both from a student and institutional perspective, distance education is increasingly seen as part of higher education.

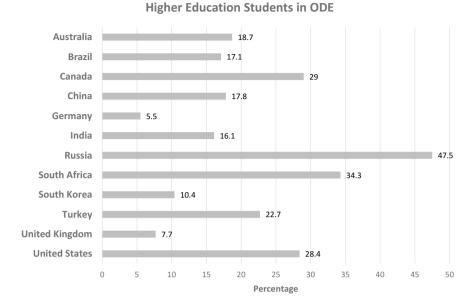


Fig. 14.2 Percentage of higher education students taking open, online or distance education courses

The Ascendance of Online Education

The book chapters reveal that there is a substantial movement towards online education by ODE providers. This is not universal. Distance education is not the same as online education. Forms of DE, other than online education, are still important. One can draw a spectrum of the type of ICTs used to deliver ODE based on the descriptions provide for each country in the books.

As Fig. 14.3 indicates, several countries like South Korea, Australia, Canada and the United States have moved heavily into online education, almost to the exclusion of correspondence education. Other countries like India, China and South Africa are still strongly committed to correspondence education and the use of broadcast radio and television for distance education. Some DE providers continue to be committed to correspondence education not because they are opposed to online education or because they are risk-averse. First, it is not feasible to move towards online, mobile or other digital-based distance education delivery. Uneven access and use of the internet persist, despite increased connectivity in most countries. As indicated in Fig. 14.4, the internet is used regularly by nearly 80% of people in Europe and by over 20% of people in Africa.¹

¹For details about definitions of internet use, developed and developing countries and methodologies for determining use see: http://www.un.org/esa/sustdev/natlinfo/indicators/methodology_sheets/econ_development/internet_users.pdf.



Fig. 14.3 Spectrum of ICT use for open and distance education, by country

On aggregate, nearly 84% of people in developed countries were using the internet and 41% of people in developing countries were. Access to the internet varies in important ways that make it a poor choice, and at times prohibitive, for distance education provision in many countries.

Second, many ODE institutions have long running infrastructure that supports correspondence and broadcast education. The challenge is how to decide what formats to use for course production and delivery when there are so much sunk costs for existing formats. For example, the University of South Africa, the largest DE provider in South Africa, has huge buildings for printing course materials. Any financial calculation about future programs needs to include these legacy infrastructures that may make it more financially beneficial to continue with correspondence education. But sunk costs are also an issue for online education. There is a prohibitive cost of transferring to, for example, a new learning management system.

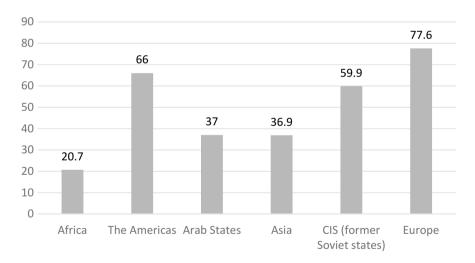


Fig. 14.4 Percentage of people using the internet. *Source* International Telecommunications Union *Facts and Figures* (2016)

The Mainstreaming of Distance Education

With the advent of online education in particular, distance education programs have more legitimacy from larger educational institutions, governments and employers. In countries like Canada, the United States and the United Kingdom, a degree or diploma or other credential does not indicate if it was done via distance education. This has been the case for decades in some institutions. Increasingly, employers and other educators recognize the parity of ODE, or at least do not diminish the legitimacy of learning via distance education. There is no important economic opportunity difference between getting a degree or diploma via ODE or on campus. The output is the same. But the flexibility, time savings, and sometimes, costs savings, make ODE the preferred option for many students. Indeed, in the United States, distance education is seen to be adequately important that the National Center for Education Statistics Integrated Postsecondary Education System is now collecting data about it. This is not the case in all countries. In the United Kingdom and Australia, there is increasing awareness that not tracking online enrollments and providers is a gap in data. In most developed countries, distance education has become an important part of higher education. DE has gained mainstream acceptance.

This is not universally the case. In India, it is still a struggle to get distance education programs and degrees recognized as being of equal value as on-campus programs and degrees. In India, this is expressed by Panda and Garg, in their chapter, as concerns about "parity of esteem". The esteem accorded distance education is not on par with that of residential degrees. This view comes from government bodies like the University Grants Commission, the Indian higher education regulator, that deems DE lacks quality programs for both correspondence and online education. Since 2009, this regulator has banned M.Phil. and Ph.D. programs via distance learning. Distance education providers in India have not been able to offer or grow their graduate programs, programs that have proved very successful for distance education providers in other countries. Kondakci, Bedenlier and Aydin state that in Turkey, there is technically equality of status between open and distance education degrees, and residential degrees. But most employers, especially in white-collar professions, still give priority to conventional residential programs. DE programs still struggle with an image of offering low-prestige degrees. Still, ODE is now an integral part of higher education in most countries.

The Digital Transformation of Education

The growth of ODE enrollments, increased number of ODE providers, and growing acceptance of ODE in most countries is part of a larger digital transformation of education. Certainly, in many countries, ODE growth is partly attributable to increased persistence of students from primary and secondary onto tertiary education. However, in most countries, the growth of ODE is strongly connected to the growth of

online education. And online education is part of digital transformation of higher education.

To varying degrees, all countries are encountering social and economic change due to digitization. In education, digitization has become a part of most educational functions, especially in higher education (Altbach, Reisberg, & Rumbley, 2009). Selwyn (2014) argues that most functions in tertiary educational institutions are deeply digitized, including research (i.e. gathering, storing and analyzing research data, writing and publishing reports and articles), administration (i.e. promotion and marketing, registering, enrolling and managing students, etc.), libraries (i.e. online journals and books) and, of course, communication among students, instructors, administrators and researchers. Countries differ in how much education in general and ODE in particularly have been changed by digitization. In some countries, the digital transformation of higher education is well under way while other countries are still early in their use of ICTs and its impact on higher education. The digital transformation of education is strongest in South Korea, the United States, Canada, Australia and the United Kingdom. Countries like India and South Africa are moving in this direction at a slower pace, but definitely have increased digitization of educational processes. In China and Russia, there are concerted efforts by governments and higher education institutions to digitize more educational functions, including teaching. In all countries studied, the teaching function is not immune to the digitization of education. Teaching is increasingly digitized both for on-campus and off-campus students. The growth of distance education is another instantiation of digital processes and practices in education, manifest in the growth of online education. The growth and acceptance of distance education seems to be a symptom of this digital transformation of all education.

Growing Competition in ODE

Competition for providing ODE has been growing. In most countries in the world, an increasing number of institutions are providing online and distance education. Provision of open and distance education courses and programs are available from three major types of institutions: existing institutions, new dual-mode institutions, and new institutions.

Institutions that have historically offered ODE are still important providers. In most cases, they have been growing the number of programs and courses being offered. In the Australia chapter in volume one for example, Latchem stated that almost 75% of all online enrollments are from six universities: Central Queensland University, Charles Sturt University, Deakin University in Melbourne, University of New England, University of Southern Queensland, and the University of Tasmania. In Turkey and South Africa, Anadalou University and UNISA, respectively, are by far the largest providers of distance education. In India, open universities like the Indira Gandhi National Open University (IGNOU) and Yeshvantrao Chavan Maharashtra Open University each have more than half a million students, while four other open

universities continue to be growing providers with well over 100,000 students each (CEMCA, 2016).

However, more campus-based institutions are offering ODE, mainly as online education. Over 80% of higher education institutions in Europe offer online courses to distance students (Gaebel, Kupriyanova, Morais, & Colucci, 2014, p. 7). The numbers are similar in the United States. Of the institutions with more than 1000 students, more than 80% of them offer distance education courses (Seaman, Allen, & Seaman, 2018). In Canada and the United States, on-campus institutions are the largest providers of distance education, in the form of online education. As Li and Chen state earlier in this book, in China, high profile campus-based institutions like Peking University, Nanjing University, Sun Yat-Sen University, Beijing Normal University and the Harbin Institute of Technology all offer online education programs. Similarly, in South Africa, the University of Cape Town, which regularly ranks first among universities in all of the African continent, has moved into offering online distance education since 2014. For decades in Russia, most higher education institutions have had distance education units, next to their "direct departments", historically offering correspondence courses. These universities are now some of the main providers of online education. In India, while there are 15 open universities, there are more than 100 dual mode universities, that offer on campus and distance education. Distance education is firmly ensconced in an increasing number of conventional higher educational institutions. Indeed, the term "dual-mode" institutions may now be unnecessary.

There are two major types of new institutions offering online and distance education: institutions created by universities, and institutions created by companies. The emergence of online spin-off institutions, from existing higher education providers, is likely most well known in the MOOC world, with Stanford University spin-offs Coursera and Udacity, and EdX as an MIT initiative. However, it is not a recent or MOOC idea. This practice has been occurring for decades. Lim, Lee and Choi inform us in the South Korea chapter that cyber-universities were established after 2000 and were accredited by South Korean Ministry of Education, Science and Technology. Cyber-universities are institutions providing online education that are affiliated with a campus-based university. Most are administratively distinct from the campus-based institutions but maintain ties, often being a subsidiary. For example, the Kyung Hee Cyber University is independent but based on the Kyung Hee University in Seoul which has been around since 1949. The Daegu Cyber University was established in 2002 and has close ties with Daegu University, which has been around for over 60 years in Gyeongsang province. The Korea National Open University, the main provider of distance education in the country, has seen enrollments affected by competition from the 17 cyber universities. As Table 14.3 indicates, their enrollments have been increasing most years, while KNOU enrollments have been steadily decreasing for several years.

Private companies are also institutions providing distance education. There are private non-profit and private for-profit educational companies. Private universities usually do not receive public funding from the government. While the University of Phoenix is well known to many western audiences, it is certainly not the largest

Institutions 20	2010	2011	2012	2013	2014	2015	2016
Korea National Open University 27	272,452	268,561	254,652	245,257	227,618	214,347	184,074
Cyber 9 Universities	93,297	103,917	106,080	109,673	109,466	111,924	114,496
Total 36	65,749	372,478	360,732	354,930	337,084	326,271	298,570

Table 14.3 Student population of KNOU and cyber universities

private provider of online and distance education courses. Litto states in volume 1 that private for-profit distance education provision is particularly important in Brazil. In 2002, the Ministry of Education approved 25 institutions that were allowed to offer distance education courses. Of these 25, 16 were public institutions and 9 were private institutions. In 2012, 150 institutions that were allowed to offer DE courses -80 public and 70 private. By 2016, 331 institutions were authorized to offer DE courses, 74 public and 257 private institutions. By 2016, public institutions constituted 22.4% of all institutions offering DE in Brazil and 77.4% were private. This growth in private providers of DE is reflected in the enrollment patterns. In 2009, public providers had 20.6% of online and distance education enrollments. By 2014 they had 10.4% of enrollments. Conversely, private institution enrollments grew from 79.4% of DE students to 89.6% during that same time frame. The net effect is that competition has increased substantially and enrollments in DE offerings from public institutions are decreasing as a percentage of enrollments. Four groups, UNOPAR, Anhanguera, Estácio, and UNIP (Universidade Paulista), have over half of all distance education enrollments in Brazil. Private sector distance education enrollments make up nearly 90% of all DE enrollments, and the four major organizations constitute nearly 60% of the private-sector distance education enrollments in Brazil. Even in Russia, there are more students enrolled in correspondence courses from private institutions than from state universities. Private educational institutions emerge and grow when they are able to meet a demand that public institutions may not be able to.

All of these existing and new providers amount to increased competition in the distance education sector. As enrollments have been growing for distance education in most countries, so has the number of providers. The pie is getting larger and there is more competition for it. However, the nature of the competition also matters. High profile, prestigious, institutions are now offering online education like Beijing Normal University in China, Lomonosov Moscow State University in Russia, the University of Cape Town in South Africa, and some Ivy League institutions in the United States like Columbia University and Harvard's extension school. Existing distance education providers now have to consider "brand" and institutional trust as a part of the competitive landscape.

Meeting the Challenges for ODE

Past and current trends in ODE in the 12 countries analyzed indicate that enrollment growth and digital changes in ODE will likely continue. Globally the appetite of ODE is robust, as the demand and acceptance for distance education grows in most countries. While the future of ODE seems strong, not all current providers of ODE may have a future. The current changes are not inevitable and there are many important issues for countries and institutions to address, including competition, strategic responses, and regulations.

The competition for ODE offerings is from current providers, new entrants, and also possible substitutes from current offerings. In most countries, current providers of ODE are visible or at least readily identifiable. Orr, Weller and Farrow (2017) identify three important dimensions of provision in online, open and flexible higher education by current providers: the delivery of learning, content development, and recognition of learning. Most existing ODE organizations are making ongoing changes to their delivery formats in response to changes in demand, and the digital transformation of education. There are many examples of this in all of the 12 countries analyzed. In Australia, for example, Latchem points out that the boundaries between conventional higher education and distance education are blurring. This is in response to a common theme from all countries studied: the strong demand by students for more flexibility because most students, not just conventional ODE students, want more convenient and accessible offerings. This is increasingly achieved by offering more blended formats of educational programs using digital technologies. This will likely continue to be an expansion area from current providers of ODE.

Many educators seem to be fond of thinking of online education as having the potential to be a "disruptive innovation", based on Harvard University business professor Clayton Christensen's work (2011). A disruptive innovation is an innovation that disrupts and overtakes existing organizations and products. Indeed, Christensen himself has written about online education, and been involved with online education initiatives, in this vein. But current educational institutions providing ODE, need to ask if they are the disruptors or the disrupted. In each country, there are new entrants to ODE, both from within countries and, in some cases, international initiatives. In many cases these new entrants are private for-profit educators or partnerships between conventional educational organizations and private companies. As Li and Chen state, Peking University has partnered with Alibaba Group, the largest e-commerce retailer in the world to create Chinese MOOCs. FutureLearn is a for-profit division from the UK Open University. They function as an international distance education provider by partnering with "local" universities to deliver existing and new content in countries.

Increased competition is bringing not just more competitors but also more types of distance education offerings. Among the most successful practices by ODE providers is the provision of different types of credentials. While degrees are still the focus of most institutions, many ODE providers are offering an increased number of certificates. These are often specializations in a subject area, but require far less course

work for students than a degree. Micro-credentials are also growing. The highest profile online education micro-credentials are the ones offered by MOOCs. These include badges, statements of accomplishments, and verified certificates. They are often competency-based assessments of learning. Credentials other than degrees are promising for many ODE audiences as they require less time and financial commitment. In some countries, such as teacher training certificates for in-service teachers in Brazil, these certificates have educational and economic value for students.

All types of ODE providers, current and new, are subject to government regulations to varying degrees. In Brazil, all distance education courses must be approved by the Ministry of Education. The documents submitted for approval are used to assess: the curriculum, student admission numbers and student selection policy, ongoing student evaluation, attendance control, qualifications of the teaching staff, library and laboratory facilities, and partnerships with other groups. These have to be approved every five years. In China, government regulations are administered by different levels of national and local educational authorities, and include access regulations, price regulations, quality regulations, and information regulations. These barriers can slow the provision of distance education. Or as seen in India, they can stop any provision for graduate programs via distance education.

The major advantage that existing ODE providers have is that they are known and generally trusted. This is extremely important. New providers of online and distance education can be met with resistance, as students want to know that the institution where they got their degree will still be in existence in 10 and 20 years. That trust and familiarity is important but not enough. The digital transformation of education is an opportunity for ODE providers to rethink what their core value proposition is. In all countries, there are more providers of distance education, but there are not necessarily more providers of open education. Distance education has benefited from, and benefited, the digital transformation of education. It is more complicated for open education, an area that has been contested, appropriated and at times marginalized by the digital transformation of education (Weller, 2014).

Overall Changes

Overall, the changes taking place in ODE seem to be driven by four sets of factors, summarized by the acronym VEDI (Latin for "see"):

1. Values—the values and vision of educational institutions and policymakers for ODE. There seem to be two major sets of visions among ODE providers: offering open access to potential students who may not otherwise have ready access to education; or providing flexible access to students. Many of the changes taking place for ODE seem to be driven by providing more flexibility for students. But the historical mission and vision of distance education, particularly single-mode institutions, has been about providing openness. These two sets of visions need not be opposed. However, there is certainly concern about the future of openness and single mode ODE universities (Tait, 2018). Open education is still important

- for many students served by ODE providers. However, providing flexibility, not openness, seems to be more prioritized by many institutions offering ODE across the globe.
- 2. Environment—the historical, political and policy environment for open and distance education affects the provision, growth and changes to ODE offerings in all countries. In some countries a highly centralized approach to educational policy regulation continues to define how ODE is allowed to develop. In other places, where education policy regulation is more decentralized, the development and innovation within ODE is emerging at the institutional and local level. Indeed, in many countries, the regulatory environment can seem invisible as local educators and administrators are making key decisions about the development and growth of ODE.
- 3. **Demand**—the demand for ODE is emerging from different sources. In some countries, all educational demand is growing and ODE is part of the trend. In other countries, the demand for ODE being driven by demand for flexibility, for lifelong learning, and for different types of certification. ODE growth is benefiting from existing educational demand and partly fostering growing educational demand from lifelong and adult learners.
- 4. ICTS—the types and level of ICT access that potential students have. In some countries, ICT access is extensively digital, via computers and mobile phones. In these settings, the digital transformation of education has been extensive. Distance education has substantially become online education in these countries, and they are relatively, what Bates (2018) calls, mature markets for online education. In other countries, digital ICT access is growing but not extensive. Online education is still emerging, but other forms of ICTs for ODE continue to be important.

Current Approaches

In this context, educational providers have been both re-active and pro-active in their approach to dealing with increased competition and the changing landscape for ODE. Re-active approaches include, what Orr et al. (2017) have called, "defender-like" competitive strategies. Here, institutions focus on providing ODE to their main constituent of students. They may update and innovate their offerings for, and relationships with, the core student audiences. But the focus is on serving these core audiences that have historically been the priority. Pro-active approaches include what Orr et al. (2017) have called, "prospector-like" competitive strategies. Here, institutions take a more entrepreneurial approach and try to innovate in all areas of their ODE provision. This includes innovating in the delivery and design of offerings (e.g. modules, courses, programs) and certifications. But it also includes new target audiences of students and trying to be revenue generating and profitable.

It can be tempting to advocate that ODE providers need to use only or mainly pro-active approaches in the current ODE landscape. However, the decision to use re-active or pro-active strategies depends not just on the demand for ODE, the policy

environment, or the type of ICT access available. It also depends on the values and visions of educators. As the chapters in these volumes indicate, ODE has been changing in a digital age. However, open and distance education has a strong history of being education for those who may not otherwise have an opportunity to education. There is a risk that these values and visions may become secondary priorities or non-priorities, with the strong move globally to online education. Fifty years ago, distance education was transformed by the beginning of the open university movement. This transformation was based on the values and vision of educators. These values and visions need to be just as important as the policy environment, demand, and ICT access, for open and distance education in a digital age.

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