"I wish I had had this book years ago… A book like this, founded on experience, makes the journey of leadership in educational innovation less hazardous and more certain of success."

Lord Dearring, Past chairman of the Higher Education Funding Council for England

"Each day learning systems become more diverse, open, and accessible. I am especially pleased that Colin Latchem, Don Hanna and their colleagues have chosen to focus on the issue of leadership. From around the globe, the authors offer new perspectives and fresh thinking and a sense of excitement in the opportunities and challenges that lie ahead."

Dr Stanley O. Ikenberry, President of the American Council on Education

"All educators, governmental leaders, and policy-makers who are concerned about the future should read this book."

Dr James C. Votruba, President of Northern Kentucky University, USA

Education is in a state of sweeping change worldwide, with a more demand-driven market and ever-higher expectations of greater accessibility, flexibility, quality, relevance and efficiency. In addition, new information and communications technologies are becoming more global, competitive and commercialized, and are transforming the delivery and content of education and training.

This uncharted environment calls for transformational leadership, both at the organizational and the operational level, to energize and empower others to share the vision of what can be accomplished, to change work cultures, and to create systems that are responsive and sustainable.

Leadership for 21st Century Learning is a thought-provoking and ground-breaking book. By bringing together the experience and guidance of 18 distinguished educational leaders and innovators from around the world, Colin Latchem and Donald Hanna critically examine:

- Global developments and trends in open and flexible education and training;
- The changes, challenges and choices confronting all educators and trainers;
- The development of an entrepreneurial culture;
- The processes of organizational change and of successful leadership.

Addressing the key leadership concepts and change strategies that face educators and trainers today, this book is essential reading for everyone with responsibility for, or interest in, leading and managing change in education and training.

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Colin Latchem is a former head of the Teaching Learning Group at Curtin University of Technology, Western Australia, and a past president of the Open and Distance Learning Association of Australia.
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Open and Distance Learning Series
Series Editor
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Leadership for 21st Century Learning
Global Perspectives from Educational Innovators

Edited by
Colin Latchem & Donald E Hanna
I wish I had had this book years ago. For any fool can learn from his own mistakes and hopefully I did: the wise soul learns from those who have made the journey of leadership and lived to tell the tale. Leadership is at once the highest of the arts and the most perilous: the highest because it is so creative in its outcomes, the most perilous because it is achieved through people. Nowhere is it more difficult than when disturbing the established order of things. A book like this, founded on experience, makes the journey of leadership in educational innovation less hazardous and the more certain of success.

Lord Dearing
Former Chancellor of Nottingham University, past chairman of the Higher Education Funding Council for England and author of the Dearing Report, Higher Education in the Learning Society

One of the most significant developments of the latter part of the 20th century was the changed relationship between higher education and society. Alan Greenspan called it ‘the conceptual economy’. Other have referred to it as ‘the information era’ or ‘the knowledge age’. Whatever the characterization, the value and demand for learning has escalated. Education is now a major public policy concern. For individuals, the need is for access to quality education, for life. The implications are global. Traditional colleges and universities are changing. New learning providers are emerging. New approaches, applying new technologies, are reaching new learners. Each day learning systems become more diverse, open, and accessible. I am especially pleased that Colin Latchem, Donald Hanna and their colleagues have chosen to focus on the issue of leadership. Ultimately it will be the leaders of the 21st century who will craft a response to the new era. From around the globe, the authors offer new perspectives and fresh thinking and a sense of excitement in the opportunities and challenges that lie ahead.

Dr Stanley O Ikenberry
President of the American Council on Education, and formerly President of the University of Illinois, USA

Make no mistake, higher education worldwide is undergoing a fundamental realignment which is being driven, in large measure, by new forms of educational communications and technology. New opportunities abound for educational institutions that position themselves creatively and aggressively. The authors and contributors explore key concepts of leadership, the changing nature of opportunities and challenges for institutions, and the personal dynamics, qualities, and characteristics they have found important in their own leadership experiences.
They reflect very personally on the risks and rewards of leadership for change. All educators, governmental leaders, and policy-makers who are concerned about the future should read this book.

Dr James C Votruba
President of Northern Kentucky University, USA

This book should be on the shelf of every university president, senior institutional administrator, dean and department chair, board member, and mid-manager and faculty member who has responsibilities for leading open and flexible learning organizations. Moreover, it should be part of every graduate program in open and flexible learning because of its synthesis of scholarship, practice, and vision for the field.

Dr Don Olcott, Jr
Vice President for Higher Education, VCampus Corporation, Tucson, USA

Leading a contemporary educational organization requires complex skills and qualities. It is no good just managing; organizations need leadership. Leaders have to sniff the winds of policy, markets and community aspirations and then pick the right directions for their organizations. Leadership for 21st Century Learning provides valuable insights into how leaders from around the world have set the course for their organizations and why. These global perspectives bring these attributes together in a stimulating collection.

Professor Terry Evans
Director of Research, Faculty of Education, Deaking University, Australia

Colin Latchem, Donald Hanna and the other contributors provide the necessary knowledge foundation for creating cohesive strategic plans for open and flexible learning environments and new directions for education and training using advanced digital technology. This book of international perspectives should be in the libraries of universities worldwide and read by all leaders of open and flexible learning.

Professor Insung Jung
Director, Multimedia Education Institute,
Ewha Woman's University, Seoul, Korea
LEADERSHIP for 21st CENTURY LEARNING
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LEADERSHIP
for 21st CENTURY LEARNING

Global Perspectives from Educational Innovators

edited by colin latchem & donald e hanna
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Upon reading this book I discovered that the US brokerage house Merrill-Lynch estimated the global expenditure on education and training in 2000 to be about US$2 trillion with 50 per cent being spent in Europe, 33 per cent in the United States and 15 per cent in developing countries. I also discovered that the global number of learners is set to more than double from an estimated 70 million today to 160 million by 2025. It is clear that the challenge facing us, in generating the wealth needed to spend these sums on education and training, to provide increased access to quality materials and at a realistic cost is formidable. What is more, this global expenditure and growth in the number of learners is occurring in the midst of a revolution in learning and teaching and in the use of the new technology.

In his book Learning and Teaching in Distance Education (Kogan Page, 1998), Professor Otto Peters examined the pedagogy that has evolved in different countries and how the shift from expository to constructivist teaching is gaining momentum. Others, such as Professor Marc Eisenstadt and Professor Tom Vincent in their book The Knowledge Web (Kogan Page, 1998), have argued and illustrated how the knowledge media are influencing our teaching and learning. What emerges from these and similar books is that open, distance and distributed learning can make a significant contribution to teaching and training. However, the extent to which we are able to do this, and meet the broader challenge, is directly related to the leadership provided within each and every institution.

In this book, Leadership for 21st Century Learning, the authors explore those issues associated with leadership within educational and training institutions. They consider the process of formulating and sharing a vision, of managing change such as responding to the shift from supply-driven to demand-driven systems, of investing in staff via academic and professional development programmes and of fostering an entrepreneurial culture. The arguments they provide are eloquent and the framework invaluable – whether we aspire to be leaders in education or to better understand the pressures such people face. The series of case studies provided from acknowledged leaders in open and distance learning not only reads like a global who’s who but serves to reinforce the analysis that Colin and Don offer. For me the challenge facing us is summarized by Janet Poley in her chapter when she says, 'It takes great vision and leadership and team management and passion and hard work to achieve anything of the magnitude we are attempting – not to mention quite a bit of luck.'
Series editor's foreword

I am sure that after reading this book no one will be complacent regarding the challenge facing us. I am also sure that Colin Latchem and Don Hanna will have stimulated many to respond. I wish you every success in facing the challenge ahead of us – and also a bit of luck.

Fred Lockwood
Preface

The imperatives for change in education and training are relentless, never-ending and worldwide. Education is itself contributing to changes in expectations and practices but change is not something that necessarily comes easily to this sector. A former board member of a major public US university (Weinstein, 1993) describes changing the system as akin to 'moving a battleship with your bare hands', a South African vice-chancellor observes 'the plane has to be serviced in mid-flight' (Randell and Bitzer, 1998) and a voice from history warns:

there is nothing more difficult to plan or more uncertain of success than an attempt to introduce new institutions, because the introducer has as his enemies all those who profit from the old institutions, and has as lukewarm defenders all those who will profit from the new institutions . . . thus lukewarm subjects and innovating prince are both in danger. (Machiavelli, 1963: 26)

Such observations will surely strike a chord with many working in education. Educational institutions have to face the ramifications of globalization, the explosion in digital communications and the shift from a 'supply-driven' to a 'demand-driven' market. Worldwide, educators and trainers are confronted with demands for greater accessibility, flexibility, cost-effectiveness, quality and relevance and lifelong provision. They are also grappling with the implications of the new educational and information technologies. Both in developed and developing countries, educators and trainers are expected to achieve more with less as a consequence of budgetary pressures on governments and inter-sectoral competition for funding.

One response to the imperatives to increase access and equity and achieve economies of scale has been to establish dedicated distance teaching institutions, open to all and using new approaches and technology to achieve greater access at lower costs. Another has been for conventional face-to-face institutions to transform themselves into dual-mode providers, offering some mix of distance and classroom teaching. Another has been to form consortia, partnerships and alliances, in some cases involving international or cross-sectoral collaboration. Yet another has been to create corporate and 'virtual' institutions, heavily reliant upon online delivery. Not all of these are funded through public provision and there is a growing tendency to adopt the principle of 'the beneficiaries should pay' and to see the commercial potential of open and flexible learning.
In 1999, the UK Open University's International Centre for Distance Learning database listed over 31,000 distance learning programmes, and over 1,000 institutions teaching at a distance. It has been estimated that well over 4 million students study through open and flexible learning around the globe. These numbers may well seriously underestimate the extent to which open and flexible learning is being introduced into education and training because of the rapid developments in applying computer-based and online learning and the blurring of any distinction between on-campus and off-campus teaching and learning.

There are both wonderful opportunities and dangerous pitfalls in introducing open and flexible learning. The challenges confronting its adopters are complex, requiring multiple specialists to collaboratively develop appropriate management, development, delivery and support systems. Such a destabilized and uncharted environment calls for leaders of change at all levels to energize and empower others to share their vision of what can be accomplished through open learning, to change work cultures and to create systems that are built to last but constantly adaptable.

We cannot predict with any certainty the course of the changes in education and training, but we can be confident of two things: that the economic landscape of communications and technology will be radically different, and that this change will have revolutionary implications for education and training. Currently, the information and communication technology infrastructure makes it difficult to deliver education and training over 'the last mile' into many remote and disadvantaged regions. However, one has only to see the speed at which satellite, wireless and other networks are going into hitherto poorly served communities to realize that now is the time to plan for the educational and technological opportunities that will be realizable within a very short timeframe.

There is a great hunger and need for learning in developed and developing countries alike. There is a need to reach out and to serve new student groups and provide lifelong learning through the exciting variety of learning environments and technologies at our disposal. Open and distance education is also becoming a commercial and globally competitive environment, wherein stakes are very high. There is strong pressure for education to be more accountable and 'business like' in dealing with its customers. We therefore make no apology for stressing the need to import and apply some concepts and approaches from the world of business into open and flexible learning but ultimately, change must be driven by educational rather than economic or technological imperatives.

Our aim in writing this book is to give the reader some insights into what we have come to see as the major issue in open and flexible learning – the need for forward looking transformational leadership that is concerned with change, innovation and entrepreneurship. We scan the global developments in open education and training and the challenges confronting its application in developed and developing countries. We examine the issues that leaders must be sensitive and responsive to in open learning. We look at change and the barriers to change in education and training. We examine the theory and practice of leadership and seek to apply these to open and distance learning. We also share and draw heavily
upon the experiences and insights of some of the world's most experienced leaders in open learning who are working in a variety of organizational and cultural settings. We hope that our book will help to inspire and guide those who are keen to lead, manage and improve education and training in response to the needs of the 21st century.

Colin Latchem
Donald E Hanna
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Chapter 1

Open and flexible learning: an environmental scan

Colin Latchem and Donald E Hanna

Introduction

Distance education has always been quick to exploit new delivery systems and service providers. As correspondence education, pioneered in the United Kingdom in the 1840s by Sir Isaac Pitman to teach office workers his new Stenographic Soundhand system, it capitalized on the improved surface mail (Rumble, 1997). Throughout the 20th century, as external studies or distance education, it extended its basic print/correspondence methodology by incorporating radio, television, audioconferencing, videoconferencing (particularly in the United States), the computer and the Internet/Web. Today's open and flexible learning (commonly known as 'distributed learning' in North America) uses a mixture of presentational and constructivist (guided inquiry, collaborative learning and mentoring) pedagogies and enables learners and teachers to interact synchronously or asynchronously across classrooms, workplaces and other settings, increasingly, but not exclusively, by means of information and communications technology (Dede, 2000).

Educationally, open and flexible learning is adopted in pursuit of access, equity and lifelong learning and to provide learning environments wherein learners can create their own understanding and teachers play a guiding rather than a dominant role. Strategically, it is used in response to changing student demographics, the shifting balance of power caused by information and communications technology and learners' access to alternative sources of knowledge, reduced public funding, globalization and commercial imperatives. In developing countries, it is used to help overcome the critical problems of numbers, resources and quality in providing primary and secondary schooling, 'second chance' adult learning, teacher training, and support for social and economic development (Perraton, 2000). Seventy-six developing countries – 34 in Africa, 2 in the Middle East, 19 in Asia, 3 in Oceania, 6 in the Caribbean, and 12 in Latin America – have adopted distance and open learning (Hawkridge, 1999), sometimes with the support of such agencies as UNESCO, the UN Food and Agriculture Organization, International Development Bank, World Bank, Africa Development Bank, Asia Development Bank, Consortium Francophone de Formation à Distance and the Commonwealth of Learning.
2 Leadership for 21st century learning

This chapter provides an environmental scan of what governmental, institutional and community leaders have achieved in open and flexible learning and the challenges that lie ahead.

Open schooling

Open schooling provides for isolated primary-age pupils in small, remote populations, children unable to attend school because of illness, disability, or migratory lifestyle, indigenous students in traditional communities, and secondary-age pupils in small country schools or ‘second chance’ adult learners unable to access particular courses by conventional means. It reduces teacher recruitment, travel and accommodation costs, eliminates or defers the need for attendance at boarding school, and transforms isolated and disadvantaged schools from ‘small’ to ‘large’ in terms of students enrolled and from ‘closed’ to ‘open’ in terms of curriculum and teacher expertise.

When first introduced into countries such as Australia and New Zealand, open schooling was restricted to correspondence, talkback radio and on-site teaching by parents or peripatetic teachers. Many countries have used schools broadcasting modelled on the BBC approach and interactive radio instruction first developed in Nicaragua. Today, open learning networks such as the Australian Distance Education Centres and Schools of the Air, New Zealand Correspondence School, US Star Schools, Contact North/Contact Nord in northern Ontario, Open School of British Columbia, and Chilean Schools Learning Network use the latest information and communications technologies and ‘virtual’ online high schools have been developed in the United States.

Open schooling is also helping developing countries to overcome their acute difficulties in providing sufficient classrooms, teachers and teaching resources. The world’s largest open schooling system, India’s National Open School, offers bridging programmes and alternative secondary, senior-secondary courses for those who cannot attend schools and vocational programmes. In 1998–1999, the NOU had more than 500,000 students on its rolls and an annual enrolment of over 130,000, of which 35 per cent were female and 25 per cent from scheduled castes and tribes and handicapped groups. The Bangladesh Open School operates as an integral part of the Bangladesh Open University, providing school equivalency and non-formal education programmes. Indonesia’s Open School, SMP Terbuka, teaches 200,000 students through a mix of print, broadcasts and teachers’ aides and a network of study centres linked to junior secondary schools. Malawi’s College of Distance Education provides for 150,000 primary and secondary students through a network of 564 community-managed distance education centres and nighttime classes in secondary schools. Mexico uses radio and television to supplement the classroom teaching of 12–15-year-old pupils in telesecundaria, small rural and remote secondary schools with fewer than 100 pupils, and to meet the special needs of young working men and women wishing to complete middle school education.
The UN Convention on the Rights of the Child declares that every child has the right to education without discrimination and in 1990, the UN organizations, the World Bank and other bilateral and multilateral donor agencies committed themselves at the Jomtien conference to achieving universal elementary education. The developed nations have repeatedly fallen short on their pledges and this goal has been shifted to 2015, which on present projections, seems equally unachievable. Globally, more than 125 million children, predominantly girls, are currently denied schooling. Without some means of dramatically increasing enrolments, this number is predicted to soar to 165 million by 2015. In India alone, 30 million 6-10-year olds and 33 million 11-14-year olds lack schooling. In many sub-Saharan and South Asian countries, children can only expect four to seven years of education compared with the 15 to 17 years taken for granted in wealthier nations. Only nine African countries have achieved secondary participation rates of 50 per cent. Most have failed even to achieve the 20 per cent considered essential for socio-political and economic development. As Director of UNESCO's International Institute for Capacity Building in Africa, Fay Chung (1999) observes, it is small wonder that uneducated, unemployed youths and child soldiers are drawn into destroying their own countries in places like Sierra Leone, Rwanda and Mozambique.

Graca Machel (1999), South Africa's former first lady and President of the Foundation for Community Development, stresses that this failure to provide universal education is not attributable to any lack of resources – an additional US$8 billion or four days' global arms expenditure would fund basic education for all the world's children – but to a lack of political will. Fay Chung (1999) emphasizes that such developments can only take root when governmental leadership, commitment, and resources combine with community and parental commitment, participation and responsibility. UNESCO's Richard Siaciwena (1999) notes that while open schooling may be part of the answer, many administrators and teachers unfamiliar with the philosophies inherent in its operations resist it.

Non-formal adult and community education

Spronk (1999) describes non-formal adult and community education as the most elusive and ill-defined sector of open and flexible learning, and Dodds (1996) notes that work in this area is poorly and uncritically documented. However, Perraton (2000) suggests that the scale and achievements of non-formal education linked to applications of mass media may be more significant than the printed record suggests. In developed countries, the focus is typically on lifestyle or work enhancement for the already well educated. In developing countries, it is concerned with literacy and numeracy, primary healthcare, occupation skills, community or social development and political awareness among marginalized communities, refugees and nomads (Yates and Bradley, 2000).
Print is the traditional and most favoured medium for this work but has limited application in a world where almost one billion people, two-thirds of them female, are illiterate. Where affordable, audiovisual media are used to attract and teach adult learners lacking the necessary reading skills. Villages in developing countries may not have electricity or running water, but the chances are that they will have radio-cassette players, and so radio-led education is found to be very useful for such initiatives as the Escuelas Radiofónicas of Latin America and Canary Islands, and the Canadian, Ghanaian, Zambian and Indian 'listen-act-discuss' radio farm forums and audiocassettes are used extensively by such providers as Pakistan's Allama Iqbal Open University and the Sudan Open Learning Organization. Television and videocassettes are used by Telecurso 2000 in Brazil, Centre de Service de Production Audiovisuelle in francophone Africa, and the Indira Gandhi National Open University in India. Indian adult educators have also shown how video cameras and videoconferencing can be used to enable non-literate rural people to express their needs and viewpoints to the outside world and support self-development and self-government in rural areas (Dighe and Reddy, 1996).

Unfortunately, such applications are all too often restricted by a lack of funds, technology access and technical skills, but one way of bringing telephony and computer-based services into disadvantaged communities is to create public-access centres, variously called telecentres, telegates, infocentres, espaces numérises, telegsites, phone shops, cabinas públicas and so on. Many international development agencies are now supporting the establishment of such centres in countries ranging from Ecuadorian Amazonia to Bhutan, and from rural Ireland to the Australian outback, providing previously undreamed-off opportunities for info-exchange tailored to local requirements, teleeducation, teletraining, telemedicine, teletrading, telecommerce, and telework (Latchem and Walker, 2001).

The 1990 'Education for All' UNESCO Jomtien conference declared that such basic learning needs demanded an 'expanded vision' surpassing present resource levels, institutional structures, curricula and conventional delivery systems. Initiatives such as UNESCO's 'Learning Without Frontiers' and by agencies such as the International Telecommunications Union and the Commonwealth of Learning are encouraging the collaborative development of 'open learning communities'. However, as Dodds (1996) observes, open learning is rarely applied to this sector in a sustained, systematic, and concerted way. It is often accorded low status and low priority and is typically reliant upon non-government agencies and small groups of devotees. There are serious gaps in provision and most programmes are under-resourced, vulnerable beyond the pilot phase and questionable in long-term impact. Yates (2000) suggests that open and distance education appear to hold great promise in training the thousands of basic education teachers, literacy workers and support cadres needed to provide both adult basic education and open schooling. But the harnessing of open non-formal learning for national regeneration demands political commitment to meeting the needs of the poor and oppressed, partnerships between governments and public and private providers, and far greater recognition of local values, knowledge systems, experiences and resources that can be drawn upon within the communities.
Vocational education and training

Changes in the world of work are impacting dramatically on vocational education and training. And in a world where it is predicted that future employees will need higher levels of skill than those they replace, re-training at least five times during their working lives, and for nearly half the new jobs created, the equivalent of 17 years' full-time education, such change is only likely to increase. Many governments now argue that vocational education and training benefits not only the state, but also the employer and the individual, and so an increasing share of the costs has to be borne by the latter two. The colleges are required to compete in the open market and operate on a 'user pays' basis. A recent Australian National Training Authority report concluded that the employers felt that this more competitive and rigorous market had improved the employers-providers relationship and the providers' performance, while the training providers felt that this approach and a national quality assurance framework had been incentives for change and service improvement (Rowe, 1999).

Faced with the need for economy in upgrading the knowledge and skills of large numbers of employees, sometimes over great distances and with high employee turnover, and to ensure uniformity of content and delivery, many providers are adopting online or some mix of Web-based and instructor-led training strategies.

Such is the demand for vocational educational and training that in Europe, 70 per cent of the open learning market is estimated to be in this sector, which has become a key industry in its own right, attracting many new private providers. In the United Kingdom, it is estimated that there are about 4,000 private providers as against about 350 colleges (Calder and McCollum, 1998). Major organizations such as the Ford Motor Company, J C Penney, British Aerospace, Qantas and South Africa Telkom have also developed corporate training networks to meet their internal needs. New alliances are being forged. For example, in the United Kingdom, the government has established a new public–private partnership – the University for Industry (http://www.ufiltd.co.uk), to deliver flexible training programmes to boost the competitiveness of business and industry and the performance and employability of individuals through a national Learndirect network linked to 250 Learning Centres and smaller Access Centres in workplaces and educational and community settings (http://www.learndirect.com.uk/).

Horsfield (1999) notes that corporate training programmes are primarily concerned with developing specific operational, supervisory, management and leadership skills matched to organizational strategic priorities and to national or international benchmarks. Rowntree (1992) observes that such programmes may be 'distant', catering for employees who are off-site, and 'flexible', accommodating those for example, on shiftwork, but not 'open', being closely tailored to company objectives, proprietary content, specific personnel development requirements or technical infrastructure.

The shift from 'supply-driven' to 'demand-driven' challenges the values and practices of the traditional providers, the colleges. The sector has had to become
more entrepreneurial, accustomed to new world-of-work quality standards and prepared to cater to a wider student cohort. Many businesses and industries have decided to work only with those institutions that offer quality, flexibility and value for money. Some colleges have ‘re-branded’ themselves as businesses, drawing their governing bodies largely from industry, and mandating their CEOs to increase productivity and the national and international customer base.

Reviewing open learning in this sector, Calder and McCollum (1998) suggest that leaders and managers need to inculcate a new work-learning ethic, become more aware of what open learning can achieve, increase the employees’ sense of ownership in work-based learning, and address the lifelong learning needs of basic grade staff and the unemployed as well as the high- and middle-grade staff.

**Universities**

**Dual-mode or extended traditional universities**

Dual-mode universities extend their traditional role by providing their on-campus courses to a non-traditional constituency of off-campus, part-time, working adults. They had their origins in the correspondence course pioneers of the late 19th and early 20th centuries: such institutions as the University of South Africa, the University of Chicago and the US land-grant universities, the University of London, the University of Queensland and the University of Western Australia. The last two decades have seen exponential growth worldwide in university-level dual-mode provision.

Distance learning may start as a marginal activity in universities, embraced by a few but perceived by many as diverting scarce resources, lowering quality, diminishing status and threatening time-honoured roles and practices. But with the growing demand for access, convenience and flexibility and the increasing realization of the commercial potential of distance education, there is often commensurate growth in its influence and status, especially where there is institutional commitment to long-term change. The new forms of course development and delivery influence the curriculum, the new technologies permeate the offices and classrooms, and distinctions blur between the different on- and off-campus methodologies, types of student and funding bases and ultimately lead to a re-framing of missions and operations.

Some universities provide open learning through a non-profit arm. One of Australia’s leading distance-teaching universities, Deakin University, has over 40,000 enrolments in its corporate programmes, as opposed to 28,000 in its mainstream courses.

**Single-mode open universities**

The past 30 years have also seen the rise of a number of single-mode open universities, typically modelled upon the UK Open University. Some have
enrolments exceeding 100,000 in their degree-level courses – the UK Open University, France’s Centre National d’Enseignement à Distance, Spain’s Universidad Nacional de Educación, Iran’s Payame Noor University, Turkey’s Anadolu University, The University of South Africa, India’s Indira Gandhi National Open University, Indonesia’s Universitas Terbuka, Thailand’s Sukhothai Thammathirat Open University, China’s Radio and Television Universities and the Korea National Open University. Daniel (1996) observes that by increasing university capacity dramatically while lowering costs sharply, these ‘mega-universities’ represent a rare discontinuity in the evolution of higher education.

Other open universities include Canada’s Athabasca University, British Columbia’s Open University/Open College, Télé-université du Québec, the Empire State College and Thomas Edison State College in the United States, Venezuela’s Universidad Nacional Abierta, Costa Rica’s Universidad Estatal de Educación a Distancia, Germany’s Fern Universität, Open Universiteit Nederland, Pakistan’s Allama Iqbal Open University, Bangladesh Open University, Sri Lanka Open University, Myanmar University of Distance Education, Open University of Hong Kong, Asian International Open University in Macao, Open University of the University of the Philippines, University of the Air of Japan, Open University of Tanzania and Zimbabwe Open University.

The open universities have achieved notable gains in access and equity for the geographically and socially disadvantaged and older and female students. Daniel (1996) sets the cost per enrolled student in the mega-universities at 10–50 per cent of that in conventional universities in the same countries (although the cost per graduate may be higher in some of these institutions because of higher dropout rates than in comparable institutions). Some open universities enjoy parity of esteem with the conventional institutions and some have gained high national and international reputations. For example, India’s Indira Gandhi National Open University received the 1994 Commonwealth of Learning Centre of Excellence Award and Sukhothai Thammathirat Open University, the 1995 Commonwealth of Learning/International Council for Distance Education Award for Institutional Excellence; the latter has been designated by UNESCO as the lead institution for distance education in the Asia-Pacific. The UK Open University has been particularly successful in ensuring status and quality, gaining a maximum score of 24/24 in the national teaching assessment scheme and attracting 180,000 students worldwide to its degree-credit programmes and a further 100,000 to its continuing professional development courses.

However, open learning is not universally accepted. There are still professional bodies and others, especially traditional academics, who regard the graduates of such institutions as ‘second chance’ and ‘second best’. Such perceptions derive in part from inherent elitism and conservatism and in part from recollections of some earlier correspondence courses designed for financial gain or political expediency rather than educational excellence.

Ramanujam (1997) warns of the problem of introducing western models of open learning into developing countries where they may be neither fully understood nor in accord with the traditional values and practices of the educators
or society at large. Koul (1998) observes that some politicians and planners have been carried away by success stories of open learning overseas, and have totally underestimated the problems of thrusting self-directed learning upon staff, let alone learners conditioned by the traditional classroom, lacking the necessary reading and study skills and without any privacy and study facilities in their homes.

**For-profit universities**

US brokerage house Merrill-Lynch estimates global expenditure on education and training to be US$2 trillion, 50 per cent of which is in Europe, 33 per cent in the United States and 15 per cent in developing countries. The US Department of Commerce ranks higher education as the nation’s fifth largest service sector export and in Australia, higher education export ranks eighth behind coal, tourism, transport, gold, iron ore, wheat and aluminium. The World Bank predicts that the number of students seeking university education will rise from 70 million to 160 million by 2025.

This burgeoning global market is attracting new for-profit universities that are substantially different from their traditional non-profit public counterparts. Their revenue base is tuition fees and they need to maximize dividends to their shareholders. They serve niche markets, offering a narrow range of career-oriented courses in profitable fields such as business and information technology. They also minimize investment in physical plant and student services, and they rarely commit resources to social or community activities. Those staff who teach do not necessarily research, and curriculum development, delivery and assessment may be carried out by different people, in-house or outsourced.

Such institutions present formidable competition to the traditional universities. Their courses are specifically designed to attract large numbers of students, focus on fields offering plentiful and lucrative career prospects, are offered in multiple locations, and may be completed in less time through year-round part-time study, thus minimizing loss of earnings by the students.

For-profit universities are currently mainly an American phenomenon and the largest, best known, and most successful of these is the University of Phoenix (UoP). In less than 25 years, UoP’s undergraduate and graduate enrolments in the United States, Puerto Rico and elsewhere have reached 75,000. About 19 per cent of these students are enrolled in UoP Online Division programmes and off-campus enrolments are increasing by 45 per cent per annum. UoP is also expanding into the corporate sector and internationally through partnerships with institutions in countries such as Brazil, China, India and Mexico. UoP develops its own courses and recruits well-credentialed teaching staff on a part-time basis. Its ‘virtual classrooms’ offer a teaching ratio of 1:10–15 and its modularized programmes and weekly assignments require online ‘attendance’ at least five days a week. Service protocols are strictly monitored and end-of-course surveys reveal high levels of ‘customer’ satisfaction.

Other US for-profit institutions include Strayer Education Inc, DeVry Inc and Sylvan Learning Systems Inc, all of which are publicly traded on the New York
Stock Exchange. White (1999) suggests that these institutions 'have the advantage of being able to hire and fire managers and teachers and offer them a share of the “profits” and that Wall Street analysts eye the US$635 billion education sector as ripe for investment because it is seen as a low-tech industry managed by amateurs'.

**Corporate universities**

During the 1980s, some US corporations such as American Express, Apple, Disney, First Bank of America, Intel, MasterCard, Motorola, Xerox and McDonald's established human resource development organizations that they called 'universities' but rarely offered degrees. These did not develop to the extent predicted and it now seems that most corporations will focus on their core business and offer certification and degree options for their employees through outsourcing and strategic alliances with universities and colleges. But the concept of the corporate university is not entirely dead. In New Zealand, the government's qualifications authority has indicated that it will license companies to award their own degrees if a certain percentage of their staff have PhDs and a certain percentage of their budget is spent on research.

**Consortia and strategic alliances**

A growing number of institutions are forming consortia or strategic alliances to capture the members' primary strengths and compete against potential rivals or interlopers. The US-based National Technological University (NTU) was conceived in 1984 as a non-profit university catering primarily for engineers in IBM, Motorola and other large corporations. NTU harnesses expertise in 50 affiliate universities and delivers competitive and profitable certificate, baccalaureate-degree and graduate-level programmes by satellite television and online within North America and overseas. Earlier expectations were unrealized and NTU's for-profit arm, NTU Corp, has now merged with the Business Channel (the commercial arm of the Public Broadcasting Service) to provide video and Internet non-credit courses for learners at home rather than at corporate sites.

Many of the consortia have a brokering role. The US National Universities Degree Consortium sponsors degree and sub-degree programmes on behalf of its nine accredited member institutions and the American Distance Education Consortium provides similar services for its 58 affiliates. Open Learning Australia acts as a private educational broker, enabling eight shareholding universities and affiliate universities and colleges to collaboratively provide non-matriculation entry to fee-for-service degree and non-degree programmes studied through institutions and modes of the students' choice. Engineering Education Australia, a subsidiary of the Institution of Engineers Australia, brokers off-campus doctoral, masters, bachelors and diploma programmes in management, engineering and technology for engineering personnel in Australia and overseas. The UK OU on the other hand, forms international alliances to overcome hurdles of language, culture, accreditation, articulation and student support in 'exporting' its own range of courses.
University-industry partnerships

The growing market for professional degrees and short courses is leading to new collaborative open learning ventures between universities, publishers and multimedia companies. The universities provide the ‘brand names’, intellectual property, pedagogy, credentials and credibility. The companies offer the business and marketing expertise, technology, and opportunities for the universities to profit from their endeavours. Examples of this include:

- A global consortium of 12 universities in Australia, Canada, Holland, New Zealand, the United Kingdom and the United States partnered with the Hong Kong-based educational and training infrastructure company NextEd targeting the Asia higher education market.
- The Scottish Knowledge consortium comprising the 14 Scottish universities and colleges and commercial and industrial providers in which News International plc has a 25 per cent equity, selling distance education postgraduate programmes to the United States, United Arab Emirates and Malaysia.
- UK management consultants Ernst & Young partnering with Henley Management College to create a ‘virtual business school’ and offer their staff worldwide opportunities to study and research business and leadership programmes leading to MBAs and PhDs. Ernst & Young saw this as a means of accumulating intellectual capital, encouraging staff to stay with or join the company, and achieving competitive advantage. Henley’s staff saw themselves gaining from first-hand involvement with the issues currently confronting the business world (White, 1999).
- Illinois-based UNEXT.com partnering with Columbia University, Stanford University, University of Chicago, the London School of Economics and Political Science and other high-profile universities to sell business-oriented online courses to multinational and overseas corporations. The collaborating universities receive royalties and if UNEXT.com goes public, the right to convert these royalties into stock (Blumenstyk, 1999).
- US publishers Macmillan partnering with Sylvan Learning Systems Inc to provide training for information technology professionals with Macmillan providing the courseware and instructors and Sylvan its Caliber Learning Network.
- Universitas21, a consortium of 18 universities in 10 countries and education publisher and provider Thomson Learning, in which the member universities would be responsible for the badging and quality assurance, Thomson and the universities for the content and intellectual property, and Thomson for the course material, assessment, student database management and translation (Illing, 2001).
- i-Global, a joint venture between the University of California-Berkely, University of Waterloo in Ontario, University of Manchester Institute of Science and Technology, and University of Technology Sydney, marketing electronically-supported skills-based modules and postgraduate programmes in business, IT
Universitas21 was the brainchild of University of Melbourne Vice-Chancellor Alan Gilbert, who recognized that Melbourne would never be a global brand on its own. U21 will buy courses from various providers, not necessarily universities, add its own brand and quality stamp, and sell them online and via satellite and cable television. Gilbert says: 'First into this market wins... Waiting six months in this kind of endeavour can mean missing out forever'. In this he follows the entrepreneurial strategy of aiming at permanent leadership and market dominance, which Drucker (1985) describes as 'the Fustest with the Mostest', which was how a famous Confederate general claimed he won all his battles. According to Drucker, this is a highly risky strategy. If it goes wrong, it opens the way for 'creative imitation' by other newcomers, but if it succeeds, the rewards can be great. U21 will make its own awards with testamurs bordered by the logos of the consortium members. Its contribution to the joint venture will be in the form of intellectual property for which members will receive an income stream, although trading equity for royalty or equity investment is a possibility in the future. The main challenges in this initiative are seen to be the possibility of cultural conflicts between academia and industry, the development of a worldwide quality assurance structure and the certifying of the various degrees conferred (Richardson, 2000).

University–industry partnerships provide excellent opportunities for tapping into the major growth areas in higher education: corporate training, continuing and distance education and the international market. But to build long-term relationships, each side must learn a lot about the others' objectives, values, methods, and standards. Cunningham et al (1997) note that there can be cultural conflict in such inter-sector partnerships, with the various parties ending up perplexed if not contemptuous of each other. When film-maker Lord Puttnam sought to establish World Learning Network, an educational export initiative involving UK universities, broadcasters and media producers, one of the problems he encountered was the mutual mistrust of the ultimate aims and ambitions of the academic and the business communities (Puttnam, 1996).

There is strong debate in the universities about the deployment of academic resources and reputations for financial gain and the tacit endorsing of commercial organizations and products. However, David Brady, associate dean at the Stanford Business School reasons that universities have traditionally claimed rights to staff's inventions and made money from patents but not from their textbooks. He further notes that distance education provides a whole new means of institutions profiting from intellectual property (Blumenstyk, 1999).
Online and virtual universities

Many universities are capitalizing on the capacity of the Internet to support collaborative but asynchronous learning. The United Kingdom, Canada and Australia are significant players in online delivery, but the US presence is large and overwhelming. America's first fully accredited for-profit online university is Jones International University™, established in 1995 and offering undergraduate and graduate degrees in business communications. Enrolments are as yet small, but affiliation with other Jones companies in the United States and Europe is seen as offering a substantial base for marketing, programme delivery and enrolment growth.

The leaders of such institutions need to be risk-takers, as evidenced by the experiences of distance learning consortium Western Governors' University that aimed to offer competency-based programmes, but initially attracted significantly lower enrolments than envisaged, arguably because of a lack of track record and recognizable 'brand name'. However, the very establishment of WGU mobilized the more traditional US universities to become more inclusive and outward looking.

A number of US states have established so-called 'virtual universities', but these are currently limited to brokering and providing online course information and delivery, library services and student support on behalf of the member institutions rather than granting their own degrees, and to date are enjoying mixed success. Other online US organizations bearing the title 'university' are the California Virtual University, Southern California University of Professional Studies, American Coastline University, Athena University, Commonwealth Open University, Coast University, Cyber State University, Greenleaf University, Kennedy Western University, International University, Magellan University, Virtual Online University, and a virtual university in which textbook publisher Harcourt has invested US$25 million.

Private online universities are also being developed in some developing nations. Universiti Telekom (Multimedia University) and Universiti Tun Abdul Rasak are part of the Malaysian government's Silicon Valley-type location, the Kuala Lumpur Multimedia Super Corridor. The Korean government, with the support of hi-tech industries such as Hyundai and Samsung, has encouraged the establishment of the Korean Virtual University Consortium (Jung, 1999). The World Bank has sponsored a pilot African Virtual University using information and communications technology to share expensive resources and specialized staff across 14 anglophone and 8 francophone sub-Saharan universities and provide fee-for-service computing and engineering degree programmes and professional development.

The cost of establishing such ventures, without any requirement to maintain campuses or research infrastructure, can be relatively low. Turoff (1997) estimated that for US$15 million, or less than the cost of a single major building, a virtual university could be established to serve 2,000–4,000 students paying fees of US$7,500–15,000 per year and could hire instructors at US$150,000 a year to teach online classes of 25–50. Such reasoning leads Daniel (1999a) to warn of the
‘imperial fantasies’ of alternative providers and the threat of their skimming off the cream of undergraduate and professional programmes, leaving only the less lucrative courses to the public institutions. However, Cunningham et al (1997) conclude that there is currently more rhetoric than reality in the concept of the virtual university and Farrell (1999) observes that while the term ‘virtual university’ is used widely and indiscriminately, there are few examples of university teaching and learning mediated entirely through new technology. Institutions are finding the development and support costs to be higher than estimated and most have encountered technological problems and student resistance in their online trials (ODLAA Times, 1999). The former dean of New York University’s online programme admits, ‘Online is a big, important field in higher education, but it does not have a business model that works. The dirty little secret is that nobody’s making any money’ (Arenson, 1998). Despite this, many governments and institutional managers, like gold prospectors searching for the mother lode, believe that ICT can bring cost savings to education, just as they have to banking. Unfortunately, as shown in the fraudulent ‘Columbia State University’, closed by the Louisiana courts in 1998, questionable operators will also seek to exploit this market and Cunningham et al (2000) suggest that vigilance, care and tight regulatory frameworks will be needed to deal with these.

The future

Various predictions are made for the future of higher education. It seems inevitable that universities will become ‘clicks and mortar’ institutions, structured more like ‘virtual universities’, expanding their market reach and operating more like businesses. Some ‘brand name’ universities, like the US Ivy League campuses, believe they can go it alone in the global e-education market. Others see a need to form alliances or focus on niche markets.

Poole (2000) reports that the Association of Commonwealth Universities envisages four possible scenarios:

1. The invaders triumph. Higher education becomes a global big business dominated by a few players.
2. The Trojan horse. Universities seek outside and international partners, offering services such as international degrees.
3. Community champions. A wide range of educational services is widely available through community hubs.
4. Explorers international. Educational service providers are a university/business hybrid.

Dhanarajan (1998) predicts the emergence of a number of pan-global open learning systems, not necessarily funded from the public purse, but led by entrepreneurs with a vision of global developments, a desire to help reduce unhealthy disparities among people and nations and a willingness to strive for mutual respect, trust and benefit.
Chipman (1999) predicts that within 20 years all universities will be universal or nearly so, entered and re-entered at multiple points in people's lives, international in focus and delivery, and robust in their quality standards. None will receive anything like the current levels of taxpayer support. Some will be high-cost, high-price, high-status providers. Some will deliver a few unique or particularly outstanding programmes globally. Others will organize their programmes to meet rising student expectations of convenience-focused delivery and reduce input costs per graduate to be price-competitive. Yet others will develop strategic partnerships to shore up weaknesses in their programmes and services. All will need to shed time-honoured assumptions and practices. None will be able to ignore the external imperatives, not even those currently at the top of the pyramid.
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