United Nations
Educational, Scientific and
Cultural Organization

International Institute
for Educational Planning

Tertiary education in small states

Planning in the context of globalization

Edited by
Michaela Martin
and Mark Bray

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IIEP Policy Forum

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Contents

List of abbreviations

AARNET	Australian Academic Research Network
ACHEA	Association of Caribbean Higher Education Administrators
ACTI	Association of Caribbean Tertiary Institutions
ADB	Asian Development Bank
ALDEC	Adult Learning Distance Education Centre
ANQA	Armenian National Centre for Quality Assurance
APS	Arya Pratinidhi Sabha
AUF	Agence Universitaire de la Francophonie
AusAID	Australian Government overseas aid program
AUST	Australian Territory administered from Canberra
BAICE	British Association for International and Comparative Education
BEd	Bachelor of Education
BROT	British Overseas Territory
CAAM	Caribbean Accreditation Authority for Education in Medicine and other Health Professions
CANQATE	Caribbean Area Network for Quality Assurance in Tertiary Education
CAPE	Caribbean Advanced Proficiency Examination
C@ribNET	Caribbean Research and Education Network
CARICOM	Caribbean Community
CAS	College of Applied Sciences
CCEM	Conference of Commonwealth Education Ministers
CDB	Caribbean Development Bank
CEDEFOP	European Centre for the Development of Vocational Training
CERC	Comparative Education Research Centre

CFDL	Centre for Flexible and Distance Learning
CHE	Council of Higher Education
CIDA	Canadian International Development Agency
CIS	Commonwealth of Independent States
CKLN	Caribbean Knowledge and Learning Network
COHSOD	Council for Human and Social Development
COL	Commonwealth of Learning
COMESA	Common Market for Eastern and Southern Africa
CRISPAC	CKLN Regional Institutional Strengthening Advisory Committee
CRNM	Caribbean Regional Negotiating Machinery
CSEC	Caribbean Secondary Education Certificate
CSFP	Commonwealth Scholarship and Fellowship Plan
CSME	CARICOM Single Market and Economy
CSTO	Collective Security Treaty Organization
CXC	Caribbean Examinations Council
DENSG	Self-governing Overseas Administrative Division of Denmark
DFID	Department for International Development
DFL	distance and flexible learning
DVD	Digital versatile disc
ECCB	Eastern Caribbean Central Bank
ECOWAS	Economic Community of West African States
ECSC	Eastern Caribbean Supreme Court
ECTEL	Eastern Caribbean Telecommunications Authority
ECTS	European Credit Transfer System
EFA	Education for All
EFTS	equivalent full-time students
EHEA	European Higher Education Area

ENQA	European Association for Quality Assurance in Higher Education
EPA	European Partnership Agreement
ERASMUS	European Region Action Scheme for the Mobility of University Students
EQA	External Quality Assurance
EQAR	European Quality Assurance Register
ERIIC	External Relations and Inter/Intra Institutional Collaboration
EU	European Union
FCA	Fiji College of Agriculture
FCAE	The Fiji College of Advanced Education
FEDM	Fiji Education Ministers' meeting
FIT	Fiji Institute of Technology
FNQF	Fiji National Qualifications Framework
FNU	Fiji National University
FQA	Fiji Qualifications Authority
FRPOM	French Pays d'outre-mer au sein de la République
FSM	Fiji School of Medicine
FSN	Fiji School of Nursing
FTI	Fast Track Initiative
GCC	Gulf Cooperation Council
GCE	General Certificate of Education
GCTT	Graduate Certificate in Tertiary Teaching
GDP	gross domestic product
GER	gross enrolment rate
GMC	General Medical Council
GUNI	Global University Network for Innovation
HEAB	Higher Education Advisory Board
HEC	Higher Education Commission

HP	Hewlett-Packard
ICT	information and communications technology
IESALC	Instituto Internacional para la Educación Superior en América Latina y el Caribe
IFC	International Finance Corporation
IFRI	French Institute for International Relations (l'Institut français des relations internationales)
IIEP	International Institute for Educational Planning
IMF	International Monetary Fund
IMR	inbound mobility ratio
INQAAHE	International Network for Quality Assurance Agencies in Higher Education
ISCED	International Standard Classification of Education
IOC	Indian Ocean Commission
ITS	Institute of Tourism Studies
KFPE	Swiss Commission for Research Partnerships with Developing Countries
KOM	Knowledge Oasis Muscat
LMS	learning management system
LTC	The Lautoka Teachers' College
MATSEC	Matriculation and Secondary Education Certificate
MBA	Master of Business Administration
MC	Matriculation Certificate
MCAST	Malta College of Arts, Science and Technology
MOES	Ministry of Education and Science
Moodle	Modular object-oriented dynamic learning environment
MPRA	Munich Personal RePEc Archive
NAB	National Accreditation Board
NAC	National Accreditation Council
NAECOB	National Accreditation and Equivalency Council of the Bahamas

NCHE	National Commission for Higher Education
NCR	A leading global technology company
NETHPA	Part of the Kingdom of the Netherlands with Full Autonomy in Internal Affairs
NGO	Non-governmental organization
NQF	National Qualifications Framework
NZPTC	New Zealand Pacific Technical College
NZSAT	New Zealand Self-Administered Territory
OAB	Oman Accreditation Board
OAC	Oman Accreditation Council
OECD	Organisation for Economic Co-operation and Development
OECS	Organisation of Eastern Caribbean States
OERU	OECS Education Reform Unit
OMR	outward mobility rate
OQN	Oman Quality Network
OSCE	Organization for Security and Co-operation in Europe
PACER	Pacific Agreement on Closer Economic Relations
PD-Oman	Petroleum Development Oman
QA	quality assurance
R&D	research and development
RBTT	Royal Bank of Trinidad and Tobago
RDI	Resource Development International
REACT	cooperative information platform
RQF	Regional Qualifications Framework
SAARC	South Asian Association for Regional Cooperation
SADC	Southern African Development Community
SALCC	Sir Arthur Lewis Community College
SAR PRC	Special Administrative Region of the People's Republic of China

SCIMS	School of Computing, Mathematics and Information Science
SCS	School of continuing studies
SEC	Secondary Education Certificate
SFRE	Strategic Forum for Research in Education
SGCUS	Commonwealth in Political Union with USA
SGNZ	Self Governing in Association with New Zealand
SIDS	small island developing states
SIM	Seychelles Institute of Management
SPC	Secretariat of the Pacific Community
SPF	South Pacific Forum
SQA	Seychelles Qualifications Authority
SSR	Soviet Socialist Republic
SSTE	State Standards of Tertiary Education
STEPS	Strategic Educational Pathways Scholarship
TAMCC	T.A. Marryshow Community College
TEI	tertiary education institution
TFYR	The former Yugoslav Republic (of Macedonia)
TLIU	Tertiary Level Institutions Unit
TLRP	Teaching and Learning Research Programme
TPAF	Training and Productivity Authority of Fiji
TVET	Technical and Vocational Education and Training
UBBS	University of Basutoland, Bechuanaland and Swaziland
UBLS	University of Botswana, Lesotho and Swaziland
UBS	University of Botswana and Swaziland
UGC	University Grants Commission
UIO	University of the Indian Ocean
UIS	UNESCO Institute for Statistics
UK	United Kingdom
UKCD	United Kingdom Crown Dependency

UN	United Nations
UniFiji	University of Fiji
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
US	United States
USAID	United States Agency for International Development
USP	University of the South Pacific
USSR	Union of Soviet Socialist Republics
UST	Unincorporated territory administered by USA Office of Insular Affairs
UWI	University of the West Indies
UWIDEC	University of the West Indies District Education Centre
VBC	video broadcast
VUSSC	Virtual University for Small States of the Commonwealth
WHO	World Health Organization

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Executive summary

Small states have in common a number of challenges and opportunities. They face particular constraints in the organization of a diversified and cost-effective tertiary education offer because of their limited pool of highly qualified human resources and difficulties in achieving economies of scale in administration and management. However, more positively, in some regions of the world they benefit from the opportunities arising from longstanding regional collaboration and strong donor support.

In many small states, the tertiary education sector has undergone considerable change and reform as a result of rapidly growing enrolments, a diversification of the institutional fabric, the use of technology-based and networked models, and the emergence of cross-border providers, including degree mills. While some small states have found effective solutions to increasing social demand, others are still looking for appropriate responses.

Divided into four major parts, this book identifies recent trends in the environment of small states as well as emerging challenges which have a bearing on tertiary education systems. It presents varied country experiences, and synthesizes some policy options to respond to the challenges.

The first part deals with concepts and goals, commencing with what may be called the small-states paradigm. The first chapter elaborates on conceptual literature which has focused on the ways in which small states are generically different from medium-sized and larger states. The second chapter in this section highlights the implications of this expansion for quantity and quality in small states. It analyses patterns by world region, and considers external and cross-border provision as well as domestic provision as strategic avenues for the development of the tertiary education sector. *Chapter 3* turns to educational research capacity. Particularly in the social sector, small states need to develop their own research strengths to ensure appropriate tailoring of policies to local circumstances. However, this objective may be difficult to achieve precisely because small states have limited stocks of human resources.

The second part of the book presents selected regional and national experiences. Perspectives cover the Caribbean and the South Pacific,

regions with strong concentrations of small states, and which are both served by regional universities. The University of the West Indies (UWI) serves 16 small states, while the University of the South Pacific (USP) serves 12 such states. Thus, between them they serve 28 states and a considerable share of all small states worldwide. *Chapter 4* focuses on the UWI, noting its history and role in the English-speaking Caribbean, while *Chapter 5* analyses the case of Fiji but includes comments on the USP which is headquartered in that country.

The next four chapters focus on issues and challenges in Saint Lucia, Malta, Oman, and Armenia. These countries have contrasting geographic features, economic systems, and relations with their neighbours. The four states also have different colonial histories and different opportunities for regional collaboration.

The third part of the book focuses on specific themes through cross-national analysis. *Chapter 10* focuses on technology for tertiary education, *Chapter 11* addresses funding for tertiary education, and *Chapter 12* examines regulation and quality assurance.

The last part of the book pulls threads together with comments on ways in which small states can seize opportunities and balance constraints. It maps small states on a matrix which considers population size and the degree of regional integration. Use of these two criteria shows that the policy challenges and responses of small states can vary considerably. Through this and other analysis, the chapter identifies lessons from comparative analysis. It remarks on various directions for development, with comments on the roles of international agencies as well as national governments and institutional actors.

Preface

Small states face unprecedented challenges in an ever more globalized and interconnected world. Many of them are island developing countries, and they bear the direct consequences of climate change while being structurally exposed to geographical isolation and economic vulnerability. Given their particular features, small island developing states (SIDS) have been identified by UNESCO as a group in need of specific support.

UNESCO's International Institute for Educational Planning (IIEP) has long been concerned with the distinctive features of small states in its specialist area of work, educational planning. IIEP's Advanced Training Programme and related work in capacity development have welcomed and supported planners from small states around the world for the past four decades, and IIEP has also long focused on small states in its research agendas. As a component part of UNESCO, IIEP has thus included a specific focus on SIDS in its programmes.

In 2009, IIEP launched a specific project on tertiary education in small states. In a globalized economy, the fundamental importance of tertiary education is increasingly seen since it provides the human resources that allow countries to connect to the knowledge society. While small states are relatively advanced in their education coverage at the school level, they encounter specific challenges related to cost-effective provision of tertiary education.

One major focal point in IIEP's work on this theme was a Policy Forum organized in Paris in 2009. The event brought together some 50 policy-makers, planners, researchers and administrators from tertiary education institutions, ministries of education, international agencies and other bodies. The majority of participants were themselves nationals of small states, bringing voices from Africa, the Arab states, Asia, the Caribbean, Europe, and the South Pacific. The international agencies included representatives of the Commonwealth Secretariat, Commonwealth of Learning, the Agence universitaire de la Francophonie (AUF), and the World Bank.

IIEP's 2009 Policy Forum dovetailed with UNESCO's second World Conference on Higher Education. The Communiqué of the second World Conference specifically reflected the concerns of small states, partly as

a result of discussions during the IIEP Policy Forum. In particular, it encouraged UNESCO Member States, working in collaboration with all stakeholders, to develop policies and strategies at the system and institutional levels to empower least developed countries and SIDS to benefit from the opportunities offered by globalization and to foster collaboration between them. The role of the IIEP Policy Forum in the World Conference was also recognized in other documents.

The book also fits other work on tertiary education, both in IIEP and in UNESCO more broadly. IIEP's research programme includes particular focus on design and management of higher education systems; and the Institute's capacity development work has included focus on quality assurance for planners of higher education in small states. The higher education programme administered from UNESCO Headquarters fosters innovation to meet education and workforce needs, and promotes dialogue and knowledge sharing across borders. It has also included specific focus on small states. Related work in other parts of UNESCO includes that of the International Institute for Higher Education in Latin America and the Caribbean (Instituto Internacional para la Educación Superior en América Latina y el Caribe – IESALC). This body has commissioned various studies of individual small states, and in 2010 organized a Caribbean regional conference in Suriname which drew specific attention to the distinctive features of small states.

I would like to thank my colleagues from IIEP, in particular Mrs Michaela Martin, who has been in charge of the project on reform options for tertiary education in small states. She has worked on this project jointly with Mark Bray, former director of IIEP and a renowned expert on education in small states. Despite his manifold tasks and responsibilities, Mark Bray has provided his expertise and devoted considerable time to this project and publication. And finally, my thanks also go to all the other contributors to this book, who have brought the valuable knowledge and experience of their countries and regions to this publication. Many of them have policy-making responsibilities and are thus able to share their experience with their peers.

Khalil Mahshi
Director, IIEP

Introduction

Mark Bray, Michaela Martin

Small states comprise a large proportion of the total number in the world. Among UNESCO's 193 Member States and seven Associate Members, 66 have populations below 3 million; and to them may be added 23 small dependent territories which have high degrees of autonomy (*Table I.1*). These states are very varied in geographic, cultural, political and economic features, but they may also share characteristics arising from their small size.

A substantial literature suggests that small states are not simply scaled-down versions of larger states. They may face particular challenges because of their small size, but they may also benefit from the fact that they *are* states rather than just geographic sub-entities in larger states. This observation is as relevant in education as in other sectors.

During the twenty-first century, various forces have modified the patterns of earlier periods. Perhaps chief among them is the strengthened power of globalization, which has facilitated international linkages and shifted centres of gravity. The Internet, in particular, has radically altered means of communication and access to information. Institutions and households in small states which have appropriate infrastructural back-up may have the same access to information through this medium as their counterparts in larger states. Increased ease of travel has also changed patterns of communication. It has arguably made certain types of regional grouping less essential than they may have appeared in the past, but perhaps strengthened other types of grouping. Small states, and especially island developing states, may have particular concerns about climate change; and migratory patterns also have greater significance in small states than in larger states.

Table I.1 The world's small states and territories

Africa	Arab States	Atlantic	Caribbean
Botswana	Bahrain	Bermuda (BROT)	Anguilla (BROT)
Djibouti	Kuwait	**Cape Verde**	**Antigua and Barbuda**
Equatorial Guinea	Oman	Falkland Islands (BROT)	*Aruba* (NETHFA)
Gabon	Qatar	*Faeroe Islands* (DENSG)	**The Bahamas**
The Gambia		Greenland (DENSG)	**Barbados**
Guinea Bissau		**Iceland**	**Belize**
Lesotho		Saint Helena (BROT)	*British Virgin Islands* (BROT)
Namibia		**São Tomé and Príncipe**	*Cayman Islands* (BROT)
Swaziland			**Dominica**
Western Sahara			**Grenada**
			Guyana
			Jamaica
			Montserrat (BROT)
			Netherlands Antilles (NETHFA)
			Saint Kitts and Nevis
			Saint Lucia
			Saint Vincent and the Grenadines
			Suriname
			Trinidad and Tobago
			Turks and Caicos (BROT)
			US Virgin Islands (UST)

Europe	Indian Ocean	South Pacific	Asia
Andorra	**Comoros**	American Samoa (UST)	**Bhutan**
Armenia	**Maldives**	Cook Islands (SGNZ)	**Brunei Darussalam**
Channel Islands (UKCD)	**Mauritius**	Federated States of Micronesia	*Macao* (SAR PRC)
Cyprus	**Seychelles**	**Fiji Islands**	**Mongolia**
Estonia		French Polynesia (FRPOM)	**Timor Leste**
Gibraltar (BROT)		Guam (UST)	
Isle of Man (UKCD)		**Kiribati**	
Latvia		**Marshall Islands**	
Liechtenstein		**Nauru**	
Luxembourg		New Caledonia (FRPOM)	
Malta		Niue (SGNZ)	
Monaco		Norfolk Island (AUST)	
Montenegro		Northern Marianas (SGCUS)	

San Marino	**Palau**
Slovenia	**Samoa**
Vatican City	**Solomon Islands**
TFYR Macedonia	*Tokelau* (NZSAT)
	Tonga
	Tuvalu
	Vanuatu

Notes: The table shows states with populations below 3 million in 2008. Countries in bold are UNESCO Member States. Territories in italics are UNESCO Associate Members. Certain non-sovereign territories are excluded because their populations are below 1,000 and/or their constitutional arrangements do not fit the classification adopted for the table.

Abbreviations: AUST: Australian Territory Administered from Canberra; BROT: British Overseas Territory; DENSG: Self-governing Overseas Administrative Division of Denmark; FRPOM: French Pays d'outre-mer au sein de la République; NETHFA: Part of the Kingdom of The Netherlands with Full Autonomy in Internal Affairs; NZSAT: New Zealand Self-Administered Territory; SAR PRC: Special Administrative Region of the People's Republic of China; SGCUS: Commonwealth in Political Union with USA; SGNZ: Self Governing in Association with New Zealand; TFYR: The Former Yugoslav Republic (of Macedonia); UKCD: United Kingdom Crown Dependency; UST: Unincorporated territory administered by USA Office of Insular Affairs.

Concepts and definitions

A book on tertiary education in small states must necessarily define at least three terms – tertiary education, small, and state. This helps not only to set conceptual boundaries for focus but also to recognize various ambiguities and spectrums.

The concept of tertiary education, expressed simply, designates the third level of education which follows secondary education and, before that, primary education. However, the concept may imply more than this. As noted by Henchey (1990: 58), tertiary education can be seen as applying:

> to a *level* of learning (more advanced than secondary), to a type of *clientele* (normally older adolescents and young adults, but increasingly older adults as well), and to a certain kind of *institution* (universities, colleges, institutes, advanced schools) that are distinct from the structure of primary and secondary education.

This definition, Henchey noted, would embrace the full-time and part-time programmes of institutions such as:

- degree-granting universities and colleges;
- community colleges;
- junior colleges;

- advanced technical, commercial, and agricultural colleges and institutes which are at least partly post-secondary;
- post-secondary teacher training and teacher education institutions;
- professional schools (e.g. in medicine, engineering, and business) distinct from, but affiliated with, universities;
- certain adult education institutions; and
- certain distance education programmes, and all open universities.

Also useful is a publication by the Organisation for Economic Co-operation and Development (OECD) entitled *Redefining tertiary education* (OECD, 1998). The authors stated that they chose 'tertiary' in preference to 'higher' (p. 14): 'partly because "higher" so often connotes university, whereas much of the development now taking place is in the so-called "alternatives to universities"'.

The authors noted overlap with the term 'post-secondary education', and could have added the term 'further education', but observed (p. 14) that the term 'tertiary education' also has value:

> in that in the sequential logic of primary then secondary education, it refers to the next phase or stage. Instead of being a separate, self-enclosed domain, 'tertiary' has become more integrally related with what goes before in a situation where participation has shifted from a highly selective and narrow base to one of broad inclusiveness.

More mechanically, the International Standard Classification of Education (ISCED) distinguishes three levels of tertiary education (UNESCO, 2006):

- Level 5A comprising academically oriented programmes leading at the minimum to a degree and a minimum duration of three years;
- Level 5B comprising occupationally oriented, short cycle programmes at the associate degree level with a minimum duration of two years; and
- Level 6 for the postgraduate level including Masters' and Doctorate degrees.

However, this classification excludes two-year programmes in community colleges which lead to associate degrees. Community colleges have become important in many of the countries covered by the present book, and in at least some of those countries are considered part of tertiary education (see e.g. Roberts, 2003; Gandhi, 2009; Grant-Woodham and Morris, 2009). Thus for this book the definition of

tertiary education matches that proposed by Henchey and the OECD, and at the lower end is broader than the ISCED. The definition is consistent with the usage by bodies such as the Association of Caribbean Tertiary Institutions (ACTI).[1]

Turning to the question of statehood, Dommen (1985: 4) noted that many commentators expect a state to have 'the attributes of a territory, a permanent population, a government and the capacity to entertain relations with other states'. Although Dommen then proceeded to show that none of these attributes is entirely straightforward, the broad conception may be taken as adequate for present purposes. The book chiefly focuses on sovereign countries as defined by the United Nations, while also noting that many dependent territories which operate with strong degrees of autonomy may, in the domain of tertiary education, face challenges and adopt strategies that can be usefully be considered alongside those of their sovereign counterparts.

The focus then turns to the definition of a *small* state. Smallness is of course relative: Singapore feels small compared with neighbouring Malaysia and Indonesia, but feels large compared to Brunei Darussalam. Likewise, Fiji might feel small compared with Singapore, but feels large compared with neighbouring Tuvalu, Tonga, and Vanuatu. Such perceptions may have relevance since they can affect the nature of self-comparisons and ambitions. At the same time, it is usually helpful to employ quantifiable indicators that lie outside perceptions. Among such indicators, size of population is among the most useful; but many other indicators could be recognized, including geographic area and size of economy (Raadschelders, 1992; Smawfield, 1993; Hindmarsh, 1996).

This book, following a dominant strand in the literature on small states, takes population as the basic yardstick while recognizing that in tertiary education, as in other domains, additional factors are also pertinent. The volume also notes the arbitrary nature of any cut-off point in definitions, and observes that practices vary quite significantly. Thus for example the World Bank (2009) took a cut-off point of 1.5 million people for its definition of small states, Bacchus (2008) employed a yardstick of 3 million, and the Commonwealth Secretariat (2009) set the ceiling at 5 million. For this book, the cut-off has been set at 3 million

1. On its website (www.acticarib.org, accessed 19 August 2010), ACTI states that its member institutions include universities, colleges, community colleges, teacher training colleges, national colleges, state colleges, and technical colleges.

people. This decision permits the book to focus on a substantial spread of states in many regions of the world, and a range of cultures, colonial histories, and other features. Nevertheless, it is often more useful to look at a spectrum of scale, with the smallest of the small being treated differently from their larger counterparts. In some settings it is useful also to consider various regional, economic, and linguistic sub-sets.

Finally, a few remarks about globalization may also be useful. Globalization has become one of the great meta-narratives of contemporary times and has entered much common discourse. Held *et al.* (1999) began their book by suggesting (p. 2) that globalization may be thought of as 'the widening, deepening and speeding up of worldwide interconnectedness in all aspects of contemporary social life'. The range of dimensions, Held *et al*. observed, stretch 'from the cultural to the criminal, the financial to the spiritual'. Elsewhere, Held and McGrew (2000: 3) noted that globalization:

> has been variously conceived as action at a distance (whereby the actions of social agents in one locale can come to have significant consequences for 'distant others'); time-space compression (referring to the way in which instantaneous electronic communication erodes the constraints of distance and time on social organization and interaction); accelerating interdependence (understood as the intensification of enmeshment among national economies and societies such that events in one country impact directly on others); a shrinking world (the erosion of borders and geographical barriers to socio-economic activity); and, among other concepts, global integration, the reordering of interregional power relations, consciousness of the global condition and the intensification of inter-regional interconnectiveness.

All these dimensions are as relevant to small states as to other categories of states, though small states may be particularly affected by some forms of globalization since, in Bacchus' words (2008: 141), small states 'are usually "takers" rather than "makers" in world economic policies'. At the same time, small states seek their own niches, for example in offshore banking. The strategies to secure these niches may have implications for tertiary education as well as for other social and economic domains.

Structure and contents of the book

The book is divided into four major parts. It begins with concepts and goals, commencing with the small-states paradigm and its evolution. This chapter

elaborates on conceptual literature which has focused on the ways in which small states are generically different from medium-sized and larger states. The second chapter in this section focuses on the major expansion of social demand for tertiary education during recent decades, and highlights the implications of this expansion for quantity and quality in small states. It analyses patterns by world region, and considers external and cross-border provision as well as domestic provision. The third chapter turns to educational research capacity. Particularly in the social sector, small states need to develop their own research strengths to ensure appropriate tailoring of policies to local circumstances. However, this objective may be difficult to achieve, precisely because small states have limited stocks of human resources.

The second part of the book presents some regional and national experiences. The Caribbean and the South Pacific have strong concentrations of small states, and both are served by regional universities. The University of the West Indies (UWI) serves 16 small states, while the University of the South Pacific (USP) serves 12 small states. Thus, between them they serve 28 states, which is nearly one-third of those listed in *Table I.1*. *Chapter 4* focuses on the UWI, noting its history and role in the English-speaking Caribbean, while *Chapter 5* focuses on Fiji but includes comments on the USP which is headquartered in that country.

The next four chapters focus on patterns in Saint Lucia, Malta, Oman, and Armenia. These countries have contrasting geographic features, economic systems, colonial histories, and relations with their neighbours. Saint Lucia has a population of approximately 167,000 and is an island with a British colonial legacy and strong links with its Caribbean neighbours. At the other end of the scale, Oman and Armenia have populations close to 3 million. The tertiary sector in Oman has developed from almost zero in the 1980s, financed in particular by oil revenues. Oman operates in close liaison with neighbours in the Gulf, but has not been afraid to import expertise from wider afield. Armenia is finding its identity in the post-Soviet era, retaining links with some former-Soviet states but also looking to Western Europe for ideas and expertise. Malta presents yet another model as a former British colony with a long history of tertiary education but with radically different forces following accession to the European Union (EU). Malta consists of a pair of islands, though unlike Saint Lucia it has a relatively high per capita income and thus is not part of the SIDS group.

The third part of the book focuses on specific themes through cross-national analysis. Echoing sections of *Part 2*, two chapters focus particularly on the South Pacific and the Caribbean. *Chapter 10* presents the USP experience of harnessing technology for tertiary education, highlighting the university's pioneering roles and the lessons to be learned. *Chapter 11*, which addresses funding for tertiary education, also refers to the USP but devotes more attention to the UWI. It also makes some generic points which apply to small states in other regions. Then *Chapter 12* focuses on issues of quality assurance in a wide range of countries. It notes the emergence of a large number of national and regional bodies, and remarks on the strengths and challenges of various models.

Finally, *Part 4* of the book pulls threads together with comments on ways in which small states can seize opportunities and balance constraints. The chapter maps small states on a matrix which considers population size and the degree of regional integration. Through this and other analyses, the chapter identifies lessons from comparative analysis. It remarks on various directions for development, with comments on the roles of international agencies as well as national governments and institutional actors.

References

Bacchus, M.K. 2008. 'The education challenges facing small nation states in the increasingly competitive global economy of the twenty-first century'. In: *Comparative Education*, *44*(2), 127–145.

Commonwealth Secretariat. 2009. *Small states: Economic review and basic statistics – Volume 13.* London: The Commonwealth Secretariat.

Dommen, E. 1985. 'What is a microstate?' In: E. Dommen and P. Hein (Eds), *States, microstates and islands* (pp. 1–15). London: Croom Helm.

Gandhi, M. 2009. 'Bhutanese education systems: a look towards the future'. In: R.L. Raby and E.J. Valeau (Eds), *Community college models: Globalization and higher education reform* (pp. 589–601). Dordrecht: Springer.

Grant-Woodham, J.; Morris, C. 2009. 'Community colleges embracing change: The Anglophone Caribbean experience'. In: R.L. Raby and E.J. Valeau (Eds), *Community college models: Globalization and higher education reform* (pp. 299–320). Dordrecht: Springer.

Held, D.; McGrew, A. 2000. 'The great globalization debate: An introduction'. In: D. Held and A. McGrew (Eds), *The global transformations reader: An introduction to the globalization debate* (pp. 1–45). Cambridge: Polity Press.

Held, D.; McGrew, A.; Goldblatt, D.; Perraton, J. 1999. *Global transformations: Politics, economics and culture*. Cambridge: Polity Press.

Henchey, N. 1990. 'Reform in tertiary education'. In: *La Educación: Revista Interamericana de Desarrollo Educativo* [special issue on education in members of the Organisation of Eastern Caribbean States], *XXXIV*(III), 53–75.

Hindmarsh, J.H. 1996. 'How do we define small states and islands? A critical analysis of alternative conceptualisations'. *Convergence*, *29*(2), 36–45.

OECD. 1998. *Redefining tertiary education*. Paris: Organisation for Economic Co-operation and Development (OECD).

Raadschelders, J.B. 1992. 'Definitions of smallness: A comparative study'. In: R. Baker (Ed.), *Public administration in small and island states* (pp. 26–33). West Hartford, Connecticut: Kumarian Press.

Roberts, V. 2003. *The shaping of tertiary education in the Anglophone Caribbean: Forces, forms and functions*. London: The Commonwealth Secretariat.

Smawfield, D. 1993. 'Notions of smallness: What are they and what are their implications?' In: K. Lillis (Ed.), *Policy, planning and management of education in small states* (pp. 25–47). Paris: UNESCO-IIEP.

UNESCO. 2006. *ISCED 1997: International standard classification of education.* Montreal: UNESCO-UIS.

World Bank. 2009. 'Small States'. Accessed 6 August 2010 from: www.worldbank.org/smallstates

Part I
Concepts and goals

1. The small-states paradigm and its evolution

Mark Bray

During the 1980s and 1990s, a literature emerged that may be called the small-states paradigm. It showed that small states were not just medium-sized and large states on a smaller scale. Rather, they had distinctive features which contributed to commonalities despite the great diversity of these states. The commonalities existed in the economic and social domains, and had implications for education as well as for other sectors.

This chapter reviews parts of the literature which contributed to the paradigm, and brings in updated perspectives from the twenty-first century. It commences with remarks on the numbers and geographic distribution of small states, before turning to some generic features in the economies and societies of small states and in international collaboration. The chapter first identifies these features at a broad level, and then turns to the implications of these features for tertiary education.

The numbers and geographic distribution of small states

Table I.1, in the Introduction, listed 89 states and territories with populations below 3 million. They are found in most regions of the world, with particular concentrations in the Caribbean and the South Pacific. Many of these states are composed of single or multiple islands, but some are coastal and others are landlocked.

Over the decades and centuries, the number and geographic distribution of small states has fluctuated. In Europe, for example, the nineteenth-century unification of Italy brought together multiple small states under a single umbrella, though it still left the Vatican and San Marino as independent entities (Peacock, 1973). In Asia, the consolidation of British colonial rule in India created a single entity from many disparate components in the sub-continent, but even then did not incorporate several hundred 'princely states' which only became unified into either India or Pakistan following the achievement of independence of those countries in 1947 (Hardgrave and Kochanek, 2008). Similar unification of separate states is part of the political history of Malaysia (Milne and Mauzy, 1977); and in a somewhat different context the creation and expansion of the Union of Soviet Socialist Republics

(USSR) aggregated various small states during the first half of the twentieth century (Schapiro, 1988).

During the second half of the twentieth century, the direction of change was at least partially reversed. In particular, the processes of decolonization of the British Empire led to the sovereignty of many small states in Africa, the Caribbean, and the South Pacific. Parallel decolonization of the Dutch, French, and Portuguese empires added to the list. Some very small territories remained under colonial administration, but were granted strong degrees of autonomy. These moves were followed at the end of the century by the break-up of the USSR into 15 countries and of Yugoslavia into six countries.

Against these tides, efforts were made in some locations to create larger aggregations. For example, the West Indies Federation was established in 1958, comprising the territories of Antigua and Barbuda, Barbados, Dominica, Grenada, Jamaica, Montserrat, Saint Kitts-Nevis-Anguilla, Saint Lucia, Saint Vincent, and Trinidad and Tobago (Smith, 1974). However, the Federation collapsed in 1962, and in 1971 Anguilla separated from Saint Kitts and Nevis. In Africa, during the 1980s the leaders of Senegal and the Gambia considered political union to form Senegambia, though the idea was abandoned in 1989. More successfully, in 1997 and 1999 respectively the British and Portuguese administrations of Hong Kong and Macao reverted to China; but even in these cases the arrangement was under the formula of 'one country, two systems' through which the governments of Hong Kong and Macao retained control over their legal systems, economies, currencies, and education systems (Bray and Koo, 2004).

These centrifugal forces led to considerable expansion of the United Nations (UN). In 1950 the UN had 58 members, but by 1970 it had 126 members and by 1990 it had 156 members (Basu, 1996). The expansion continued during the following decades. By 2010 UNESCO, as noted in the Introduction, had 193 Member States and seven Associate Members, among which 66 had populations below 3 million. Many of these entities were Small Island Developing States (SIDS), which formed a specific category of focus for the UN as a whole, including UNESCO.[2]

2. The SIDS were formed as a specific group in 1992 at the UN Conference on Environment and Development. The initial agenda for the group was set out during a 1994 conference in Barbados, and followed up in a 2005 meeting in Mauritius. See www.sidsnet.org

Parallel to the expansion of the UN was expansion of the Commonwealth. The majority of members of this body, which was created in its current form in 1949, are countries with direct or indirect political links to the United Kingdom (UK). Most of the UK colonies which gained independence in the 1950s and after joined the Commonwealth. During the 1970s, the Commonwealth recognized that while at one end of the scale its membership included India which was, after China, the second most populated country in the world, at the other end of the scale the majority of members had populations below 1 million.

Commonwealth concern with the distinctive issues facing small states was first given formal expression at a 1977 meeting of finance ministers in Barbados, which noted 'the special characteristics of small states, particularly their extreme dependence on exports and imports, high dependence on capital inflow and, in some cases, their lack of natural resources' (Commonwealth Secretariat, 2009*a*: 1). The focus was subsequently expanded, with a small-states perspective being injected into the work of all divisions in the Commonwealth Secretariat. One milestone was the report of a committee chaired by the Chief Justice of the Bahamas entitled *Vulnerability: Small states in the global society* (Georges, 1985). That work emphasized the problematic dimensions of small size, though related work, including that concerning the education sector (e.g. Commonwealth Secretariat, 1986; Bacchus and Brock, 1987), also recognized the positive dimensions.

At the time of the 1985 *Vulnerability* report, Commonwealth states with populations below 1 million numbered 27 out of 49. During the following decades the Commonwealth welcomed additional countries, and the populations of many of its members grew. By 2010 the Commonwealth had 54 small state members, of which 23 had populations below 1 million and 31 had populations below 3 million.[3] In addition to these members were 15 territories with varying degrees of autonomy which did not have full sovereignty but which were in some way attached to members.

Despite the need for cut-off points when classifying states by size of population, often it is useful to consider a spectrum of scale. *Table 1.1* regroups the states and territories listed in *Table I.1*, this time presenting

3. These numbers include Fiji Islands, though it had been suspended from Commonwealth membership on 1 September 2009.

them according to the sizes of their populations. Among the 89 states and territories, 32 (36 per cent) have populations below 100,000 and thus comprise the smallest of the small. At the other end of the spectrum, only 10 states (11.2 per cent) have populations between 2 and 3 million. Thus, the overall centre of gravity is strongly at the bottom end of the spectrum, where the implications of small size may be particularly apparent.

Table 1.1 States and territories with populations below 3 million

	Year	Population (thousands)		Year	Population (thousands)
Below 100,000			*250,000 – 1 million*		
Vatican City	2000	0.8	French Polynesia	2008	266.2
Tokelau	2006	1.2	Belize	2008	293.7
Niue	2006	1.7	Barbados	2008	294.8
Norfolk Island	2006	2.5	Iceland	2008	303.5
Falkland Islands	2006	3.0	Maldives	2008	311.1
Montserrat	2001	4.5	The Bahamas	2008	335.3
Saint Helena	2008	6.6	Brunei Darussalam	2008	398.1
Tuvalu	2002	9.6	Malta	2008	408.2
Nauru	2002	10.1	Suriname	2008	460.5
Anguilla	2001	11.4	Luxembourg	2008	472.1
Cook Islands	2006	19.6	Macao	2008	484.1
Palau	2005	19.9	Western Sahara	2008	496.7
British Virgin Islands	2001	20.6	Solomon Islands	2008	507.3
Gibraltar	2006	29.1	Equatorial Guinea	2008	519.7
San Marino	2006	31.4	Cape Verde	2008	542.4
Monaco	2000	32.0	Montenegro	2008	597.9
Turks and Caicos	2006	33.2	Bhutan	2008	666.9
Liechtenstein	2006	35.0	Guyana	2008	736.1
Saint Kitts and Nevis	2001	46.1	Bahrain	2008	766.1
Faeroe Islands	2006	48.3	Fiji Islands	2008	844.0
Cayman Islands	2006	52.0	Djibouti	2008	847.7
Greenland	2006	56.8	Qatar	2008	855.9
American Samoa	2000	57.3	Comoros	2008	860.1
Marshall Islands	2008	60.7	Cyprus	2008	863.6
Bermuda	2008	67.8			
Dominica	2002	70.4	*1–2 million*		
Northern Marianas	2002	77.6	Swaziland	2008	1,148.3

	Year	Population (thousands)		Year	Population (thousands)
Isle of Man	2006	80.1	Timor Leste	2008	1,192.5
Andorra	2006	82.2	Mauritius	2008	1,271.5
Antigua and Barbuda	2005	82.8	Estonia	2008	1,330.5
Seychelles	2006	84.6	Trinidad and Tobago	2008	1,338.2
Kiribati	2005	92.5	Gabon	2008	1,350.2
100,000 – 250,000			Guinea Bissau	2008	1,745.8
Tonga	2008	100.9	The Gambia	2008	1,754.1
Aruba	2008	103.5	Botswana	2008	1,905.5
Grenada	2008	105.6			
US Virgin Islands	2008	111.4	*2–3 million*		
Federated States of Micronesia	2008	111.6	Slovenia	2008	2,001.6
Saint Vincent and the Grenadines	2008	121.0	Lesotho	2008	2,020.1
Channel Islands	2008	149.5	TFYR Macedonia	2008	2,040.0
São Tomé and Príncipe	2008	160.2	Namibia	2008	2,102.1
Saint Lucia	2008	166.8	Latvia	2008	2,265.5
Guam	2008	175.6	Oman	2008	2,650.8
Samoa	2008	188.8	Mongolia	2008	2,653.7
Netherlands Antilles	2008	194.4	Jamaica	2008	2,728.2
Vanuatu	2008	231.6	Kuwait	2008	2,919.1
New Caledonia	2008	244.4	Armenia	2008	2,995.9

Source: United Nations Statistics Division, December 2008.
Note: The list of states and territories is the same as in *Table I.1*. See Notes in that table for explanation of states and territories which are included and excluded.

Economies, societies and international collaboration

This section examines the nature of the economies and societies of small states, and dimensions of international collaboration. It does so at the broad, generic level. The specific implications for tertiary education are examined in the following section under a parallel set of sub-section headings.

The economies of small states

The Commonwealth Secretariat's *Vulnerability* report, referred to above (Georges, 1985), was partly concerned with threats to territorial and

political security but was also concerned with economics. The report recognized (p. 16) that small states as a group are 'not very unfavourably placed among developing countries in respect of per capita income', but asserted that this fact had 'hindered recognition of their special economic problems by the international community'. The chief economic challenges to which the report referred were as follows:

- *Narrow resource base*. The land areas of 14 of the 31 states considered by the report were less than 750 square kilometres. Small land area restricts mineral endowment, while undifferentiated climatic conditions and soil resources restrict agricultural development. However, the report did note some examples of favourable natural resource endowments, including the marine resources of island states, and oil in Brunei Darussalam.
- *Lack of economies of scale*. Although many small states have achieved economic growth through tourism and offshore financial services, industrialization has been constrained by the small size of domestic markets, difficulties in penetrating foreign markets, lack of indigenous technological bases, and inadequate supplies of raw materials.
- *Relative openness*. Limited domestic markets and extensive exposure to the outside world encourage outward orientations. The ratio of imports to gross domestic product (GDP), which averaged about 20 per cent for all oil-importing countries, was about three times as high for states with populations below 1 million. Small states had a tendency in the export sector towards both product and market concentration – a few products going to a small number of countries.
- *Infrastructural costs*. Small states commonly bear high per capita costs of constructing and maintaining harbours and airports. Such costs also apply to other public service activities and to public administration generally.
- *Remoteness*. Some island states, particularly in the Pacific, are distant not only from continents but also from each other. Nine countries among the 31 considered were over 1,500 kilometres from the nearest continent. Efforts to improve transport links had sometimes been impeded by the increasing use of container vessels and wide-bodied aircraft which required larger volumes of traffic. However, other island states are located more favourably on sea routes and near other states and continents.
- *Natural disasters*. Many small island states are in typhoon or hurricane regions, and damage from single incidents may have a

much greater proportional impact than it would in larger states. Saint Lucia lost 60 per cent of its coconuts and 75 per cent of its banana output from a hurricane in 1980; and Mauritius lost one-third of its sugar output in 1974 and again in 1979 from natural disasters. In Grenada, a single hotel fire in 1981 destroyed half of the country's hotel capacity.

- *International capital markets*. Small states lacked ready access to international capital markets. Difficulties arose from the cost of raising small loans and the small states' lack of expertise and administrative capacity to make effective use of capital markets.

With these and other factors in mind, the report concluded (p. 97) that 'because of their intrinsic characteristics, small states need a special measure of support.' The report made various recommendations on ways to underpin economic growth. Actions at the national level included economic diversification and special effort to improve research and development. The need for research and development was echoed in the recommendations for regional support, which, of particular pertinence to the present book, included (p. 110) focus on higher education and research alongside sharing of scarce and expensive skills. The recommendations for the global level included efforts (p. 112) 'to provide an external environment which could assist small states in promoting self-reliant and stable development and strengthening their economic independence'. The World Bank was urged to adopt more flexible procedures, and bilateral aid agencies were asked to continue to recognize the special needs of small states for concessional capital.

These excerpts from the 1985 Commonwealth report have been quoted at length in part because they were an early and clear expression of the distinctive challenges facing small states, and in part because the agenda has remained pertinent. The report was not the first analysis of the economic issues facing small states (see e.g. Demas, 1965; Ward, 1975), but it was a milestone in the field.

During the 1980s and 1990s the observations of the report were paralleled, echoed, and elaborated upon by others (e.g. Dolman, 1985; Payne, 1987; Briguglio, 1995), and in 1997 the Commonwealth Secretariat published a sequel. The team that prepared this second report was chaired by Dame Eugenia Charles, former Prime Minister of Dominica, and included some members from the original panel.

The new report (Charles, 1997) recognized that much of the original analysis and many of the recommendations remained relevant, and drew fresh attention to them. At the same time, the new report stressed that the international context had changed significantly with the end of the Cold War, and identified emergent themes including global warming and money laundering. The report also highlighted a pair of 'seemingly contradictory impulses' (p. 3), namely the embrace of globalization and the growth of regionalism. Globalization, the report suggested (pp. 3–4):

> is most easily comprehended as a process of accelerating interdependence which has at its core the liberalisation of trade, the deregulation of financial markets, the spread of transnational production of goods and services, and the development of new technologies, particularly information technology.

The report added that globalization brought cultural elements associated with the diffusion of consumerist values, environmental concerns focused on the protection of seas and habitat, and political issues to do with the effectiveness of the state. Indeed, it added (p. 4):

> states now have to recognise the power not only of other states and international organizations, but also of a range of other actors from impersonal foreign exchange markets through transnational firms to individual terrorist and criminal activity.

Intertwined with these forces were the actions of emerging regional blocs which sought competitive advantage through economic and political integration. Such regional movements, the report suggested, weakened state boundaries and led to 'widening [of] the asymmetries of power in the international system'. These factors created a more uncertain and unstable environment for small states; and globalization, the report suggested (p. 5), 'may provide some benefits but it could also lead to the marginalisation and impoverishment of small states, particularly those that are the least developed and least capable of making the changes needed to take advantage of new opportunities'.

Analysis of the economic circumstances of small states was extended and deepened in the years that followed. In 1998 the Commonwealth Secretariat joined with the World Bank in a Task Force on Small States which convened a pair of high-level conferences in Saint Lucia in 1999 and London in 2000. The events led to a report (Commonwealth Secretariat and World Bank, 2000) and an edited volume of papers (Peretz, Faruqi, and Kisanga, 2001). The Foreword to the latter was

written by Owen Arthur, Prime Minister of Barbados, who had chaired the London conference. It set the tone (Arthur, 2001: vii) by remarking that:

> We are now at a crossroads where the increasing trend towards globalisation could overwhelm the economies of many small states unless their special concerns in terms of vulnerability and transitional problems are taken into account. Small states have not only recognised these emerging trends but have been making determined efforts to chart new courses for their imperilled societies. They have been engaged in devising coherent strategies for integrating their economies with the larger trading blocs and with the new global trading system. ... But all the efforts at domestic adjustment and regional co-operation alone will not suffice. The changes involved in globalisation are so profound that the implications for small developing countries cannot be addressed only by the pursuit of conventional economic policy.

Within the book, Collier and Dollar (2001) noted that small states were seen to be more risky by investors, simply because of their size. However, the authors also showed that small states tend to receive more aid per capita than larger states, which underlined one of the positive dimensions for small states *as* states rather than just component parts of larger entities. At the same time, the book emphasized the importance of policies within small states to reduce economic risks, and the work contributed to increased awareness within the World Bank about the special circumstances of small states.

Perhaps surprisingly, one domain that received little attention in the set of papers (Peretz, Faruqi, and Kisanga, 2001) was the role and impact of migration. A corollary of the openness of small states is the tendency to have high rates of migration. Some of the early work on this theme was conducted by Connell (1988: 26), who reported that in the Pacific more Tokelau, Pitcairn, Cook, and Niue islanders lived outside their countries than at home, and that in the Caribbean the same applied to Anguilla and Montserrat. More recently, Docquier (2007: 88) showed that in 2000 the emigration rate from states with populations below 2.5 million was 10.3 per cent, compared with 5.8 per cent from states with populations between 2.5 and 10 million, 3.1 per cent from states with populations between 10 and 25 million, and 1.3 per cent from states with populations above 25 million. Even more notable were rates of emigration of skilled persons, at 27.5 per cent from small states and 13.5 per cent, 8.8 per cent and 4.1 per cent in the other groups.

Docquier suggested (p. 115) that the 'optimal' emigration rate to maximize country gains was probably between 5 and 10 per cent. Small states in general were far above these rates. The list of 30 countries most affected by skilled emigration (pp. 93–94) contained 12 countries with populations below 3 million. The most affected, with brain drain rates of adults (aged 22 or more) all exceeding 40 per cent, were Guyana, Jamaica, Trinidad and Tobago, the Gambia, Cape Verde, Barbados, Mauritius, Fiji, Malta, and Bahamas. The highest emigration rates were in middle-income countries, where people had incentives to leave and could afford to pay moving costs. High-income countries had low incentives to migrate, and low-income countries had greater liquidity constraints. Connell (2008: 273) reported that Palau, the Federated States of Micronesia, and Marshall Islands were becoming increasingly similar to other Pacific island states with a steady outflow and growth of relatively permanent urban communities overseas. 'Nowhere', he stated, 'does the demand for migration appear to be decelerating'.

On the positive side, remittances from migrants have long been major inputs to the economies of some small states. In Samoa, for example, remittances in the mid-1970s provided over half of the national income (Shankman, 1976: 28); and in Cape Verde in 1987 they accounted for 15.4 per cent of the national income (Lesourd, 1991: 123). In 2007, four of the 10 countries with the highest levels of national income generated by remittances were countries with populations below 3 million (Ratha, Mohapatra, and Silwal, 2009: 2). They were Tonga (39 per cent), Lesotho (28 per cent), Guyana (26 per cent), and Samoa (23 per cent). However, emigration deprives the sending societies not only of skills but also of the social leadership that the migrants would have contributed had they stayed at home.

Such matters were kept on the international agenda through the Small States Forum, which was established in 2006 as a follow-up from the Commonwealth Secretariat/World Bank Task Force on Small States. The Small States Forum established a tradition of convening in the wings of the annual World Bank and International Monetary Fund (IMF) meetings. The first meeting of the forum considered a review of the patterns since the publication of the 2000 Commonwealth Secretariat/ World Bank report. The review (Briguglio, Persaud, and Stern, 2006) described a mixed picture of actions by small states and of responses by the international community. Among the various dimensions, the review again underlined the importance of human resources (p. vi):

> Though small states in general have more highly educated populations relative to the larger low- and middle-income developing countries, it is essential that they invest in and further improve the quality of their education systems, if they are to exploit effectively the current and emerging service opportunities.

The report recommended further integration of small states into the global economy. Such integration could increase brain drain, since countries benefitting from the migration of educated and trained people from small states were encouraged (p.vi) 'to develop more open immigration policies for both skilled and unskilled workers'. To balance matters, those countries were also encouraged 'to provide increased support for human resource development in small states'; but it was far from certain that the recipient countries would indeed take such matters seriously.

The approaches of the World Bank are not universally shared among economists and development specialists. As such, small states may need to be aware of alternative views (see e.g. Horscroft, 2007; Briguglio *et al.*, 2008; Pillarisetti *et al.*, 2008). Nevertheless, the point has now become well established that small states as a group have economic structures which differ from those in medium-sized and large states. These structures both present challenges to be addressed and provide opportunities to be seized.

The societies of small states

Benedict (1967) was among the first to address the sociological characteristics of small states. He began (p. 45) by distinguishing between small societies and small territories, pointing out that small societies may exist in large states with strong segmentation as well as in small states. Nevertheless, he pointed out, much of the sociological theory that had been developed for small societies in large states was pertinent to analysis of small states.

Elaborating, Benedict noted that the main criteria of size for territories are area and population, while the criteria for size of societies are the number and quality of role-relationships. In small societies, individuals interact with each other multiple times in multiple situations. In large societies, individuals have more impersonal or partial relationships. Following Gluckman (1955), Benedict (1967: 47) described social relations in small states as 'multiplex', since 'nearly

every social relationship serves many interests.' Impersonal standards of efficiency, performance and integrity, he added (p. 48), 'are modified by the myriad relationships connecting the individuals concerned'.

Lowenthal (1987: 39) expanded on these themes, highlighting what he called 'managed intimacy':

> Small-state inhabitants learn to get along, like it or not, with folk they will know in myriad contexts over their whole lives. To enable the social mechanism to function without undue stress, they minimize or mitigate overt conflict. They become expert at muting hostility, deferring their own views, containing disagreement, avoiding dispute, in the interest of stability and compromise. In a large state it is easy to take issue with an antagonist you need seldom if ever come across again; to differ with someone in a small state where the two of you share a long mutual history and expect to go on being involved in countless ways is quite another matter. Not simply the small size of the state but the complexity and durability of most relationships fosters sophisticated modes of accommodation.

Lowenthal stressed that he was 'not suggesting that small states are all sweet harmony'. Rather to the contrary, he pointed out, 'bitter and prolonged factionalism occurs and can have devastating effects.' But, he added (p. 39):

> partly because such factional differences are often seen to be potentially so damaging, inhabitants of small states often take pains to conceal or mute the hostilities they may feel. In discussion, they seldom express opinions dogmatically and are reluctant to voice divergent views.

Such forces can be an inhibitor to innovation, and can make small states conservative. However, forces are complex and may operate in different ways. Baldacchino (2001: 290) observed that small states may lack the checks and balances found in larger states. Individuals who make bold claims, ostensibly based on specialist expertise, are less likely to be challenged in small states because the number of people claiming expertise in particular specialities is usually very limited.

One domain in which these small-states perspectives have changed overall conceptions has been that of public administration. Richards (1982: 170) pointed out the need for adjustments to the conventional wisdom about the nature of public administration when the scale is

small, noting that the differences – particularly at the smallest end of the spectrum – are qualitative as well as quantitative:

> It is the combination of social homogeneity and particularism associated with smallness; the strong self-conscious feeling of collective identity asserted against the outside world; the more intimate relationship of state and society; the differences between formal constitutional theory and political reality; the prominence of personality politics; the relatively muted nature of the opposition – it is all these factors located together within a discrete area which give the microstate its separate and distinctive character.

Many of these characteristics can be seen as positive and valuable. Interpersonal links can facilitate coordination across sector boundaries, and closeness of government to the people can promote realism in development planning. However, other dimensions may be perceived less positively. Randma (2001) compared civil service traditions in the United Kingdom (population 58.8 million in 2000) and Estonia (population 1.4 million in 2000). The UK civil servants whom she interviewed agreed that personal relationships do not, and must not, affect matters such as organizational career decisions, and that all civil servants must have access to impartial information. The Estonian civil servants, by contrast, suggested that personalization in a small system was both necessary and inevitable. This matched other literature on the theme (e.g. Farrugia and Attard, 1989; Baker, 1992; see also Sutton, 2007). Randma observed (p. 153) that:

> There are good and bad sides of close personal contacts in small civil services. On the one hand, the objectivity of personnel decisions can be questioned. On the other hand, close personnel contacts and informal networks enable better collaboration between government organizations.

Some dimensions of societies in small states have changed significantly with the development of the Internet and other means of communication. As noted above, Benedict (1967) noted parallels between small (segmented) societies in large states and small societies in small states. By corollary, he added, just as it is possible to have a small society in a large territory, it is also possible to have part of a large society in a small territory. The two examples of the latter presented by Benedict were Luxembourg and Monaco, the peoples of which had strong relationships with neighbouring states. Since the time that Benedict was writing, the processes of globalization associated with advances in

communications and international travel have permitted many actors in small states to form various types of relationships which resemble those of their counterparts in larger states.

Nevertheless, it is useful to underline the phrase quoted above from Richards (1982: 170) about the characteristic 'strong self-conscious feeling of collective identity asserted against the outside world' that is still commonly found in small states. The peoples of small states commonly demand much closer tailoring of policies and recognition of identities than do comparable populations of equivalent size living in regions of larger states or suburbs of large cities.

Small states and international cooperation

A number of international bodies have already been mentioned in this chapter, including UNESCO, the Commonwealth, and the World Bank. Many other international bodies could be mentioned that operate on a global, regional or other basis.

The UN system has had to adapt to the number of small states, just as the small states themselves have had to find their own roles within larger systems. The framers of the UN Charter did not expect that the organization would have so many small states as full and equal members, and did not make special provisions to accommodate these states. Most small states have long valued their role in the UN, but some have found it a burden. The Commonwealth's *Vulnerability* report (Georges, 1985: 82) pointed out that some small states had not at that time sought admission to the UN because they found the financial and personnel expenses too heavy. Since that time, almost all small sovereign states have joined both the UN parent body and UNESCO.[4] They were encouraged by the prospect of benefitting from their investments, and by some assistance from larger states. The Commonwealth's *Vulnerability* report (Georges, 1985: 91–92) applauded the Australian initiative of providing funds, administered through the Commonwealth Secretariat, for a joint New York office to house the permanent missions of Maldives, Samoa, Solomon Islands, and Vanuatu. The follow-up Commonwealth report (Charles, 1997) remarked that small states had indeed benefitted from

4. Most states which are members of the UN parent body are also members of UNESCO, and vice versa. However, the memberships are not exactly the same. The 59 small states recorded as UNESCO members in *Table I.1* do not include Liechtenstein which became a UN member in 1990 and San Marino which became a UN member in 1992.

UN activities, for example in the specific initiatives focused on SIDS. The report noted the voting power of the small states, and remarked that they had 'exhibited some skill and influence in conference diplomacy' (p. 140).

However, the work of the Commonwealth in conceptualizing the distinctive needs of small states and in supporting practical steps to achieve improvements in both structures and processes predated the advent of significant work in the UN. Vigilance (2008: 349) was not being unduly assertive as an employee of the Commonwealth Secretariat when she wrote that:

> The Commonwealth Secretariat has been the pioneer in drawing international attention to the inherent vulnerabilities of small states. The Secretariat has a long and successful history in ensuring that the issues and challenges facing these countries receive special attention, and that the prospects for these countries in the global economy are effectively explored.

Among the strengths of the Commonwealth is that most members can operate with commonalities through their direct or indirect historical ties with the UK and with English as an official language. However, in some respects the nature of the Commonwealth is limiting. The World Bank, UNESCO and other UN bodies are able to operate across language groups and colonial legacies, on a universal basis.

Alongside these bodies are many regional ones. Obvious examples in which small states comprise the majority are the Gulf Cooperation Council (GCC), the Caribbean Community (CARICOM), and the South Pacific Forum (SPF). Bodies in which small states comprise a minority include the European Union (EU), the Economic Community of West African States (ECOWAS), and the Southern African Development Community (SADC).

In each of these bodies, small states have visibility arising from the fact that they *are* states, rather than just parts of larger political bodies. At the same time, the demands of membership can be onerous. Many documents must be read and digested, meetings attended, and views expressed. Also, the desire by international organizations to secure representation in their staffing, with quotas for nationals from each member country, takes people away from domestic leadership and leads to challenges that can be linked to earlier remarks about brain drain (Baker, 1992: 16).

Again on the positive side, it can be demonstrated empirically that small states in general receive higher levels of per capita funding from bilateral and multilateral aid compared with larger states (Connell, 1986; Collier and Dollar, 2001; Coxon and Munce, 2008). This reflects political criteria in a world which, despite the forces of transnational globalization, still heeds the voices of individual states in international arenas. However, it can also be argued that small states need much of this aid to operate the machinery that to some extent is imposed on them by the international architecture.

Implications for tertiary education

The preceding section and sub-sections have addressed themes at a broad level. It is now appropriate to turn to the specific implications for tertiary education. This will be done under a parallel set of headings.

Implications of economic features

Many of the economic dimensions for the planning of tertiary education that must be addressed in small states resemble those that must be addressed in larger states. Tertiary education is a high-cost enterprise compared to secondary and primary education, and as such demands considerable resources. This fact requires attention to subsidies and fees, and to the balance between the public and private sectors. It also demands focus on structures for efficient operation in order to avoid unnecessary costs.

The more specific issues that must be addressed by planners in small states arise from the economic structures of those states. This requires consideration of the assets that can be exploited and the vulnerabilities of the types highlighted by Georges (1985) and Charles (1997). It also requires links to both domestic and external labour markets. Concerning domestic labour markets, fine tuning is needed but may be difficult to achieve, especially for the smallest of the small. Cammish (1985: 25) described a situation in Seychelles which could also be applicable elsewhere:

> Of three students sent [abroad] to train as physics teachers, for instance, one may elect to stay overseas, the second may change to electronic engineering and the third may fail his examinations: no physics teacher for Seychelles!

States that are not so small do not face the issue quite so sharply, but their labour markets would still be described as 'thin' (Downes, 2008: 3).

At the same time, the international openness of small states requires attention to external labour markets. Planners might have a range of responses to migration from their countries. One response could be unwillingness to invest extensively in tertiary education on the grounds that much human capital is likely to be lost. Planners might also feel that where migration is considerable, households rather than governments should bear a significant proportion of the costs of tertiary education. And to limit migration, they might welcome a lack of portability of qualifications. Crocombe and Crocombe (1994: 94) remarked that qualifications from the Fiji School of Medicine (FSM) were less widely recognized than qualifications from Australia and New Zealand, and implied that the Fiji authorities welcomed this obstacle to emigration of FSM graduates (Crocombe and Crocombe, 1994: 94).[5]

An alternative government response might be to encourage migration in order to secure remittances. The governments of Tuvalu and Kiribati have long invested in maritime training institutes with this goal in mind, and the authorities in Kiribati have added training of nurses (Connell, 2010: 122). The governments of Tonga and Samoa similarly endeavour to train more professionals than can be employed locally. Migrant workers not only send remittances but also provide international connections in the globalized economy; and at least some migrants in due course return, thereby becoming brain circulation rather than just brain drain.

The opportunities for migration tend to be correlated with the demand for education since young people note the potential economic returns. Thus in contexts of high emigration, planners need both to replace the lost personnel and to cater for expanded demand. Their work can become a self-fuelling cycle, since more-educated people are more likely to emigrate than less-educated people. However, educational expansion usually generates a less than proportional increase in emigration (Docquier, 2007). This implies that domestic educational levels can still

5. However, political turbulence in the 1990s and 2000s increased outflows from Fiji. Migration to the Middle East, including nurses to the United Arab Emirates and security guards to Iraq, illustrated how new and highly paid overseas employment opportunities were firmly grasped even in unappealing and violent social contexts (Connell, 2010: 121).

be raised, though the raising of levels is more costly than it would be in the absence of migration.

A different economic question concerns the unit costs of tertiary education. Almost by definition, institutions in small states are small in size, and may thus face challenges in securing economies of scale. However, there are ways to increase the scale. Literature on this theme during the 1980s and 1990s (e.g. Bacchus, 1987; Packer, 1989; Bray, 1990; Atchoaréna, 1991) identified five basic strategies:

- *Multi-level institutions*. Operation of sub-degree courses alongside degree courses permits institutions to be larger and to justify fixed costs in administrations, canteens, etc. Universities can therefore establish foundation years and either combine with or closely collaborate with community colleges.
- *Multi-faceted institutions*. Institutions can incorporate a range of foci, such as technical subjects and the training of teachers and nurses. Many national universities in small states have been established through mergers of colleges focusing on such specializations.
- *International recruitment*. Institutions can recruit from beyond the borders of the small state, thereby enlarging the student body.
- *Regional cooperation*. Institutions can be established to serve groups of countries, and thus can be larger than would otherwise be possible.
- *Distance education*. Learners and teachers can operate at a distance, without the constraints of physical campuses.

Even with these strategies, the institutions are likely to be fairly small. However, small institutions also exist in larger states and have developed strategies for effective management (see e.g. McNay, 2002; Dance, Eichholz, and Mack, 2005). Small size does not necessarily mean inefficient: much depends on the nature of specializations and on class sizes. Moreover, some of the constraints identified in earlier decades, such as the difficulties in operating adequate libraries in small states, have become less significant following the advent of the Internet (Favaro, 2008).

At the same time, governments must consider which courses are most appropriately taught at home and which can and should be undertaken through regional institutions and/or internationally. As remarked by a World Bank (2008: 29) study: "A community college in the OECS [Organisation of Eastern Caribbean States], or anywhere else,

cannot offer curricula and courses to educate all professions of a modern society, ranging from assistant dentists to anthropologists."

Moreover, programmes which are opened or expanded to meet urgent needs may need to close or scale back once those needs have been met. In turn, this may require flexible arrangements for staffing (*Box 1*).

Box 1. Operating a community college in Montserrat

With a population of just 4,500 people, the Caribbean island of Montserrat is among the smallest of the small states. In the early 1990s Montserrat had a population of 12,000, but a volcanic eruption in 1995 made much of the land uninhabitable and forced extensive emigration.

The Montserrat Government feels that its people should not be required to leave the island to secure tertiary education. With this in mind, the Montserrat Community College was founded in 2004 after many years of planning. In 2009/2010 the college had an enrolment of 37 full-time and 43 part-time students. Despite these small numbers, it offered associate degrees with courses in 17 subject areas including accounting, biology, building business, computing systems, construction, economics, and nursing. It had three full-time teaching staff and various part-time staff. The latter included local businesspeople and professionals in the hospital (for the nursing programme). The college arranged for some part-time teachers to 'commute' from neighbouring Antigua for the other specializations. These arrangements provide flexibility, including the ability to scale back when demand has been met.

Source: Paul Payne, Principal of Montserrat Community College, April 2010.

Among the larger small states, greater institutional diversity is likely to be found. Crocombe and Crocombe (1994) cautioned against the arguments about unit costs leading to inappropriate monopolies. They remarked (p. 104) that:

> While 'wastage' is often assumed to be avoided by a monopoly, in practice wastage and inefficiency is often greater in monopolies. ... A wider range of options and more competition between institutions of learning, both within and beyond national boundaries, is likely to benefit students and nations.

Certainly in countries the size of Latvia, Mongolia, and Jamaica a multiplicity of institutions can easily be justified; but it can also be justified in many smaller countries. Tewarie (2010: 47) emphasized the importance of thinking in terms of systems as well as institutions, and for doing so at a supra-national level as well as a national level: 'It is difficult to create a World Class University in every single country, but it

is possible to create a World Class System across the OECS and across the Caribbean region.'

Implications of social features

The multiplex characteristics and need for managed intimacy in small states may be forces for conservatism, but they can also provide social cohesion and links that promote innovation. Schweisfurth (2008: 69–70) remarked that in small states even a single teacher can gain the attention of a wide audience more easily than in a more populated system with more bureaucratic layers, and that impact can be extended by the polyvalent roles demanded in small states. Her specific example was from the school sector in the Gambia, where 'head teachers often function additionally as inspectors and advisors. This means that one person attending a workshop could potentially have a dual impact, both within their own schools and more widely.'

Such factors can also apply to tertiary education and to small states in general. Personal connections can be used to facilitate the opening of new institutions and the reorientation of existing ones. In most small states the senior administrators of all tertiary institutions can gather in a single modest-sized room.

At the same time, it is pertinent to note what Baldacchino (2000) called the 'big fish in a small pond' syndrome. Referring specifically to higher education, he remarked (p. 26) that:

> The small internal market is simply unable to sustain a rigorously competitive system; thus, the institution, and its academic occupants, may come to bear disproportionate, monopolistic power. Members of staff achieve – by default – a situation of authoritative expertise, rewarded rapidly by social, economic and political spin-offs, including public acclaim and media exposure.

Such perspectives help to explain patterns in Macao, for example. Before 1981 Macao had no tertiary education institutions, but two decades later it had 11 (Bray and Kwo, 2003: 418). The largest of these had 3,128 students, but one had 92 students, another had 42 students, and a third had just 13 students. This picture of course resulted from many historical and contemporary forces. Small-state relationships shaped patterns both within and between tertiary education institutions. They also shaped interactions between the institutions and the government. The positive side included detailed mutual understanding of developments

and personalities, while the problematic side included personalized decision-making and opening of both courses and institutions that could not easily be justified from a systemic perspective.

It is useful also to consider further Benedict's (1967) observation that just as it is possible to have a small society in a large territory, it also possible to have part of a large society in a small territory. In the academic world, the latter characteristic permits scholars to consider their principal professional peers to be colleagues in distant locations who share academic specializations and disciplinary perspectives rather than their immediate neighbours along the corridors. This of course can favour both small-state perspectives and large-state perspectives. Thus, communities of scholars interested in the generic features of small states may be found in Bristol (United Kingdom) and Hong Kong (China) as well as in Msida (Malta) and Suva (Fiji). Equally, scholars working on and with the paradigms of medium-sized and large states may be found in the same locations. The forces of globalization associated with the Internet and low-cost travel have altered earlier patterns which might have forced greater integration in inter-disciplinary communities of small institutions.

Another dimension of the societies of small states arises from their openness to international connections which in some cases seems to threaten national cultures. The stress on national identity is among major reasons for establishment of domestic tertiary education institutions even when the financial costs of such institutions are high. Taufe'ulungaki (1991: 581–582) highlighted a statement from the Tongan authorities which illustrates concerns:

> What is at stake is not just national pride but the very soul and survival of a people and a society as an authentic, unique and free nation. It is freely admitted that Tonga could meet its high-level management requirements by continuing to send its future leaders to university institutions outside Tonga. But is Tonga also admitting that it can only train technocrats ...? Is Tonga prepared to accept and conform with the views of outsiders and aid donors that it should concentrate only on so-called appropriate training for the lower strata of the work force and permanently create a dependent society? ... Could Tonga afford *not* to have a say in the training of its leaders and is it entirely appropriate that it continues to permit developed countries to shape their thinking, values, dreams, hopes and perceptions of the world and life?

Similar questions would be raised in many other small states, and remain as pertinent in the present era as they were in the early 1990s. However, what Irvine and Maraj (1994: 16) called the 'not-made-here' syndrome may be problematic. It presupposes a level of tailoring which may not be either justifiable or achievable in all circumstances.

Nevertheless, in this connection it is relevant to note the tensions that commonly underlie not only training in distant countries but also regional initiatives. Such initiatives continue to be strongly advocated, and later chapters in this book examine examples in the Caribbean, the South Pacific and Europe. The University of the West Indies (UWI) has stood the test of time, though has had to adapt and will continue to do so. Similar remarks apply to the University of the South Pacific (USP). Collaboration within the European Union, as exemplified in this book by the experience of Malta, provides a third example of a rather different sort.

Alongside these models, however, should be placed ones that have failed to match expectations. The University of the Indian Ocean (UIO) was proposed at a 1989 seminar in Seychelles organized by the Indian Ocean Commission (IOC), and given subsequent backing by the heads of state of Mauritius, Madagascar, Comoros, Réunion, and Seychelles (Mundil, 1994: 11). The IOC and later the European Union gave the body some funds, but the initiative was thwarted by practical and political obstacles. Eventually the body was formally established in 1998 as a form of network rather than a university in the conventional sense. For the first three years it was headquartered in Réunion, but the decision was then taken to rotate the headquarters. Although some proponents of the IOC had in mind a body like the UWI and USP, the vision was not realized. The University of Botswana, Lesotho, and Swaziland (UBLS) contrasted in the sense that it started well but it then collapsed (Dodds, Nonyongo and Glennies, 1999: 95–96). It was established in 1964 as the UBBS: University of Basutoland (later Lesotho), Bechuanaland (later Botswana), and Swaziland, and adopted the name UBLS in 1966 when Botswana and Lesotho gained independence. In 1976, Lesotho separated from the union, instead making its campus the National University of Lesotho. That left the University of Botswana and Swaziland (UBS), but in 1982 that institution also split. The histories of such institutions reflect major tensions that can exist in such regional bodies in the face of national forces.

Implications of international cooperation

The starting point for the Commonwealth work on the conceptual dimensions of education in small states was a commissioned study by Brock (1984). It was used in the 1985 consultative meeting in Mauritius (Commonwealth Secretariat, 1986) which set the agenda for the following years and from which papers were collected in a book edited by Bacchus and Brock (1987). Subsequent Commonwealth Secretariat work focused on post-secondary education (Commonwealth Secretariat, 1988; Packer, 1989; Crocombe and Crocombe, 1994), Ministries of Education in small states (Bray, 1991; Bray *et al.*, 1991), educational consultancy (Lloyd and Packer, 1994), examination systems (Bray and Steward, 1998), and educational planning and management (Baldacchino and Farrugia, 2002). For a period, the work then lost momentum but it was revitalized following the 2009 Conference of Commonwealth Education Ministers (CCEM) in Kuala Lumpur which mandated the Commonwealth Secretariat to renew attention to the theme (Commonwealth Secretariat, 2009*b*; Crossley, Bray, and Packer, 2009).

Taking its cue from the Commonwealth Secretariat lead, UNESCO also began to focus on the specific features of education in small states. The 1985 Mauritius meeting included among its participants the Chief of Mission of the UNESCO Office for Pacific States in Apia, Western Samoa (see Higginson, 1987). Personnel in UNESCO Headquarters also took up the theme, and commissioned a set of training modules on educational planning in small countries (Bray, 1987). Small states were then given prominence in UNESCO's International Congress on Planning and Management of Educational Development (UNESCO, 1990), some papers from which led to a special issue of UNESCO's journal *Prospects: Quarterly Review of Education* (Vol. XXI, No. 4, 1991) and following which the set of training modules was revised (Bray, 1992).

The theme was given further vigour in 1994 by the UN's Global Conference on Sustainable Development of Small Island Developing States, in Barbados. UNESCO stressed its educational contribution to the theme, reporting that a 'new UNESCO initiative for 1994–1995 aims at assisting small island States to further develop their higher education systems through the reinforcement of existing subregional networks and the establishment of new ones' (UNESCO, 1994*a*: 2). A significant part of this initiative was a 1994 meeting of experts in Cape Verde (UNESCO, 1994*b*).

The role of the Commonwealth of Learning (COL) also deserves mention. This body, inaugurated in 1988 and headquartered in Vancouver, Canada, has identified small states as a particular arena in which it can provide a valued service. At UNESCO's 1994 Cape Verde conference, COL representatives highlighted the support to conversion of 'single' (face-to-face) to 'dual' mode (a combination of face-to-face and distance) national institutions in Guyana, Maldives, Mauritius, Saint Lucia, and Solomon Islands, together with regional institutions in the Caribbean and the South Pacific (Irvine and Maraj, 1994). More recently COL has established the Virtual University for Small States of the Commonwealth (VUSSC), which is playing a significant supportive role in many countries (*Box 2*).

Box 2. The Virtual University for Small States of the Commonwealth (VUSSC)

The seeds for VUSSC were sown in 2000 during the Conference of Commonwealth Education Ministers in Halifax, Canada. The Commonwealth of Learning (COL) was asked to develop the ideas and brought a proposal to the next conference in 2003. Through this initiative, COL works with national institutions to develop distance-learning materials which are then shared with other institutions.

Despite its name, VUSSC is not a university *per se*. Rather, it is a network through which universities come together for mutual support and sharing. Course foci include tourism and entrepreneurship; professional development of educators; life skills; disaster management; fisheries; construction and building; port management and stevedoring; and agriculture.

A tradition has been established through which educators convene for 'boot camps' to develop materials which are then shared through the Internet and other channels. The first seven boot camps were held in Mauritius (2006), Samoa (2007), Singapore (2007), Trinidad and Tobago (2007), Seychelles (2008), the Bahamas (2008), and Samoa (2009). The last of these focused on maritime training, and welcomed 25 educators from 13 countries.

VUSSC courses are freely available for download and adaptation from the website (www.vussc.org). They are aligned with VUSSC's Transnational Qualifications Framework, which facilitates the movement of courses and learners among countries. VUSSC is overseen by a Management Committee comprising representatives from small states in all regions of the Commonwealth. It is an important global initiative through which technologies are harnessed for small states to collaborate and serve their common goals.

Sources: West and Daniel, 2009; Commonwealth of Learning, 2010.

The World Bank came to the theme a few years later than the Commonwealth and UNESCO, but has also taken a leadership role. During the 1980s the World Bank felt that projects had to be of a minimum size to justify the processing demands. As a result, the projects became 'a big splash in the small pond' of small states. Also, the projects often became

complex as different components were added to create packages of the deemed minimum size (see e.g. Coyne and Bray, 1999). Subsequently the World Bank achieved greater flexibility, and in the education sector included valuable analytical work (e.g. World Bank, 1993; Jules, Miller and Armstrong, 2000; Salmi, 2010).

Related work has been undertaken by many other international organizations. Among the banks, it is appropriate to highlight work by the Asian Development Bank (e.g. ADB, 1995) and the Inter-American Development Bank (e.g. Tsang, Fryer and Arevalo, 2002). As noted above, the Indian Ocean Commission (IOC) and the European Union (EU) have supported the University of the Indian Ocean (Allaouie, 1998). Other bodies include the South Pacific Forum (SPF), the Association of Caribbean Tertiary Institutions (ACTI), and many other comparable organizations.

This history and the accompanying inventory of activities have been highlighted to illustrate the ways that small states both benefit from and contribute to the work of international organizations in the domain of tertiary education. However, various tensions must be recognized. One arises from the demands on small systems of multiple meetings and country reports. These meetings and reports generate both resources and ideas, but can also distract the concerned professional from other roles. As noted by Baker (1992: 20), technical assistance projects are sometimes dominated by their own logic rather than by the development needs of the countries. Also, the international bodies inevitably have their own agendas which may not completely match those of the countries concerned. One of them is a tendency to favour regional bodies over national ones. With regard to the South Pacific, Crocombe and Crocombe (1994: 101) reported that:

> It is because of the power of external donors that most of the proposals of island governments for national universities have not materialized. The National University of Samoa, established against the advice of potential donor countries, was for years effectively confined by them to largely sub-degree courses. One of the authors [of the book from which this paragraph is extracted] was assured in Japan that they allocated funds to build the National University of Samoa, but were persuaded by the Australian and New Zealand governments not to proceed as it was their policy to require Samoa to use only USP within the region. The decision of the Tongan Government to have its own university was likewise changed by pressures from the aid donors to conform to a model more congenial to them.

This account is more about bilateral than multilateral bodies, but similar views may be discerned in at least some multilateral agencies.

Conclusions

This chapter has presented concepts and experiences which provide a framework for the subsequent chapters in the book. It notes that the small-states paradigm, in which small states are viewed as having an ecology of their own rather than being merely scaled-down versions of medium-sized and large states, gained currency in the economic domain from the 1960s onwards and in the education sector from the 1980s onwards. The small-states paradigm also has application to other sectors, including public administration, health, law, and security.

While much of the small-states paradigm as developed in the 1980s and 1990s remains valid, some forces have brought changes. Most notable among them are the realignments of political and economic balances following the end of the Cold War, the formation and strengthening of regional economic and political blocs, and the advent of new technologies. The Internet has much reduced the isolation at least of states which have adequate infrastructure and technical support. It has removed some arguments about the need for adequate economies of scale to operate libraries in tertiary institutions, and it has permitted international networking of subject specialists throughout the world.

Also pertinent are changing perceptions on the roles and interconnections between national, regional and international institutions (Pillay and Elliott, 2005; Mayo, 2010). Contradictory forces are evident insofar as on the one hand small tertiary education institutions are being encouraged to merge in order to make larger bodies but on the other hand governments and private operators in small states continue to open and operate small institutions. These small institutions often operate in a reasonably efficient mode, and collectively offer a multiplicity of voices and tracks for education and training.

In that connection, it is worth noting the World Bank's declaration (2002: 116) that states with populations below 1 million 'can rarely marshal sufficient resources to establish and sustain even one national university'. Even in 2002 the statement was of questionable validity. At that time universities existed in well over a dozen countries with

populations below 1 million;[6] and since then institutions have been established in additional countries as distant from each other as Aruba, Equatorial Guinea, Luxembourg, Djibouti, and Fiji. In Cyprus (population 864,000), doubt was expressed on the capacity of the country to operate a university before the University of Cyprus was established in 1989; but this institution rapidly ceased to stand alone, and by 2010 the country had three government universities and four private ones. Such factors showed that thresholds had changed. On the one hand the concept of a university had evolved to embrace broader clienteles, modes of learning, and forms of ownership; and on the other hand, the supply of applicants had grown following expansion of secondary education and raising of social expectations in the increasingly globalized knowledge economy.

Alongside these universities, moreover, were many other tertiary institutions. Community colleges had long existed in parts of the South Pacific strongly influenced by the USA (e.g. American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Palau), and became increasingly evident in the former UK colonies of the Caribbean. Other tertiary institutions in a wide range of small states included technical colleges, nursing schools, teachers' colleges, and seminaries. Many of them were free-standing institutions, but some were articulated with other institutions. In the Caribbean, for example, many community colleges were articulated with the UWI and other universities in 2 + 2 arrangements (i.e. two years leading to an associate degree, followed by another two years leading to a full degree). With such factors in mind, Tewarie's advice (2010: 47) in the Caribbean context was to:

- Think nationally but in concentric circles, build on what exists by rationalizing, harmonizing, integrating and synergizing.
- Think of national and regional systems as partnerships.
- Think of national/regional partnerships in linkage with global partners.
- Think of rationalizing and integrating what exists in-country and build on them whether national, regional or international. National entities have to look to the region and the world. Regional and international institutions must be responsive to national needs and aspirations.
- Think efficiency, effectiveness, quality, impact.

6. These include Bahrain, Belize, Bhutan, Brunei Darussalam, Cyprus, Guyana, Iceland, Macao, Malta, Montenegro, Qatar, Samoa, Suriname, Tonga, and the US Virgin Islands.

These and other dimensions will be explored in other chapters of the book. Once again it must be emphasized that each country is different, and that even on the spectrum of population size a huge range exists between the larger small states and the smallest of the small. Nevertheless, common threads can be identified, and the contrasts are sometimes as instructive as the commonalities.

References

Allaoui, M. 1998. 'University of the Indian Ocean – training, research and communication for the environment'. Accessed 21 August 2010 from:
www.unesco.org/csi/pub/info/allaouie.htm

Arthur, O. 2001. 'Foreword'. In: D. Peretz, R. Faruqi, and E.J. Kisanga (Eds), *Small states in the global economy* (pp.vii–viii). London: The Commonwealth Secretariat, and Washington DC: World Bank.

Asian Development Bank (ADB). 1995. *Human resource development: Small Pacific island countries*. Manila: Asian Development Bank.

Atchoaréna, D. 1991. 'Post-secondary education in small states: Difficulties and strategies'. In: *Prospects: Quarterly Review of Education*, *XXI*(4), 527–535.

Bacchus, K. 1987. 'The provision of post-secondary education'. In: K. Bacchus and C. Brock (Eds), *The challenge of scale: Educational development in the small states of the Commonwealth* (pp. 85–94). London: The Commonwealth Secretariat.

Bacchus, K.; Brock, C. (Eds) 1987. *The challenge of scale: Educational development in the small states of the Commonwealth*. London: The Commonwealth Secretariat.

Baker, R. 1992. 'Scale and administrative performance: The governance of small states and microstates'. In: R. Baker (Ed.), *Public administration in small and island states* (pp. 5–25). West Hartford, Connecticut: Kumarian Press.

Baldacchino, G. 2000. 'Higher education in small island territories: Some frank considerations for stakeholders'. In: *New approaches to higher education: The university college* (pp. 21–30). Proceedings of an international conference, 18–21 October 2000, Bermuda College.

——. 2001. 'Human resource management strategies for small territories: An alternative proposition'. In *International Journal of Educational Development*, *21*(3), 205–215.

Baldacchino, G.; Farrugia, C.J. (Eds) 2002. *Educational planning and management in small states: Concepts and experiences*. London: The Commonwealth Secretariat.

Basu, R. 1996. *The United Nations: Structure and functions of an international organization*. New Delhi: Sterling Publishers.

Benedict, B. 1967. 'Sociological aspects of smallness'. In: B. Benedict (Ed.), *Problems of smaller territories* (pp. 45–55). London: University of London/Athlone Press.

Bray, M. 1987. *A set of training modules on educational planning in small countries*. Paris: Division of Educational Policy and Planning, UNESCO.

——. 1990. 'Provision of higher education in small states: Demands, constraints and strategies'. In: *Higher Education Quarterly*, *44*(3), 264–281.

——. (Ed.) 1991. *Ministries of education in small states: Case studies of organization and management*. London: The Commonwealth Secretariat.

——. 1992. *Educational planning in small countries.* Paris: UNESCO.

Bray, M.; Charles, H.; Farrugia, C.; Packer, S.; Swartland, J. 1991. *Making small practical: The organisation and management of ministries of education in small states*. London: The Commonwealth Secretariat.

Bray, M.; Koo, R. (Eds) 2004. *Education and society in Hong Kong and Macao: Comparative perspectives on continuity and change*. 2nd edition. Hong Kong: Comparative Education Research Centre, The University of Hong Kong; Dordrecht: Springer.

Bray, M.; Kwo, O. 2003. 'Higher education in small territories: Political transition and development in Macau'. In: *Higher Education Policy*, *16*(4), 413–432.

Bray, M.; Steward, L. (Eds) 1998. *Examination systems in small states: Comparative perspectives on policies, models and operations.* London: The Commonwealth Secretariat.

Briguglio, L. 1995. 'Small island developing states and their economic vulnerabilities'. *World Development*, *23*(9), 1615–1632.

Briguglio, L.; Cordina, G.; Farrugia, N.; Vigilance, C. (Eds) 2008. *Small states and the pillars of economic resilience*. Malta: Islands and Small States Institute, University of Malta; London: The Commonwealth Secretariat.

Briguglio, L.; Persaud, B.; Stern, R. 2006. 'Toward an outward-oriented development strategy for small states: Issues, opportunities and resilience building – a review of the small states agenda proposed in the Commonwealth/World Bank joint task force report of April 2000'. Paper presented to the World Bank Group/International Monetary Fund annual meeting, Singapore.

Brock, C. 1984. *Scale, isolation and dependence: Educational development in island developing and other specially disadvantaged states*. London: The Commonwealth Secretariat.

Cammish, N.K. 1985. 'Educational issues in small countries: The case of the Seychelles'. In: C. Brock (Ed.), *Educational issues in small countries* (pp. 22–29). Occasional Paper No. 2, Hull: British Comparative and International Education Society.

Charles, E. (Chairperson) 1997. *A future for small states: Overcoming vulnerability*. London: The Commonwealth Secretariat.

Collier, P.; Dollar, D. 2001. 'Aid, risk and the special concerns of small states'. In: D. Peretz, R. Faruqi and E.J. Kisanga (Eds), *Small states in the global economy* (pp. 11–38). London: The Commonwealth Secretariat; Washington DC: World Bank.

Commonwealth of Learning (COL). 2010. 'Samoa workshop develops VUSSC maritime training materials'. *Connections* [Newsletter of the Commonwealth of Learning] *15*(1), 1–2.

Commonwealth Secretariat. 1986. *Educational development: The small states of the Commonwealth – report of a pan-Commonwealth experts meeting, Mauritius, 1985.* London: The Commonwealth Secretariat.

——. 1988. *A pan-Commonwealth meeting on post-secondary colleges in the small states of the Commonwealth: Summary report.* London: The Commonwealth Secretariat.

——. 2009*a*. 'Commonwealth Secretariat briefing note: Small states'. London: The Commonwealth Secretariat. Available at: www.thecommonwealth.org/files/216535/FileName/ComSec%20Briefing%20-%20Small%20States.pdf

——. 2009*b*. '17th Conference of Commonwealth education ministers: Kuala Lumpur communiqué'. London: The Commonwealth Secretariat. Available at: www.thecommonwealth.org/document/208198/17ccem_communique.htm

Commonwealth Secretariat; World Bank. 2000. *Small states: Meeting the challenges in the global economy.* London: The Commonwealth Secretariat; Washington DC: World Bank.

Connell, J. 1986. 'Small states, large aid: The benefits of benevolence in the South Pacific'. In: P. Eldridge, D. Forbes, and D. Porter (Eds), *Australian overseas aid: Future directions* (pp. 57–78). Sydney: Croom Helm.

——. 1988. *Sovereignty and survival: Island microstates in the third world*. Research monograph No. 3. Sydney: University of Sydney, Department of Geography.

——. 2008. 'Poverty, migration and economic resilience in small island developing states'. In: L. Briguglio, G. Cordina, N. Farrugia and C. Vigilance (Eds), *Small states and the pillars of economic resilience* (pp. 263–288). Malta: Islands and Small States Institute, University of Malta; London: The Commonwealth Secretariat.

——. 2010. 'Pacific islands in the global economy: Paradoxes of migration and cultures'. In: *Singapore Journal of Tropical Geography*, *31*(2), 115–129.

Coxon, E.; Munce, K. 2008. 'The global education agenda and the delivery of aid to Pacific education'. In: *Comparative Education, 44*(2), 147–165.

Coyne, G.; Bray, M. 1999. 'External aid and education in small states: Structural issues, and insights from a World Bank assisted project in Solomon Islands'. In: *Asia Pacific Journal of Education*, *19*(1), 31–43.

Crocombe, R.; Crocombe, M.T. 1994. *Post secondary education in the South Pacific*. London: The Commonwealth Secretariat.

Crossley, M.; Bray, M.; Packer, S. 2009. 'Education in the small states of the Commonwealth: Towards and beyond global goals and targets'. In: *The Round Table*, *98*(6), 731–751.

Crossley, M.; Holmes, K. 1999. *Educational development in the small states of the Commonwealth*. London: The Commonwealth Secretariat.

Dance, M.; Eichholz, A.; Mack, N. 2005. 'Building on strengths: Strategies for small liberal arts institutions'. In: *Continuing Higher Education Review*, *69*, 125–139.

Demas, W.G. 1965. *The economics of development in small countries with special reference to the Caribbean*. Montreal: McGill University Press.

Docquier, F. 2007. 'Brain drain and inequality across nations'. In: *Migration and development: Mutual benefits?* (pp. 83–121). Paris: Agence Française de Développement.

Dodds, T.; Nonyongo, E.; Glennies, J. 1999. 'Cooperation competition or dominance: A challenge in Southern Africa'. In: K. Harry (Ed.), *Higher education through open and distance learning* (pp. 95–109). London: Routledge.

Dolman, A. 1985. 'Paradise lost? The past performance and future prospects of small island developing countries'. In: E. Dommen and P. Hein (Eds), *States, microstates and islands* (pp. 40–69). Beckenham, Kent: Croom Helm.

Downes, A.S. 2008. 'Introduction'. In: A.S. Downes (Ed.), *Labour markets in small developing states* (pp. 1–8). London: The Commonwealth Secretariat.

Farrugia, C.J.; Attard, P.A. 1989. *The multi-functional administrator: Educational development in the small states of the Commonwealth*. London: The Commonwealth Secretariat.

Favaro, E.M. (Ed.) 2008. *Small states, smart solutions: Improving connectivity and increasing the effectiveness of public services*. Washington DC: World Bank.

Georges, P.T. (Chairperson) 1985. *Vulnerability: Small states in the global society – report of a Commonwealth consultative group*. London: The Commonwealth Secretariat.

Gluckman, M. 1955. *The judicial process among the Barotse*. Manchester: Manchester University Press.

Hardgrave, R.L.; Kochanek, S.A. 2008. *India: Government and politics in a developing nation.* 7th edition. Boston: Thomson.

Higginson, P. 1987. 'Multilateral assistance to education in the Pacific island states: A view from Unesco/SOPAC'. In: K. Bacchus and C. Brock (Eds), *The challenge of scale: Educational development in the small states of the Commonwealth* (pp. 196–211). London: The Commonwealth Secretariat.

Horscroft, V. 2007. 'Small economies and special and differential treatment: Strengthening the evidence, countering the fallacies'. In: E. Kisanga and S.J. Danchie (Eds), *Commonwealth small states: Issues and prospects* (pp. 55–98). London: The Commonwealth Secretariat.

Irvine, D.H.; Maraj, J.A. 1994. 'Higher education in small island states: Challenges and responses'. Paper presented at the International Experts' Meeting on Higher Education in Small Island States, Praia, Cape Verde, 12–17 March.

Jules, D.; Miller, E.; Armstrong, L.A. 2000. *A Caribbean education strategy.* Washington DC: Education Advisory Service, World Bank.

Lesourd, M. 1991. 'Emigration, développement et culture: L'exemple de la République du Cap-Vert'. In: *Islands' culture and development* (pp. 113–133). Paris: UNESCO.

Lloyd, M.P.; Packer, S. 1994. *Educational consultancy in small states*. London: The Commonwealth Secretariat.

Lowenthal, D. 1987. 'Social features'. In: C. Clarke and T. Payne (Eds), *Politics, security and development in small states* (pp. 26–49). London: Allen and Unwin.

Mayo, P. (Ed.) 2010. *Education in small states: Global imperatives, regional initiatives, and local dilemmas.* London: Routledge.

McNay, I. 2002. 'Governance and decision-making in smaller colleges'. In: *Higher Education Quarterly*, *56*(3), 303–315.

Mundil, H.K. 1994. 'Higher education in the South West Indian Ocean'. Paper presented at the International Experts' Meeting on Higher Education in Small Island States, Praia, Cape Verde, 12–17 March.

Milne, R.S.; Mauzy, D.K. 1977. *Politics and government in Malaysia*. Singapore: Federal.

Packer, S. 1989. 'Post-secondary education in the small states of the Commonwealth'. In: *International development programmes in higher education: Special papers* (pp. 47–68). London: The Commonwealth Secretariat.

Payne, T. 1987. 'Economic issues'. In: C. Clarke and T. Payne (Eds), *Politics, security and development in small states* (pp. 50–62). London: Allen and Unwin.

Peacock, H.L. 1973. *A history of modern Europe 1789-1970*. London: Heinemann Educational Books.

Peretz, D.; Faruqi, R.; Kisanga, E.J. (Eds) 2001. *Small states in the global economy*. London: The Commonwealth Secretariat; Washington DC: World Bank.

Pillarisetti, J.R.; Lawrey, R.; Yean, J.T.S.; Siddiqui, S.A.; Ahmad, A. (Eds) 2008. *Small economies and global economics*. New York: Nova Science.

Pillay, H.; Elliott, R. 2005. 'Looking through old lenses to understand the emerging new world order: Implications for education reform in small states'. In: *Journal of Research in International Education*, *4*(1), 87–106.

Randma, T. 2001. *Civil service careers in small and large states: The cases of Estonia and the United Kingdom*. Baden-Baden: Nomos Verlagsgesellschaft.

Ratha, D.; Mohapatra, S.; Silwal, A. 2009. *Migration and development brief 10*. Washington DC: Migration and Remittances Team, World Bank.

Richards, J. 1982. 'Politics in small, independent communities: conflict or consensus?' In: *Journal of Commonwealth and Comparative Politics*, *20*(2), 155–171.

Salmi, J. 2010. *Tertiary education in OECS countries: An overview*. Washington DC: World Bank.

Schapiro, L. 1988. *The government and politics of the Soviet Union*. 6th edition. London: Hutchinson.

Schweisfurth, M. 2008. 'Education and democracy in the Gambia: Reflections on the position of development projects in a small African state'. In: D. Johnson (Ed.), *The changing landscape of education in Africa: Quality, equality and democracy* (pp. 63–75). Oxford: Symposium Books.

Shankman, P. 1976. *Migration and underdevelopment: The case of Western Samoa*. Boulder, Colorado: Westview Press.

Smith, M.G. 1974. *The plural society of the West Indies*. Berkeley and Los Angeles: University of California Press.

Sutton, P. 2007. 'Public sector reform in small states: Cases from the Commonwealth Caribbean'. In: E. Kisanga and S.J. Danchie (Eds), *Commonwealth small states: Issues and prospects* (pp. 218–235). London: The Commonwealth Secretariat.

Taufe'ulungaki, A.M. 1991. 'The major educational problems facing small isolated states in the Pacific'. In: *Prospects: Quarterly Review of Education*, *XXI*(4), 572–583.

Tewarie, B. 2010. 'Tertiary education development in the OECS: Looking at statistical indicators, cases, approaches and issues regarding tertiary system development'. Presentation at the OECS (Organisation of Eastern Caribbean States) Higher Education Conference, Saint Lucia, 22–24 March.

Tsang, M.C.; Fryer, M.; Arevalo, G. 2002. *Access, equity and performance: Education in Barbados, Guyana, Jamaica and Trinidad and Tobago*. Washington DC: Inter-American Development Bank.

UNESCO. 1990. *Round table: Planning and management for small countries*. International Congress on Planning and Management of Educational Development, Mexico City, 26–30 March. ED.90/CPA.401/RT.IV.

——. 1994*a*. 'A review of the specific development needs of small Member States and the responsiveness of the United Nations development system to these needs (JIU/REP/93/4)'. Document for UNESCO Executive Board 145 EX/7, agenda item 3.3.2.

——. 1994*b*. 'UNESCO introductory document: Higher education in small island states – review of major features, trends and figures'. Document for the International Experts' Meeting on Higher Education in Small Island States, Praia, Cape Verde, 12–17 March. ED-94/CONF.601/INF.2.

Vigilance, C. 2008. 'Small states and the Commonwealth Secretariat'. In: L. Briguglio, G. Cordina, N. Farrugia and C. Vigilance (Eds), *Small States and the pillars of economic resilience* (pp. 331–350). Malta: Islands and Small States Institute, University of Malta; London: The Commonwealth Secretariat.

Ward, M. 1975. 'Dependent development: Problems of economic planning in small developing countries'. In: P. Selwyn (Ed.), *Development policy in small countries* (pp. 115–133). London: Croom Helm.

West, P.; Daniel, J. 2009. 'The Virtual University for Small States of the Commonwealth'. *Open Learning*, *24*(1), 85–95.

World Bank. 1993. *Pacific regional post-secondary education study*. Washington DC: Population and Human Resources Division, World Bank.

——. 2002. *Constructing knowledge societies: New challenges for tertiary education*. Washington DC: World Bank.

——. 2008. *School and work in the Eastern Caribbean: Does the education system adequately prepare youth for the global economy?* Washington DC: World Bank.

2. Meeting social demand for quantity and quality

Michaela Martin

Among the major challenges for education authorities worldwide is the provision of equitable access to tertiary education. Unprecedented levels of social demand for the most advanced layer of education have arisen from the expansion of primary and secondary education, in part resulting from the Education for All (EFA) movement (Inter-Agency Commission, 1990; UNESCO, 2000, 2010). In a growing number of countries, lower secondary education has become part of a compulsory basic education cycle. Small states are no exception to this pattern – indeed their educational coverage is more advanced than the average of all countries. While the world average gross enrolment rate (GER) in secondary education was 66 per cent in 2006 (UNESCO Institute for Statistics [UIS], 2008: 91), the great majority of small states had GERs in secondary education above 70 per cent.[7]

In addition to the general expansion at lower levels of education, several small states in the Caribbean – principally Antigua and Barbuda, Dominica, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago – have adopted policies to universalize secondary education. Such policies can be expected to boost the social demand for tertiary education, which is, at least partially, a function of the pool of qualified secondary graduates. This being said, social demand is not only a matter of students reaching the final grades of secondary education and complying with the necessary entry requirements into tertiary education, but also of available student support and social perceptions of the private benefits of study beyond the secondary level.

The growing social demand for advanced levels of education has been accompanied by renewed interest in tertiary education. Governments have realized that the globalized economy offers new opportunities for specialization in international value chains where the

7. Most of the exceptions were located in Africa, namely Comoros (35%), Lesotho (37%), the Gambia (45%), São Tomé and Príncipe (46%), and Namibia (58%). The others were in the Arab region [Djibouti: 22%]; Asia [Bhutan: 49%]; and the Pacific [Solomon Islands: 30%; Nauru: 54%]. Thus, this list of exceptions contains only nine of the 63 sovereign states listed in *Table 1*.

various value-added activities comprised in the manufacture of a product or a service are geographically dispersed. In addition, rapid changes to the global economy in the context of technological and other developments require workers with higher skills.

Various studies (e.g. Bourne and Dass, 2003; Bloom, Canning, and Chan, 2005; World Bank, 2009) have indicated rising rates of return to higher education as the demand for skilled workers increases. Rising rates of return are particularly evident where the share of the labour force in the service sector is rising, as is the case in many small states. Investment in tertiary education is increasingly considered a means to enhance productivity and increase national economic competitiveness. The Organisation for Economic Co-operation and Development (OECD) has indicated that investment in tertiary education can be highly profitable in terms of the salary differentials of graduates, their employment prospects, and non-monetary social benefits (OECD, 2008).

With these factors in mind, some countries have established quantitative planning targets for their tertiary education sectors. One example is Trinidad and Tobago, where the Government during the 1990s set a target of 60 per cent participation by 2015. In Barbados, a target of one graduate per household has been announced; and in Oman a 50 per cent participation rate has been set for 2020. In a proposal on tertiary expansion, rationalization and integration, a minimum participation rate for the Caribbean region of 35 per cent by 2020 has been suggested (Tewarie, *Chapter 4*). These targets reflect the historic transformation of plantation into service-based economies in the Caribbean, and the fact that investment in advanced human capital has become a priority in many small countries.

Quantitative targets for expansion are frequently questioned. It is argued that small size is a limiting factor for capacity to absorb tertiary-level graduates since some small countries face considerable graduate unemployment. However, data sets on local labour market needs in small economies are ambivalent. A study conducted by the Caribbean Knowledge and Learning Network (CKLN, 2006) confirmed that employers find it difficult to attract and retain a skilled, adaptable, and flexible workforce. The World Bank's School and Work report for the Eastern Caribbean (World Bank, 2007) indicated that employers were not able to recruit qualified candidates in emerging skill areas, such as in the use of information and communications technologies (ICTs).

A share of business firms (as high as 41 per cent) from Grenada were rating workers with lack of skills and education as a severe obstacle for their competitiveness. In Saint Kitts and Nevis, finding a first job took an average of 14 months for a Common Examination Entrance graduate; and an estimated 56 per cent of youth were unemployed in Dominica. These figures from the Eastern Caribbean can be taken as an indication that the education and training systems were not preparing school leavers adequately for the job market.

However, in small states labour markets are only local to a limited extent. Indeed, small economies have a long tradition of solving employment problems through migration to bigger labour markets, with variations depending on economic, legal, and geographic factors (Atchoaréna, 2009). Indeed, overall out-migration rates among tertiary-educated people are very high in small developing states. Data from UN small island countries place this rate at 13.8 per cent compared to 1 per cent for all UN least developed countries (Docquier and Marfouk, 2006). Within the context of high out-migration rates of highly educated human resources, it is increasingly difficult to link the development of tertiary education to the single analysis of the local labour market in small states. It thus seems more appropriate to combine the use of migration data with a local labour market analysis.

Anticipating social demand from the development of secondary education

In order to anticipate demand for tertiary education, it is useful to examine more specifically the GERs in upper secondary education. According to the UIS (2008: 91), in 2006 the world average GER in upper secondary education was 53 per cent. While there was much variation among small states, the general level was high in comparison with regional averages.

- The average GER in *North America* and *Western Europe* was 98 per cent, and 86 per cent in *Central* and *Eastern Europe*. Most small states in the two regions had rates exceeding the regional averages. The exceptions were Andorra (72 per cent), Cyprus (97 per cent), Luxembourg (88 per cent), Malta (89 per cent), and The Former Yugoslav Republic of Macedonia (75 per cent).
- In the *Arab* region the average was 54 per cent, and Djibouti was the only small state with a lower than average rate (16 per cent). This region also showed a dynamic increase of GER in the period 2000

to 2006 with 13 percentage points in Bahrain, 18 in Qatar and 20 in Oman.

- In *Africa*, a large majority of small states had rates exceeding the regional average of 25 per cent (10 out of 13 countries), with notably high rates in Mauritius (80 per cent) and Seychelles (106 per cent in 2007). The exceptions were Lesotho (24 per cent), Equatorial Guinea (13 per cent in 2002), and Guinea Bissau (11 per cent in 2000). All small countries of the region showed growth in their GERs, some with substantial increases between 2000 and 2006 such as 12 percentage points in Mauritius and 20 percentage points in the Gambia.
- In the *Caribbea*n, most small states were again above the regional average of 74 per cent (14 out of 19 countries), with a modest trend for growth in GER with some exceptions such as Anguilla, Dominica, and Saint Kitts and Nevis.
- In *Asia* and the *Pacific*, again only three small states were below the regional average of 58 per cent, namely Solomon Islands (17 per cent), Bhutan (29 per cent), and Timor Leste (37 per cent). Nearly all small countries of this region demonstrate growth in their GERs, some with considerable increases such as 20 percentage points in Brunei in the period 2000 to 2006, and 20 percentage points in Palau.

Table 2.1 demonstrates that while 17 small states had decreasing GERs in upper secondary education during the period 2000 to 2006, 35 small states had increasing GERs. In addition, there was a dynamic growth of 10 or more percentage points in 16 small states, most of which were located in the developing world.

From the above, it can be concluded that: (i) the level of educational development in terms of upper secondary education in the majority of small states is higher than that of their regional averages; and (ii) enrolments in upper secondary education are increasing rapidly.

Table 2.1 Evolution of upper secondary gross enrolment rates, 2000–2006 (in percentage points)

Regions	Growth categories			
	Decrease of the GER	↗ of GER ≤ 10 points	↗ of GER 10–20 points	↗ of GER > 20 points
Arab States	1	1	4	0
Central and Eastern Europe	3	2	0	0
Central Asia	0	1	0	1
East Asia and the Pacific	2	4	2	1
Latin America and the Caribbean	7	5	4	0
North America and Western Europe	2	1	0	1
South and West Asia	1	0	0	0
Sub-Saharan Africa	1	5	3	0
Total	17	19	13	3

Source: UNESCO Institute for Statistics, 2008.
Note: Since data were not available from the UIS for 2000 and 2006 for all small states, fewer countries are represented than in *Table I.1*.

Trends in the expansion of tertiary education

With regard to tertiary education, the global GER moved from 18 per cent in 1999 to 25 per cent in 2006 (UIS, 2008: 114). Much of this growth occurred in large countries, including China and India. The question that arises here is whether and to what extent small states followed this general trend and whether the expansion of enrolments is modifying the nature and the function of tertiary education in small states.

Trow (1974) established a distinction between three stages of the development of tertiary education, namely *elite, mass*, and *universal* access. His GER benchmarks at that time were up to 5 per cent for elite, up to 15 per cent for mass, and up to 30 per cent for universal. Three decades later, reflecting overall growth and revised social expectations, he revised his benchmarks to up to 15 per cent for elite, up to 50 per cent for mass, and above 50 per cent for universal (Trow, 2006). He suggested that each stage corresponded to a specific function of tertiary education in society. Elite tertiary education, he argued, prepares students for roles in government and the learned professions, whereas mass tertiary education provides the leading strata of the technical and economic organizations,

and universal access to tertiary education prepares large numbers of people for life in advanced societies.

Over the last few decades, small states as a group have not only been part of the global increase but have exceeded general averages. However, some systems have remained elite, others are mass, and yet others are moving to universal access. This may be viewed by region as follows:

- Most small states in *Europe* are in the mass or universal stage with a GER in the range of 30 per cent to 50 per cent. The exceptions for domestic provision – though figures should also take account of the outbound mobility of students – are Andorra (10 per cent) and Luxembourg (10 per cent). Estonia, Iceland, Latvia, Lithuania, and Slovenia have GERs exceeding 50 per cent, and are thus grouped among the tertiary education systems with universal access, whereas Cyprus, Malta, and TFYR Macedonia with GERs around 30 per cent are also to be counted among the countries with mass access. In the period from 2000 to 2006, nearly all small states in Europe showed a dynamic total increase in the GER of 10 to 15 percentage points. In the period from 2000 to 2006, this growth varied between 2 per cent in Andorra and 32 per cent in Armenia.
- In *African* small states, the GER remains in the elite stage of tertiary education, as it does throughout the continent, with access of around 5 per cent. The only exception is Mauritius, with a GER of 17 per cent in 2006. The growth of the GER in terms of percentage points in small states was around 2 to 3 per cent, again with the exceptions of Mauritius (10 per cent between 2000 and 2006), and Cape Verde (6 per cent).
- *Arab* small countries are moving towards mass systems of tertiary education, with GERs in 2006 ranging from 15 per cent to 32 per cent. Again, some countries achieved impressive growth in only a few years. Between 2003 and 2006, Bahrain moved from 22 per cent to 32 per cent, United Arab Emirates from 18 per cent to 23 per cent, and Oman from 14 per cent to 25 per cent.
- The *Caribbean* has tremendous variation, with Belize showing a GER as low as 3 per cent in 2004, Barbados at 53 per cent in 2006, and British Virgin Islands at 75 per cent in 2006. Most other Caribbean countries showed a GER of 10 per cent to 15 per cent (elite access). Policies of universalizing secondary education had not yet led to a major increase in the GERs with the exception of Barbados (GER moved from 38 per cent in 2000 to 53 per cent in 2006), the

British Virgin Islands (from 52 to 75 per cent), and a modest increase, so far, in Trinidad and Tobago from 6 per cent in 2000 to 11 per cent in 2006.

- In *Asia* and the *Pacific*, GERs are relatively modest. Palau took the lead (40 per cent in 2003), but Marshall Islands, Fiji, and Micronesia had a medium GER in the order of 15 per cent, and Tonga and Vanuatu were at the bottom with GERs respectively of 6 per cent and 5 per cent in 2003. Bhutan increased its GER from 3 per cent to 6 per cent in this period.

Table 2.2 demonstrates that the majority of small states worldwide experienced growth – in some states a dynamic growth – in their tertiary education coverage. Twenty-six out of 29 countries for which data were available are in this situation, while 10 of the 26 growing systems had undergone a major expansion of more than 10 per cent in only six years.

Table 2.2 Evolution of tertiary gross enrolment rates, 2000–2006 (in percentage points)

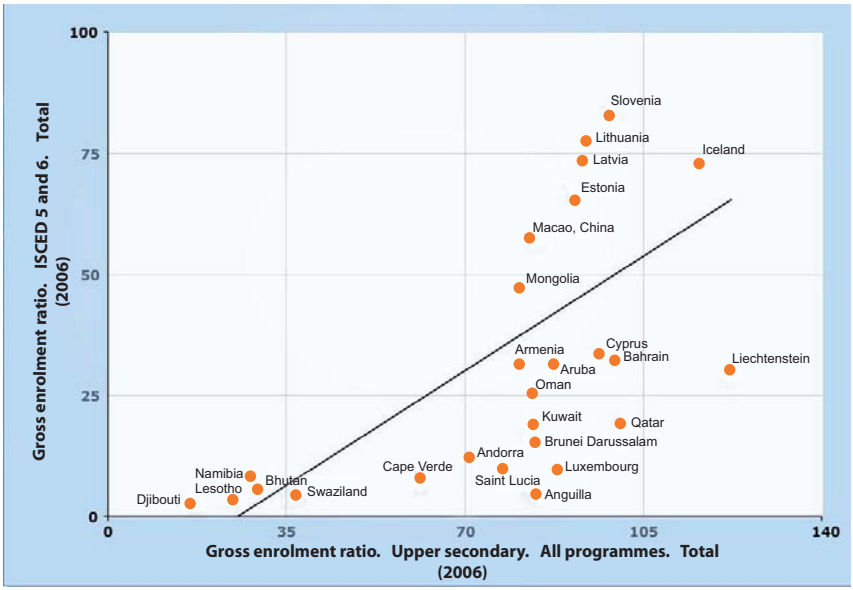
Regions	Growth categories			
	Decrease of the GER	↗ of GER ≤ 10 points	↗ of GER 10–20 points	↗ of GER > 20 points
Arab States	2	3	0	0
Central and Eastern Europe	0	2	1	2
Central Asia	0	1	1	0
East Asia and the Pacific	0	1	0	1
Latin America and the Caribbean	1	2	1	1
North America and Western Europe	0	1	2	1
South and West Asia	0	1	0	0
Sub-Saharan Africa	0	5	0	0
Total	3	16	5	5

Source: UNESCO Institute for Statistics, 2008.
Note: Since data were not available from the UIS for 2000 and 2006 for all small states, fewer countries are presented than in *Table 1.1*.

Figure 2.1 demonstrates the relationship of GER at the upper secondary education level and GER in tertiary education in those small countries with a population of less than 3 million for which data are available. It shows a clear positive correlation between the two variables

with a large correlation coefficient of 0.5 or above.[8] This table confirms a somewhat intuitive knowledge that GER in upper secondary education directly affects the GER at tertiary education level.

Figure 2.1 Gross enrolment rates in upper secondary and tertiary education, 2006



Source: Prepared from UNESCO Institute for Statistics Data Centre, June 2009.

Figure 2.1 helps to identify three types of situations. Some countries had low GERs in both upper secondary and tertiary education, where expansion of upper secondary education needed to take place before growth of social demand for tertiary education could be expected. Other countries had high GERs at both upper secondary and tertiary levels. These countries seemed to be in a situation of more or less balanced educational development of both levels. Countries in the third group, with high GER in upper secondary education and low GER in tertiary education, faced strong social demand with potential difficulty to satisfy it. These countries needed to find alternative pathways for the rapid development of tertiary education.

8. According to Cohen (1992), a small correlation is in the range of 0.1 to 0.3, a medium one 0.3 to 0.5, and a large one above 0.5.

Revisiting alternative pathways to the satisfaction of social demand

While the potential benefits from the development of a domestic tertiary education provision are well known, so also are the constraints. For both families and governments, tertiary education is the most onerous level of education because of its high costs and requirements for specialized staff, facilities and equipment. The economies of many small states commonly fluctuate more than those of larger states because of their lack of diversification and external dependency, and unit costs are increased by difficulties in achieving economies of scale (Bray, 1990). In addition, small states face particular constraints in the organization of diversified tertiary education because of their limited pool of highly qualified human resources.

Study abroad: A substitute or complement for domestic tertiary provision

Because of the above-mentioned specific constraints for small states in building up domestic tertiary education provision, the strategy of sending students abroad has been a traditional alternative to the development of domestic tertiary education, particularly in specialist disciplines from which only a few graduates are needed each year. The strategy of course depends not only on the desires of the sending countries but also on those of the potential hosts. Pertinent factors include the availability of visas and scholarships, the languages of instruction, and the willingness of host countries to recognize the secondary school qualifications of the applicants from the small states.

One measure of the proportion of students studying abroad as a share of total enrolments is the outbound mobility rate (OMR).[9] According to the UIS (2006: 37), the world average OMR in 2006 was 2 per cent, with Africa showing the highest rate of 6 per cent, Arab states 3 per cent, Europe 1.8 per cent, Asia 1.3 per cent, the Pacific 2 per cent, and Latin America and the Caribbean 1 per cent. In general, small states have much higher outbound mobility in comparison with the averages of their regions.

9. The outbound mobility rate is calculated from the number of students studying abroad to the total number of enrolled students in the country in a given year.

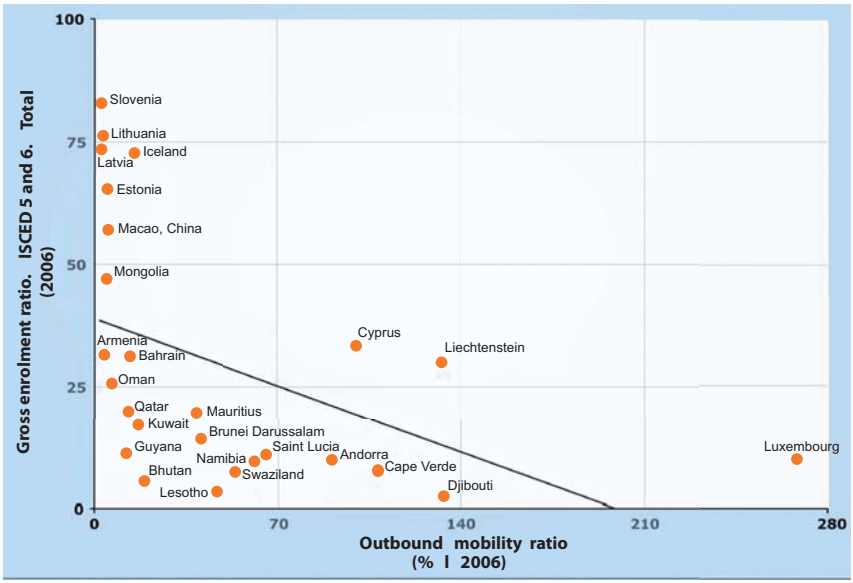
- In *Europe,* the countries with the lowest domestic GERs have the highest outbound mobility, namely Andorra, Luxembourg, and Liechtenstein (GER of 10 per cent to 22 per cent only), with an outbound mobility rate of 293 per cent for Andorra in 2003, 269 per cent for Luxembourg in 2006 and 151 per cent for Liechtenstein.[10] With the exception of Cyprus (GER 33 per cent), all other European small countries, show relatively low OMRs such as 2 per cent for Slovenia to 16 per cent in Iceland.[11]
- *African* students are known to be among the most mobile in general (average close to 6 per cent in 2004). The OMRs of small states are particularly high, especially among those with low GERs, namely Djibouti with 136 per cent in 2006, Comoros with 148 per cent, and the Gambia with 68 per cent.
- In *Asia*, Maldives is clearly a country where so far the choice has been to rely mostly on foreign tertiary education. Reported enrolments outside the country (1,408) were 19 times higher than those in the country (73) in 2003.[12]
- In the *Arab* region, where GERs are average, the OMR is modest with a range from 21 per cent in Qatar to 8 per cent in Oman. There is a regional growth trend of both GERs and OMRs. It thus seems that mobility in the Arab region is not a substitute for tertiary education at home, but more of a complement.
- *Caribbean* students, as can be expected, demonstrate a relatively strong tendency to study abroad. Belize, which has a domestic GER of only 2 per cent, has a very high OMR of 143 per cent. However, countries in this region adopt very different patterns. The British Virgin Islands increased its GER from 52 per cent to 75 per cent while the OMR increased from 16 per cent to 33 per cent between 2000 and 2006.
- In *Asia* and *Pacific* small states, students also tend to be very mobile. While GERs in the region are modest, OMRs are high and vary from 16 per cent in Fiji (which has relatively developed tertiary education) to 50 per cent in Brunei Darussalam and 73 per cent in Tonga.

10. For Andorra for instance, this means that for every 100 students in the country, 293 nationals were studying abroad.
11. The outbound mobility ratio needs to be interpreted in terms of national and institutional policies for student mobility. In Western Europe, mobility has been increased as a response to European mobility programmes such as ERASMUS. At the University of Luxembourg, all students are expected to spend at least one semester abroad, and thus mobility levels are particularly high.
12. It appears that this figure reported to UIS includes only degree-level students.

The above discussion shows that in many small states outbound mobility is mainly a substitute for domestic provision of tertiary education but that in others it is a complement. *Figure 2.2* demonstrates a negative correlation between the GER in tertiary education and the outbound mobility ratio. It suggests that the higher the GER, the lower the outbound mobility. For the 27 countries analysed, there was a small correlation coefficient at the -0.2 level.

Figure 2.2 suggests also that a considerable number of countries have high GERs in tertiary education and low OMRs, while the reverse is true equally for a large number of countries. Only a few countries have both a high GER and a high OMR. This seems to substantiate the hypothesis that outbound mobility is still playing the role of a substitute more than a complement to domestic tertiary education provision in a majority of countries, despite rising mobility levels in many countries worldwide.

Figure 2.2 Relationship between tertiary gross enrolment rates and outbound mobility ratios, 2006



Source: Prepared from UNESCO Institute for Statistics Data Centre, June 2009.

It should, however, be added that some small states receive a considerable proportion of external students, which is measured by the

inbound mobility ratio (IMR),[13] in addition to sending local students abroad. While the challenge remains to satisfy social demand, it seems that once the decision is taken to offer a domestic provision, it is also necessary to put in place strategies for its cost-effective delivery. Recruitment of such students is certainly one strategy to increase the scale and cost-effectiveness of domestic tertiary education provision. For example, Macao's tertiary institutions have recruited large numbers of students from mainland China (Bray and Kwo, 2003: 428). The Seychelles University Foundation, which was created to establish the first University of Seychelles, set the objective for the new university to recruit an international student cohort (Seychelles, 2008: 7). The authorities in Mauritius also aim to become a 'regional knowledge hub' in higher learning (Mauritius, 2007: 5). The Maltese strategic document establishes a target of 5,000 foreign fee-paying students by 2020 (Malta, 2009: 42).

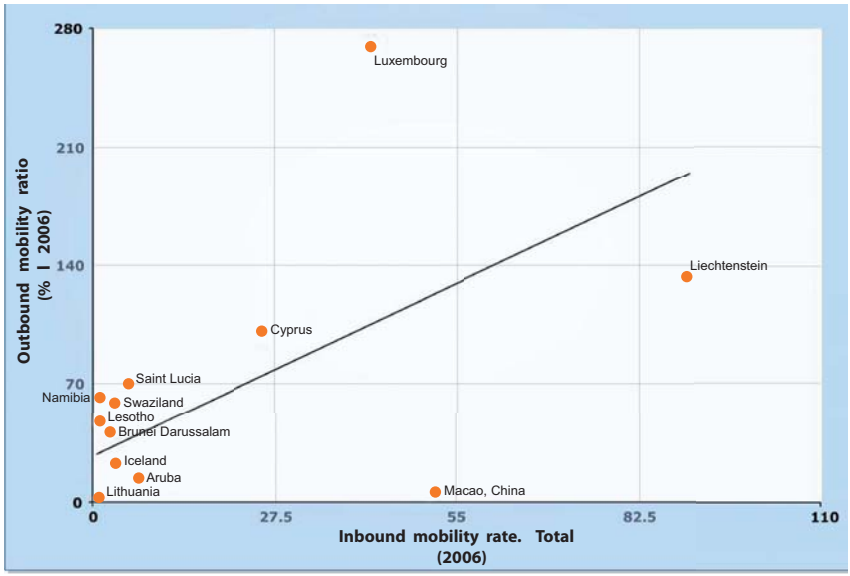
Figure 2.3 indicates that many small states with high outbound mobility also have high inbound mobility. The graph shows that both variables were strongly correlated in 2006 at a level of 1.5. It thus appears that it is rather common for small states to overcome their constraints of scale through actively recruiting foreign students. However, the extent to which this is the case is a function of many other variables, including the overall reputation and thus attractiveness of the tertiary system, the language of instruction, similarities in the host education system to those of the target countries, and the availability of scholarships.

Private and cross-border tertiary education: a steadily growing sector

Many small states, like their larger counterparts, have opened their systems to private providers as a strategy to widen access while trying to mitigate the heavy expenditures from public budgets involved in the development of public tertiary education. Many of the private institutions are of domestic origin, but increasing numbers are cross-border providers. Many small states have traditionally been rather open to cross-border provision, which is frequently welcomed as an opportunity to complement the domestic tertiary education sector.

13. The inbound mobility ratio is the number of foreign students studying in the host country over its total enrolments in a given year.

Figure 2.3 Relationship between outbound and inbound mobility ratios, 2006



Source: Prepared from UNESCO Institute for Statistics Data Centre, June 2009.

Data on private tertiary education are sketchy due to limited statistical capacities in the ministries of small states and the dynamic nature of the sector. Nevertheless, some features may be identified as follows.

- In *Europe*, most tertiary education systems, including those of small states, are dominated by the public sector. Exceptions among the small states include Estonia and Latvia, where the 2006 share of private sector enrolments was as high as 84 per cent and 96 per cent respectively, and has been progressing since 2004.
- In the *Arab* states, the share of private enrolments in Kuwait, Oman, and Qatar is between a quarter and a third of the total (26 per cent in Kuwait in 2006, 29 per cent in Oman in 2003, and 31 per cent in Qatar in 2006). In these countries, private overseas providers have greatly increased their role both through branch campus arrangements and franchised tertiary education offers.

- In the *Caribbean*, the share of private enrolments is rarely reported in international statistics.[14] One exception is Saint Lucia, where the share of private enrolments increased from 4 per cent in 2004 to 33 per cent in 2006.[15]

While medical offshore campuses already have a longstanding history in some parts of the Caribbean region, such as Grenada and more recently Saint Lucia and Saint Kitts and Nevis, branch campuses and franchised programmes from larger states are a more recent phenomenon. Hosein, Chen, and Singh (2004) listed 40 joint programmes organized by Caribbean institutions in collaboration with US and British institutions. Tewarie (2009) noted that of the 150 institutions in the Caribbean, 60 per cent were public, 30 per cent were private and the remaining 10 per cent received limited government support. He mentioned that Grenada, Saint Kitts and Nevis, and Saint Lucia alone had attracted 14 offshore tertiary education institutions, the majority of which were US investments and mainly medical schools. In Saint Kitts and Nevis, in addition to the public Clarence Fitzroy Bryant College and the University of the West Indies, seven offshore universities offered programmes in veterinary medicine, medicine, and business. These institutions provided higher education to international students in the respective disciplines. The offshore universities were relatively small, although they had grown over time. The student population was mainly from North America and comprised mainly young adults. Concerning another part of the world, *Box 3* presents the case of Seychelles which has longstanding traditions and diverse providers of cross-border education.

While private and cross-border providers are often welcomed by public authorities as a means to widen access, the rapid development of the private provision of tertiary education poses new challenges to the public authorities of small states, many of which are not yet equipped with regulatory and quality assurance systems to ensure that all private providers are of acceptable quality. The concern is also the extent to which these new providers of higher education are committed to national and regional development. Indeed, the number of 'degree mills' offering sub-standard and fake credentials has greatly expanded. Because such

14. For instance, see the UNESCO Institute for Statistics data centre, available on: www.uis.unesco.org
15. With small numbers, however, the opening of a single or limited number of private institutions can produce a major effect on the share of enrolments.

enterprises can damage the reputations of all involved, they are now emerging as a key focus for planners.

Box 3. Cross-border providers in Seychelles

Among the first efforts to provide distance education for Seychelles was a Master of Education (MEd) course offered by the University of Quebec (Canada), launched in 1985. Since then, the number of providers has grown substantially. In Seychelles itself, one of the main distance education providers is the Adult Learning and Distance Education Centre (ALDEC) set up in 1999 within the Ministry of Education. ALDEC has conducted courses in collaboration with the University of South Africa, Edith Cowan University (Australia), and the University of Rouen (France). Other prominent actors include the Indira Gandhi National Open University (India) and the Commonwealth of Learning, which has sponsored the Virtual University for Small States of the Commonwealth (VUSSC).

Distance-education providers based in Seychelles also include the Seychelles Institute of Management (SIM), which conducts degree courses in finance and commerce, the Seychelles Polytechnic, which has a twinning programme in business and management with the University of Manchester (UK), the University of Seychelles-American Institute of Medicine, and the National Institute of Education, which conducts Masters of Business Administration programmes with the University of Warwick (UK). Regionally, Seychelles is a member of the Southern African Development Community (SADC), the Common Market for Eastern and Southern Africa (COMESA), and the Indian Ocean Commission (IOC). Partly through such links, distance education courses have been launched in conjunction with colleges in Reunion and Mauritius.

The Seychelles Qualifications Authority (SQA) was created in 2006 to oversee elements of regulation. A set of national guidelines was prepared, with the anticipation that it would become a legally binding framework. A Higher Education Council has also been proposed to work with the SQA.

Many of the challenges reflect the constraints of small size. They include the small pool of local experts which is constantly depleted by brain drain, high training costs, currency fluctuations for tuition fees payable in foreign exchange, and conflicts of interest between ownership and control in a small society in which roles are intertwined.

Source: Extracts from message posted by Jean Alcindor from the online debate on External Quality Assurance in Tertiary Education, UNESCO-IIEP, 8–19 June 2009.

Distance education: A cost-effective alternative of increasing importance

Distance learning opportunities have developed rapidly worldwide as a means of cost-effective access to tertiary education. Distance education programmes are increasingly viewed as a way to reach significant economies of scale.

In all parts of the world, the development of distance education is supported by technological advances. They have opened up a range of delivery mechanisms to reach students at a distance as well as the flexibility and system-management power to customize both the content and instructional schedule. Technological upgrades and the emergence of satellite-based facilities have enhanced the quality of visuals and made the audio reliable. Today there are fewer outages or poor reception problems, even if there are still problems of telecom capacity (bandwidth) in some countries or a lack of equipment. Satellites and Internet facilities have also become less expensive, and thus the earlier quite high fixed costs in starting up distance learning systems have become less problematic.

In those regions where small states are particularly numerous, especially the South Pacific and the Caribbean, cooperation has permitted delivery of tertiary education at a distance, first via satellite networks and more recently over the Internet. The regional universities of the South Pacific and the University of the West Indies have been important players in this respect, having put in place their distance-teaching capacity at an early stage. In 1996 the number of students studying at a distance through the University of the South Pacific (USP) was 5,400 out of a total student population of 9,400; and by 2004 there were nearly 10,000 distance students out of a total student population of 16,000. The USP's strategic plan for 2006–2010 stipulated that all university courses should be designed for flexible delivery (Duncan and McMaster, 2009: 205). In the Caribbean, similar growth took place within the University of the West Indies (UWI). In Jamaica, for instance, 2,324 students were enrolled in off-campus UWI programmes in 2000/2001; and in Saint Vincent and the Grenadines in 2006, 330 students were enrolled at the campuses while 206 participated in the UWI Distance Education Centre (UWIDEC).

In 2008, the UWI created a new Open Campus known as its fourth campus alongside the three campuses in Jamaica, Barbados and Trinidad. This initiative sought stronger links for the university centres in the Caribbean countries which are UWI members but do not have physical campuses. The UWI Open Campus offers multi-mode teaching and learning services through virtual means and in over 50 physical site locations to 16 countries located in the English-speaking Caribbean region. Programmes, most of which are regular programmes of UWI, are offered online, face-to-face or in a blended teaching mode. They are located at pre-university, undergraduate and postgraduate levels, but a majority are conceived as opportunities for professional development.

The Open Campus was built from an amalgamation of formerly existing UWI structures, such as the Board for Non-Campus Countries and Distance Education, the School of Continuing Studies (SCS), the UWI Distance Education Centre (UWIDEC), and the Tertiary Level Institutions Unit (TLIU), but it enjoys the same level of autonomy as the other three campuses of UWI (see www.open.uwi.edu). However, it is difficult to obtain an accurate account of the numbers of learners enrolled or registered directly in undergraduate or graduate programmes offered purely online and/or by mixed modalities in their home country because cross-border education programmes tend to fall outside standard data-gathering systems that are generally focused on domestic programmes.

Many more learners in small states are enrolled in programmes operated by institutions in large states and not especially aiming to serve small states. They include Phoenix University and DeVry University in the US, and the UK Open University. Dominica is among the very small states where distance education has become a major part of tertiary education provision (*Box 4*).

The above-mentioned account of the multitude of distance education providers operating at the country level in many small states is of course not comprehensive. There are many other initiatives such as the Virtual University for the Small States of the Commonwealth (VUSCC), operated under the umbrella of the Commonwealth of Learning (COL) (Daniel and West, 2008; West and Daniel, 2009). It was set up to support the capacity of tertiary education professionals to develop their own multi-media courses. The proposal for the VUSSC that was presented to Commonwealth ministers in 2003 noted that a virtual university could benefit small states by providing course content, a common qualifications framework, and standards for quality assurance. Since then, 32 small states have worked together to train hundreds of their nationals in advanced skills for online collaboration. They have also created e-learning courses in tourism, life skills, building safety, disaster management, and fisheries. Some small states also participate in other multi-state networks, such as the Campus numérique francophone (CNF) initiative of the Agence universitaire de la Francophonie (AUF); and collaborative agreements between Cape Verde and Portugal illustrate possibilities in the Lusophone world (Atchoaréna, Da Graça, and Marquez, 2008: 180).

Box 4. Distance education in Dominica

Dominica is a member of the UWI and for many decades has sent students to study at the various UWI campuses. In addition, students can study domestically at Dominica State College, which offers associate degrees and a BSc in nursing.

This provision is now supplemented by many distance courses. Some are operated by the UWI through its open campus, and others are provided by institutions from beyond the region. Their courses serve learners who, for physical, family, financial or other reasons are unable or unwilling to access the traditional on-campus mode.

Resource Development International (RDI) is one of the major external providers. It is a consortium of UK institutions which offers students the possibility of beginning at the certificate or diploma level and proceeding to a full degree. In 2009, RDI had 316 students in various distance programmes, compared with the UWI open campus enrolment of 280 students. This competition caused concern to UWI, especially since some RDI programmes were similar to those of the UWI open campus. The RDI system allows students to learn at their own pace, and the programmes are very competitively priced.

The government has been sympathetic to UWI, and its offer to fund online studies through the UWI open campus did increase UWI enrolments. However, the government also funds students at RDI, feeling that its programmes are broader and that the admission criteria are more flexible.

RDI is only one among many external providers offering online courses. The government is concerned about quality and accreditation, but does not have the resources to police these providers. It has therefore encouraged the State College to form partnerships. Under so-called '2+2' articulation agreements, the college provides the first two years of programmes and students complete their degree either face-to-face or through online learning with external institutions. DeVry University, which operates from the US, is one such institution. To encourage students to take advantage of these agreements, the government provides financial sponsorship similar to that given to students registered with the UWI open campus.

The Dominican Government is aware that it cannot exclude these external providers, and therefore has a policy of accommodation. The Ministry of Education provides an information service for prospective students who wish to know the status of online providers. At the same time, the government encourages domestic providers and the UWI to learn from these providers about innovative models.

Source: Extracts from message posted by Helene Francis Seaman from Dominica State College to the online debate on External Quality Assurance in Tertiary Education, UNESCO-IIEP, 8–19 June 2009.

Diversification of the institutional fabric and the search for new models

The examples above, drawn from private providers and distance education, demonstrate that policy-makers for tertiary education are seeking innovative ways to respond to increased social demand and to reach out

to non-traditional groups. Supplementary avenues are also offered via a transformation of the traditional face-to-face offer.

The traditionally preferred model for the organization of university-level education in those regions with a considerable concentration of small states has been the regional university model. The most prominent examples of sustained regional provision in tertiary education are the UWI and USP. The UWI was established in 1948 during preparations for the West Indian Federation, which had incorporated most of the English-speaking Caribbean. The collapse of the Federation in 1962 accentuated centrifugal tendencies. In 1962 British Guyana withdrew from the UWI and founded what is now the University of Guyana. The remaining component parts of the UWI held together through extensive negotiation, often at the expense of efficiency (Payne, 1980; Sherlock and Nettleford, 1990; Parkins, 2008). The UWI did not succeed in substantially crossing language boundaries to serve French-speaking or Spanish-speaking territories, but it did welcome Bermuda in 2009, thereby enlarging its membership to 15 countries.

The USP was established two decades after the UWI, in 1968, and serves 12 countries. It has also held together, though at points in its history member states have resented the fact that the headquarters country has gained the largest share of the resources, student enrolments, and employment (Crocombe and Meleisea, 1988; Caston, 1993). Such factors contributed to the creation of the National University of Samoa in 1984 and to proposals for a national institution in Solomon Islands (Uili, 1988; Waena, 2008). Moreover Fiji has created a parallel national institution, and in 2009 announced plans for a second one.

The South Asian University is another regional university. It is sponsored by the South Asia Association for Regional Co-operation (SAARC), of which Maldives and Bhutan are members. A decision was taken in 2007 to establish the South Asian University as a non-profit public–private partnership which is expected to have campuses in all member states (South Asian University, 2009). The first campus has been established in Delhi with funding from the Indian government, and will benefit Bhutan and Maldives among others by providing scholarships.

Elsewhere, regional institutions have not survived internal tensions. The University of Botswana, Lesotho and Swaziland (then called the University of Basutoland, Bechuanaland and Swaziland) was created in 1964 but fell apart in the face of increasing nationalism (Bray and

Packer, 1993: 66–67). The Government of Lesotho broke away from the regional university to create its own university in 1976, and Botswana and Swaziland split in 1982. Today, each of the three countries has its own national university, plus a number of other tertiary education institutions.

The creation of national universities has thus been a longstanding aspiration, and an ongoing trend in many small countries. National universities are indeed an expression of national sovereignty and pride, and they perform an important function of nation-building and identity creation. Many of the newly created universities in small states continue to operate, but most of their courses are at the sub-degree level. Generally, they undertake only limited research which, insofar as it is focused on the specific context of the countries in question, is itself a way to assert identity and achieve demonstrated relevance in the wider context (Crossley, Bray, and Packer, 2009). Their emphases are more likely to be on areas which are of strategic importance for national development. Many universities located in small states face problems of a limited number of academic staff with postgraduate certification. They are also exposed to the threats of other competitors already enjoying an international reputation, as well as the expansion and acceptance of virtual universities which could act as direct competitors.

Many small states have created national universities through the amalgamation of existing tertiary institutions. This is the case in Belize, Bhutan, Cape Verde, Jamaica, Guyana, Samoa, the Gambia, Trinidad and Tobago, and others. Some states with very small populations, such as Antigua and Barbuda, the Bahamas, Maldives, Saint Lucia, Seychelles, and Solomon Islands have declared plans to transform their colleges into universities.

In the non-campus countries of the regional universities, it has become increasingly expensive to finance a growing number of on-campus students to be sent to the regional university. This, together with perceptions of polarization of the benefits towards campus territories and unequal shares of students and fees, has fuelled the idea of national universities. In some cases, these patterns are evident even in the campus countries of regional universities such as Fiji, Jamaica, Samoa, and Trinidad and Tobago. Both Jamaica and Trinidad and Tobago created their own universities as early as 1995 and 2004 respectively. In Fiji, a decision was taken in 2009 by the Minister of Education to create a Fiji National University in addition to the already existing Suva campus

of the USP and the privately run University of Fiji. The basis for this new public university was designed to be an amalgamation of the public tertiary institutions (Fijilive, 2009).

Another common way to gain economies of scale has been to group existing colleges to become multi-level and multi-faceted institutions (see e.g. Bray, 1990; Grant-Woodham and Morris, 2009). Secondary and post-secondary colleges, formerly often placed under the administrative responsibilities of diverse line ministries, have been amalgamated into multi-purpose community colleges and similar institutions. Caribbean states have been particularly eager to adopt the community college model (*Box 5*), and in 2010 there were 20 community colleges in the region. Jamaica alone had eight such institutions, linked through the Council of Community Colleges of Jamaica which is a sub-sectoral coordination body (Wolff, 2009).

Conclusions

This chapter has illustrated the strong trend towards expansion and diversification of the tertiary education offer across small states worldwide. The pressure from the expansion of secondary education fuels the social demand for tertiary education, and has already led to a major expansion of domestic capacity in many small states.

For many small countries, increasing the level of participation in tertiary education forms part of a broader development strategy aimed at economic competitiveness. Trends in the expansion of their tertiary education systems thus correspond to the political will of governments to find a niche in the new global environment for their economies and to transform them into knowledge economies. With this objective in mind, small states need to satisfy not only the social demand arising from secondary school graduates, but also from professionals who wish to update their knowledge and skills. It can be expected that the expansion of tertiary education will continue, sometimes even accelerate, as has already been indicated in some development plans prepared by small states.

The strategy to widen access relies on the development of domestic capacity in tertiary education, but is complemented by cross-border and distance education offers. The diversification of providers is generally welcome due to the expectation that they will contribute in a flexible manner to the satisfaction of otherwise unmet training needs.

Box 5. Community colleges in the Caribbean

Dominica:

In 2002 the Dominica State College was established as a national publicly funded institution merging the four publicly owned higher education facilities in Dominica. It is a non-university institution which offers programmes leading to associate degrees, certificates or General Certificate of Education (GCE) advanced level, and operates with four faculties (education, applied arts and technology, arts and sciences, and health sciences) and a Continuing Studies Division.

Grenada:

In the 1970s the Ministry of Education established a number of colleges offering programmes in teacher training, pharmacy, domestic sciences, and agricultural sciences, with both technical and vocational subjects. In 1988 the government amalgamated eight colleges into one institution, the Grenada National College. In 1996 this institution was renamed and established as a statutory body: the T.A. Marryshow Community College (TAMCC).

Saint Vincent and the Grenadines:

The launching of a community college took place later in Saint Vincent and the Grenadines than in many of the other countries. The integration of four colleges as divisions of one community college was always seen as a challenge, since the colleges had each functioned for some time as independent institutions with their respective policies, procedures, and cultures. This integration turned out to be a long process and the Draft Bill was laid in the House in 2005.

Jamaica:

The teachers' colleges played a significant part in the origins of the higher education system in Jamaica. Many teachers' colleges established during the nineteenth century continue to this day and have transformed themselves into strong multi-purpose and/or degree-granting institutions. Multi-purpose or multi-disciplinary institutions have been created mainly as a result of the amalgamation of smaller single-purpose institutions. In 2006, there were three such multi-purpose colleges, formed as a result of a teachers' college combining with another institution.

Sources: Alfred, 2005; Bobb-Smith, 2005; Gittens Mellanson-Guiste, 2005; Evans and Burke, 2006; Roberts, 2006.

Also, new models for the organization of public tertiary education have emerged while old models keep transforming. Despite many tensions, the regional university model has survived in the Caribbean and South Pacific, but it constantly needs to change and adapt. The creation of a national university has become more feasible from a cost-effectiveness point of view, even in places where regional universities exist. The establishment of community colleges has also been discussed in some detail since it seems to suit the particular needs of small countries.

Within this constantly changing institutional landscape, new and old institutions have to define their specific niches, as well as linkages and articulations. It thus seems that a more complex new order is emerging in many small states made up of global, regional and national players with a view to satisfying an increasingly diverse demand from learners for both national and international labour markets.

References

Alfred, E. 2005. *Dominica national report on higher education*. Higher Education in the Caribbean Series No. 10. Caracas: UNESCO Instituto Internacional para la Educación Superior en América Latina y el Caribe (IESALC).

Atchoaréna, D. 2009. 'Linking the development of tertiary education and the labour market in small states: Between localization and internationalization'. Paper presented at the Policy Forum on Tertiary Education in Small States, UNESCO International Institute for Educational Planning (IIEP), Paris, 2–3 July.

Atchoaréna, D.; Da Graça, P.D.; Marquez, J.M. 2008. 'Strategies for post-primary education in small island developing states (SIDS): Lessons from Cape Verde'. In: *Comparative Education*, *44*(2), 167–185.

Bloom, D.; Canning, D.; Chan, K. 2005. *Higher education and economic development in Africa*. Washington DC: World Bank.

Bobb-Smith, Y. 2005. *National report on higher education in Grenada*. Higher Education in the Caribbean Series No. 11. Caracas: UNESCO Instituto Internacional para la Educación Superior en América Latina y el Caribe (IESALC).

Bourne, C.; Dass, A. 2003. 'Private and social rates of return to higher education in science and technology in a Caribbean economy'. In: *Education Economics*, *11*(1), 1–10.

Bray, M. 1990. 'Provision of higher education in small states: Demands, constraints and strategies'. In: *Higher Education Quarterly*, *44*(3), 264–281.

Bray, M.; Packer, S. 1993. *Education in small states: Concepts, challenges and strategies*. Oxford: Pergamon Press.

Bray, M.; Kwo, O. 2003. 'Higher education in small territories: Political transition and development in Macau'. In: *Higher Education Policy*, *16*(4), 413–432.

Caston, G. 1993. 'Higher education in the South Pacific'. In: *Comparative Education*, *29*(3), 321–332.

Cohen, J. 1992. 'Quantitative methods in psychology: A power primer', In: *Psychological Bulletin*, *112*(1), 155–159.

Crocombe, R.; Meleisea, M. (Eds) 1988. *Pacific universities: Achievements, problems and prospects*. Suva: Institute of Pacific Studies, University of the South Pacific.

Crossley, M.; Bray, M.; Packer, S. 2009. 'Education in the small states of the Commonwealth: Towards and beyond global goals and targets'. In: *The Round Table*, *98*(6), 731–751.

Caribbean Knowledge and Learning Network (CKLN). 2006. *Report on Labour Market Survey*. Barbados: CKLN.

Daniel, J.; West, P. 2008. 'The Virtual University for small states of the Commonwealth: What is it for? How is it doing? Where is it going?' Vancouver: Commonwealth of Learning. Available at: www.col.org/resources/speeches/2008presentations/2008-VUSSC/Pages/articleVUSSC.aspx

Docquier, F.; Marfouk, A. 2006. 'International migration by educational attainment, 1990–2000'. In: Ç. Özden and M. Schiff (Eds), *International migration, remittances and the brain drain* (pp. 151–199). Washington DC: World Bank; London: Palgrave Macmillan.

Duncan, R.; McMaster, J. 2009. *Impact of ICT on university education in small states: The case of the University of the South Pacific*. Washington DC: World Bank.

Evans, H.; Burke, O. 2006. *National report on higher education in Jamaica*. Higher Education in the Caribbean Series No. 12. Caracas: UNESCO Instituto Internacional para la Educación Superior en América Latina y el Caribe (IESALC).

Fijilive. 2009. 'Fiji to open third university'. Accessed 21 June 2009 from: www.fijilive.com/news_new/index.php/news/show_news/16907

Gittens Mellanson-Guiste, C. 2005. *A report on higher education in St Kitts and Nevis*. Higher Education in the Caribbean Series No. 13. Caracas: UNESCO Instituto Internacional para la Educación Superior en América Latina y el Caribe (IESALC).

Grant-Woodham, J.; Morris, C. 2009. 'Community colleges embracing change: The Anglophone Caribbean experience'. In: R.L. Raby and E.J. Valeau (Eds), *Community college models: Globalization and higher education reform* (pp. 299–320). Dordrecht: Springer.

Hosein, R.; Chen T.; Singh R. 2004. 'The international supply of tertiary education and services trade negotiations: Implications for CARICOM'. Report prepared for the Caribbean Regional Negotiating Machinery (CRNM). Saint Augustine: University of the West Indies.

Inter-Agency Commission. 1990. *Final report: World conference on education for all – meeting basic learning needs*. New York: UNICEF on behalf of the Inter-Agency Commission.

Malta, National Commission for Higher Education. 2009. *Further and higher education strategy 2020*. Malta: National Commission for Higher Education.

Mauritius, Tertiary Education Commission. 2007. *Strategic plan 2007–2011*. Port Louis: Tertiary Education Commission.

Organisation for Economic Co-operation and Development (OECD). 2008. *Tertiary education for the knowledge society*. Volumes 1 and 2. Paris: OECD.

Parkins, L. 2008. 'The English-speaking Caribbean: Regional and global context'. Paper presented at the Regional Conference on Higher Education for Latin America and the Caribbean. Accessed 21 June 2009 from:
www.cres2008.org/upload/documentosPublicos/tendencia/Tema06/Lorna%20Parkins.doc

Payne, A. 1980. 'One university, many governments: Regional integration, politics and the University of the West Indies'. In: *Minerva*, *18*(3), 474–498.

Roberts, V. 2006. *National report on higher education in St Vincent and The Grenadines*. Higher Education in the Caribbean Series No. 17. Caracas: UNESCO Instituto Internacional para la Educación Superior en América Latina y el Caribe (IESALC).

Seychelles, Government of. 2008. *Strategic plan 2007–2009*. Mahe: Government of the Seychelles.

Sherlock, P.; Nettleford, R. 1990. *The University of the West Indies: A Caribbean response to the challenge of change*. London: Macmillan Caribbean.

South Asian University. 2009. 'About us'. Accessed 21 June 2009 from: www.southasianuniversity.org

Tewarie, B. 2009. 'Concept paper for the development of a CARICOM strategic plan for tertiary education services in the CARICOM Single Market and Economy (CSME)'. CARICOM Regional Symposium on Services, Antigua, 15–17 July. Available at: www.caricom.org/.../services.../concept_paper_tertiary_education.pdf

Trow, M. 1974. 'Problems in the transition from elite to mass higher education'. In: *Policies for higher education, from the General report on the Conference on Future Structures of Post-secondary Education* (pp. 55–101). Paris: Organisation for Economic Co-operation and Development (OECD).

——. 2006. 'Reflections on the transition from elite to mass to universal access: Forms and phases of higher education in modern societies since WWII'. In: J. Forest and P.G. Altbach (Eds), *International handbook of higher education* (pp. 243–280). Dordrecht: Kluwer.

Uili, T. 1988. 'The National University of Samoa'. In: R. Crocombe and M. Meleisea (Eds), *Pacific universities: Achievements, problems and prospects* (pp. 210–217). Suva: Institute of Pacific Studies, University of the South Pacific.

UNESCO. 2000. *World education forum: Final report.* Paris: UNESCO.

——. 2010. *EFA global monitoring report 2010: Reaching the marginalized*. Paris: UNESCO.

UNESCO Institute for Statistics (UIS). 2006. *Global education digest 2006*. Montreal: UIS.

——. 2008. *Global education digest 2008*. Montreal: UIS.

Waena, Sir N. 2008. 'Governor General wants Solomon Islands University'. Accessed 21 June 2009, available at: www.radioaustralia.net.au/news/stories/200809/s2368326.htm

West, P.; Daniel, J. 2009. 'The Virtual University for Small States of the Commonwealth'. In: *Open Learning*, *24*(1), 85–95.

Wolff, L. 2009. 'Challenges and opportunities for post-secondary education and training in Barbados, Bahamas, Guyana, Jamaica, and Trinidad and Tobago'. In: R.L. Raby and E.J. Valeau (Eds), *Community college models: Globalization and higher education reform*. Dordrecht: Springer, pp. 173–195.

World Bank. 2007. *School and work: Does the Eastern Caribbean education system adequately prepare youth for the global economy?* Report No. 38555.Washington DC: Human Development Sector, Caribbean Country Management Unit, Latin America and the Caribbean Region.

——. 2009. *Accelerating catch-up: Tertiary education for growth in sub-Saharan Africa*. Washington DC: World Bank.

3. Strengthening educational research capacity in small states

Michael Crossley

This chapter examines the case for strengthening educational research capacity in the light of the intensification of globalization, the rise of the knowledge economy, and the emergence of new research priorities for small states. A review of international literature on research capacity building provides a framework for the analysis. Global trends and developments are questioned, and it is argued that modalities for both educational research and capacity building for research in small states should be carefully tailored to meet the distinctive contexts, needs, and priorities of their own education systems and cultures.

For many years, planners and decision-makers in small states, and those working within international agencies, gave scant attention to the development of tertiary education in such contexts. Small populations were not considered to warrant investment in this sector, and colleges and universities abroad were commonly seen as the most cost-effective and appropriate vehicles for meeting such needs. Further, it was often assumed that any research that might have been necessary could be carried out by external agencies and personnel. However, regional universities were developed to complement external provision and to strengthen local ownership and capacity. The University of the West Indies (UWI) was created in 1948, and the University of the South Pacific (USP) was established in 1968.

Many of the assumptions and arguments that inhibited tertiary sector developments within small states remain influential. This is reflected in ongoing debates about the nature, role, and place of research capacity. Caston's (1993) account of the political economy of higher education in the South Pacific reveals the impact of many of the arguments raised above, especially when contrasted with Crocombe and Meleisea's (1988) challenge to the initial dominance of regional tertiary education policy agendas.

For present purposes, an awareness of this historical background is helpful since it has influenced the nature, development, and distribution of the foundations for research capacity in many small states. However,

the intensification of globalization has brought major shifts of emphasis in tertiary education worldwide, along with new debates about the nature, role, and place of research in society and across all fields and disciplines.

The impact of the knowledge economy

Along with the intensification of globalization and the dramatically increased pace of social and technological change, knowledge and knowledge-generation have come to be seen as the new engines for national economic competitiveness (Castells, 1996; Brown and Lauder, 2001). Within this new global context, investment in tertiary education is seen as essential for successful participation in the knowledge economy and for national development. While maintaining their focus on basic education through the Education for All (EFA) initiative that has dominated global education agendas since 1990, international organizations such as the World Bank and UNESCO now see developments in higher education as a priority for the twenty-first century. Papers prepared for UNESCO's 2009 World Conference on Higher Education demonstrate this well, with Altbach, Reisberg, and Rumbley (2009: iii) maintaining that an 'academic revolution has taken place in higher education in the past half century marked by transformations unprecedented in scope and diversity'. Recognizing the significance of such trends, including the rapid growth of Western tertiary education sectors, many countries have responded with massive public investment.

Research and the development of research capacity is a major factor that underpins this competitive investment, as emergent economies such as Hong Kong, Singapore and the Republic of Korea seek to challenge the global dominance of the West in knowledge generation. Altbach highlights the contemporary significance of this in his analysis of the relationship between peripheries and centres, and its relevance for research universities in developing countries. Altbach (2009: 15) considered the research university to be 'a central institution of the twenty-first century – providing access to global services, producing basic and applied research and educating leaders of the academe and society'. While recognizing that there will always be centres and peripheries, Altbach observed (p. 15) a growing conviction 'that knowledge production and dissemination must spread internationally and that all the regions of the world need a role in the knowledge network'. Indeed, he argued that 'If knowledge production and dissemination are not to remain a monopoly

of the rich countries, research universities must become successful outside of the main cosmopolitan countries.'

To underline the significance of this, it is pertinent to acknowledge the extent of the current uneven global distribution of research capacity. Galama and Hosek (2008), for example, assert that between them the United States and the leading European countries accounted for over 60 per cent of all research and development between 1993 and 2003. Moreover, Altbach, Reisberg, and Rumbley (2009: xvi) document the strategic role of Western governments in funding, noting that 'the government sector funds directly and indirectly 72 per cent of all academic research in OECD countries.' The implications of this extend further, with Western nations controlling the most globally influential means for publishing and disseminating the findings of research. They also control the organizations that determine the nature and shape of research agendas, modalities, and capacity building initiatives. It is in this rapidly changing global context that the nature, role, and place of small states must be considered.

Emergent research priorities for small states

While the focus of this chapter is on educational research, and the development of related capacity, this must be considered in the light of the broader developmental challenges encountered by small states. Once again, the multiple forms of impact resulting from intensified globalization deserve close consideration, but small states also have a heightened awareness of the challenges that are being generated by major environmental shifts, including climate change and rises in sea level. Small states must consider the implications of such challenges for land use, food production, and both voluntary and involuntary migrations.

The need to understand better the implications of rising sea levels was a 'principal motor' for the 1994 United Nations conference in Barbados on the Sustainable Development of Small Island Developing States (SIDS). In 2005, a high-level meeting in Mauritius reviewed and built on the Barbados Programme of Action. UNESCO, along with other United Nations institutions, has subsequently provided 'a focal point mechanism and platform for inter-disciplinary and intersectoral cooperation relating to work on and in small island states' (UNESCO, 2007: 2). These initiatives have played an important role in shaping current and future research priorities as they relate to small island developing states, and

from this broad agenda many distinct implications for educational research also arise.

Of particular relevance to the present discussion, the Mauritius Strategy recognized (UNESCO, 2007: 6) how in the contemporary global context:

> The wealth of a nation depends more on its ability to produce, exchange and transform knowledge than on its natural resources or industrial production. More than most, islanders are very conscious that the future of any institution, country or region depends in large part on the depth and quality of its human capital. More than any time in history, the 'success' of individual, corporation or nation is based on knowledge, connections, creativity and engagement and on how a country manages its workforce.

Priority attention is therefore being directed at efforts to strengthen or 'boost' knowledge societies throughout SIDS, to diminish the digital divide as a way of reducing the traditional isolation of small states, to take into account the diversity of knowledge cultures, and to foster an ethic of collaboration and the promotion of knowledge-sharing cultures. Perhaps most pertinently for present purposes, this dimension of the Mauritius Strategy (UNESCO, 2007: 7) suggests that 'There is no single model for a knowledge society. Knowledge societies must be pluralistic and take into account the diversity of knowledge cultures. It is up to each society to promote the local and indigenous forms of knowledge it possesses.'

Ways of boosting the development of such knowledge societies that are envisaged in the Mauritius Strategy include:

- the use of information and communications technologies (ICTs) for knowledge sharing and for community empowerment in the fields of education, science, and culture;
- promoting cultural and linguistic diversity;
- preserving local and indigenous knowledge and its transmission between generations and within and between regions;
- strengthening the science and technology base of island economies;
- encouraging disaster preparedness and mitigation;
- exploring the ethical dimensions of knowledge production; and
- promoting educational development and sustained capacity building.

From this, many connections to emergent educational research priorities and the need for capacity building are clearly evident. The spirit underpinning such thinking goes well beyond simply portraying

small states as the users of research, to envisioning them as active agents in national, regional, and international knowledge generation and policy formulation, and as critically informed participants in all dimensions of the research process.

In another forum, that of the Commonwealth, similar sentiments have emerged. These extend beyond SIDS to the 28 small member states of the Commonwealth (islands and others) that have populations below 2 million people (Crossley, Bray, and Packer, 2009). Ways in which sustainable educational research capacity may be best developed in and for small states are thus being explored for (by?) Commonwealth decision-makers, in the light of recommendations arising from the 17th Conference of Commonwealth Education Ministers (CCEM) held in Kuala Lumpur, Malaysia, in 2009. The Kuala Lumpur Communiqué draws attention to the impact of the 'global economic downturn on social sectors such as education, particularly in poorer countries and small states'; recognizes the 'need to tailor approaches to take account of socio-economic and cultural diversity across different member countries'; and urges the Commonwealth Secretariat to advance education in small states 'through a variety of capacity building and research initiatives' (Commonwealth Secretariat, 2009: 2–3). Making direct reference to tertiary education, the Communiqué endorsed the ongoing development of the Virtual University for the Small States of the Commonwealth (VUSSC), reaffirmed support for the Commonwealth Scholarship and Fellowship Plan, and called for exploration of ways to increase access for students from small states to other parts of the Commonwealth. It is therefore to these more specific educational issues and questions that this chapter now turns, with attention being given first to different conceptions of research capacity and to the implications of the analysis so far.

Conceptualizing educational research capacity

A substantial international literature on educational research capacity has grown during the last two decades. Within the United Kingdom (UK) and the United States (US), this has been partly in response to widespread criticism of much social and educational research being distant from the needs of policy-makers, lacking a cumulative sense of authority, being insufficiently cost-effective, and being inaccessible to stakeholders. The response to such criticism has taken many forms, and in the UK has included major investments in research capacity building initiatives, such as the £40 million Teaching and Learning Research Programme (TLRP)

(see Pollard, 2008), the generation of collaborative educational research networks, and intensification of the depth and reach of research assessment exercises (Gilroy and McNamara, 2009: 321). Menter and Murray (2009: 315) remarked that 'in these times of accountability and audit, it should come as no surprise that there has been a great concern – some might say obsession – with "capacity building".' They explored difficulties relating to definitions of research capacity building, noting that the term may relate to the range of skills available, the research infrastructure (funding, facilities, etc.), and the numbers of experienced and/or qualified researchers. To this list they added issues of quality, arguing (p. 315) that 'there is little point in having substantial capacity, if the quality of that capacity is at a low level.'

All of the UK-based research capacity building initiatives referred to above have been introduced to help improve the quality of educational research, to strengthen linkages between research, policy, and practice, and to ensure there is a 'strong and sustainable infrastructure' (Menter and Murray 2009: 316). In 2008 a UK-wide Strategic Forum for Research in Education (SFRE) was set up to harness some of these developments. The report of the first SFRE meeting (Pollard, 2008: 47) contributed to efforts to conceptualize the nature of research capacity by identifying and applying three different lenses:

> a macro-level perspective upon the knowledge management system as a whole; a meso-level perspective upon a 'community' level of activity systems and institutions; and a micro-level focus on individuals' research capacity. The systemic perspective is abstract, considering the knowledge management system as a whole. The community perspective focuses upon activities, networks and outputs. The micro-perspective of the research capacity of individuals enables attention to be given to the working conditions, professional development opportunities, and career routes of those working within the field. An effective research capacity building strategy will need to provide a means of addressing research capacity at these different levels.

Other ways of conceptualizing the nature and dimensions of research capacity processes identified by the SFRE recognize:

- the potential of the systematic interaction between experienced and junior researchers through discussion and critical engagement with research outputs,
- the strengthening of peer review processes,

- improving the quality of the research community through enhanced skills training opportunities and the application of ICT,
- the strategic use of career incentives and research scholarships to attract future generations, and
- the promotion of collaborative partnerships designed to provide knowledge and skills sharing for mutual support.

Yet while such developments have much to offer, writers such as Peters (2001), Oancea (2005) and Hammersley (2008) recognize the dangers of educational research, and research capacity building, becoming too closely associated with policy-making processes and the goals of the state, thereby marginalizing the role of independent academic critique. Leitch (2009: 357) also drew attention to Munn's (2008) suggestion that the concept of research capacity building should incorporate ways of strengthening the abilities of the commissioners and the users of educational research to understand and draw upon existing studies:

> Thus, we need to critique the notion of what we mean by 'educational capacity building' and widen it to include not simply the acquisition of methodological skills and capacities by educational researchers but also the understanding of the range and purposes of these by policy-makers and other user/stakeholder groups, including the improvement of the public understanding of research and its applications.

Dimensions of scale are also significant within the research capacity literature as Altbach (2009) observes with regard to the concentration of high-cost scientific research in a very select number of global research universities. Similar trends can also be observed worldwide with the concentration of educational research in elite specialist organizations and university departments. It is argued that a critical mass of high-quality researchers – and research capacity – can be best sustained in such ways. Indeed, Pollard's (2008: 45) SFRE report extends this rationale to the dilemmas encountered by the smaller nations that make up the UK, noting that:

> It was felt that sustaining an effective research base within smaller nations was limited by available research expertise and the smaller scale of the labour market. In some cases it was felt that smaller research and policy communities were more vulnerable, in terms of maintaining and developing research capacity, because of their scale. Others felt that these weaknesses were balanced by the opportunities

that these smaller nations had to build enduring relationships with policy.

This challenge, and the contrasting assumptions and positions relating to the significance of scale that are embedded in this quotation, reflect many of the dilemmas and debates encountered within small states worldwide. It is to the potential for the development of educational research capacity in such contexts that the analysis now turns.

The case for sustainable educational research capacity in small states

While small states can learn much from the international literature and the contemporary experience of policy-oriented research capacity building elsewhere, care must be taken by planners and decision-makers not to borrow policies and practices simplistically (Crossley and Holmes, 2001; Crossley and Watson, 2003). As Stenhouse (1979: 5–6) warned, comparative studies of education should 'deal in insight rather than law as a basis for understanding', and insights derived in this way can then help to 'tutor our judgement' with regard to the potential of experience for possible adaptation or guidance elsewhere.

Secondly, while research capacity development may be emerging as a worldwide priority in many fields and disciplines, others can learn much from the experience of small states in this arena. Contributors to a special issue of the journal *Comparative Education* (Mayo, 2008) provided evidence of innovative and challenging developments along with critical analyses of ways in which globally or regionally inspired educational initiatives can fail to relate closely to national and local contextual realities. Coxon and Munce (2008: 147), for example, highlighted the need for more locally grounded research to strengthen regional educational planning in the South Pacific, and specifically 'on how the basic education issues identified as important by Pacific educators were, or were not, addressed'.

The review of experience elsewhere suggests that multiple ways forward are possible, but from Altbach's (2009) study of leading research universities it is clear that states and tertiary institutions worldwide cannot develop research capacity in all fields and disciplines. Few universities, even in large and prosperous nations, can marshal the human and financial resources to lead engagement in, for example, world-class biomedical sciences or astrophysics. Even those that do have the relevant

expertise and infrastructure are increasingly entering more viable and cost-effective international partnerships with similarly placed research bodies and organizations to generate critical mass and economies of scale. On the other hand, beyond such obvious illustrations, there are research fields and activities where this logic does not apply in quite the same way, and where the uncritical transfer of assumptions and modalities from such experience could be misleading and counterproductive.

Educational research is one case in point, given its focus upon social and educational phenomena, and its implications for educational planning, policy development, and implementation in practice. In such fields of research, a deep and well-grounded understanding of local context matters at least as much as an awareness of international trends and developments and a command of professional and methodological skills and expertise. Initiatives designed to promote research capacity building for education may thus have much to learn from the international literature and experience, but they must also be closely related to the needs and circumstances of different contexts. As suggested in the review of Commonwealth research relating to education by Crossley and Holmes (1999: 60):

> Social research has much potential to contribute to the formulation of more contextually relevant (and feasible) policy and practice which is sensitive to national, regional and international trends. If the quality of education is to be improved in practice, it is necessary to better understand what it is intended to achieve in a certain context. In this respect careful attention must be paid to the relationship between education systems, the economy and society as a whole; to the future livelihoods of school leavers and graduates within and outside the formal labour market, in rural and in urban settings.

Returning to the historical background noted at the outset of this chapter, decolonization processes and early policy trajectories in the Caribbean and the South Pacific favoured the development of regional universities as the foundation for tertiary-level teaching and research for many small states. The USP serves 12 member states in the Pacific and is a leading centre of excellence within the region. Its qualifications are accepted worldwide, and maintaining high standards in both teaching and research is central to the mission and ongoing reputation of the university. This, in turn, strengthens its ability to attract a critical mass of resources, to invest in appropriate infrastructure, and to recruit high-calibre staff. Contributions by member states and the international

community are essential for the sustainability of both teaching and research capacity and, not unexpectedly, internationally recognized quality assurance mechanisms are in place to monitor and evaluate the nature, significance, and impact of all work carried out, including the quality, depth, and impact of educational research. As is the case for the UWI in the Caribbean, the ongoing strengthening of research capacity within these premier regional universities is of paramount importance for their own future, and for the member states that they serve.

Recent years have also seen emerging pressures for the development of the domestic tertiary sector within many of the small states served by these regional universities (Lewis and Simmons, 2010). Early trends were documented by Crocombe and Meleisea (1988), but, as already noted, the rise of the knowledge society, globalization, and advances in ICT have intensified such movements. Many small states have invested substantially in their own tertiary colleges, and in some cases initiatives have been designed to lead to the inauguration of new national universities. In 2009, the Government of Saint Lucia, for example, began consideration of plans to develop its one multi-purpose tertiary organization, the Sir Arthur Lewis Community College (SALCC) into a university college; [16] and similar moves were visible elsewhere within the Caribbean, the Indian Ocean and the South Pacific. The rationale for this in Saint Lucia was underpinned by awareness that regional tertiary provision cannot meet all national needs, that local research is important, and that greater potential existed for creative partnerships between the UWI and SALCC through which complementary roles and collaborative ventures in both teaching and research could be developed. In Saint Lucia, an added reason for domestic development has been a desire to provide an intellectually stimulating environment which could reduce brain drain. Yet translating such aspirations into successful practice is not easy to achieve, and numerous efforts to generate sustainable educational research capacity – at SALCC and within civil society – have suffered from human and financial resource limitations and proved to be problematic.

Looking to the future

Earlier sections of this chapter examined different concepts and dimensions of educational research capacity. This final section suggests that insights

16. See *Chapter 6* of this book.

can be drawn from international literature and experience without falling prey to the dangers of the uncritical transfer of inappropriate approaches and modalities. In the arena of educational research and research capacity building, the latter caution is especially pertinent given the distinctive characteristics of small states and the changing political economy of educational research. Building upon the critique introduced earlier, writers such as St Clair and Belzer (2007) have reported increased attention and prestige being given to 'big science' approaches to educational research and to what Vulliamy (2004: 261) portrayed as 'growing international investment in systematic review methodology and its associated privileging of quantitative research strategies, such as randomized controlled trials'. While these developments have distinctive merits, they embody neo-liberal assumptions that favour globally dominant state interests, while promoting new managerialism and challenging the legitimacy of many of the more qualitative approaches to social and educational research that came to prominence in the last three decades of the twentieth century. The latter include paradigmatic developments that pioneered qualitative fieldwork in education, case study, action and participatory research, the application of critical theory, narrative enquiry, and postmodern and postcolonial perspectives.

If small states are to use locally grounded research to challenge their traditionally acknowledged dependence on externally inspired educational and development agendas (Brock, 1984), and if they are to deal creatively with their own contextual priorities as identified in the Barbados and Mauritius strategies for SIDS and the Commonwealth's 2009 Kuala Lumpur Communiqué, then culturally and contextually sensitive approaches to research have much to offer. Perhaps more pointedly, research capacity building that covers such a diversity of approaches, epistemologies, and paradigms will be essential. Moreover, critical theory and postcolonial research traditions, some of which have their intellectual origins in small state contexts, go further in drawing attention to the politics of research and to the potential of diverse forms of knowledge and modes of knowledge generation to reflect the views of the marginalized, the disadvantaged, and the 'other' (see for example Bacchus, 1990, 2008; Smith, 1999; Alatas, 2003; Holmes and Crossley, 2004).

These arguments are especially pertinent for cross-cultural and comparative research in education, and for small states that engage in international research collaboration. International collaboration

in research certainly holds great potential for small states. However, considerable care needs to be taken to avoid the uncritical transfer, and perhaps unrecognized dominance, of powerful and fashionable paradigms, approaches, and strategies that prioritize certain forms of technical expertise at the expense of approaches that are more sensitive to cultural and contextual differences.

Lessons can also be drawn from challenges raised concerning the costs, both financial and human, of the commitment of the higher education sector in the UK to globally influential research assessment exercises as vehicles to strengthen educational research capacity. As Gilroy and McNamara (2009) observe, such initiatives can have both positive and negative influences upon the development, shape, and nature of research capacity. Implications, as indicated earlier, also extend beyond issues of quality assurance in the form of increased control and managerialism in the academy, and potential challenges to intellectual freedom and autonomy.

On the other hand, work on the nature and scope of research capacities in identifying, for example, different dimensions and extended definitions, could prove helpful in guiding the involvement of small states in research capacity building. The SFRE, reviewed earlier, is useful in identifying three levels of research capacity: the macro-level of knowledge management systems, the meso-level of community systems and institutions, and the micro-level of individual research capacity. This framework could help those engaged in planning processes designed to establish or strengthen research capacity within small states, by, for example, drawing attention to different dimensions of activity and to specific possibilities within and beyond the tertiary education sector itself. Similarly, this literature draws attention to the need to incorporate research commissioners and users in capacity building initiatives, and the potential role of peer review systems, academic publishing processes, and the provision of career incentives and scholarships, in addition to the more frequently recognized dimensions of methodological training, ICT and research software applications, academic and professional networking, and collaborative research initiatives.

How might such thinking translate into more concrete and sustainable research capacity building in and for small states? There are limitations to what individual small states can do alone, and many of the most promising ways forward have much to gain from capacity building

collaborations between national, regional, and international partners. Reflecting upon 25 years of higher education partnerships funded by the British Council, Stephens (2009) assembled evidence of the benefits of international research collaboration in fields as diverse as education, health, conservation, and public policy.

While the British Council has renewed its commitment to the funding of such links, greater support of this nature could be strategically valuable for small states. In this respect, the 17th CCEM's endorsement of efforts to strengthen the Commonwealth Scholarship and Fellowship Plan (CSFP), to support the VUSSC, and to investigate ways of establishing a 'Tertiary Education Facility', hold considerable potential. In such ways emergent tertiary organizations in small states may be able to strengthen or develop collaborative research partnerships that enable them to benefit from the expertise of well-established regional and international universities – or from other specialist research bodies and associations. Through such initiatives emergent research groups in small states, both rich and poor, can draw upon their own distinctive and contextual experience – in areas such as education, local cultures and languages, the arts, or traditional medicine – and develop mutually supportive research and research capacity building activities with more experienced partner organizations within and beyond their own shores. The University of Malta, for example, has done much to support collaborative research and research training with Commonwealth support, and this type of collaborative experience holds significant potential for future development (Mayo, 2008).

Successful examples of similar partnerships can also be seen in a sequence of related studies carried out in collaboration with the University of Bristol in the UK. The first of these initiatives involved researchers drawn from the, then, University College of Belize, the Belize Teachers' College and the Belize Ministry of Education, in collaboration with a Bristol team, in the planning and implementation of detailed ethnographic studies of the quality of primary education (Crossley and Bennett, 1997). Central to this study was an integral process of research training and capacity building for Belizean personnel – the process goal component. In the light of positive capacity building outcomes, this partnership model was subsequently developed for future collaborative research funded by the UK government's Department for International Development (DFID) in Kenya (Crossley *et al.*, 2005) and Rwanda and Tanzania (Tikly *et al.*, 2003).

Collaboration is not a panacea, however, and critical reflection on these and other research capacity building partnerships reveals significant problems in translating intentions into successful practice. As argued by the Swiss Commission for Research Partnerships with Developing Countries (KFPE, 1998: 8), reducing the chances of major problems emerging 'requires mutual respect, honesty and openness. The partners must be able to communicate effectively, and must be prepared to commit themselves to a long-term involvement. In addition, research relevant to development should have results that are visible and palpable for the local community.'

Much more work is therefore needed to identify and understand the factors that limit the success of such capacity building partnerships in all fields and disciplines, if genuinely sustainable research capacity is to be achieved both within and beyond small states. This observation points to new priorities for future international attention in the arena of research capacity building and development. By acknowledging the importance of avoiding the uncritical transfer of dominant Western research modalities, international partnerships could also help to open up new opportunities for learning from elsewhere by all involved.

From a small state perspective, the strengthening of local research capacity along such lines could, in turn, help them to engage in more balanced and equal partnerships with international agencies, and to learn from, apply, or, where appropriate, challenge externally inspired agendas when they do not meet their own needs and aspirations. By playing a more creative and innovative role in the generation of new knowledge, small states may, in the light of their own distinctive experience, also help to shape the nature of future international agendas for the benefit of all.

References

Alatas, S. 2003. 'Academic dependency and the global division of labour in the social sciences'. In: *Current Sociology*, *51*(6), 599–613.

Altbach, P. 2009. 'Peripheries and centres: Research universities in developing countries'. In: *Asia Pacific Education Review*, *10*(1), 15–27.

Altbach, P.; Reisberg, L.; Rumbley, L. 2009. *Trends in global higher education: Tracking an academic revolution: A report prepared*

for the UNESCO World Conference on Higher Education. Paris: UNESCO.

Bacchus, M.K. 1990. *Utilization, misuse and development of human resources in early West Indian colonies*. Waterloo: Wilfrid Laurier University Press.

——. 2008. 'The education challenges facing small nation states in the increasingly competitive global economy of the twenty-first century'. In: *Comparative Education*, *44*(2), 127–145.

Brock, C. 1984. *Scale, isolation and dependence: Educational development in island developing and other specially disadvantaged states*. London: The Commonwealth Secretariat.

Brown, P.; Lauder, H. 2001. *Capitalism and social progress*. Basingstoke: Palgrave.

Castells, M. 1996. *The rise of the network society.* Cambridge: Blackwell.

Caston, G. 1993. 'Higher Education in the South Pacific'. In: *Comparative Education*, *29*(3), 321–332.

Commonwealth Secretariat. 2009. *Kuala Lumpur Communiqué*, London: The Commonwealth Secretariat.

Coxon, E.; Munce, K. 2008. The global education agenda and the delivery of aid to Pacific education. In: *Comparative Education*, *44*(2), 147–165.

Crocombe, R.; Meleisea, M. (Eds) 1988. *Pacific universities: Achievements, problems and prospects.* Suva: Institute of Pacific Studies, University of the South Pacific.

Crossley, M.; Bennett, A. 1997. 'Planning for case study evaluation in Belize, Central America'. In: M. Crossley and G. Vulliamy (Eds), *Qualitative educational research in developing countries: Current perspectives* (pp. 221–243). New York: Garland.

Crossley, M.; Bray, M.; Packer, S. 2009. 'Education in the small states of the Commonwealth: Towards and beyond global goals and targets'. In: *The Round Table*, *98*(6), 731–751.

Crossley, M.; Herriot, A.; Waudo, J.; Mwirotsi, M.; Holmes, K.; Juma, M. 2005. *Research and evaluation for educational development: Learning from the PRISM experience in Kenya.* Oxford: Symposium Books.

Crossley, M.; Holmes, K. 1999. *Educational development in the small states of the Commonwealth: Retrospect and prospect*. London: The Commonwealth Secretariat.

——. 2001. 'Challenges for educational research: International development, partnerships and capacity building in small states'. In: *Oxford Review of Education*, *27*(3), 395–409.

Crossley, M.; Watson, K. 2003. *Comparative and international research in education: Globalisation, context and difference.* London and New York: Routledge.

Galama, T.; Hosek, J. 2008. *United States competitiveness in science and technology*, Santa Monica, CA: The RAND Corporation.

Gilroy, P.; McNamara, O. 2009. 'A critical history of research assessment in the United Kingdom and its post-1992 impact on education'. In: *Journal of Education for Teaching*, *35*(4), 321–335.

Hammersley, M. 2008. 'Troubling criteria: A critical commentary on Furlong and Oancea's framework for assessing educational research'. In: *British Educational Research Journal*, *34*(6), 747–762.

Holmes, K.; Crossley, M. 2004. 'Whose knowledge, whose values? The contribution of local knowledge to education policy processes: A case study of research development initiatives in the small state of Saint Lucia'. In: *Compare: A Journal of Comparative Education*, *34*(2), 197–214.

KFPE. 1998. *Guidelines for Research in partnership with developing countries: Eleven principles.* Berne: KFPE. Available at: www.kfpe.unibe.ch/guidelines_e.html

Leitch, R. 2009. 'Harnessing the slipstream: Building educational research capacity in Northern Ireland – size matters'. In: *Journal of Education for Teaching*, *35*(4), 355–371.

Lewis, T.; Simmons, L. 2010. 'Creating research culture in Caribbean universities'. In: *International Journal of Educational Development*, *30*(4), 337–344.

Mayo, P. (Ed.) 2008. *Education in small states: Global imperatives, regional initiatives and local dilemmas*. Special issue of *Comparative Education*, *44*(2).

Menter, I.; Murray, J. 2009. 'Capacity building in teacher education research'. In: *Journal of Education for Teaching*, *35*(4), 315–319.

Munn, P. 2008. 'Building research capacity collaboratively: Can we take ownership of our future?' In: *British Educational Research Journal*, *34*(4), 413–430.

Oancea, A. 2005. 'Criticisms of educational research: Key topics and levels of analysis'. In: *British Educational Research Journal*, *31*(2), 157–183.

Peters, M. 2001. 'National policy constructions of the knowledge economy: Towards a critique'. In: *Journal of Educational Enquiry*, *2*(1), 1–22.

Pollard, A. 2008. *Quality and capacity in UK educational research: Report of the first SFRE meeting.* Harrogate: Strategic Forum for Research in Education.

Smith, L. 1999. *Decolonising methodologies: Research and indigenous peoples.* London: Zed Books.

St Clair, R.; Belzer, A. 2007. 'In the market for ideas: How reforms in the political economy of educational research in the US and UK promote market managerialism'. In: *Comparative Education*, *33*(4), 471–488.

Stenhouse, L. 1979. 'Case study in comparative education: Particularity and generalization'. In: *Comparative Education*, *15*(1), 5–10.

Stephens, D. 2009. *Higher education and international capacity building: Twenty-five years of higher education links*. Oxford: Symposium Books.

Tikly, L.; Lowe, J.; Crossley, M.; Dachi, H.; Garrett, R.; Mukabaranga, B. 2003. *Globalisation and skills for development in Rwanda and Tanzania*. London: Department for International Development.

UNESCO. 2007. *Sustainable living: The Mauritius strategy in action*. Paris: UNESCO.

Vulliamy, G. 2004. 'The impact of globalisation on qualitative research in comparative and international education'. In: *Compare: A Journal of Comparative Education*, *34*(3), 261–284.

Part II
Regional and national experiences

4. The University of the West Indies: Regional tertiary education in the English-speaking Caribbean

Bhoendradatt Tewarie

As a legacy of colonization, four official languages are used in the various countries of the Caribbean: Dutch, English, French, and Spanish. In the education sector, the communities speaking these languages operate largely independently of each other. This chapter focuses on the English-speaking Caribbean, which comprises 10 independent small island states, two mainland Caribbean states, and a number of dependent territories.

Tertiary education in the English-speaking Caribbean has undergone rapid change. Between 1948 and 1960, the University of the West Indies (UWI) was the only tertiary institution. The following three decades were marked by the consolidation and expansion of the UWI, and by the establishment of a number of tertiary institutions. During the 1990s, some of these institutions evolved into having university status. Today several universities are located in various countries of the Caribbean, but the UWI has maintained its status as a regional university. *Table 4.1* lists the member countries of the UWI. No other university in the region has made such an impact on human development in so many countries across the Caribbean. However, the UWI has had to evolve significantly over the decades.

Table 4.1 Member countries of the University of the West Indies

Country	Population	Country	Population
Anguilla	11,000	Dominica	70,000
Antigua and Barbuda	83,000	Grenada	106,000
Bahamas	335,000	Jamaica	2,728,000
Barbados	295,000	Montserrat	5,000
Belize	294,000	Saint Kitts and Nevis	46,000
Bermuda	68,000	Saint Lucia	170,000
British Virgin Islands	21,000	Saint Vincent and the Grenadines	121,000
Cayman Islands	52,000	Trinidad and Tobago	1,338,000

The changing institutional fabric

The University College of the West Indies was established in 1948 in Jamaica. In 1960, the Imperial College of Tropical Agriculture in Trinidad was expanded to become a campus of the UWI. In 1962, when Jamaica became independent, UWI received its Royal Charter; and in 1963 a third campus was established in Barbados (Sherlock and Nettleford, 1990). By 2010, the region had over 150 institutions. Among them, 60 per cent were public, 30 per cent were private, and the remaining 10 per cent were private but with some government support. Saint Lucia, Grenada, and Saint Kitts and Nevis have among them attracted 14 offshore tertiary education institutions, the majority of which are US investments specializing in medicine. In addition to new national universities, there has been a proliferation of community colleges and other tertiary institutions (Howe, 2003: 52). However, while the increase in enrolment for all 26 tertiary institutions in 10 countries between 1996 and 2006 was less than 5,000 students (34,421 to 39,221), the increase at the UWI was 17,000 (Roberts, 2007).

The roles of all these institutions need to be carefully assessed in a region of just 6 million people. There is still opportunity for the UWI not only to strengthen its work as a regional institution that is relevant and responsive but also to support other tertiary institutions, especially those in the public sector. Also, the UWI cannot be ignored in any national system that may emerge in any country as part of a regional sub-system. The issue of rationalizing, integrating, and harmonizing a regional tertiary sector has also received attention from the Caribbean Community (CARICOM), which coordinates the regional development agenda.[17]

17. At the 17th (2008) meeting of the education committee of the Council for Human and Social Development (COHSOD XVII), the author made a presentation on behalf of the UWI on collaboration among tertiary level institutions, particularly in the context of the Caribbean Single Market and Economy (CSME) and the Economic Partnership Agreement (EPA). The meeting agreed that seven issues identified in the presentation 'should form part of the discussion framework for consideration by the proposed cluster of ... institutions'. The EPA is a comprehensive trade agreement signed in 2008 between the European Union and the Caribbean (CARIFORUM countries – CARICOM plus Dominican Republic).

Rationale for significant growth in tertiary participation

Slow progress in the 1950s, 1960s and 1970s gave way to significant growth of the tertiary sector in the 1980s and after. Globalization has been a major factor. The global liberalization of education has led to an increase in privately owned tertiary institutions and an influx of foreign providers. In the mid-2000s, about 50 per cent of the tertiary sector institutions in Jamaica and 25 per cent in Saint Lucia were privately owned, while 10 per cent of the higher level institutions in Trinidad and Tobago were within the private sector (Kapur and Crowley, 2007).

Within the region itself, the growing momentum for democratization of tertiary education expanded demands for access by regional governments to the UWI, particularly from governments in territories not served by a physical university campus. Demand also grew as the information age became a reality, as the knowledge economy began to evolve, and as skilled knowledge workers became essential to a competitive regional economy.

Several countries also faced a mismatch between the skills acquired in secondary schools and market requirements (Jules, Miller and Armstrong, 2000). According to the World Bank (2007), 79 per cent of new hires in Saint Kitts in 2006 were expected to be in the tourism industry. The World Bank recommended that more be done in the training and education system to groom citizens to fill these vacancies. Concerning Grenada, the report indicated that 41 per cent of businesses rated workers with insufficient skills and education as a major obstacle for competitiveness. It seems also that basic skills such as reading, writing, and arithmetic at the primary and secondary school levels posed a challenge. In addition, employers indicated that many young people demonstrated inadequate teamwork, pro-activeness, critical thinking, and communication. At least some observers argued that the deficiencies in secondary schooling which had resulted in an underprepared workforce for a transforming economy could only be realistically addressed by the provision of remedial, supplementary, skills-oriented education at the tertiary level.

The English-speaking Caribbean is an extremely competitive market for tertiary education. New national institutions supported by governments, private sector investors, and foreign providers either in joint ventures or alone have emerged in almost every jurisdiction as

demand increases and opportunities present themselves. Questions about the best way forward for the region do indeed arise.

The regional university, an ever-evolving concept

The 1960s brought the breakup of the West Indies Federation,[18] and the embrace of independence by Jamaica, Trinidad and Tobago, and later Barbados. The nationalist aspirations which accompanied the drive to independence led to demands for a university to serve national ambitions. With the emergence of three full campuses of a single regional university, decentralization and greater autonomy for each campus became an issue. Other challenges were about ways to sustain coherence and strengthen the regional character of the institution while facilitating decentralization and autonomy. Up to the 1970s all participating governments paid into a pool of funds which was centrally controlled. The principal of the Mona (Jamaica) Campus up to this time functioned as Vice Chancellor. In 1984, the heads of government decided to decentralize UWI operations and to alter the method of funding the campuses and the Centre.[19]

In the Grand Anse Declaration of 1989, CARICOM heads of government explicitly recognized the pivotal role of the UWI, and made a commitment 'that it shall continue indefinitely as a regional institution' (UWI, 2006). This act reinforced the central role of the UWI in a changing landscape of tertiary education, underscored the continuing financial commitment of the governments of the region, and reaffirmed the value of the University as an agency of development.

The 1994 report of the Chancellor's Commission on the governance of the UWI recognized that the region's need to remain competitive in an

18. As noted in *Chapter 1*, the West Indies Federation was established in 1958 but collapsed in 1962. It comprised the 10 territories of Antigua and Barbuda, Barbados, Dominica, Grenada, Jamaica, Montserrat, Saint Kitts-Nevis-Anguilla, Saint Lucia, Saint Vincent, and Trinidad and Tobago.
19. In 1982, university stakeholders debated the tension between preservation of the regional nature of the University and devolution of autonomy to the three campuses. The three major contributing countries desired greater input into the way the campuses were governed and managed, and the academics desired greater autonomy. At the same time, the non-campus countries desired greater responsiveness to their needs. This resulted in a new governing structure for the University in 1984, within which were campus councils and campus grants committees. The central University Council and University Grants Committee retained their regional character and centralized roles. The Centre was established as a separate institutional structure for the office of the Vice Chancellor, who also retained leadership of the Mona Campus. In 1988, the Office of the Principal of the Mona Campus was separated from the Office of the Vice Chancellor, and the Centre functions were aligned with the Vice Chancellery.

increasingly globalized and liberalized world, demanded clear articulation of the UWI role (UWI, 1994). The report spoke to the UWI's location within the constellation of tertiary and other educational institutions serving the region. The Commission also identified ways to address the budgetary cycle and to structure the University in a way that permitted decentralization of operations. One component of the recommendations was that 'the University Centre should ... concentrate on strategic planning, the maintenance of the University's international reputation, relations with governments, the needs of the non-campus countries, the generation of funding and ensuring that the University is fully committed to regional development.' Among the issues identified was the extent to which the University could be made more outward-looking in terms of relationships with other tertiary institutions and external participation in its governance.

A change of regime came in 2004, with a new Vice Chancellor and a new Chancellor taking office at the same time. Another review of governance focused on reform of the University and Campus Councils so that the UWI could be more businesslike and more effective in decision-making.[20] The 2006 report of the Chancellor's Task Force on Governance of the UWI indicated that the new thrust for Caribbean integration reinforced the greater need for the University to remain regional in both theory and practice. It also outlined the possible structures and processes for sustaining and preserving the regional character. One line of development was strengthening of the UWI's presence in the 12 non-campus countries. It was decided to create the Open Campus to reach out to the underserved communities through e-learning and multimode education.

The Open Campus, established in 2007, represented a transformation in concept of the traditional distance and continuing education initiative. A significant part of the Open Campus's work involves developmental programmes, bridging programmes, feeder programmes to degree offerings, and leisure and skills-oriented training. The Open Campus serves over 20,000 students, almost two-thirds of whom are not enrolled

20. The initial terms of reference were: (a) to examine the position and functioning of the major organs of governance of the University Centre and campus levels with a view to improving their ability to produce the policies, strategies, and pertinent decisions needed in a university that will continue to be a relevant and respected regional institution essential to the development of the Caribbean; (b) to examine the possible mechanism to preserve and strengthen the image and presence of the University in its 'non-campus' countries.

in traditional degree programmes but can prepare for matriculation into such programmes.[21]

The creation of the Open Campus was a response to the demand by the 12 countries that were served only through distance education and continuing education programmes. They wanted greater access and participation in tertiary and higher education at lower cost and at greater convenience. This was accompanied by criticisms of the University for being insufficiently responsive to student needs in the non-campus territories. In 2007–2008, the Open Campus sites in each country served adult learners through seven certificate and diploma programmes, as well as short course modules, seminars, and workshops; six undergraduate associate degrees; 11 undergraduate degrees; and three graduate programmes. Key modules for the delivery of online education were also developed using multimode teaching.[22]

The UWI mandated its campuses to work out 'two plus two' arrangements with community colleges and other institutions. These initiatives helped to improve standards in the community colleges and to increase the flow of students from the community colleges to the UWI programmes.

Such alliances have significant precursors (Beckles, Perry, and Whiteley, 2002). As the leading educational institution in the region, the UWI is strategically placed to strengthen capacity building in the region through development of human capital. The UWI's approach to regional sector institutions, both as individual institutions and as a sector, is to strengthen individual institutional capacity to deliver high-quality programmes to meet national needs and aspirations. This should be done while working with the sector to develop a coherent tertiary system which provides student choice as well as easy movement across institutions. As such, the regional model has evolved to address internal and external demands. Nevertheless, a question remains whether the UWI has evolved fast enough.

21. The UWI Statistical Review for 2007–2008 showed the Open Campus as providing education at degree, diploma, and certificate levels for 3,915 students who were 9.6 per cent of the total UWI population. Through a range of non-degree, continuing education programmes, the Open Campus enrolled another 20,000 students, according to documents presented in 2007 to the founding Council of the Open Campus.
22. See: www.open.uwi.edu/prospective/graduate_programme.php

Social demand for tertiary education

Although it took 53 years for the UWI's student population to grow from 33 to 20,000, it took only seven years for the population to grow from 20,000 to 40,000. Notwithstanding the significant growth in intake of students and output of graduates (8,000 in 2008, compared to 3,000 in 2001), the demand for higher education has also increased and ever higher targets have been set by countries across the region.

During the 2000s, about 130,000 students sat the Caribbean Examinations Council (CXC) examination annually with about 50 per cent doing well enough to proceed to tertiary education. In addition, about 19,000 students sat the Caribbean Advanced Proficiency Examination (CAPE), which is equivalent to Advanced (A) Levels in the United Kingdom and elsewhere, with about 14,000 doing well enough to enter three-year university programmes. The annual throughput from the secondary system, taking into account both the CAPE and the Caribbean Secondary Education Certificate (CSEC), was roughly 150,000, but the pool for annual recruitment to tertiary education was about 85,000.[23] The UWI accepted fewer than 11,000 applicants to undergraduate and related programmes, plus 3,000 graduate students. Its total enrolment in 2009 was just over 41,000. The target for 2012 was 46,557 enrolled students, and the graduate target alone was 9,194. As such, the undergraduate growth rate was expected to be quite modest (UWI, 2007: 58).

From the above figures, it was clear that the UWI alone could not absorb all qualified candidates and that a diversity of tertiary institutions as well as more tertiary places were needed to support a meaningful development effort in the region. Most other tertiary institutions in the region had structured their programmes to receive students on completion of the CSEC and conceived of their tertiary input as part of a four-year degree programme.

In 2007, the average tertiary gross enrolment rate (GER) for Latin America and the Caribbean was 34 per cent. In general, enrolment rates were much higher in Latin America than in the Caribbean. Indeed several CARICOM countries had GERs below 10 per cent. These figures indicated two major challenges: the need to increase participation at

23. This is based on CXC country reports. The size of the pool for tertiary recruitment is calculated on the basis of numbers passing at least five subjects at CXC. The 19,000 CAPE students would all have qualified for entry to four-year degree programmes, even in the US. The 14,000 who succeeded at CAPE would all have had a fair chance of access to three-year degree programmes.

tertiary level given the size of the secondary pool (which would be approximately 84,000 annually based on CXC successes, but which would be approximately 150,000 based on the cohort sitting the examinations each year); and the need for better-prepared graduates from the secondary sector so that the tertiary experience could be meaningful.

In 2002, CARICOM had set a 15 per cent target participation rate for the region by 2005; and in 2005 CARICOM revised the target to 20 per cent by 2015. While individual countries such as Jamaica, Barbados, and Trinidad and Tobago would have achieved this, most other countries would not have done so. Trinidad and Tobago set its own target of 60 per cent participation by 2015, and Barbados set a target of one graduate per household. A proposal on tertiary expansion, rationalization and integration, suggested a minimum participation rate for the region of 35 per cent by 2020 (Tewarie, 2009).

Remaining challenges

The counterpart of diversity in the nature of regional and national institutions is diversity of governance, missions, and student and staff profiles (Roberts, 2003; 2007). Efforts have been made by the Association of Caribbean Tertiary Institutions (ACTI) and by CARICOM to develop systemic coherence with standards for equivalence and articulation. In this process, the leadership, guidance, and support of the UWI are critical. Also essential is the collaboration by counterpart institutions. The growing number of institutions supported by the state will have to draw from the same pool of funds in circumstances that may be increasingly challenging. In 2009 the main contributing countries to the UWI were Jamaica, Barbados, and Trinidad and Tobago, which respectively spent 17 per cent, 30 per cent, and 27 per cent of their education budgets on tertiary education. In Saint Lucia the figure was 8 per cent, and in Saint Kitts and Nevis it was 25 per cent.[24]

Tertiary expansion will also need revenue from fees, and equity of access will demand support through subsidies and loans. Integration and rationalization within the tertiary education sector will help to minimize duplication while still permitting institutions to respond to market realities and to carve out individual competitive strategies. Some institutions are

24. This information is from various sources, including annual budgets of countries and individual ministries in relevant countries.

highly specialized and also very small. For example, in 2009 the Jamaica Constabulary Staff College had just 136 students.

The academic development of staff is another major issue. Most of the tertiary institutions which have emerged alongside the UWI emphasize teaching rather than research, and are designed to be directly responsive to students and their communities. Much work is required to maintain and improve quality. One indicator is the qualifications of teaching staff. Roberts' (2007) review of 37 institutions found that in 20 of these institutions over 50 per cent of teaching staff had no more than Master's degrees. The proportion exceeded 70 per cent in 11 institutions, and was below 25 per cent in only four institutions. Comparatively, at the UWI 60 per cent of the full-time faculty held PhDs, 27 per cent had Master's degrees as the highest qualification, and 13 per cent had Bachelor's degrees as the highest qualification (UWI, 2008).

The 1960s, 1970s, and 1980s were an era of expanding access through institutional establishment, the 1990s was the period of consolidation, and the first decade of the twenty-first century was one of transformation and innovation. Looking ahead, expansion, consolidation, transformation, and innovation all need to take place simultaneously. The pressing need is for a rational, orderly system of tertiary institutions which meets the needs of the region. Seven challenges may be identified for an effective policy framework, as follows:

1. *Legal framework*: Given the significant developments regionally and internationally, and given the desire articulated by several ministers responsible for education for a seamless regional tertiary sector, legislation needs to be reviewed, rewritten, and harmonized. The legal framework must cover issues ranging from the powers and responsibilities of line ministers and regulatory bodies to the rights and responsibilities of the students.
2. *Regional qualifications framework*: In the context of aspirations to develop the Caribbean Single Market Economy (CSME), it is imperative for qualifications to be aligned with regional and international standards. A Regional Qualifications Framework (RQF) has been designed and considered by a CARICOM technical committee, but political factors have hindered its implementation.
3. *Regional accreditation*: National accreditation exists in some but not all countries. CARICOM has proposed a Regional Accreditation Authority, which by 2010 had approval from three countries and an

indication that another four intended to approve. However, it was arguable that such a body would need wider commitment.

4. *Financing*: Three major financial issues need attention. First is the sustainable financing of publicly funded tertiary education to meet desired objectives, taking into account a rational system of tertiary delivery. Second, is the need for better mechanisms for students lacking the financial means to support themselves; and third is the need to expand and upgrade physical plant and infrastructure, especially in programmes for science and technology.
5. *Participation rates and sustainable development*: Tertiary education strategies must be linked to an overall strategic plan for the region and a human resource development strategy for each country. This will require an appreciation of the links between quality assurance and strategic planning. Challenges include the mismatch between educational output and market demand, and the gaps between academic research and policy formulation.
6. *Human resource development*: Improvement in quality across the sector requires upgrading of the quality of teachers in the tertiary sector. It also needs programmes to train and support administrators, managers, and leaders.
7. *Governance arrangements*: All systems have to be managed and a tertiary system is no different and therefore a Regional Tertiary Council or some equivalent would be necessary.

Conclusions

The region faces major challenges. Although commitments have been made to the CSME, the tendency persists to swing between cooperation and fragmentation, which has characterized this region since the establishment of the Federation and its disintegration. While entities such as the West Indian cricket team, the CXC, and the UWI are regional successes, tensions between regionalism and nationalism can have negative impacts on these institutions and the systems which facilitate the orderly advance of a regional agenda. The tensions are likely to persist as regional needs and nationalist aspirations continue to contend.

The UWI may have been the region's first concerted attempt to build a higher educational institution, but it has not been the last and other institutions will emerge. The UWI has active collaborative relations with close to 30 other tertiary institutions in the region, and is vigorously seeking to expand this network. The university is also collaborating more

effectively with the Association of Caribbean Tertiary Institutions (ACTI). As the tertiary sector evolves, providers that become institutionally stronger and more effective in serving their stakeholders will also become more competitive; but the UWI will remain an integral and indispensible part of the regional higher education sector. Undoubtedly the UWI will learn from its regional partners and collaborators as a system develops. But the UWI remains essential to the structure of higher education in the region, and given the longer tradition and genuine achievements over the decades there is also much that the UWI has to offer to the sector as well as to individual institutions.

Moreover, there may well be room for increased private investment in the tertiary sector. The offshore schools have shown that the Caribbean can be an attractive destination for foreign students. There is no reason why a competitive public tertiary sector in the Caribbean region could not attract international students and be complemented by private institutions. Should the system evolve in this way, a strong and competitive tertiary sector can be the backbone of a research enterprise, a springboard for entrepreneurial initiative, and a competitive factor in attracting investments in the knowledge sector.

References

Beckles, H.; Perry, A.; Whiteley, P. 2002. *The brain train: Quality higher education and Caribbean development*. Mona, Jamaica: UWI.

Caribbean Community (CARICOM). 2008. *The report of the seventeenth meeting of the Council for Human and Social Development (COHSOD XVII)*. Georgetown, Guyana: Caribbean Community (CARICOM) Secretariat. Accessed 15 October 2008 from: www.eubusiness.com/Trade/eu-caribbean-epa

Howe, G.D. 2003. *Contending with change: Reviewing tertiary education in the English-speaking Caribbean*. Caracas: UNESCO Instituto Internacional para la Educación Superior en América Latina y el Caribe (IESALC).

Jules, D.; Miller, E.; Armstrong, A. 2000. *A Caribbean education strategy 2020*. Washington DC: World Bank.

Kapur, D.; Crowley, M. 2007. *Beyond the ABCs: Higher education and development*. Working Paper 139. Washington DC: Centre for Global Development.

Roberts, V. 2003. *The shaping of tertiary education in the Anglophone Caribbean: Forces, forms and functions*. London: The Commonwealth Secretariat.

——. 2007. *Caribbean tertiary education development (1996–2006)*. Mona, Jamaica: Tertiary Level Institutions Unit, UWI.

Sherlock, P.; Nettleford, R. 1990. *The University of the West Indies: A Caribbean response to the challenge of change*. London: Macmillan.

Tewarie, B. 2009. 'Concept paper for the development of a CARICOM strategic plan for tertiary education services in the CARICOM Single Market and Economy (CSME)'. CARICOM Regional Symposium on Services, Antigua, 15–17 July. Available at: www.caricom.org/.../services.../concept_paper_tertiary_education.pdf

UWI (University of the West Indies). 1994. 'A new structure: The regional university in the 1990s and beyond'. Report of the Chancellor's Commission on the Governance of the UWI. Mona, Jamaica: UWI.

——. 2006. *Report of the Chancellor's task force on governance of the UWI*. Mona, Jamaica: UWI.

——. 2007. *Strategic plan 2007–2012*. Saint Augustine, Trinidad and Tobago: UWI.

——. 2008. *Statistical review academic year 2007-2008.* Saint Augustine, Trinidad and Tobago: UWI.

World Bank. 2007. *School and work: Does the Eastern Caribbean education system adequately prepare youth for the global economy?* Washington DC: Human Development Sector, Caribbean Country Management Unit, Latin America and the Caribbean Region, World Bank.

5. Tertiary education in Fiji: Between globalization, regional imperatives, and national aspirations

Rajesh Chandra

In 2008 the Pacific Islands Forum, which is a socio-economic and political grouping of 16 Pacific Island countries, decided that tertiary education should be given increased priority to ensure that the Pacific Islands safeguard their future in a world increasingly dominated by competitiveness derived from knowledge. This was a regional expression of a sentiment that had already been expressed in many individual countries, including Fiji.[25] In common with other small states, Fiji faces distinctive challenges in its efforts to develop the skilled human resources needed to support economic growth and social development. Yet history has many examples of countries taking bold decisions, of punching above their weight and succeeding. Fiji is arguably among those examples.

Developments in Fiji should be seen in the light of its ambition to consolidate its position as the tertiary education hub of the region. Fiji has been at the core of a far-sighted arrangement for tertiary education provision to 12 small island countries of the region since the establishment of the University of the South Pacific (USP) in 1968 (see Morris, 1966; Alexander, 1967). It hosts the USP's largest campus and its headquarters, and is its largest funder and beneficiary.

Pacific Island leaders and planners have long acknowledged the need for regional cooperation to enable their countries to achieve reasonable levels of tertiary education. While Fiji has mainly relied on the regional university for its tertiary education needs, it has also set up separate national institutions to provide pre-degree qualifications. These institutions have complemented the USP, and their programmes have dovetailed with those of the USP through articulation agreements.

Fiji had aspirations to establish a national university before the USP commenced operations in 1968. For a long time thereafter, the issue of a national university was shelved, but in 2004 an educational and social development organization, Arya Pratinidhi Sabha (APS), established the

25. The official name of the country is the Republic of Fiji Islands. Fiji is a commonly used short form of this name, and is used throughout this chapter.

University of Fiji as a private institution. The speed of its establishment took the Fiji Government by surprise, and while it did not act to prevent its establishment, neither did it give it formal approval at first. The existing Fiji Education Act had no specific provision for universities, and the USP had been established through a Royal Charter and a specific Act of Parliament that related only to the USP. Finally, after extensive discussions between the University of Fiji and the government, an understanding was reached whereby the government recognized the University and began providing an operating grant from 2008.

As a response to the absence of a framework to regulate and promote tertiary education, the government in 2008 established a Higher Education Advisory Board, which subsequently became the Higher Education Commission after the promulgation of the appropriate Bill by the President. This Bill provided a comprehensive framework for the establishment, registration, regulation, and facilitation of tertiary education institutions. The establishment of the University of Fiji and political and other developments in the region may have prompted the Government of Fiji to announce in 2009 that it would set up a national university, the Fiji National University (FNU).

In this context, the challenges for the government are threefold: how to accommodate a regional university that has served it well for four decades, which provides it with handsome returns, and to which it has expressed continuing support; how to find resources for the new Fiji National University; and how to continue its support for the University of Fiji in an environment of diminishing resources. In assessing the future development of all these institutions, the government will need to keep in mind that the tertiary institutions being incorporated into the national university require considerable improvement in their quality, even before factoring in the extra resources needed to raise their offerings to degree level. Quality is increasingly seen as the key benchmark of modern tertiary education systems, and this should weigh heavily on the minds of the planners. With scarce resources, one challenge is to ensure that tertiary education as a whole responds decisively to global imperatives of quality, equity, access, relevance, networking, flexible delivery, lifelong learning, and close links with the world of work.

The pre-eminence of regional forces

Developments in tertiary education are linked in most countries with global developments, particularly in changing skills needs. This is partially true

in Fiji, but Fiji's approach to tertiary education and global developments needs to be assessed in the context of the decision in 1968 to choose a regional solution for the needs of 12 small island countries, with the main campus and headquarters located in Fiji (*Table 5.1*). The way in which the Fijian Government has funded tertiary education in Fiji, and especially its willingness to contribute a high proportion of its education budget to tertiary education, arises from the very strong grassroots support for education. This includes the innovative sharing of responsibility for financing education among parents, communities, religious organizations, and the state.

Table 5.1 Member countries of the University of the South Pacific

Country	Population	Country	Population
Cook Islands	20,000	Samoa	189,000
Fiji	844,000	Solomon Islands	507,000
Kiribati	93,000	Tokelau	1,200
Marshall Islands	61,000	Tonga	101,000
Nauru	10,000	Tuvalu	10,000
Niue	2,000	Vanuatu	232,000

The regional imperatives come from the longstanding awareness that none of the Pacific Island countries can individually afford a world-class, or at least an internationally recognized comprehensive university. Once a Pacific Island country became a member of the USP, it saw the USP as its main provider of tertiary education.[26] This was indeed an innovative solution for most countries as each funded only a share of the costs of the USP, yet benefitted as if each was the owner of the regional university.[27] Fiji has provided the bulk of the funding labelled as 'government contributions', for example in 2008 providing F$38 million out of F$50 million. The university's total operating expenditure in 2008 was F$135 million (USP, 2009: 41). Fiji, while providing the largest share of government contributions, has also benefitted enormously from

26. The chief exception was Samoa, where the Government established the National University of Samoa to promote higher education with an emphasis on the preservation of its culture and identity. Also, in Tonga an interest in classical higher education led to the development of the private 'Atenisi University.

27. While the benefits of a regional university have been clear to USP Member Countries, they have felt that costs could be reduced by providing in-country programmes (something being done by the USP, but perhaps not fast enough). There may also be elements of concern about control, although the Council is made up largely of representatives of Member Countries. Issues of national pride also guide national thinking about tertiary education.

the presence of the largest campus and headquarters in its country. These benefits go far beyond what Fiji would enjoy from a solely national institution. For instance, it is a beneficiary of aid averaging about F$24 million annually. In addition, it benefits from fees paid by regional (non-Fiji) students at the Laucala Campus.[28] The large numbers of Pacific Island students who study at the three campuses in Fiji (1,716 regional students or 14 per cent of all USP students in Fiji in 2008) also contribute significantly to Suva's economy through rental of accommodation and general expenditure. A 2009 study found that Fiji receives a threefold return on every dollar it contributes to the USP (USP Annual Report, 2009).

Another significant benefit for Fiji arises from the large number of regional students who study at the Laucala campus. These students become lifelong goodwill ambassadors for Fiji in a way even large scholarships programmes could not. In this sense, Fiji's approach to the USP has been economically and politically astute.

A further imperative comes from the fact that the future of the Pacific Islands has been cast in strongly regional terms. The 2005 Pacific Plan agreed by leaders of Forum countries contains the vision and the future path for Pacific Island societies and economies. An active Pacific Plan Action Committee works on the implementation of the Plan, reporting to national leaders during the annual Forum Leaders' Meeting. The USP is seen as one of the most successful examples of regional cooperation in the Pacific Islands and worthy of strong continuing support. Many donors are not prepared to support national universities in the Pacific Islands region because of their belief in a regional university and also because of an assessment that countries will not be able on their own to build tertiary institutions of comparable quality. Given that a viable regional institution exists, they doubt the wisdom of starting new national universities.

However, the gross tertiary education enrolment rate in Fiji remained relatively low at 15 percent in 2007 (see *Table 5.2*). Much effort is therefore needed to increase this to respectable levels. The USP has not always responded effectively to national expectations or requirements because of its regional nature, a lack of resources, and

28. The USP has 14 campuses, the main one and headquarters being the Laucala Campus. Each country now has a campus. There are also centres and sub-centres to allow greater access to tertiary education.

shortcomings in leadership. Fiji has also felt that if smaller countries such as Samoa, which has one-fifth of Fiji's population and a quarter of Fiji's gross domestic product (GDP) can establish a national university despite having a large USP campus, Fiji can successfully establish its own national university.

Table 5.2 Gross enrolment rates in tertiary education for Fiji, other USP member countries, and international comparators, 2007

Country	Gross enrolment rate (%)
South Pacific	
Fiji	15
Marshall Islands*	17
Tonga*	5
Vanuatu*	4
International comparators	
Republic of Korea	95
United States of America	82
New Zealand	80
Australia	75
Barbados	53
Malta	32
Malaysia	30
Mauritius	14
World	26

* 2003
Source: UNESCO Institute for Statistics, 2009.

Tertiary education in Fiji: The institutional fabric

Although high by Pacific Islands' standards, Fiji's tertiary education enrolment rate is much lower than the 40–50 per cent that the World Bank recommends as the minimum for developing countries if they are to succeed in the new knowledge economy and society (World Bank, 2002). In Fiji the provision of tertiary education in the past has mainly been through the USP, the Fiji School of Medicine (FSM), and a number of non-degree national providers (*Table 5.3*). This section provides details of these providers.

Table 5.3 Main providers of tertiary education in Fiji, 2009

State or Private	Institution	Types of programmes	Comments
Regional	University of the South Pacific (USP)	Full range of degree and postgraduate programmes	Regional university with headquarters in Fiji. Almost 11,000 students are Fiji citizens (57 per cent of total)
State	Fiji Institute of Technology (FIT)	Mainly technical and vocational but also business and IT. Offered a franchised degree until 2008, when it began offering degrees on its own. Plans underway for a range of degrees, although the final outcome will depend on Fiji National University configuration	Issues of balance of technical/vocational and business education, and of quality
State	Fiji School of Medicine (FSM)	Medical education; MBBS, postgraduate degrees awarded by USP. Issues certificates and diplomas of its own	Oldest of all Fiji institutions
State	Fiji School of Nursing (FSN)	Mainly certificates and diplomas in nursing	Has begun discussions on possible degree by franchising from Australia
State	Fiji College of Agriculture (FCA)	Mainly certificates and diplomas	Arrangements with USP for quality assurance
State	The Lautoka Teachers College (LTC)	Provider of primary teacher training	Extensive recent upgrade with help from Australian aid
State	The Fiji College of Advanced Education (FCAE)	Diploma level provider of junior secondary teaching	Links with the USP
Private	New Zealand Pacific Technical College (NZPTC)	Franchised operation	New model with little academic depth
State	Training and Productivity Authority of Fiji (TPAF)	Mainly franchisee at different levels	Issue of duplication with FIT and lack of academic capacity
Private	Fulton College	Primary level of teacher training	Church institution
Private	Islamic Institute of the South Pacific	Has now ceased operation	
Private	Corpus Christi College	Primary level teacher training	Church institution
Private	Sangam School of Nursing	New diploma-level private provider	Can benefit from high demand for nurses in Fiji and internationally
Private	University of Fiji (UniFiji)	Full range of levels in limited fields	Most vulnerable of the major providers

Source: Field observations.

The University of the South Pacific

The USP offers a full range of tertiary education to just over 19,000 students spread across 12 countries and serviced by 14 campuses. It is also a longstanding leader in the use of satellite technologies for distance learning, starting in the early 1970s. Its information and communications technology (ICT) infrastructure is leading edge, strengthened with the completion of the Japan-Pacific ICT Centre in 2010.

The university also leads the region in the development of flexible and distance learning, with over 40 per cent of its equivalent full-time students (EFTS) studying through distance mode. The large-scale use of learning systems such as Moodle, and the USPNet infrastructure that delivers an integrated video-audio-telephony and Internet services over 63 million square kilometres, are potent demonstrators to the region of how ICTs can be used not only for education but also for social and economic development and the improvement of governance.

The USP is also a large educational institution by regional standards. With an annual income of F$135 million, it is almost 14 times larger in operational terms than the next largest tertiary institution in Fiji. Its infrastructure in the 14 campuses is valued at about F$350 million, and it employs over 1,500 people. By 2010 the university was producing about 2,400 graduates per year, following rapid increases in its postgraduate enrolment and graduations.

The Strategic Plan for the 2010–2012 triennium centred on six priority areas that would strengthen quality, enhance its value and relevance, and increase its sustainability. These priority areas were learning and teaching; student support; research and innovation; regional engagement and internationalization; governance, management and continuous improvement; and human resources.

The Fiji Institute of Technology

The Fiji Institute of Technology (FIT) is the largest provider of technical and vocational tertiary education in Fiji and indeed the entire Pacific Islands region. Together with the Training and Productivity Authority of Fiji (TPAF), it is mainly responsible for meeting Fiji's demand for technical and vocational education. It had 18,000 students in 2009. In 2008, FIT embarked on a major expansion plan and introduced degree programmes in business and economics. It has also introduced a new degree in teacher training for technical and vocational education and training (TVET). FIT

is governed by a Council established by the Government of Fiji comprising academics, government officials, and business and private persons with commercial and industrial expertise.

FIT's vision is to 'produce the broadest spectrum of human resource needs for Fiji to the extent that resources allow'. Given its historical focus and responsibility for technical and vocational education, the breadth of the FIT vision poses a problem. A 2008 Asian Development Bank (ADB) report pointed out (p. 72) that: 'In the Fiji Islands, employers complain that the present curriculum of FIT and vocational secondary schools tends to be theoretical and based on time spent, rather than being practical and based on competencies achieved. Curriculum updating is needed.'

The report also asserted that FIT lacked quality assurance over the complete franchise programme. It recognized that FIT monitored theoretical training, mainly through examinations, but felt that the franchise system lacked systematic monitoring and evaluation.

Fiji School of Medicine

The Fiji School of Medicine (FSM) is the oldest tertiary education institution in the Pacific Islands. It has provided most of the medical personnel of the region for nearly a century, and many of its graduates have become national leaders. It developed from early certificates and diplomas to degree programmes in the 1990s under the quality assurance of the USP, which awards all FSM degrees and postgraduate qualifications.

The FSM went through a process of achieving greater autonomy in the 1990s, becoming more regional with representation from the Pacific Islands in its Council, and by admitting more regional students. It had 1,067 students in 2009, of which 352 or 33 per cent were regional. The FSM has developed a small number of graduate programmes. It has also embarked on distance learning and is developing a research programme to inform medical policy in the region. The FSM had a total income of $16.4 million in 2009, making it the second largest tertiary institution in Fiji in terms of its income. Most of its income was earned from tuition fees.

The University of Fiji

The University of Fiji was established in 2004 by the Arya Pratinidhi Sabha (APS),[29] and admitted its first students in 2005. The establishment of the university reflected a natural growth for the APS as a religious and social organization that was already operating a large number of primary and secondary schools. The APS also felt that many students in Western Fiji were not able to access tertiary education from the USP's Laucala campus because of their poverty and sharply increased accommodation costs in Suva.

The university has five schools: Arts and Humanities; Business and Economics; Science and Technology; Law; and the Umanand Prasad School of Medicine. It also has a number of centres, including the Centre for Indigenous Studies; Centre for Regional and International Affairs; Centre for Energy, Environment and Sustainable Development; and the Centre for Gender Research.

The University of Fiji had 550 students in 2009. This number was not considered economic, and the long-term viability of the university will depend on how successfully it is able to market itself to students in what will now be an increasingly crowded market. The university has been receiving government grants since 2008.

Recent developments

Overall coordination

Fiji has not had an effective system of coordination of tertiary education. In the past there have been two modes. First, the USP has its own systems of coordination through its Governing Council, in which Fiji has five representatives, and through the University Grants Committee and the Regional Ministers of Finance meetings that decide on its triennial funding. The USP's Strategic Plan 2010–2012 was developed through extensive consultations with the Government of Fiji, the local tertiary sector, and other governments and stakeholders. It therefore provided opportunities for coordination, especially in relation to ensuring complementarities between the USP's plans and those of Member Countries.

29. The Arya Pratinidhi Sabha of Fiji is a religious, educational, and cultural non-governmental organization (NGO).

The coordination of the remaining tertiary institutions in Fiji is undertaken by the Ministry of Education, Science and Technology, the Ministry of Health (for the FSM), and the Ministry of Agriculture (for the Fiji College of Agriculture). This coordination, however, has been neither intensive nor effective. The Higher Education Promulgation 2008 provided the clearest and most comprehensive framework for the coordination of tertiary education, and thus prospects for improvement.

The Higher Education Commission

The government established the Higher Education Advisory Board (HEAB) in 2007. The Board, comprising a Chair and six other members representing the tertiary education sector and community leaders, held its inaugural meeting in April 2008. The HEAB was given the task of preparing and finalizing the proposed Higher Education Bill, including the establishment of the Fiji Higher Education Commission.

The Higher Education Promulgation was gazetted in October 2008. The Commission has an independent Chair and five members with significant experience of tertiary education as well as education in general in Fiji (Republic of Fiji Islands, 2008: 864). It is served by a Secretariat initially supplied by the Ministry of Education and two other professional staff.

The Higher Education Commission is responsible for establishment and recognition of universities, including degree-awarding institutes of technology; establishment and recognition of other tertiary education institutes; and allocation of funds to tertiary education institutions once the government has made an allocation for tertiary education. It has the potential to harness considerable opportunities in tertiary education, including the export of tertiary education services.

Fiji National University

In 2007 the Cabinet approved in principal a recommendation by the Minister of Education to merge all the public tertiary institutions into a new university. At this time the body was to be called the Fiji University of Science and Technology, but a revision in 2008 changed the name of the planned institution to the Fiji National University. The institutions to be merged were the Fiji Institute of Technology, the Fiji School of Agriculture, the Fiji School of Medicine, the Fiji School of Nursing, the Fiji School of Advanced Education, and the Lautoka Teachers' College.

An interim Council was appointed with instructions to commence operations in 2010. The immediate issues revolved around the mechanics of merging, the establishment of a new administrative structure, the appointment of key staff, and the working out of the details of how the merger would produce synergies and result in more cost-effective operation. This represented a major organizational challenge, given that the institutions had had few dealings with each other and were supervised by different ministries. The main demand seemed to be in technical and vocational education and at the lower to middle level. The declining number of students sitting the final secondary examination introduced a further challenge.

Technical and vocational education and training (TVET)

For many years the Pacific Islands have acknowledged the need to improve the range, access, cost-effectiveness and quality of TVET (see ADB, 2008). The Secretariat of the Pacific Community (2009) has begun an active programme of regional harmonization of provision of TVET. Donors such as the ADB and AusAID have also expressed interest in ensuring greater rationalization and harmonization of TVET across the region. In Fiji the issues are very much concerned with the quality of the current provision, the identification of the gaps in the provision of technical and vocational education at the certificate, diploma, and at the degree levels, and above all providing for a system of articulation across different providers and different qualifications.

Quality assurance and the national qualifications framework

Clarke-Okah (2008: 5–6) described quality as 'the critical angle of the Iron Triangle'. Quality is at the forefront of issues relating to tertiary education in developing countries, including small countries such as Fiji. The issue of quality also exemplifies how global, regional, and national imperatives operate. Since many graduates emigrate from Fiji, international recognition of qualifications is a prerequisite for tertiary education in Fiji. Regional forces and initiatives in quality assurance are also important. A regional qualifications framework is being developed as a complement to national systems of quality assurance.

Until the establishment of the Higher Education Commission, there had not been an integrated national quality assurance system for tertiary

education in Fiji. The USP had a well-developed quality assurance system which combined the use of external advisers for various schools and programmes together with an institutional quality assessment undertaken jointly by the Australian Universities Quality Agency and the New Zealand Universities Academic Audit Unit. Quality was emphasized strongly by the first planners of the USP. The Morris Report, for instance, argued that 'The countries of the South Pacific would not be satisfied, and ought not to be satisfied, with university degrees which do not command a proper esteem' (Morris, 1966: 25).

Quality assurance for the FSM is undertaken jointly by the FSM and the USP, which awards the degrees and postgraduate qualifications of the FSM. The University appoints the external examiners following receipt of the FSM's recommendations.

Quality assurance for the remaining tertiary institutions in Fiji is uneven and does not use external validation. The 2008 ADB study raised concerns about the quality of TVET programmes at FIT and in general. In the absence of any kind of systematic external validation, it is very difficult to comment on the quality of these institutions other than to say that the establishment of proper quality assurance systems and proper external validation will be critically important.

A positive development in Fiji's attempt to give quality a higher priority has been the development of the Fiji National Qualifications Framework (FNQF), embarked upon in 2005. Initially developed as part of the Fiji National Training Council and later under the Fiji Training and Productivity Authority of Fiji, the FNQF has now taken an independent form. The Fiji Qualifications Authority (FQA) has been set up under the FNQF. The main objectives of FQA are to improve the quality of tertiary education, especially in TVET, and to improve synergies among different providers. The relationship between the Higher Education Commission (HEC) and the FQA was among the matters needing clarification, given the self-accrediting nature of universities. Owing to its link with similar qualifications frameworks, another function of FQA would be to assist foreign recognition of Fiji qualifications, which would be very important with the possible future increase in labour mobility as part of the Pacific Agreement on Closer Economic Relations (PACER) between Australia and New Zealand and the Forum Island countries.

The FQA is also part of the Pacific Regional Qualifications Register, which aims to provide a regional list of qualifications registered by

national qualifications authorities. The development of these national and regional frameworks and registers shows how closely national and regional activities are linked in the Forum Island countries, including Fiji.

Opportunities and challenges ahead

Many opportunities and risks lie ahead. It will be critically important for Fiji that all providers of tertiary education ensure that their activities are focused, add value, and avoid duplication. However, duplication cannot be avoided without strong planning and regulatory bodies.

Significant gaps have been identified in skills needed in Fiji, especially in the areas of TVET. Additional resources, therefore, are needed to ensure that these needs are met. The ADB has identified these needs as comprising: plumbers; carpenters, electricians, building finishers of high quality; building technicians; maintenance workers; civil construction workers; air conditioning technicians; hospitality workers; hospitality middle management; and IT workers (ADB, 2008: 185). These needs would best be served by consolidation and improvement of FIT and TPAF Certificate and Diploma programmes.

The global economy is already extremely competitive and only countries with low costs and high-quality skills are expected to do well. The quality of tertiary education is a prime determinant of competitiveness. It is therefore vital that Fiji puts a premium on the quality of tertiary education. This will mean that Fiji's quality and qualifications framework will need to be regionally and internationally benchmarked.

Supply and demand in tertiary education are not well matched. There is a lack of employment in many graduate areas, and there are gaps in education in other areas. A close partnership needs to be developed between business and educational providers. For this reason, and to avoid increased demands on the government for funding, such partnerships need to be systematically developed between the community and tertiary education institutions. The development of these partnerships should become one of the key performance indicators of institutions.

The global knowledge society is inextricably linked to ICTs. High-quality provision of education and research in ICTs is essential to Fiji's future development. This should be reflected in the plans of tertiary education institutions. In addition, ICTs need to be deployed by all tertiary education institutions to improve their governance, management,

and operational efficiencies. ICTs also need to be used to make learning and teaching more independent and flexible.

Given Fiji's scattered population and the desire of the Government to avoid further urbanization, distance learning that applies the latest digital technologies is essential. The USP can lead in making these techniques and technologies available to the Ministry of Education and to other tertiary institutions. This should also become one of the new priorities of the HEC. The government will need to ensure that the telecommunications market is fully liberalized, and that there is a strong academic network along the lines of those that exist in other countries.

Applied research is also becoming one of the key requirements, especially to assist the key industries of tourism, agriculture, and marine resources, and to assist in public policy development. Fiji has established a Research Council to encourage the government to provide funding for research (which is extremely limited), focus it on a few relevant areas, and disseminate the findings for the benefit of the economy and society.

Conclusions

The tertiary education landscape in Fiji has undergone a significant, even dramatic, reconfiguration. From its sole reliance on the USP in 1968, Fiji has seen the establishment of the University of Fiji in 2004 and now the establishment of Fiji National University, which became operational from the beginning of 2010 through an amalgamation of existing state tertiary institutions. Given the commanding presence of the USP and the multiplicity of other actors, it is difficult to anticipate with confidence the future configuration of the tertiary education landscape. Certainly the Higher Education Commission will powerfully guide the future development of tertiary education in Fiji.

As indicated in this chapter, there is a very strong regional component to national developments in all Pacific Island countries. The clarion call for regional integration and regional cooperation has been getting louder as a result of worldwide trends towards greater regional cooperation and integration and the declining economic performance of Pacific Island countries.

The issue of quality is acknowledged globally as being among the most important determinants of the value of tertiary education. It is widely recognized that the quality of some existing providers of tertiary

education in Fiji has considerable scope for improvement and will require significant injections of resources as well as fundamental changes in the mindsets of the academic leaders and managers. There is a significant challenge in moving existing state institutions into a more client-oriented environment. This will take some time in terms of the new vision and modalities of operation. The setting up of the Fiji National University, the establishment of the Higher Education Commission, and the governments' continued support for the USP present new opportunities to raise enrolment rates. Fiji will remain a tertiary education hub for the Pacific Islands, though it faces potential risks in quality and duplication.

References

Alexander, Sir N. 1967. *Report on the University of the South Pacific* (Alexander Report), Fiji Legislative Council Paper No. 3. Suva: Government Printer.

Asian Development Bank (ADB). 2008. *Skilling the Pacific: Technical and vocational education and training in the Pacific*. Manila: Asian Development Bank.

Clarke-Okah, W. 2008. 'Higher education in the 21st century: The iron triangle's angle of quality assurance'. 2nd Dennis Irvine Lecture, Mico University College, Kingston, Jamaica. Accessed 14 July 2010 from:
www.col.org/resources/speeches/2008presentations/Pages/2008-02-11.aspx

Morris, Sir C. (Chairman). 1966. *Report of the higher education mission to the South Pacific appointed by agreement between the Governments of Britain and New Zealand with the co-operation of the Government of Australia*. London: Her Majesty's Stationery Office.

Republic of Fiji Islands. 2008. 'Higher education promulgation'. *Republic of Fiji Islands Gazette*, *8*(78).

Secretariat of the Pacific Community. 2009. 'Regional support to technical and vocational education and training (TVET): A progress report'. Paper for the 2009 Forum Education Minister's Meeting (FEDM), 24–26 March 2009.

University of the South Pacific (USP). 2009. *2008 Annual Repor*t. Suva: University of the South Pacific.

UNESCO Institute for Statistics (UIS). 2009. *Global education digest 2009: Comparing education statistics across the world*. Montreal: UIS.

World Bank. 2002. *Constructing knowledge societies: New challenges in tertiary education*. Washington DC: World Bank.

6. Tertiary education in Saint Lucia: Challenges and priorities within the evolving global environment

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Developments associated with the global financial crisis that began in late 2008 clearly demonstrated how interconnected the modern, globalized world has become. The speed of financial and economic change was unprecedented, demanding equally swift and coordinated international responses. At the national level, the implications of this new global environment for economic, social, and educational planning and development are many. This is perhaps especially evident in small states where financial service industries, tourism, and related activities generate essential resources for national development. Similarly, the first decade of the twenty-first century drew international attention to new challenges from increasingly visible environmental shifts, and from the prospect of major climate change. Many small states now find themselves on the front line of events, contemplating the impact of potentially devastating sea level rises, and related implications for land use, food production, livelihoods, and possible migrations. Sustainability is a very real and inescapable environmental challenge with many implications for tertiary education.

Global interconnectedness is also increasingly apparent in political, economic, and social domains where the demands of the knowledge economy, global security issues, and the influence of powerful international development agendas are increasingly visible (King, 2007). Moreover, this is increasingly a virtual world, where information and communications technologies (ICTs) transform social relations, underpin globalization processes, and increase the range and speed of international transfer. While the potential benefits of global partnerships, agendas, and targets are widely recognized, the importance of adjusting generic policy models, strategies, and assumptions to local contextual and cultural differences deserves greater attention than it is often given (Crossley and Watson, 2003).

The experience of many small states helps to demonstrate this within the field of education. Throughout the 1990s, for example, when

the Education for All (EFA) agenda prioritized primary education worldwide, many small states looked in vain for international support for their efforts to advance their secondary and tertiary education sectors (Crossley and Holmes, 1999). The contextual realities of many small states often necessitated a different interpretation of the EFA agenda, as they worked towards and beyond global goals (Crossley, Bray and Packer, 2009). Partnerships and collaboration continued to be strongly supported, but greater scope for adaptation, mediation, and negotiation was also called for.

It is in this multi-faceted and rapidly changing global environment that planning for tertiary education in small states must now develop. Moreover, if small states are to negotiate ways forward, and respond creatively and innovatively to a volatile global environment, increased attention to the potential of tertiary education is both pertinent and timely. Such developments could help small states worldwide to benefit, in more realistic and contextually grounded ways, from sub-regional, regional, and international partnerships and collaboration – to strengthen their own voice, and to be accepted as serious players in envisioning and shaping sustainable development trajectories and modalities. It has been argued, for example, that while the new global environment may create opportunities, if left unchecked it could also limit horizons and deepen inequalities for the marginalized (Anthony, 2000; Smith and Naim, 2000).

Innovative planning for tertiary education in small states can represent a strategic investment in scarce human resources and strengthen capacity for critical international engagement, at the same time as it acknowledges that much can be learned by both small and larger states from small states' experiences (Crocombe and Meleisea, 1989). In this spirit, the following sections focus upon the tertiary educational experience of Saint Lucia (population 170,000 in 2008). In doing so, three key challenges are identified, and efforts to promote tertiary sector 'differentiation in a globalized context' (Jules, 1998: 15) are explored in detail.

This chapter examines tertiary education in Saint Lucia in the light of issues and priorities generated by the new global environment and the influence of international policy trends and agendas. Insights derived from comparative research highlight the significance of contextual

factors in the formulation and implementation of educational policy and practice.

The foundations of tertiary education in Saint Lucia

From the outset, tertiary education development in the small states of the Commonwealth Caribbean looked outwards to western metropolitan countries for models, inspiration, and guidance. International perspectives thus had a dominant influence upon tertiary education policy and practice. The University College of the West Indies, now the University of the West Indies (UWI), for example, was established in 1948 with its mission to serve the region conceived (Fraser, 1998: 64) as 'a university for the multi-racial international community of the Commonwealth Caribbean and a prototype of the university for the twenty-first century where knowledge and learning know no frontiers and accept no horizons'.

Saint Lucia, as a member of that international Caribbean community, was among the first to buy into the regional model for tertiary education provision. Indeed, there is an anecdotal account that the first student in residence at the new university was from Saint Lucia. The drive for the expansion of tertiary education opportunities would subsequently result in the decentralization of the university into three island campuses (Jamaica in 1948, Trinidad in 1960, Barbados in 1963); and an Open Campus now serving Saint Lucia and the region with access 'Onsite, Online and On Demand' (www.open.uwi.edu).

Notwithstanding Saint Lucia's continuing participation in the regional provision of higher education as a contributing member of the UWI, successive administrations have consistently sought in-country university education since the attainment of political independence in 1979. In 1980, a Committee on Educational Priorities, set up by the government to prescribe an educational philosophy and policy for the country, recommended the establishment of a Junior University College for students to pursue undergraduate studies in certain subjects locally before proceeding to one of the UWI campuses (Edmunds, 1980). The idea was for existing post-secondary institutions to be merged into a Community College or an institution of a similar nature. However, external funding agencies provided very little support for the development of a domestic tertiary education sector. An education sector survey carried out in 1981 under a cooperative agreement between UNESCO and the World Bank advised against substantial growth in the tertiary sub-sector. The report

was highly critical of what it considered the system's top-heavy recurrent expenditure level, and asserted (UNESCO, 1982: 7) that 'while it is desirable for good educational and economic reasons, and in the interest of regional cooperation for Saint Lucia to support strongly higher-level education, it is debatable whether the level of commitment should rise much further'.

Despite this lack of support, Saint Lucia continued with its own efforts to develop a tertiary education sector. Compelling reasons why the country did not allow external development agencies to derail its plans included:

- the need to meet a growing and pressing social demand for tertiary education,
- the need for the newly independent country to accelerate the development of its human resources to meet the manpower needs of the economy,
- the need to curb the flight of the country's intellectual capital by providing an environment in which a core of qualified people remaining in-country could flex their wings, and
- the perception by the non-campus contributing countries of the UWI that the re-structuring exercise undertaken by the regional institution would marginalize them even further.

The Community College that had been proposed in 1980 was established by an Act of Parliament in 1986. It brought together under a single administrative structure five existing post-secondary institutions that offered a mix of academic, technical, and vocational education and training. These were the Saint Lucia 'A' level College, Saint Lucia Teachers' Training College, Morne Fortune Technical College, Saint Lucia College of Agriculture, and Victoria Hospital School of Nursing.

The Sir Arthur Lewis Community College (SALCC) was conceived from the outset as an autonomous multi-purpose, multi-level institution bolstered by strong inter-institutional partnerships with regional and international institutions (Louisy, 1993). Within two years of its establishment, the college was able to realize the vision proposed by the Committee on Educational Priorities by introducing undergraduate studies leading to degrees awarded by the UWI.

In its 29th year of national independence, the Government of Saint Lucia announced its intention to accelerate SALCC's transformation to a fully fledged university (Saint Lucia, 2008*a*). Parallel initiatives are being pursued elsewhere in the Caribbean, including Barbados and Antigua. Such trends were anticipated in the 1980s by the first Vice Chancellor of the UWI, Saint Lucian-born Sir William Arthur Lewis, who argued for in-country provision even while presiding over the expansion and development of the regional institution. As Roberts (2008: 17) noted, Lewis maintained that:

> The chief reason why it is worthwhile, from the economic point of view, to have a university at home, even though it costs more than sending students abroad, is that the function of a university is not confined to teaching students. ... Apart from teaching, a university contributes to its community through the participation of its teachers in the life of the country, and through its research into local problems. ... A body of one or two hundred first class intellects can make an enormous difference to the quality of its cultural, social, political and business life.

The importance of knowledge in development, which is now occupying centre stage in the new globalized environment, had thus been signalled and articulated by Lewis in the 1980s. Moreover, Lewis suggested that the fundamental cure for poverty was not money, but knowledge, which included locally generated knowledge.

With the intensification of globalization, and the passionate responses that the phenomenon raises, one might be tempted to ascribe all current initiatives to the new global realities and to view all educational development through the lens of globalization. However tertiary education planning in Saint Lucia, and in the Caribbean in general, can also be seen to have followed an evolutionary trajectory, anticipating emergent situations before they became critical, and seeking practical measures to deal with the constraints and challenges inherent in the small state context. However, the implementation of many creative and innovative decisions has been limited by lack of adequate financial and human resources to drive the development process.

Three key challenges

It is not possible here to address every pertinent issue in Saint Lucia's tertiary education. The analysis therefore focuses upon three key challenges related to expanding the sector, balancing nationalism and regionalism,

and strengthening research capacity. This commentary is followed by a discussion of priorities for future action in which implications for international collaboration and technology-based provision are explored.

Expanding the sector

Perhaps the most prominent challenge facing the tertiary education sector in Saint Lucia is one of expansion. In 2005 the Caribbean Community (CARICOM), of which Saint Lucia is a member, set a target tertiary gross enrolment rate (GER) for the region at 20 per cent by 2015. Saint Lucia's 2009 GER stood at only 12 per cent. Planners envisaged that a 36 per cent enrolment increase at the Community College, together with the projected increase in demand following the introduction of universal secondary education in 2006, could conceivably take the country close to the 20 per cent target (*Table 6.1*). However, it was arguable that even this target of 20 per cent would need to be raised after 2015.

The planners' projections of tertiary GERs were partly based on the pass rates at the regional examinations taken on completion of the five-year secondary school programme. In 2008, the pass rate at the Caribbean Secondary Education Certificate (CSEC) examinations stood at 62 per cent (*Table 6.2*). These were set to improve following establishment of three new secondary schools. Nevertheless, even with the existing pass rate, only about 62 per cent of eligible students were admitted into tertiary education programmes annually. *Table 6.3* shows the enrolment figures for the two public institutions which offered two-year programmes at the tertiary level. There was potential for growth in the sector, an increase which the Education Sector Development Plan (Saint Lucia, 2009) set at 40 per cent.

However, that increase will come at a price of substantial financial investment in physical infrastructure and/or communication technology, the development of new and relevant curricula to make students more globalization-ready, and staff training and development. The nation may be hard-pressed to attract the level of external financing required in the form of grants or concessionary loans from such bodies as the World Bank, the Caribbean Development Bank (CDB), the Canadian International Development Agency (CIDA), or the European Union (EU). Development agencies continue to favour multilateral rather than bilateral approaches in their dealings and interventions in the Caribbean, and national governments thus find it difficult to attract financing for initiatives that do not form part of a wider regional project.

Table 6.1 Actual and projected student enrolment for public secondary schools, Saint Lucia, 2004/2005 to 2013/2014

Year	Intake Form 1	Enrolment				Total Forms 1 to 5
		Form 2	Form 3	Form 4	Form 5	
2004/2005	2,591	2,689	2,636	2,623	2,276	12,815
2005/2006	2,652	2,578	2,705	2,581	2,449	12,965
2006/2007	3,797	2,904	2,936	2,573	2,368	14,578
2007/2008	3,420	3,842	2,966	2,818	2,481	15,527
2008/2009	3,145	3,386	3,804	2,936	2,790	16,061
2009/2010	2,937	3,114	3,352	3,766	2,907	16,075
2010/2011	2,690	2,908	3,082	3,318	3,728	15,726
2011/2012	2,685	2,663	2,879	3,052	3,285	14,564
2012/2013	2,591	2,658	2,637	2,850	3,021	13,757
2013/2014	2,488	2,565	2,632	2,610	2,821	13,116

Source: Saint Lucia (2008*b*).

Table 6.2 Pass rates at the Caribbean Secondary Education Certificate examinations, general and technical proficiency, Saint Lucia, 2003–2008

2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
65%	66%	66%	59%	61%	62%

Source: Saint Lucia (2008*b*).

Table 6.3 Domestic level enrolments, Saint Lucia, 2003–2008

	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008
SALCC	3,298	3,397	3,878	3,758	3,385
VF Comp.	313	320	301	272	268
Total	3,611	3,717	4,179	4,030	3,653

Source: Saint Lucia (2008*b*).
Note*:* SALCC = Sir Arthur Lewis Community College; VF Comp. = Vieux Fort Comprehensive School, Post Secondary Department.

Balancing nationalism and regionalism

The growth of the tertiary education sector in Saint Lucia poses a second challenge to government and its policy-makers that lies at the core of the globalization process in the form of the dialectic between the global and the local (Arnove and Torres, 2007). This 'tension of opposites'

(Roberts, 2008) is playing itself out in Saint Lucia in the form of a 'nationalism versus regionalism' debate. Should the Community College be developed into an autonomous national institution, or should Saint Lucia contribute to the further regionalization of tertiary education by being incorporated or assimilated into the UWI?

Saint Lucia is certainly deeply committed to regionalism. As a member of the Caribbean Community (CARICOM), it is a state party to the original Treaty of Chaguaramas and all subsequent Protocols. As a founding member of the nine-member Organisation of Eastern Caribbean States (OECS), it hosts the OECS Headquarters and has been an active partner in the formulation of policies that have resulted in the establishment of:

- the Eastern Caribbean Central Bank (ECCB),
- the Eastern Caribbean Supreme Court (ECSC),
- the Eastern Caribbean Telecommunications Authority (ECTEL), and
- the OECS Education Reform Unit (OERU).

And as a contributing member country of the UWI, Saint Lucia sits on the University Council and makes policy decisions.

On the other hand, despite Saint Lucia's strong commitment to functional cooperation with other states in the Caribbean region – a commitment which requires a significant annual financial contribution towards the operational budget of these entities – the state has to give priority consideration to its national interests and imperatives. The challenge, therefore, is to find a balance between striking out on its own and developing its tertiary education sector to respond to both local and global needs, or to lock itself into a more unwieldy and sometimes inflexible regional system which is not always sensitive or responsive to local needs.

It can be argued that this is not just an educational challenge, but a key development dilemma for many small states. While Saint Lucia has indeed benefitted from its own national tertiary institution, SALCC has been considerably strengthened by the support of the Tertiary Level Institutions Unit of the UWI. Similarly, the work of the OERU in harmonizing policy and practice across the OECS sub-region has helped Saint Lucia to advance education to a level which it would not otherwise have been able to achieve. Equally, there are other potentially good initiatives that have been agreed upon at the regional level that have not been implemented because of the difficulties inherent in pursuing regional

collaboration between unequal partners. The Tertiary Education Council and the Regional Centres of Specialization proposed by the OERU are two cases in point. This is a familiar and long-recognized dilemma that has also been expressed in the South Pacific (Taufe'ulungaki, 1991; Udagama, 1993).

Strengthening research capacity

Some of the most critical imperatives in the Caribbean are related to knowledge creation and management, and to the sharing and dissemination of information. Increasingly, global competitiveness will be enhanced, measured, and controlled by the level of knowledge production, application, and dissemination. Since it is at the tertiary level that major contributions to knowledge generation are made, at the international level priority is increasingly being given to improving the quality of that knowledge and to the strengthening of institutional and national research capacity. Lewis (1974) argued that the first university in any poor country should engage in its own research. Saint Lucia, however, like most of the non-campus countries in the Caribbean, does not have a strong formal research culture. Holmes (2001: 241) described formal research in the country as being 'individualized, uncoordinated, fragmented and disconnected'. Strengthening the country's research capacity is therefore increasingly acknowledged as a national priority. It is not realistic to expect any state that is dependent on external knowledge and ideas to compete meaningfully with the countries that have generated and shaped that knowledge. Holmes rightly asked whose knowledge should guide Saint Lucian development, and how local research capacity can be strengthened in ways that will enable Saint Lucia to engage more effectively in applying, mediating, or challenging powerful global educational and development agendas.

In the light of such arguments, several initiatives in Saint Lucia have aimed to strengthen research activity within governmental, educational, and civil society arenas. They include the Caribbean Research Centre, the Folk Research Centre, the National Research and Development Foundation, and the Centre for Applied Research at SALCC. Sustainability has been problematic in the face of human and financial constraints. Other more informal and participatory types of research activity are nevertheless being developed to inform policy decisions in all areas of national life. National consultations, town hall meetings, and even talk shows via the electronic media have proven

quite effective. But what the country lacks is the expertise to translate new information, consultations, and data – the research findings – into the type of knowledge that has currency in the international marketplace and accessibility for a democratic populace. As Holmes (2001: 113) in his analysis of the Saint Lucian situation remarked: 'The need to maintain "academic rigour" according to international standards, while developing appropriate research knowledge and research skills, remains a difficult balancing act for small states to achieve.'

Two decades after the death of Sir Arthur Lewis – 'the physician of ailing economies' – local engagement in the creation and production of the forms of knowledge that could make his native country globally competitive remains one of its greatest educational and economic challenges.

Priorities for future development

In light of the above, the next section examines priorities for future development. These focus on strategies designed to strengthen national tertiary education provision, regional tertiary sector collaboration, and international tertiary education partnerships. Attention is also given to the influence of the liberalization of the telecommunications sector on such developments.

Strengthening national provision

In 2009, the Government of Saint Lucia committed itself to upgrading the Community College to a 'full-fledged competitive and self-sustaining University College' (Saint Lucia, 2009). While this was always a long-term goal, these upgrading plans were precipitated by the:

- increase in demand for tertiary education generated by the impact of globalization and the rise of the knowledge economy;
- increase in the number of graduates expected from universal secondary education;
- need to ensure equity of access to people from low-income households;
- increased cost of education outside of the country, and the decline in scholarship funding from external agencies; and
- growing number of offshore/foreign providers, including three medical schools with parent bodies in the USA as well as face-to-face, distance, and blended delivery programmes from the UK and the USA.

This strengthening of national tertiary education capacity has been seen by some as an indication of the state reneging on its commitment to regionalism, in particular to the regional university. But as Bowles (2008: 5) pointed out:

> Much has changed in these [past] 20 years including globalization of trade, movement of people, expectations of higher professional standards and skills, not to mention the revolution in microchips, the Internet and satellite information transfer. This is today a knowledge society revolving around information technology and alternative ways and means of delivering information and education. The changes over these 20 years have placed considerable demand and stress on traditional institutions of higher education to change or become obsolescent or renew and take advantage of the opportunities and challenges of the twenty-first century. To do less than renewal will place Sir Arthur Lewis Community College in jeopardy of creeping obsolescence, and the Saint Lucian community and students at greater risk and disadvantage.

Regional collaboration

Saint Lucian planning documents strongly recommend that a transformed Sir Arthur Lewis University College continue its commitment to the community college concept with its focus on certificates, associate degrees, and employment qualifications, while simultaneously developing and offering university-level degree programmes. This model, which has proven quite successful in Australia and Canada, is being increasingly considered as a viable option for the Caribbean.

Such strengthening of national tertiary education provision may affect traditional relationships with the UWI in matriculation, articulation, and franchising. However, it does lend itself to other types of regional collaboration, like the Centres of Specialization concept proposed by the OECS Reform Strategy in the 1990s. This remains one of the central pillars of sub-regional tertiary education policy, and one of the strategic objectives outlined in the Saint Lucia Education Sector Development Plan 2009–2014. That this strategy has not been fully implemented across the OECS region (only the Sir Arthur Lewis Community College and the Antigua State College attempted it, with funds from the British Development Division in the Caribbean) is largely due to the inadequacy of funding for tertiary education. National colleges have therefore encountered challenges in building capacity, which in turn has adversely

affected the regional integration process. From this perspective, national tertiary education development can be seen to go hand in hand with plans to strengthen regional tertiary collaboration and integration.

The Open Campus of the UWI, with sites in Saint Lucia and other contributing territories, also continues to manage inter-institutional relations through its Department of External Relations and Inter/ Intra Institutional Collaboration (ERIIC). Other mechanisms, such as the Association of Caribbean Tertiary Institutions (ACTI) of which Saint Lucia was a founding member, and the Association of Caribbean Higher Education Administrators (ACHEA) are all responses to the creation of a regional framework for higher education based on the harmonization of policy and practice. This approach respects and accommodates national sovereignty (Jules, 2008), while ensuring regional compatibility of the training provision for professional mobility within the context of the Caribbean Single Market and Economy. The key policy approach that is recommended is therefore one of differentiation in the regional context.

International partnerships

To generate further support for the strengthening of national tertiary education, Saint Lucia has for many years identified international collaboration as a key strategy to help reduce administrative and instructional costs, enhance the quality of teaching and learning, support research, provide professional development for its faculty, offer access to advanced technologies, and enhance international approval and accreditation (Bowles, 2008). In addition to the franchising arrangements which SALCC already has with the UWI for Bachelor's degrees in education, agriculture, the natural sciences, the social sciences, and the humanities, other cross-border collaboration initiatives are being actively pursued. Registered nurses in Saint Lucia, for example, can read for Bachelor's degrees under a project administered by the UWI in collaboration with Ryerson University of Canada. Enrolments are now possible for PhD programmes at Case Western Reserve University of the United States, and there have been overtures made by Duke University and the University of California (Santa Cruz) for collaboration with the College's nursing programmes.

Distance learning, research networks and the liberalization of telecommunications

Cross-border collaboration in tertiary education in Saint Lucia has been made easier because of more affordable telecommunications costs and more open access to information and communications technologies in-country. The liberalization of the telecommunications sector in Saint Lucia and some of its OECS sister islands has been facilitated by the establishment of the Eastern Caribbean Telecommunications Authority (ECTEL). ECTEL has a mandate to promote open entry, ensuring the widest possible access to telecommunications at an affordable rate. This enables the people of the contracting states to share in the freedom to communicate over an efficient and modern sector (www.ectel.com). ECTEL has thus created an enabling environment for the increase of open and distance education initiatives in Saint Lucia through online and blended delivery modalities. But even in this liberalized regime, telecommunication costs remain beyond the reach of many in Saint Lucia. At the rate of US$300 an hour for use of its video-conferencing facility, the Community College and other external clients can hardly afford to use that technology for regular online delivery of its programmes whether in-country or from external portals. Students enrolled in programmes offered by locally based foreign providers have easier access, but it is generally accepted that their parent institutions have more resources than do the local providers.

The regional approach to the development of the telecommunications infrastructure has, with these qualifications, strengthened the networking capabilities and potential of Caribbean small states. One initiative launched by CARICOM and the OECS with support from international development agencies deserves further attention in light of concern about Saint Lucian research capacity. This is the Caribbean Knowledge and Learning Network (CKLN), which is designed to enhance the global competitiveness of Caribbean countries by using information and communications technologies to connect the region to the global pool of knowledge, thus strengthening research resources and facilitating greater regional integration.

One of the CKLN's projects is the development of a regional strategy for the Caribbean Research and Education Network (C@ribNET). This strategy aims to build a communications platform which will facilitate access to indigenous knowledge, contribute to the development of new knowledge, and reduce the constraints of distance and geography that

are characteristic of individual Caribbean countries (CKLN, 2008). C@ribNET was designed to connect educational, research, and civil society institutions that are engaged in capacity building, knowledge formation, and the development of regional public goods to the Caribbean citizenry, and to similar networks in other parts of the world. Support for the development of national research and education networks was among the outcomes expected. Efforts to strengthen the levels of local research capacity within tertiary education are essential if Saint Lucian values, perspectives, and priorities are to play an active part in shaping the project and in the generation of locally grounded research.

Conclusions

In light of changes in the global environment, this chapter has identified three key challenges that currently face tertiary education planning in Saint Lucia. These concern the expansion of tertiary education, the balance between national and regional initiatives, and the need to strengthen local research capacity. Building on this analysis, a number of related priorities for future action are examined, as summarized below:

1. Strengthening the national tertiary education sector to lay the foundation for more balanced partnerships and collaboration within the region and beyond;
2. Re-investing in the regional integration initiative to help achieve global competitiveness;
2. Improving Saint Lucia's and the region's research capability;
3. Encouraging more creative tertiary education partnerships within and among small states in the Caribbean;
4. Promoting the use of ICTs to increase the availability of cost-effective access to tertiary education, and to help strengthen the development of local research capacity and knowledge generation;
5. Connecting Saint Lucia and the Caribbean region more actively and creatively with the wider international educational community.

Rapid changes in the contemporary global environment are influencing ways in which the nature and potential of tertiary education in small states are conceptualized and understood. As the case of Saint Lucia demonstrates, parallel national and regional tertiary education strategies can be mutually beneficial, and the potential of an active and critical research dimension is increasingly being recognized. International

cross-border initiatives and the application of ICTs also feature strongly in plans designed to support both teaching and research.

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References

Anthony, K.D. 2000. 'Rethinking globalisation: The prospects for small economies'. Address delivered at the Sixth Conference of CARICOM Heads of State, 9–12 October 2000. Castries: Office of the Governor General.

Arnove, R.F.; Torres, C.A. (Eds) 2007. *Comparative education: The dialectic of the global and the local*. 3rd edition. Lanham: Rowman and Littlefield.

Bowles, D. 2008. 'The transformation of Sir Arthur Lewis Community College to Sir Arthur Lewis University and College: Recommendations for policy and implementation'. Unpublished report.

Caribbean Knowledge Learning Network (CKLN). 2008. *Terms of reference: Development of regional strategy for the Caribbean Research and Education Network – C@ribNET*. Saint Georges: Caribbean Knowledge Learning Network.

Crocombe, R.; Meleisea, M. 1989. 'Higher education in the Pacific Islands: Spheres of influence, trends and developments'. In: *International Journal of Educational Development*, *9*(3), 163–173.

Crossley, M.; Bray, M.; Packer, S. 2009. 'Education in the small states of the Commonwealth: Towards and beyond global goals and targets'. In: *The Round Table*, *98*(405), 731–751.

Crossley, M.; Holmes, K. 1999. *Educational development in the small states of the Commonwealth: Retrospect and prospect*. London: The Commonwealth Secretariat.

Crossley, M.; Watson, K. 2003. *Comparative and international research in education: Globalisation, context and difference*. London: Routledge.

Edmunds, J. 1980. 'Final report of the Committee on Educational Priorities'. Unpublished report.

Fraser, H. 1998. *UWI: A photographic journey*. Kingston, Jamaica: Ian Randle Publishers.

Holmes, K. 2001. 'Whose knowledge for educational development? Research capacity in small states with special reference to Saint Lucia'. PhD Thesis, University of Bristol.

Jules, D. 1998. 'Kweyol culture: Differentiation in a globalised context'. Address delivered at the International Symposium on Creole Cultures, 28 October, Roseau, Dominica.

——. 2008. 'Rethinking education for the Caribbean: A radical approach'. In: *Comparative Education*, *44*(2), 203–214.

King, K. 2007. 'Multilateral agencies in the construction of the global agenda on education'. In: *Comparative Education*. *43*(3), 377–391.

Lewis, W.A. 1974. 'The university in less developed countries'. Reprinted 1994 in: P.A.M. Emmanuel (Ed.), *Sir William Arthur Lewis: Collected Papers, 1941–1988*, Volume III. Cave Hill, Barbados: Institute of Social and Economic Research.

Louisy, C.P. 1993. 'Tertiary education in Saint Lucia: Implications for small island states'. PhD Thesis, University of Bristol.

Roberts, V. 2008. 'Education and development: Celebrating excellence, confronting challenges'. Fourteenth Sir Arthur Lewis Memorial Lecture. 25 January, Castries.

Saint Lucia, Government of. 2008*a*. Throne Speech delivered at the Third Session of the Ninth Parliament of Saint Lucia. 21 April. Castries: Government of Saint Lucia.

——. 2008*b*. *Education statistical digest June 2008: Past trends, present position and projections up to 2009/2010*. Castries: Ministry of Education and Culture.

——. 2009. *Education sector development plan 2009–2014*. Castries: Ministry of Education and Culture.

Smith, G.; Naim, M. 2000. *Altered states: Globalisation, sovereignty and governance.* Ottawa: International Development Research Centre.

Taufe'ulungaki, A.M. 1991. 'The major educational problems facing small isolated states in the Pacific'. In: *Prospects: Quarterly Review of Education*, *XXI*(4), 572–583.

Udagama, P. 1993. 'Regional co-operation: a view from the University of the South Pacific'. In: K. Bacchus and C. Brock (Eds), *The challenge of scale: Educational development in the small states of the Commonwealth* (pp. 142–161). 2nd edition. London: The Commonwealth Secretariat.

UNESCO. 1982. *Saint Lucia education sector survey: An analysis of the education and training system and recommendations for its development*. Report No. 184. Paris: UNESCO.

7. Tertiary education in Malta: Reform and innovation in the context of European integration

Jacques Sciberras

Malta has witnessed rapid growth in tertiary education in line with worldwide trends. This chapter pays particular attention to the University of Malta, which for several centuries has defined the country's culture, economy, and social and political fabric.[30] Other institutions include private bodies which offer qualifications from foreign universities. Malta has invested heavily in the post-secondary vocational sector, and in 2009 the Malta College of Arts, Science and Technology (MCAST) launched its first set of vocational top-up degrees in collaboration with well-known foreign technical institutes.

Nevertheless, the tertiary education sector faces constraints as a consequence of growing social demands, exponential growth in the global body of knowledge, and the cost of sophisticated teaching and research. In addition to the increasing participation rates of young students, the University of Malta faces the challenge of more adult learners seeking tertiary education at a mature age or returning to study as part of their continuous vocational training.

Malta has benefitted immensely from its membership of the European Union (EU). This is an example of ways in which small states can collaborate effectively with much larger neighbours within the framework of a regional integration process. Malta has undertaken an entire reform programme for integration and cooperation. Tertiary education is among the sectors benefiting from this process, and has attracted substantial funding for infrastructure and staff development.

This chapter commences with the socio-economic and population challenges which have an impact on tertiary education. It notes that Malta's adherence to the EU has established considerable requirements for reform arising from the system for harmonization of higher education

30. The university traces its origins to the Collegium Melitense which was set up by the Roman Catholic Church in 1592. The institution gained university status in 1769. The present shape of the university was defined by an Education Act in 1988.

launched in 1999 in the Italian city of Bologna and known as the Bologna Process. The chapter examines the responses to these and other challenges.

The impact of regional and socio-economic change

Evolving demands and labour markets

Malta joined the EU in 2004. This move led to the dismantlement of protection measures, changes in taxation and import duties on goods and services from different regions depending on their EU or non-EU origin, and integration into the Euro zone. These actions had significant effects on the economy. Entrepreneurs can now access new markets, but some sectors have lost competitiveness without protection. Malta has experienced a shift from labour-intensive industries such as textiles and manufacturing towards financial services and information and communications technologies (ICTs). Tourism remains a pillar of the economy, but has also been restructured.

At the broader EU level, planners anticipate that what will be needed are fewer routine, and more creative, skills and more familiarity with digital technologies, and that more skills specific to particular trades will be identified. Demand will grow for critical thinking and adaptability. In the EU as a whole, the distribution and transport sector, including hotels and catering, was expected in 2008 to create over 4.5 million additional jobs during the following decade. Employment in non-marketed services, including health and education, was projected to grow at a similar rate. Specific projections for Malta by sector followed wider European patterns, with 14,000 anticipated new jobs by 2015 (CEDEFOP, 2008). Yet while the EU's single market makes Malta more attractive to investors with easy transfers of capital and labour, regional integration also permits rapid capital reallocation if inefficiencies develop. Thus, as a small state Malta may also experience vulnerability.

Persistent skills mismatches may prolong unemployment, discourage foreign direct investment, and/or lead to serious operational problems within specific sectors. Intensive retraining and continuing training requirements for adults, particularly for ones at risk of unemployment, remain a priority. Lifelong-learning strategies and policies to reconcile flexibility and security take on a new dimension. Tertiary institutions have major opportunities to develop their capacity to serve adult learners, particularly in the part-time sector. This provision is fee-based

and therefore does not face the financial constraints of fee-free full-time education. This segment can thus be more responsive to changing requirements and linked more closely to labour market developments.

Malta's National Commission for Higher Education (NCHE) was created in 2006 as an advisory body able to provide an overview of the sector. Policy-makers realized that even small systems may need such bodies to advise on links between institutions and between the higher education sector as a whole and wider economic and social dimensions. Shortly after its establishment, the NCHE embarked on an analysis of links between higher education and the labour market. Its report, *Skills for the future* (NCHE, 2009*a*), highlighted the need for more research, better statistics, and stronger foresight capacity to identify trends and anticipate change. It also recommended education, business, and government development agencies to share data and perspectives; and guidance services in schools to be developed.

Demographic change and mobility

Changing demographics compound the challenges. Malta is witnessing simultaneous shrinking of both its working-age population and its student population. The working-age population is forecasted to fall from 286,000 in 2007 to 284,000 in 2015 and then 251,000 in 2050 (Malta, National Statistics Office, 2007). At the same time, the population is ageing.

These demographics affect education in three ways. First, more adult learners demand training and re-training. Second, an increasing dependency ratio places the onus on younger generations to achieve higher levels of education, skills, and competencies. Third, declining birth rates and shrinking student populations imply that although Malta is targeting increased participation rates, absolute numbers of students may remain constant or decline.

Another dimension which may pose both a challenge and an opportunity is the expanded mobility of students, graduates, and staff. Students have easier access to a broader spectrum of learning opportunities in specializations across Europe. Maltese students have the same conditions as nationals of other EU countries, making foreign studies more affordable. This may contribute to Malta losing some of its best brains to other countries. The other side of this picture is that the EU gives Maltese industry opportunities to recruit from a much larger pool

of specialist workers. In certain instances the brain gain has turned into a huge advantage.

Finally, the EU rules relating to the equal treatment of EU nationals in education have an impact on tuition fees. EU students are entitled to the same fee-free provision of education as are Maltese nationals. This means that Maltese institutions have less interest in attracting EU students as compared to non-EU students.

Levels of formal education

The secondary system and output for post-secondary studies

Schooling in Malta is compulsory up to 15 years of age. After this age, progression depends on the various routes chosen by students and on their performance in different examinations. Some students choose to leave education and seek work opportunities. Reducing early school leaving requires changes in secondary schooling to prepare and motivate students to pursue further studies.

The Matriculation and Secondary Education Certificate (MATSEC) examination system permits students to follow an academic route into post-secondary general colleges and eventually the University of Malta. It includes examinations at two stages: the Secondary Education Certificate (SEC), and the Matriculation Certificate (MC).

Between 2004 and 2008, over 80 per cent of the cohort registered for examinations, but only 40 per cent obtained Grades 1–5 in a minimum of six subjects and thus access to further education. Coupled with pass rates for the Matriculation Certificate, only 22.8 per cent of the 1990 cohort obtained obligatory entry requirements for the University in 2008 (University of Malta, 2008: iii). Practically all those who passed sought to enter higher levels of education. The state area secondary schools were responsible for most of the early school leavers. A case could be made for extra support to low achievers in the early years of secondary education, to enable them to obtain the skills and knowledge required for post-secondary education. More pathway options were desirable.

Further and higher education

Further education includes all formal education above the compulsory school age leading to post-secondary qualifications (ISCED levels 2–4 and 5B). Public and private colleges and institutes provide both general

and vocational post-secondary education. This level gives students access to higher education.

In 2008, seven institutions provided general further education. They were two state higher secondary schools, two church institutions, two independent private sixth forms, and the Junior College of the University of Malta. The student population at the general post-secondary level was 5,711. These institutions were the main route to enter the University.

The Malta College of Arts, Science and Technology (MCAST) and the Institute of Tourism Studies (ITS) are public colleges providing vocational further education, and in 2008 had 5,028 students. An additional 749 students pursued vocational post-secondary courses in private institutions. In 2009, both these vocational institutes announced their intention to launch top-up degrees for students with Higher National Diplomas (ISCED level 5B) in the vocational sector. By 2010, MCAST had already launched seven top-up degree programmes in collaboration with foreign partners. In total, 11,847 students were enrolled in further education in 2009, with 84 per cent in the public sector. Some 223 courses were provided, 65 per cent of which were in the public sector. This was arguably an impressive number for a small system.

Higher education includes all formal education, training, and research leading to Bachelor's, Master's or Doctoral degrees (ISCED levels 5A and 6). Higher education is offered mainly by the University of Malta, which serves 97 per cent of the higher education population. In 2008 the University had 9,508 students. Private institutions provided programmes leading to qualifications awarded by foreign universities, predominantly those in the United Kingdom (UK), and served 3 per cent of all tertiary students. In many cases, their programmes were in niche areas not served by the University of Malta. The links with the UK reflected Malta's colonial legacy. Malta gained independence from the UK in 1964, but many ties remained.

A new strategy for higher education

In 2009, the NCHE launched a major report entitled *Further and higher education strategy 2020* (NCHE, 2009*b*). The report listed 12 priority recommendations under four strategic objectives as follows:

Objective 1: Attract more participants into further and higher education

1. Attract more students to continue studies after compulsory education.
2. Encourage students to undertake studies relevant to Malta's economic and social development.
3. Attract foreign fee-paying students in various fields of study and research.
4. Adapt systems for adults seeking lifelong-learning opportunities.

Objective 2: Ensure fair and open access

1. Secure fair and open access to further and higher education with particular focus on vulnerable groups.

Objective 3: Make Malta a centre of excellence in education and research

1. Assure quality provision across all institutions and programmes.
2. Develop Malta's qualifications framework and qualification-recognition services.
3. Increase the University of Malta's research capacity.
4. Facilitate and promote student and teacher mobility.

Objective 4: Sustain public responsibility for an inclusive, qualitative, and responsive education system

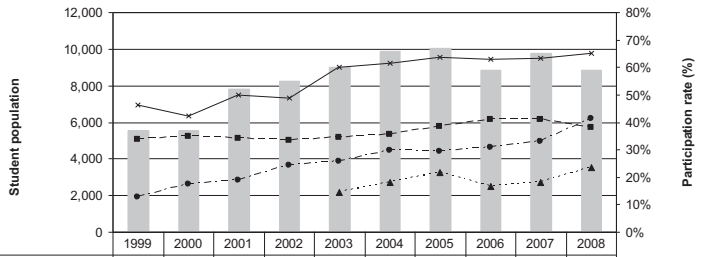
1. Ensure responsive systems through adequate governance and funding policies.
2. Maintain active participation and cooperation within Europe and internationally.
3. Develop and implement a long-term investment plan.

The higher education participation rate of students aged 18 to 22 was estimated at 22 per cent in 2008 (NCHE, 2008*a*). A standard Bachelor's degree lasts three years, with an additional year for an Honours degree. Master's degrees last one or two years depending on the programme, and Doctoral studies last on average three to four years.

Figure 7.1 shows the trends in enrolments and participation rates from 1999 to 2008. The student population at the University increased from 7,332 in 2002 to 9,508 in 2008. The University was still small relative to many institutions in larger countries, but was large in Maltese terms. In 2008, the University produced 2,684 graduates.

Despite the expansion, the participation rate in Malta was lower than the country mean for members of the Organisation for Economic Co-operation and Development (OECD), which stood at 54 per cent in 2005. Malta's target was to increase participation rates of students aged 18 to 22 to reach 35 per cent by 2020. This was linked to the underlying objective of increasing participation of 17-year-olds in further education to 85 per cent by 2015.

Figure 7.1 Enrolments and participation rates in further and higher education, Malta, 1999–2008



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Participation rate (%) - 17 year olds	37%	37%	52%	55%	60%	66%	67%	59%	65%	59%
P.Sec General	5,033	5,191	5,122	4,970	5,169	5,339	5,732	6,117	6,119	5,711
P.Sec Vocational	1,917	2,615	2,801	3,638	3,858	4,473	4,386	4,620	4,930	6,163
Tertiary	6,959	6,362	7,493	7,332	9,006	9,245	9,530	9,450	9,500	9,747
Short Courses					2,176	2,695	3,261	2,497	2,708	3,511

Sources: National Statistical Office; National Commission for Higher Education.

All OECD countries have seen upward trends in the participation rates for higher education (OECD, 2008: 344). In 2005 the OECD average participation rate for 20-year-olds was 34 per cent, the EU-19[31] average was 35 per cent, and Malta stood at 25 per cent. Malta's student population in further and higher education increased by just over 50 per cent between 1998 and 2008, from 14,172 to 21,621.

At the postgraduate level, numbers were much smaller. In 2008, 82 students were following doctoral studies (ISCED 6) at the University of Malta. Other Maltese students followed doctoral studies in foreign universities. The Strategic Educational Pathways Scholarships (STEPS) assist postgraduate research students in areas identified as a national

31. This category means all EU countries prior to the accession of the 10 candidate countries on 1 May 2004, plus the four eastern European member countries of the OECD, namely the Czech Republic, Hungary, Poland, and the Slovak Republic.

priority. The scheme was designed to award over 400 Master's and 70 Doctoral scholarships between 2009 and 2013.

Enhancing mobility and developing quality assurance

Malta has more outgoing than incoming students. Just over 600 foreign students were studying in Malta in 2005 (around 6 per cent of the higher education population), while 850 Maltese students were studying abroad in 2006 (10 per cent of Maltese students), predominantly in the UK (European Commission, 2008: 83). However, incoming mobility for the ERASMUS programme was significantly higher than outgoing, with 325 and 125 students respectively in 2006/2007.[32] Such flows assisted the University of Malta to achieve economies of scale. At present, the authorities aim to attract 5,000 foreign students by 2020, and embark on proactive participation in international fairs, collaboration with countries seeking strategic partnerships in specific fields, and other initiatives related to language and hospitality.

The University of Malta and other institutions rely on internal quality assurance processes which include visits by external examiners and committees to validate new programmes. Recognition of the need for stronger mechanisms for quality assurance was among the factors leading to the establishment of the NCHE as advisory body in 2006. The background to this initiative included developments in Europe, particularly those within the Bologna Process, and the principles of the *Standards and guidelines for quality assurance in the European Higher Education Area* (European Association for Quality Assurance in Higher Education [ENQA], 2005).[33] The NCHE proposed a *Quality assurance framework for further and higher education* in 2008 (NCHE, 2008*b*). The NCHE also facilitated training by ENQA, and represented Malta as a founding member of the European Quality Assurance Register (EQAR). The quality assurance and licensing framework required legal reforms, which in 2009 became part of a Further and Higher Education Act distinct from the Education Act. The framework had four elements: adequate internal quality assurance systems; external quality audits and accreditation/recognition decisions based on the results of external

32. ERASMUS is the European Region Action Scheme for the Mobility of University Students.
33. The European Association for Quality Assurance in Higher Education evolved from the European Network for Quality Assurance in Higher Education. The acronym of the Network, ENQA, was retained by the Association despite the change of name.

audits; renewal of licensing; and continued recognition of qualifications, which are then linked to accreditation.

One challenge for quality assurance is to devise a committee that can serve the University of Malta as well as micro-institutions that are linked to foreign universities and that offer franchise education. It was envisaged that foreign experts or partnerships with agencies with more experience and capacity would be sought, and that private providers offering tuition leading to foreign qualifications would also be subject to quality assurance in the spirit of the UNESCO-OECD (2005) *Guidelines for quality provision in cross-border higher education.* Recognizing constraints on expertise within a small system, and looking to harness the opportunities provided by the EU, Malta is particularly seeking collaboration with agencies elsewhere in Europe. Nevertheless, the Maltese Government retains a core role, particularly over final decisions on accreditation and licensing.

Governance and management

In its *Strategy 2020*, the NCHE (2009*b*: 56) recommended that governance of the University of Malta 'should shift from the current management of the University to the management of change – change outside the walls of the University and strategic changes necessary within'. However, such a shift may be difficult to achieve, and changes of this sort may have distinctive features in small states.

Small states like Malta that have only one university cannot afford low performance in that institution. Since the University of Malta plays such an important role in Malta's socio-economic development, its performance has high political, social, and economic consequences. This increases the pressure to secure appropriate governance in this single institution.

Within the single university, moreover, a balance of stakeholders must be achieved. Countries with multiple universities can afford less balanced approaches in individual institutions provided the system as a whole achieves balance. Again, the pressures on single-university systems are more intense.

Once the governing bodies have been appointed, the next question concerns role models and peers. In countries with multiple universities, peers within the countries can learn from each other. In single-university

systems, managers must look outside to find role models and peers – and must use filters to screen out practices which might be appropriate to the foreign settings but not necessarily to the domestic ones.

Cross-national interactions may also take other forms. Small societies tend to be highly personalized, with multiple relationships beyond as well as within the workplace. Single-university countries can benefit from the appointment of external stakeholders on sub-committees to provide both expertise and impartiality.

The Bologna Process and the Lisbon Agenda

Shortly after the 1999 meeting on higher education in Bologna, Italy, decision-makers from the European Union met in Lisbon, Portugal. They set out the Lisbon Agenda, which had a 10-year horizon from 2000 and sought to make the European Union 'the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion' (European Parliament, 2000: 1). The Bologna Process and the Lisbon Agenda have overhauled the reform agenda for higher education systems of countries across Europe, including Malta. All participating countries have worked towards the building of a European Higher Education Area (EHEA).

The Bologna Declaration was signed by ministers responsible for higher education from 29 countries, including Malta. Participating states committed themselves to create a framework to enable close collaboration between higher education institutions, increase the attractiveness of European higher education, facilitate student and academic mobility, and increase the competitiveness of graduates in the labour market. By 2010, the Process united 46 states which were parties to the European Cultural Convention. Actions by the participating countries included:

- adoption of a system of easily readable and comparable degrees and the awarding and recognition of joint degrees;
- adoption of a system based on the three cycles (Bachelor's, Master's and Doctorate) and on qualifications frameworks;
- establishment of a system of credits;
- promotion of mobility of students and academics;
- promotion of European cooperation in quality assurance, and setting standards and guidelines for quality assurance systems;
- promotion of the European dimension in higher education;
- increased focus on lifelong learning;

- inclusion of higher education institutions and students; and
- promotion of the attractiveness of the European Higher Education Area.

These initiatives shaped developments in Malta alongside other countries. Malta's system, based on that of the UK, did not require any major overhauls in the three cycles; and since the University had used a workload-based credit system since the 1970s, the basis for implementing the European Credit Transfer and Accumulation System (ECTS) was already in existence. However, the demands for mobility and quality assurance did have significant implications. The University introduced so-called mobility windows to encourage students to spend some time abroad, and launched a number of joint degrees. Mobility is the basis for many of the reforms in European higher education, because its success is dependent on countries' successful implementation of other 'action lines' such as degree recognition, a credit transfer and accumulation system, the three-cycle system, and qualifications frameworks. The attractiveness of specific institutions is partly shaped by formal and informal rankings. The University of Malta has the benefit of long traditions. However, competition may be based on large-state criteria more than small-state ones. The missions of universities in small states may be to demand more generalist approaches which could make international competition more difficult.

To facilitate the recognition of degrees, Malta ratified the *Convention on the recognition of qualifications concerning higher education in the European region* (also known as The Lisbon Recognition Convention) in 2006. This is the main international legal framework underpinning the recognition of qualifications and other objectives of the Bologna Process.

Conclusions

International and regional agendas (in particular the EU and Bologna Process) have brought unprecedented opportunities for Malta to participate in broader networks and pan-European initiatives. However, regional integration may have its costs. Increased mobility can contribute to rapid brain drain, and regional projects may be designed for initiatives which are too large for Malta's active participation.

One clear need in Malta is for a strategy to attract more students to post-secondary and tertiary-level education. This will meet the country's human resource needs, and assist institutions to gain economies of scale.

Students in some specializations should continue to go abroad for their studies, but students in other specializations can be attracted to Malta. Such interflow will promote Malta's international outlook, though it will have to be balanced by financial considerations given the restrictions on charging fees to EU nationals.

Other needs which demand priority include research on skills requirements and collaboration between the University and the business community to improve the responsiveness of education to future labour market requirements. Malta will also need improved mechanisms to monitor the progress of the sector and to inform policy-makers on the measures required to reach targets. Malta is actively participating and gradually converging in its performance, but it faces a long road ahead in delivering a policy portfolio which meets the challenges and expectations of society in a timely manner.

References

Bologna Declaration. 1999. Joint declaration of the European Ministers of Education. Accessed 1 July 2010 from: www.magna-charta.org/pdf/Bologna_Declaration.pdf

European Centre for the Development of Vocational Training (CEDEFOP). 2008. *Future skill needs in Europe: Medium-term forecast synthesis report.* Luxembourg: Office for Official Publications of the European Communities. Accessed 1 July 2010 from: www.skillsweb.eu/Portals/0/Future%20sjkills%20needs.pdf

European Association for Quality Assurance in Higher Education (ENQA). 2005. *Standards and guidelines for quality assurance in the European higher education area.* Helsinki: ENQA. Accessed 1 July 2010 from: www.eqar.eu/uploads/media/050221_ENQA_report_01.pdf

European Commission. 2008. *Progress towards the Lisbon objectives in education and training: Indicators and benchmarks*. Brussels: European Commission. Accessed 1 July 2010 from: http://ec.europa.eu/education/policies/2010/doc/progress06/report_en.pdf

European Parliament. 2000. 'Lisbon European Council 23 and 24 March 2000: Presidency conclusions'. Accessed 1 July 2010 from: www.europarl.europa.eu/summits/lis1_en.htm

Malta, National Statistics Office. 2007. *Demographic review 1977–2006*. Malta: National Statistics Office.

National Commission for Higher Education (NCHE). 2008*a*. *NCHE further and higher statistics 2008.* Malta: NCHE.

——. 2008*b*. *A quality assurance framework for further and higher education in Malta (Consultation Report)*. Malta: NCHE.

——. 2009*a*. *Skills for the future*. Malta: NCHE.

——. 2009*b*. *Further and higher education strategy 2020*. Malta: NCHE.

Organisation for Economic Co-operation and Development (OECD). 2008. *Education at a glance 2008*. Paris: OECD.

UNESCO-OECD. 2005. *Guidelines for quality provision in cross-border higher education.* Paris: UNESCO and OECD.

University of Malta. 2008. *Matriculation certificate statistical report 2008*. Malta: MATSEC Examination Board.

8. Tertiary education in Oman: Catching up rapidly

Saif Al Shmeli

With a population of 2.7 million, Oman is one of the larger small states on the Arabian Peninsula. The gross domestic product (GDP) per capita of US$21,000 (Ministry of National Economy, 2009) positions Oman as a high-income country. This is particularly due to its oil and gas resources.

Oman's tradition of development planning dates from the 1980s. In 1995, the Government adopted *Vision 2020*, which outlined its perspective on socio-economic development (Ministry of Development, 1995). One aim is to diversify the economy away from dependence on oil and gas. *Vision 2020* also contains a major education-related objective, namely human resource development and the upgrading of the skills of the Omani population. During the early stages of Oman's economic development, the country needed to rely on expatriate human resources. *Vision 2020* gives priority to tertiary education in order to develop indigenous advanced human resources and permit expatriate workers in all fields to be replaced by Omanis.

Over two and a half decades, tertiary education has grown at a phenomenal rate, starting from almost nothing. To a large extent this growth has been achieved through diversification of the public tertiary education provision and a private sector which was requested to affiliate with well-recognized overseas providers. This chapter examines the dramatic growth, the reform of the tertiary education system, and the challenges for Oman as it strives to increase the gross enrolment rate of the population aged 18 to 24 in tertiary education from 25 per cent in 2007 to 50 per cent by 2020.

The development of tertiary education

Public provision

Before the 1970s, hardly any formal education was available in Oman. As a consequence, government efforts during the 1970s and the first half of the 1980s focused on lower levels of education (Ministry of Education, 2006). At this time, the number of Omanis completing secondary education remained small. In 1976, there were only 58 general secondary graduates

(Wilkinson and Al Hajry, 2007: 145). During this period, as in many other small states, it was felt that the most cost-effective way to gain access to more advanced levels of education was through scholarships for study abroad.

From the 1980s onwards, the number of secondary school graduates increased rapidly as a consequence of both population growth and the generalization of access to earlier levels of education. By 1985, the number of secondary school graduates had already reached 2,591.

The first local higher education institution, Sultan Qaboos University, was opened by the government in Muscat, the capital, in 1986 with 557 students. The University started with Colleges of Education and Islamic Studies, Medicine, Engineering Sciences, and Agriculture. The College of Arts was added in 1987, and the College of Economics and Commerce in 1993. Subsequently, postgraduate programmes were launched in some faculties. In 2009, enrolments reached approximately 17,000, distributed over eight specialized colleges. Sultan Qaboos University remained the largest tertiary education institution (TEI) in the country.

When formal schooling was established in Oman, the government had to rely on teachers from other Arabic-speaking countries such as Egypt, Sudan and Jordan. In order to train Omani primary school teachers, teacher training centres were opened in 1976, admitting graduates of intermediate schools. In 1984 two additional teachers' colleges were opened for secondary school graduates, offering a two-year diploma in teacher training. Later, these teacher training colleges became Colleges of Education offering Bachelor of Educational Studies programmes. Subsequently, a number of Colleges of Applied Sciences (CASs) were opened with bachelor degrees in a variety of programmes. By 2008/2009, six CASs had enrolled approximately 7,000 students.

In order to further reduce dependence on expatriates with technical and vocational skills, during the 1990s the government created six industrial technical colleges. In 2007, these colleges enrolled some 6,000 students. One was a degree-granting Higher College of Technology, and five were Colleges of Technology offering diplomas. To help Omanize the labour force in the health sector, the government opened 16 Institutes of Health Science which by 2007 enrolled 707 students (Ministry of Higher Education, 2008). *Table 8.1* lists the government and private institutions existing in 2008/2009.

Table 8.1 Government and private tertiary institutions in Oman, 2008/2009

Under the jurisdiction of	Higher education institution
Independent (1)	Sultan Qaboos University (government)
Ministry of Higher Education (30)	6 Colleges of Applied Sciences (government)
	5 Private Universities
	19 Private Colleges, two of which are designated as University Colleges
Ministry of Manpower (7)	1 Higher College of Technology (government)
	5 Colleges of Technology (government)
	Oman Tourism College (private)
Ministry of Health (16)	11 Nursing Institutes (government)
	5 Health Science Institutes (government)
Ministry of Defence (5)	4 Academies/Training Centres and the Command and Staff College (government, with restricted admission)
Ministry of Aqaf and Religious Affairs (1)	The Institute of Shari'a Sciences (government)
Royal Oman Police (1)	The Royal Oman Police Academy (government, with restricted admission)
Central Bank of Oman (1)	The College of Banking and Financial Studies (quasi-government)

Private provision

The pressure on tertiary education arising from completion of secondary education continued to grow rapidly in the 1990s. As in many other small countries of the Gulf region, private tertiary education appeared to be a promising avenue to expand access at a modest cost. Since the mid-1990s, the Omani Government has actively encouraged the participation of the private sector. The Ministry of Higher Education set regulations for the establishment and monitoring of the performance of private institutions. It decided that private institutions must be affiliated to recognized and accredited foreign universities. This policy was based on the assumption that it would guarantee quality and make available foreign capacity in curriculum, teaching methods and staff development. Many programmes were launched with universities in Australia, the United Kingdom, and the United States, and some with institutions in India and Jordan. Wilkinson

and Al Hajry (2007) identified 25 programmes offered by foreign universities in Oman, mainly via private local TEIs.

The first private TEIs were colleges, but in 2000 Sohar University began operations as the first private university. Subsequently, additional private universities were established outside the capital. This gave access to students in three major regions – the Governorate in the south (Dhofar University), the north-western coastal plain (Sohar University) and the northern interior (Nizwa University). Planners envisaged that the Shariqiyah region and the far western region near the United Arab Emirates border would also be served by universities. Muscat was also expected to have another private university to augment the provision by the German University of Technology and the Arab Open University. This would create a total of eight universities – one public and seven private.

In March 2009, enrolment in private TEIs was 33,521, representing 42 per cent of total enrolments. The vast majority of the students were Omani, but 1 per cent came from other countries of the Gulf Cooperation Council and 3 per cent were of other nationalities.

The Oman Government is directly involved in the ownership of two private TEIs. The International Maritime College of Oman is 70 per cent owned by the Oman Government and 30 per cent by the Shipping and Transport College of the Netherlands. The Oman Tourism College commenced with 100 per cent ownership by the Government of Oman through the Ministry of Manpower, with a plan to privatize as government ownership is gradually phased out.

Private TEIs are directly supported by government through tax exemptions and subsidies for students from low-income families. Omani majority-owned private universities have received incentives of land, matching grants at the time of establishment, and a one-time RO17 million grant (approximately US$44,155,000) for quality improvements.

One of the most exciting developments has been the diversification of programme offerings. This has partly been achieved through specialized institutions such as the International Maritime College of Oman, the German University of Technology, the Oman College of Tourism, and the Oman Dental College. It has also been achieved through additions to the spectrum of programmes offered by established colleges, including the Colleges of Applied Sciences. Job-oriented programmes include

tourism, medicine, pharmacy, dentistry, port management and marine science, design, technology, management, and information technology.

Overseas studies

As in many other small countries, overseas study remains one of the privileged avenues to access tertiary education. During the early stages of tertiary education development the government provided many scholarships, but these were reduced in number as local opportunities grew. Nevertheless, the number of students opting for overseas studies, most of them with private resources, exceeded 13,000 in 2009. This reflected the demographics of a young population and an increasing awareness of the value of tertiary education to personal advancement.

The traditional destinations for foreign studies are the United Arab Emirates, other Gulf countries, India, and Malaysia. While the UK and USA have been popular destinations for students seeking a western education, increasing numbers of students go to Australia, New Zealand, Canada and continental Europe.

Overall system coordination and quality assurance

The Council of Higher Education

The development of tertiary education in Oman has been largely carried out under the human resources imperative. As a consequence, tertiary education institutions were placed under the authority of line ministries (see *Table 8.1*). The variety of bodies that supervise tertiary education in Oman has led to the scattering of efforts and inefficiency in the utilization of resources.

The Council of Higher Education (CHE) was created in 1998 to address this problem. It is responsible for policy-making and overall planning of tertiary education. In particular, the Council considers issues related to standards and quality. Its mandate includes coordinating admission and aspects of the operation of the tertiary education institutions. To allow for inter-ministerial coordination, the CHE is chaired by the Minister of the Diwan of Royal Court. The Minister of Higher Education is Deputy Chair, and the Ministers of Social Development, National Economy, Education and Manpower are members. Seven other members are selected from Oman's intelligentsia and from the private sector.

The CHE has undertaken many important initiatives in fulfilment of its mandate, including the commissioning in 2005 of a Strategic Plan for Education to 2020. The CHE has also prepared legislation to encourage private sector investment and initiated projects for a Centralized Admissions Office and a Career Guidance Centre. Although Oman has a high per capita income, as a small state it is short of human resources. As such, it can ill afford inefficiencies from the uncoordinated involvement of too many actors.

Quality assurance and accreditation

In 2001, the Oman Accreditation Board (OAB) was established as an independent body reporting to the CHE. Together, the Board and its secretariat are called the Oman Accreditation Council (OAC). The Board has 10 members appointed from among senior academic staff and high-level professionals in the private and government sectors. The Board assists in the development of the tertiary education sector through institutional accreditation (which includes quality audit) as well as a programme accreditation process. In collaboration with the Ministry of Higher Education, the Board also has responsibilities for establishing academic standards, and providing training and networking opportunities.

The OAC and the Ministry of Higher Education have worked with international experts and representatives from Oman's higher education institutions to establish essential components of a national quality framework (Oman Accreditation Council, 2008*a*, 2008*b*). These components include a classification system for different types of tertiary education institutions, a set of institutional standards, a national qualifications framework, and processes for accrediting institutions and programmes.

This work of the OAC also responds to the growing need for integrating a highly diversified tertiary education provision offered by both public and private providers, including many foreign ones via franchising arrangements and offering foreign credentials. With this objective in mind, the OAC has devised a mechanism under which it establishes a priori whether a foreign credential can be recognized by the Omani authorities. One of the conditions is that the programme is recognized and/or accredited by the authorities of the sending country. This work was also the first stage in the preparation of a comprehensive

plan for a Higher Education Quality Management System, developed in consultation with the higher education sector.

Involvement and collaboration were cornerstones in the formation of the Oman Quality Network (OQN), a national network of tertiary education institutions, the Ministry of Higher Education, and OAC representatives. The OQN is concerned with developing a strong and vibrant tertiary education sector by improving the quality of tertiary education throughout the system. It aims to build a quality-conscious, knowledge-rich tertiary education sector through the sharing of ideas, strategies, research, and practices which nourish the improvement of quality.

The OAC has avoided the approach of imposing external standards. Instead, the TEIs are encouraged to carry out their own internal assessments, followed by independent peer reviews. Institutional accreditation starts with formative quality audits, to be followed several years later by more summative assessments against external standards. This model has received international recognition for its approach, winning awards in the United States and Australia.

The Oman Accreditation Council has a grand vision and far-reaching goals. As in other small countries, there is a continuous tension between the development of quality standards which are locally relevant and also internationally acceptable so that Omanis can be globally mobile. The task is not merely to get Omani graduates into work locally but also to give them the skills to make them global players.

International partnerships

Like other small states, Oman has been eager to work out collaborative strategies for sustainable and context-sensitive development with overseas partners. For example, the Colleges of Applied Sciences (CASs) gain academic expertise from a New Zealand consortium of universities and the Aachen University of Applied Sciences in Germany. The New Zealand consortium was involved in the feasibility study for the transformation of the colleges of education into CASs, and supplied the curriculum for the four original degree programmes. The Aachen University of Applied Sciences is working with counterparts in engineering.

Unlike many other small countries, Oman is minimally affected by the brain drain of its advanced human resources. The salary levels are

attractive internationally, but lower than those of the neighbouring Gulf countries. The Sultanate has thus been able to retain local expertise as well as invite international expertise, including for the management of its tertiary education sector.

In 2005, Knowledge Oasis Muscat (KOM), a technology park, was established to support technology-oriented businesses. KOM brings together diverse enterprises from industry, including e-commerce, e-security, and software development for international airline call centres. The Knowledge Oasis is now home to over 60 companies, including HP, Oracle, Microsoft, NCR, Motorola, and Huawei. Also on the property are two IT colleges: Waljat College and the Middle East College of Information Technology.

Initiatives in research and development

The education plan for 2020 (Ministry of Education, 2005) includes a comprehensive strategy for research and development (R&D). It emphasizes international standards, internationally linked research networks within the country, productive research partnerships with industry, and applied research. It also stresses capacity building, including the development of research skills in the early stages of education and the inculcation of a meaningful culture of research. This strategy echoes *Vision 2020*, which highlighted the importance of R&D for building a successful knowledge-based economy. Along with teaching and learning, research plays a major role in the contribution to society of tertiary education institutions. Oman has made considerable progress over the past three decades in laying and strengthening the foundations for its continued development as a modern nation in the global arena.

Much of the scientific research in the Sultanate has been undertaken by Sultan Qaboos University and by the ministries concerned with petroleum, agriculture, fisheries, the environment, and health. With the exception of Oman's main oil company, PD-Oman (Petroleum Development Oman), private companies have not significantly supported R&D activities in the country.

One important development in the strategic promotion of science and technology was the creation of a Research Council in 2005. Focused on integrated planning and capacity building, the Research Council began with an administrative framework for its operations. Over the course of two years of consultation and study, a comprehensive strategic plan

for R&D was developed. As is appropriate for a small state, these key initiatives focused on creating a critical mass in selected areas. One focus is on enhanced oil recovery, an area in which Oman has built considerable expertise and has a track record of innovation. This focus links to other significant domains, including water treatment and desalination, ICT for smart oil fields, and alternative forms of energy, including solar power.

A key initiative of the Research Council is a programme of research chairs. Their main objective is to build capacity and develop a competitive edge in selected niche areas, engaging the best talent from around the world. Endowments include resources for state-of-the-art equipment, as well as for PhD and post-doctoral students. The concept for the Research Council chairs goes beyond the standard idea of an academic chair to that of a centre of excellence. The programme commenced with a Chair for Nanotechnology in Water Desalination at Sultan Qaboos University.

The Research Council's strategic plan calls for strong support of the tertiary institutions in their research endeavours, including international networks. Sultan Qaboos University has many cooperative agreements with universities in the region and beyond, including with top-ranked universities such as Aachen, Cambridge, McGill, and Peking. In parallel, the Ministry of Higher Education has signed a number of academic cooperation agreements with countries including Azerbaijan, Brunei Darussalam, India, Iran, Japan, Russia, South Africa, and Uzbekistan.

The Sultanate also promotes research around the globe through the Sultan of Oman Chairs at prestigious universities. While the majority of the Sultan of Oman Chairs are devoted to research in the field of Arab and Islamic studies, some are specifically geared to the physical sciences and technology, including a Chair in Water Management at Utrecht University, two Information Technology Chairs at the Universities of Engineering and Technology in Pakistan, and a Chair for Arid Land Cultivation in Bahrain. Oman may be a small state, but its oil and gas resources give it a big voice.

Conclusions

Since the mid-1980s, despite constraints related to size and difficulties in achieving economies of scale, Oman has developed a substantial system of tertiary education with a workable balance between government and private provision. The majority of qualified secondary school graduates, regardless of their socio-economic circumstances, can find places in

universities and colleges offering a broad range of programmes through a centralized and transparent system of admission and scholarship allocation (Al Bandary, 2009).

As a small state, Oman has taken advantage of opportunities available in the global era by importing international expertise for both the management and delivery of its tertiary education. It has done this without compromising Omani identity, integrity, and independence or the traditional values in which the culture is rooted. With the exception of the Arab Open University, all private tertiary institutions in the Sultanate are dominantly Omani-owned and Omani-governed, even though they offer a considerable number of foreign programmes.

While private tertiary education has been strongly facilitated, government policy through licensing by the Ministry of Higher Education ensures that all proposals for new institutions are rigorously screened to meet required standards. This mechanism is also designed to ensure that new provision is in required fields as set out in the Five-Year Plans. The policies of the Oman Accreditation Council are designed to assure the integrity of national standards, the quality of provision at international standards, and the integration of foreign programmes offered locally into the national offer through a recognition mechanism.

References

Al Bandary, M. 2009. *National report on higher education in the Sultanate of Oman*. Muscat: Ministry of Higher Education.

Ministry of Development. 1995. *2020 Vision for Oman's economy: Towards a better economic future*. Muscat: Ministry of Development.

Ministry of Education. 2005. *Education strategy in the Sultanate of Oman 2006–2020*. Muscat: Ministry of Education.

——. 2006. *From access to success: Education for All (EFA) in the Sultanate of Oman 1970–2005*. Muscat: Ministry of Education.

Ministry of Higher Education. 2008. *The annual statistical book for the higher education academic year 2007/2008*. Muscat: Ministry of Higher Education.

Ministry of National Economy. 2009. *Monthly statistical bulletin.* Muscat: Ministry of National Economy.

Oman Accreditation Council. 2008*a*. *Quality audit manual, institutional accreditation: Stage 1*. Muscat: Oman Accreditation Council.

——. 2008*b*. *Requirements for Oman's system of quality assurance in higher education – Oman's system for quality assurance: Part one: Standards*. Muscat: Oman Accreditation Council.

Wilkinson, R.; Al Hajry, A. 2007. 'The global higher education market: The case of Oman'. In: M. Martin (Ed.), *Cross-border higher education: Regulation, quality assurance and impact* (pp. 129–180). Paris: UNESCO International Institute for Educational Planning (IIEP).

9. Tertiary education in Armenia: Between Soviet heritage, transition, and the Bologna Process

Arayik Navoyan

Armenia gained its independence in 1991 following the collapse of the USSR. A small country situated between Turkey, Azerbaijan, Georgia, and Iran in the South Caucasus region, it has a territory of 29,743 square kilometres and a population of just below 3 million. Armenia definitely feels small in the context of its neighbours, though in absolute terms it can be considered as one of the larger small states.

As a consequence of the political and social period of transition which followed independence, Armenia's tertiary education sector has undergone considerable reform. The objective is to move away from the strong Soviet heritage and to establish a modernized higher education sector. Part of this shift requires linkage with major reforms initiated through what has become known as the Bologna Process. This is a major process of European integration of higher education named after the Italian city of Bologna in which the decisions were made (Bologna Declaration, 1999). This chapter discusses tertiary education reform in Armenia within the context of its economic transition and various processes of international cooperation.

The chapter begins by presenting Armenia as a small state at the crossroads of East and West, highlighting the different geopolitical interests in the region. These interests form the background to understanding the political affiliations that Armenia must maintain. These affiliations have a strong influence on public policy choices, including in the area of tertiary education. Tertiary education reforms have emphasized growing social demand, decreased state funding, and implementation of the Bologna Process. The chapter ends by presenting the main challenges for further development, one of which is quality assurance within Armenian tertiary education.

The changing environment

The crossroads of East and West

Armenia's geographic and political location has generated serious challenges for national policy, security, and economic development. Armenia is the only small state in the Caucasus region, and is strongly influenced by political factors with regard to its neighbours.

Indeed, between Europe and Asia, Armenia has traditionally been a strategic crossroads for both trade and military routes. Armenia's relations with Turkey remain difficult because of the 1915 genocide;[34] and relations with Azerbaijan are marked by the Nagorno-Karabakh conflict.[35] In the context of the refusal of the Turkish authorities to recognize the Armenian genocide, the relations between Armenia and Turkey are also marked by Turkey's support for the Republic of Azerbaijan in the Nagorno-Karabakh conflict. As a result, Armenia has no official diplomatic relations with either Turkey or Azerbaijan, and these two countries have imposed a blockade on all Armenian trade and land transport.

Because of these closed borders, Armenia depends on Georgia for its land connection with Russia, which is Armenia's main energy supplier and economic partner. However, relations with Georgia are not easy either, chiefly because of issues concerning Armenian minorities in the Javakheti region in southwestern Georgia.

34. During the First World War, Ottoman Turkey ordered a systematic deportation of the Armenian population to the deserts of Syria and Mesopotamia. According to some estimates, over 1.5 million Armenians either were murdered or died of starvation. This ended almost 3,000 years of Armenian presence in western Armenia (eastern Anatolia).
35. The roots of the Nagorno-Karabakh conflict lie in a Bolshevik decision during the 1920s establishment of Soviet rule in the South Caucasus. Nagorno-Karabakh, a part of Armenia and with a 93 per cent Armenian population in 1926 (77 per cent in 1989), was attached to Soviet Azerbaijan as an autonomous region with borders excluding territorial links with Armenia. Using the opportunity given by 'Perestroika' in 1988 and accusing the Azerbaijani Soviet Socialist Republic (SSR) Government of forced 'azerification' of the region, the deputies of Nagorno-Karabakh asked the Supreme Council of the USSR to transfer to the Armenian SSR the tutelage exercised over Nagorno-Karabakh by Azerbaijan SSR. This request provoked deportations of the Armenians of Azerbaijan, and repression of those of Nagorno-Karabakh. The conflict between Azerbaijan and Nagorno-Karabakh was transformed into a war in 1989, causing about 30,000 deaths and over a million refugees on both sides. A ceasefire came into force in 1994, following which the region remained *de jure* part of Azerbaijan but was de facto governed by the internationally unrecognized Nagorno-Karabakh Republic.

In contrast, Armenia has good political and economic relations with the Islamic Republic of Iran. The supply of Iranian gas and the development of road links with Tehran, including a planned railway, are crucial for Armenia. However, these relations are not always viewed favourably by the USA.

Russia, which is a central player in the South Caucasus, has growing geopolitical, financial, and economic interests in Armenia, especially in the context of Georgia's pro-Western orientation and cooperation with Iran on defence, energy, and economic issues. Relations with Russia are central to Armenian security, since Armenia is part of the Commonwealth of Independent States (CIS) and a member of the Collective Security Treaty Organization (CSTO). An important Russian military contingent is located in Armenia and guards the Armenian–Turkish and Armenian–Iranian borders. Under the auspices of the Organization for Security and Co-operation in Europe (OSCE), Russia is responsible for mediation of the conflict of Nagorno-Karabakh, together with the USA and France.

Social and economic transition

Following independence, the country experienced social and economic transformation typical of an economy in transition from Soviet central planning to a market-led democratic society. This transition also disrupted supply chains and caused the loss of traditional markets. Over time, due to productivity gains in the private sector within a context of macroeconomic stability, Armenia recovered from the economic crisis. During the first five years of the 2000s, the economy grew at double-digit rates (World Bank, 2006). However, part of this growth resulted from foreign aid. Armenia has benefitted from generous international assistance, and has also been supported by considerable remittances from the Armenian diaspora. According to Freinkman (2000: 337), the inflow of remittances and private transfers to Armenia represented between 8 and 9 per cent of gross domestic product (GDP) annually during the 1990s, mostly coming from relatives who either had emigrated recently or who were temporarily working abroad.

Nevertheless, the transition to a free market economy, accompanied by the closure of borders resulting from the military conflict with Azerbaijan, led to increased poverty and unemployment. In 2005 the proportion of poor in the population was 25.2 per cent, while that of the very poor was 4.6 per cent (Republic of Armenia, 2006*a*).

Post-independence developments and the economic transition have also created serious challenges for social integration and national identity. The social transformations have resulted in a duality of norms and values, especially between the 'Soviet-period mentality' (Temple and Petrov, 2004: 91) and newly emerging democratic approaches. As observed by a UNDP report (2007: 25), 'Armenia's last 15 years of transition can be characterized as an anomie chain which was primarily manifested in the education system.' The majority of the population found themselves within previously adopted norms and corresponding types of behaviour which were no longer compatible with new social realities.

International cooperation

Armenia's socio-economic transition and internal reforms took place within the framework of its enhanced cooperation with the international community. The World Bank is among agencies that are actively involved in the education sector. In 2009 the World Bank approved a US$25 million credit for the Armenia Secondary Education Quality and Relevance Project. This project was designed to ensure universally accessible quality education from pre-school to higher education. Within tertiary education, the project was designed to strengthen the capacity of the National Centre for Quality Assurance of Professional Education and to create an integrated Tertiary Education Management Information System (World Bank, 2009).

Armenia also received funding from multilateral and bilateral organizations for other reforms in the education sector. A UNDP project aimed to modernize the vocational education and training system with a budget of US$1.1 million exclusively financed by the Government of Norway. In 2007, significant external aid for the education sector was launched by the European Union as support to the vocational education and training system with financing of 15 million Euros within the framework of the European Neighbourhood Policy.

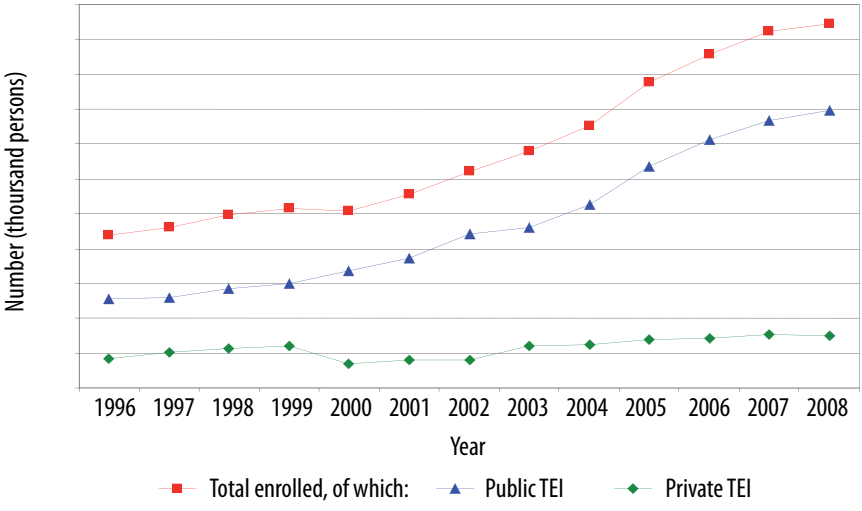
External financing of the education sector has significantly directed the content of reforms in this small state. Armenia is highly dependent on external resources and technical expertise. The overall changes have generated serious challenges in almost all areas. Tertiary education is no exception, and its development has been influenced by global changes affecting the country.

Patterns of tertiary education development

Expansion

During the Soviet era, tertiary education was selective, with low enrolment rates. Since the 1990s, there has been a regular increase in admissions. *Figure 9.1* shows that enrolment doubled between 1999 and 2008, partly as a result of the massive acceptance of fee-paying students into state tertiary education institutions.

Figure 9.1 Enrolments in Armenian tertiary institutions, 1996–2008



Source: National Statistical Service of Armenia (2008).

The annual growth of admissions was stable but dynamic, averaging over 7 per cent between 2002 and 2008. The gross enrolment rate (GER) was 24 per cent in 1999, increased to 26 per cent in 2004 (UNESCO Institute for Statistics, 2006: 120), and reached 28 per cent in 2006 (Republic of Armenia, 2007: 142). The share of government-funded places was 41.6 per cent in 1999/2000, but had decreased to 16.5 per cent in 2008/2009 (National Statistical Service of Armenia, 2008).

In parallel with increasing enrolments of local students, there was an increase in the enrolment of fee-paying foreign students. In 2006, the number of registered foreign students was 4,239, compared with just

1,302 in 2002. However, only 4,230 foreign students were registered in 2007, and 4,011 in 2008. This reflected the absence of a public strategy for the recruitment of foreign students and a perceived decrease in the quality of Armenian higher education. The main source countries of foreign students were Georgia, India, Iran, Russia, and Syria.

Decreased state funding

The economic difficulties caused by Armenia's overall transition and closed borders have had negative consequences for state funding of education. The financial resources allocated to education have stagnated, with the proportion of GDP remaining low compared with the averages of OECD countries, Central Asia, and even countries of the former USSR. In 2006, public funding of education represented 12.6 per cent of overall public spending.

While the government boosted public spending on general secondary education, it decreased spending on tertiary education. In 2006, public funding of tertiary education represented only about 7 per cent of total public expenditures. Moreover, in 2006, the government contributed only 15 per cent of the total revenue of the state tertiary education institutions, in contrast to 28 per cent in 2002 (World Bank, 2004*b*: 38).

State funding is traditionally allocated through an input-based formula involving a refund of tuition fees for a given number of places fixed by the government annually by 'needed' specialties (so-called 'state order places'). The reimbursed amount per student according to type of studies and specialty calculated by the Ministry of Education and Science is significantly below the tuition fees demanded by the institutions. Tuition fees in state tertiary education are extremely high when compared with per capita income. The lack of state funding is highlighted by the growth in tuition fees and the expansion of private sector tertiary education institutions, which enrol more than 20 per cent of all students.

The low level of state funding and the high reliance on private spending have led to restricted access to tertiary education among the poor, thus raising a major concern about equity. In the capital, Yerevan, enrolment in tertiary education is 2.1 times higher than in other urban areas and 4.3 times higher than in rural areas (Republic of Armenia, 2007: 146).

Private tertiary education institutions – even those accredited by the State – do not benefit from public financing. Moreover, the Law on Education (Republic of Armenia, 1999) demands that the tertiary education institutions assure 10 per cent of free places on the basis of the academic results of the students.

Decreased quality

Global changes and their consequences have affected the conditions of human and physical resources in Armenia. These conditions determine the quality of inputs, process and outputs (Green, 1994), and lead to weak relevance of studies to labour market demand and low academic quality. More particularly, the following problems can be mentioned:

- advanced average age of faculty,
- ineffectiveness of administrative and pedagogical management,
- old-fashioned programmes and teaching methods, and
- ineffectiveness of links with the labour market.

Each may usefully be examined in turn.

Advanced average age of faculty

The average age of academic staff is between 55 and 60 years (Haroutounyan and Davtyan, 2006: 19). It has a tendency to increase because of the unattractiveness of academic careers to young people due to low salaries. As in many other small countries, there is a high degree of brain drain among Armenian academics. Lack of training of academic staff together with their high average age creates numerous problems: low motivation, difficulties in adapting to new conditions, pedagogical approaches based on outdated Soviet practices, and poor mastery of new teaching methods, including information and communications technologies (ICTs).

Ineffectiveness of administrative and pedagogical management

The effectiveness of the management of tertiary education institutions remains very low. The small size of institutions makes the use of resources inefficient and obstructs the improvement of physical conditions and the quality of education delivered (Republic of Armenia, 2003). Problems related to size are especially evident in the private sector. In 2007/2008, 54 per cent of private tertiary institutions had enrolments below 300 students, 25 per cent had enrolments between 300 and 600, and

15 per cent had between 600 and 1,200 students. Only 6 per cent of the institutions had over 1,200 students.[36]

In 2001/2002, the average student:teacher ratio was 1:8 in state tertiary education institutions, and 1:10.4 in private institutions. By contrast, in the countries of the OECD it was 1:15.7 in 1999. In 2006/2007, in Armenia this ratio reached 1:9 in state institutions but it remained considerably below the OECD average (OECD, 2007: 339).

As noted by a World Bank report (2004*a*: 7), the majority of state tertiary education institutions 'operate with deteriorating physical facilities, limited and outdated library resources and curricula, [and] insufficient and obsolete equipment and instructional materials'. The report added that similar or even worse conditions were evident in many private institutions. This reflected inadequate government financing and ineffective institutional fund-raising mechanisms.

Old-fashioned programmes and teaching methods

The teaching methods do not contribute adequately to the development of students' analytical, critical, and innovative thinking capacities. Again to cite the World Bank (2004*a*: 8):

> Tertiary institutions continue their practices, developed under the centrally planned economy, emphasizing the acquisition of factual knowledge. Analytical skills are de-emphasized, which has a negative impact on innovative thought.

While primary and secondary education teachers are trained on more student-centred education approaches, such training is not compulsory in tertiary education. In a small state, efficient use of limited human resources is crucial, and the introduction of mandatory training for tertiary teachers might be desirable.

Ineffectiveness of links with the labour market

Cooperation between tertiary institutions and the labour market is almost completely absent. As observed by the UNDP (2005: 6): 'links between the tertiary education institutions and firms, as well as between the employers and the institutions of professional education, are weak, unstructured, and socially ineffective; the labour market orientation of the system of professional education is insufficient.' Opportunities to adapt

36. Data from the Ministry of Education and Science.

programmes to the environment are lost because of weak involvement of firms in the development and teaching processes.

As a result, tertiary education programmes do not assure the qualifications required by the labour market and 'therefore, in Armenia the mismatch between the profile of graduates and labour market demands is the most apparent issue' (World Bank, 2004*a*: 8). Besides, the state does not encourage enough involvement of the economy in tertiary education: there is no effective mechanism which would make compulsory the teaching of certain sections by professionals or a fiscal policy encouraging firms to invest in education. While almost all national policy papers have stressed the importance of the development of a knowledge-based economy, the programmes foreseen for the implementation of the draft education plan for 2008–2015 were defined in a general way, without measurable results or indicators. This was (among other factors) the main reason why the government refused to adopt this programme and sent it for revision.

Remnants of a Soviet heritage

The Soviet unified tertiary education system had a strong political orientation and functioned under the control of the Communist party (Saltikov, 2008). In this framework:

- The state was omnipresent and centralized.
- Involvement of faculty in decision-making was limited and symbolic.
- Programmes in the social sciences were totally guided by Communist ideology.
- Curricula were standardized, without adaptation to local cultures and economies.
- Unified assessment methods were used throughout the system.
- Individual thinking was discouraged.
- The universities lacked autonomy and academic freedom.

Nevertheless, the system did have some advantages. In particular, it facilitated:

- systemic management and economies of scale, which were especially valuable for Soviet Armenia as one of the smallest republics of the USSR;
- centralized financing and distribution of resources to less-developed regions;
- standards of student qualifications;

- assured job placements for graduates; and
- fee-free education with stipends.

Many of these advantages have been lost due to the collapse of the USSR, but several limitations of the Soviet education system remain.

Recent reforms in tertiary education

The socio-economic transition and the cooperation with international organizations have brought both threats and opportunities. As a small country with limited financial and human resources for policy analysis and development, political affiliation and collaboration with international organizations have strongly influenced the objectives of the reform of tertiary education, sometimes producing inconsistencies in policy response.

Legal reforms and planning

Facing the economic difficulties caused by transition and closed borders, the main objective of the reforms of the 1990s was to ensure the survival of the system inherited from the Soviet period. However, some principles had to be sacrificed at an early stage. In 1991, tuition fees were introduced in state institutions; and the first private institutions appeared even before the development of an appropriate and coherent legal framework. These measures allowed Armenia to face the economic crisis in a period of increased social demand. By 1996 the system had 53,800 students, compared with 49,800 in 1990 (National Statistical Service of Armenia, 2008).

To accompany the ongoing reforms, a new legal framework was progressively developed. In 1999, the main Law on Education was adopted, defining the objectives, structure, and principles of the organization and management of tertiary education. Institutional autonomy and academic freedom for staff were established as new principles, and the main roles of the state were redefined. An educational development plan for 2001–2005 was adopted in 2001. On the basis of a diagnosis of problems, an agenda and calendar of activities to solve them was envisaged (Republic of Armenia, 2001*a*). However, due to the lack of implementation capacity, most activities were postponed.

The reform strategy, approved by the government in 2003, defined the objectives in the light of the sector's main challenges and the country's international commitments. Thus, the foreseen reforms aimed (Republic of Armenia, 2003: 86) to:

- ensure application of efficient and targeted ways of state assistance,
- improve the management and efficiency of state institutions,
- link institutions with the labour market, and
- ensure the system's compliance with international standards on educational organization and quality.

A 2001 law on not-for-profit public organizations (Republic of Armenia, 2001*b*) facilitated the introduction of institutional and pedagogical autonomy, which had been declared as a principle by the earlier law. This shift was reinforced by the Law on Higher and Postgraduate Professional Education (Republic of Armenia, 2004), which determined the scope of institutional autonomy. State institutions received the legal status of not-for-profit entities with freedom to decide on their modes of organization and internal management. They were permitted to define their institutional missions and implementation strategies, and to determine their academic programmes, budgetary allocations, and tuition fees. They were also permitted to recruit and dismiss academic staff, and to set levels of remuneration.

Diversification of the academic offer

Within the context of increasing social demand, the government decided to create new institutions and programmes. The number of state tertiary education institutions grew from 13 in 1989 to 23 in 2008, and some institutions opened branches in different regions. By 2008, there were three times as many private as state institutions, though total enrolments in state institutions remained greater than in private ones. In addition, four institutions were established on an intergovernmental basis: the American University of Armenia (1991), the Russian (Slavonic) Armenian University (1999), the French University in Armenia (2000), and the European Regional Institute of Information and Communication Technologies in Armenia (2001).

The diversification focused particularly on new programmes in subjects such as law, management, and international affairs. In 2007/2008, over 230 specialties were taught, compared to 171 in 1999. At the same time, tertiary education institutions diversified their offer by incorporating secondary education provision through specially created colleges. This matched the multi-level strategy employed in other small states (Bray, 1990: 273). However, the diversification also created concern about the capacity to assure quality education in all specialties (Haroutounyan and Toumasyan, 2007: 11).

The Bologna Process: Providing guidance for reform

Armenia joined the Bologna Process in 2005, committing itself to meet the requirements of the European Higher Education Area by 2010. This led to an overhaul of the tertiary education system. In 2006, an agenda for the implementation of the principles of the Bologna Process was adopted as one of the main strands for sub-sector reform (Republic of Armenia, 2006*b*).

In 2005/2006, in line with the Bologna Process requirements, a two-cycle tertiary education system was introduced consisting of 'Bakalavriat' (equivalent of Bachelor) and 'Magistratura' (equivalent of Master). This arrangement replaced the five-year unified curricula. An exception was made for medical education, which retained five years for the first cycle and four years for the Master's level.[37] This reform was criticized for being conducted in a superficial manner and not contributing to the enhanced overall internal consistency of programmes.

Following the ratification in 2004 of the 1997 Lisbon Convention concerning the recognition of qualifications relating to tertiary education, a diploma supplement, recommended by the Council of Europe and UNESCO, became mandatory in all state and accredited tertiary education institutions. In line with the Bologna Process, the Armenian National Information Centre for Academic Recognition and Mobility, which became the official representative in the European Network of Information Centres, was founded in 2006 to assure the recognition of degrees and other tertiary qualifications.

Other major changes to meet the requirements of the Bologna Process focused on student mobility and comparability of qualifications, in part through the credit accumulation and transfer system introduced in 2007/2008. Student participation in the governance of tertiary education was also emphasized in the new legal framework. In particular, students were given at least 25 per cent of the seats on elected management bodies in tertiary education institutions.

37. At the same time, the two-cycle Soviet system of organization of postgraduate and doctoral studies was maintained. Thus, at the end of 'aspirantura' – the first cycle lasting at least three years – the degree of Candidate of Sciences was offered. This degree was a prerequisite for the second cycle, leading to the degree of Doctor of Sciences.

Implementation of an external quality assurance system

The Bologna Process required a quality assurance system. One system had been established in 2000, in accordance with the 1999 Law on Education. Given the limited capacity, Armenia's unwillingness to develop its own new system, and easy access to the Russian language, the system was set up using a prototype of the Russian system.[38] Thus, external quality assurance in Armenian tertiary education was organized through state licensing for educational activities and accreditation based on State Standards of Tertiary Education (SSTE). Following the introduction of the State Licensing Scheme, all tertiary education institutions were required to secure licenses before offering courses. The counterpart was state accreditation – that is, the recognition by the state of the quality of specialists' preparation in compliance with state educational standards, which defined the minimum content of programmes, the maximum academic workload, and the qualitative requirements for graduates.

Nevertheless, the initial outcome of the work of the National Licensing and Accreditation Service was unsatisfactory. A review showed that the licensing process failed adequately to address quality concerns, and that some licensed institutions lacked the necessary resources and facilities (Saroyan, 2008). To some extent, perhaps, this was inevitable since expansion of the system had severely thinned the availability of professionals with the necessary skills.

At the end of 2005 the accreditation process was suspended by the government. However, private providers managed to enforce court decisions that led to the accreditation of several private institutions. As a consequence, the process of accreditation was restarted in 2007 before being definitively terminated in 2008. The main limitations of the initial system of external quality assurance were:

- *Design.* In line with the old Soviet patterns of introducing educational change in a top-down manner, the aims, procedures and standards for accreditation were determined without discussion with the main stakeholders: the tertiary education institutions, students, companies, and enterprises. Moreover, the self-analysis and external review criteria were insufficiently concrete and precise.
- *Processes*. Legally, accreditation in Armenia concerned tertiary education institutions and programmes. In reality, considering the

38. See www.nica.ru

accreditation standards and decision criteria, it centred on programme accreditation by specialty. The requirement that at least 75 per cent of specialties should be accredited for the providing of state accreditation to the institution reinforced this trend. In addition, the fact that the evaluation of conformity was based only on the State Standard of Tertiary Education of a given specialty neglected the institution's strategic and managerial frameworks.

- *Procedures for monitoring.* The external quality assurance system did not contribute to the cyclical monitoring and periodic evaluation of institutions and programmes.
- *Communication of results*. No public communication of the results of external quality assurance procedures was assured, despite the requirements of the Law on Higher and Postgraduate Professional Education.

Ongoing challenges

Developing an overall strategy and policy

Numerous policy documents espouse priorities and strategies for tertiary education. They include the Poverty Reduction Strategy Paper (Republic of Armenia, 2007), the strategy of tertiary education reforms (Republic of Armenia, 2003), and a number of Armenian laws. However, as noted by the UNDP (2007: 30), these documents 'do not contain a productive strategic vision' which would be able to mobilize change by effectively and efficiently guiding behaviour and supporting decision-making at all levels. This kind of strategic vision for tertiary education could assure the effective contribution and involvement of all relevant stakeholders and significantly improve the effectiveness of ongoing reforms in the context of social and economic transition and a drastic reduction of state funding. This is especially true for the involvement of the Armenian diaspora as potential supporters of a strategic vision, as potential stakeholders, and as an asset for educational development.

Such a strategic vision is especially important, taking into consideration that independence, liberalization of the economy, and international integration have created new opportunities for the development of a competitive national advantage through the exchange of experience and building of new capacities. In this perspective, it is crucial to develop a new tertiary education strategy and policy in line with changing contexts and ongoing reforms, putting coherence with the

national development priorities together with Armenia's international integration commitments. Such a strategy would allow the country to overcome contradictions in orientation and approaches to the tertiary education system, and to make efficient use of the limited resources allocated to the sector.

Reforming the external quality assurance system

A new licensing procedure came into force in 2009, and clarified the licensing process and evaluation norms. After the closure of the Licensing and Accreditation Service, a department in the Ministry of Education and Science was placed in charge of the licensing process. In accordance with the requirements of the Bologna Process, the Armenian National Centre for Quality Assurance (ANQA) was established in 2008. Based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area developed by the European Association for Quality Assurance in Higher Education (ENQA), a concept for a revised state-accreditation procedure for tertiary education was developed by the ANQA. During discussions with the main stakeholders, the following basic choices on quality assurance components were made:

- *Compulsory accreditation*. In view of the large number of small private tertiary education institutions, the compulsory nature of state accreditation could be a useful tool for improved state regulation of tertiary education.
- *Elaboration of tools and procedures.* In order to make the accreditation system more effective, it was important to establish a consensus with the main stakeholders regarding the accreditation procedures and tools.
- *External review.* Considering the small size of the Armenian tertiary education system, it is preferable to involve international experts in the external review process, so that it becomes more objective and more credible.
- *Consequences of an external quality assurance procedure.* According to the legal definition of quality assurance – evaluation of conformity of the quality of education with the state standards of tertiary education and accreditation within the continuous process of quality improvement – it is clear that the Armenian system of quality assurance combines both summative and formative objectives (Vroeijenstijn, 1995). Therefore, the purpose of the Armenian external quality assurance system is both the control of the quality of tertiary

education institutions and their improvement. This means that the procedures for external quality assurance have immediate consequences for tertiary education institutions: their conformity or nonconformity with the requirements of the State Standards of Tertiary Education serves as the basis for an accreditation decision. Also, with the help of quality assurance, the assessed tertiary education institutions are expected to progressively improve their pedagogical methods and their modes of management.

The main challenge in the establishment of a quality assurance system is the lack of specialists with relevant experience and knowledge in Armenia. In this sense, the fulfilment of the Bologna Process requirements have led to an exchange of experience and the building of new capacities for the national quality assurance system. While a reform of the Armenian quality assurance system is now underway, it is faced with many difficulties of interpreting the Guidelines and translating them into a local reality where cultural norms and stakeholder interests may have a strong impact on the final decisions about system choices.

Conclusion

This chapter has situated Armenia as a country between Europe and Asia and at a strategic crossroads of East and West. This political, geographical, and strategic location has generated serious challenges for Armenia's national policy, security, and economic development. As a small state with strong external dependency, Armenia has adopted a *modus vivendi* for its foreign policy which permits adaptation to the rapidly changing interests of geopolitical actors.

These geopolitical interests influence not only policies related to international integration and cooperation, but also many other aspects of public choice, including tertiary education. Since independence, tertiary education reform has been guided first by the need to ensure the survival of the system, and then by the desire to put in place a legal and policy framework which would enable tertiary education institutions to become more responsive to a rapidly changing market-led environment. Within a context of a rapidly progressing private tertiary sector, and greater market involvement of state tertiary education, the creation of an external quality assurance system became a priority and needed to be established quickly. With this imperative in mind, the Soviet system was imported without much adaptation, but proved ineffective. A World Bank

project was devised to develop a new system in line with the European Standards and Guidelines for Quality Assurance.

The example of developing a quality assurance system is thus a telling instance of the strong influence of external forces, including in the education sector, and the eagerness of the Armenian state to import ready-made solutions from the outside. In the end, such models do not always provide sustainable answers to specific local needs. This is of course a general problem for states of all sizes, but may be especially common for small states. For Armenia, the challenge is to maintain appropriate balances within an uncertain wider environment.

References

Bologna Declaration. 1999. Joint declaration of the European Ministers of Education. Available at: www.magna-charta.org/pdf/Bologna_Declaration.pdf

Bray, M. 1990. 'Provision of higher education in small state: Demands, constraints and strategies'. In: *Higher Education Quarterly*, *44*(3), 264–281.

Green, M.D. 1994. 'What is quality in higher education? Concepts, policy and practice'. In: M.D. Green (Ed.), *What is quality in higher education?* (pp. 3–20). Buckingham: Open University Press.

Freinkman, L. 2000. *Role of the diasporas in transition economies: Lessons from Armenia.* MPRA Paper No.10013. Washington DC: World Bank. Available at: http://mpra.ub.uni-muenchen.de/10013

Haroutounyan, K.; Davtyan, N. 2006. *Education in Armenia.* Yerevan: Edit Print.

Haroutounyan, K.; Toumasyan, M. 2007. *Efficiency of the policy in graduate education.* White Paper #4. Yerevan, Armenia: Economic Development and Research Centre (EDRC). Available at: www.edrc.am/WP/WhitePaper4.ENG.pdf

National Statistical Service of Armenia. 2008. *The socio-economic situation in the Republic of Armenia in 2001-2008.* Available at: www.armstat.am [in Armenian].

Organisation for Economic Co-operation and Development (OECD). 2007. *Education at a glance 2007*. Paris: OECD.

Republic of Armenia. 1999. *Law on education*. Yerevan: Republic of Armenia [in Armenian].

——. 2001*a*. *Education development plan validation for 2001–2005.* Yerevan: Republic of Armenia [in Armenian].

——. 2001*b*. *Law on not-for-profit state establishments.* Yerevan: Republic of Armenia [in Armenian].

——. 2003. *Strategy of reforms of tertiary education*. Government decision No. 46. Yerevan: Republic of Armenia [in Armenian].

——. 2004. *Law on higher and postgraduate professional education*. Yerevan: Republic of Armenia [in Armenian].

——. 2006*a*. *Report on implementation of poverty reduction strategy (2004–2005, 1st semester)*. Yerevan: Republic of Armenia. Available at:
www.prsp.am/new/publications.php [in Armenian].

——. 2006*b*. *Approval of agenda on implementation of Bologna Process principles in Armenian tertiary professional education system*. Government decision No. 43. Yerevan: Republic of Armenia.

——. 2007. *Poverty reduction strategy paper: Revised version (PRSP-2*). Yerevan: Republic of Armenia. Available at:
www.prsp.am/new/en/index.php [in Armenian].

Saltikov, B. 2008. *Enseignement supérieur en Russie: Comment dépasser l'héritage soviétique?* L'Institut français des relations internationales (IFRI). Visions, No. 29. Available at:
www.ifri.org/frontDispatcher/ifri/publications/russie_cei_visions_1111752534925

Saroyan, A. 2008. *Quality assurance in higher education in the Republic of Armenia: Analysis and recommendations*. Washington DC: World Bank.

Temple, P.; Petrov, G. 2004. 'Corruption in higher education: Some findings from the states of the former Soviet Union'. In: *Higher Education Management and Policy*, *16*(1), 83–99.

United Nations Development Programme (UNDP). 2005. *Conceptual approaches to state policy development in the field of professional education in Armenia.* Yerevan: UNDP. Available at:
www.undp.am [in Armenian].

——. 2007. *National human development report 2006: Educational transformation in Armenia.* Yerevan: UNDP. Available at: www.undp.am

UNESCO Institute for Statistics (UIS). 2006. *Comparing education statistics across the world.* Montreal: UIS.

Vroeijenstijn, A.I. 1995. *Improvement and accountability: Navigating between Scylla and Charybdis*. Higher Education Policy Series, Vol. 30. London: Jessica Kingsley.

World Bank. 2004*a*. *Tertiary education and innovation systems in Armenia* (Part I of the Country Policy Report). Washington DC: World Bank.

——. 2004*b*. *Tertiary education and innovation systems in Armenia* (Part II of the Country Policy Report). Washington DC: World Bank.

——. 2006. *Armenia: The Caucasian tiger. Volume 1: Policies to sustain growth.* Poverty Reduction and Economic Management Unit Europe and Central Asia Region. Washington DC: World Bank. Available at: www.worldbank.org.am

——. 2009. *World Bank continues support to education quality and relevance in Armenia*. News Release No.2009/ECA. Washington DC: World Bank. Available at: www.worldbank.org.am

Part III
Designing effective policies

10. Leveraging technology for tertiary education in the South Pacific

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Open and distance learning play a vital role in meeting the growing demand for higher education (UNESCO, 2009: 3). Several factors have given distance education a special and sometimes a preferred place in meeting higher education needs. They include dramatic improvements in information and communications technologies (ICTs), limitations in the extent to which traditional universities can meet growing demands, economies of scale, and the flexibility offered to lifelong learners.

This chapter focuses on the experiences of the University of the South Pacific (USP), which is a regional university founded in 1968. The USP serves 12 countries, and offered its first distance courses to off-campus students in 1971 (Renwick, King, and Shale, 1991: 7). Given the dispersal of the students in about 33 million square kilometres of the Pacific Ocean, distance education was very appropriate and urgently needed. Technological developments, proactive leadership, external reviews of distance learning, and pressure from the University Grants Committee (UGC)[39] and the University Council led to a major re-prioritization of distance education. Indeed, the whole university has been transformed into a flexible multi-modal institution, assisted greatly by the USPNet. The University's Strategic Plan 2010–2012 indicated firm commitment to the expansion of flexible learning (USP, 2009: 12).

The USP contributes to human resource development in the broad areas of social sciences, business, humanities, sciences and technology, agriculture, and law. The university grew to approximately 20,000 students in 2008, and has devoted effort to becoming more effective, efficient, and focused. This effort has included stress on quality and on access for in-country studies from pre-degree to PhD.

39. The UGC was established in 1971 to enquire into the recurrent and capital needs of the university and advise participating governments of the total grant required to run it. It also examines the academic and financial effectiveness of the university, advises on reasonable expected costs of new developments proposed by the university and the governments, and assists in the preparation of plans for the university to ensure that they meet the national interests and financial capabilities of the countries involved. The UGC reports to the USP Regional Ministers of Finance.

The establishment and growth of distance education

The early vision

The founders of the USP envisaged an applied role for the institution. They wanted the university to be an agent of development, to meet the manpower needs of the newly emerging countries, to assist governments in planning and implementing their development programmes, and to research and publish. The programmes included pre-degree as well as degree studies, because many countries lacked capacity in senior secondary education.

The report which led to the establishment of the university (Morris, 1966) asserted that it should have an extra-mural department to enable it to carry university studies to towns and villages throughout the region and to promote understanding of and affection for the institution in distant areas. The first Reader in Extra-mural Studies in the School of Education took up his position in 1970, and the first courses were offered to 154 off-campus students in 1971 (Renwick, King, and Shale, 1991: 7). Extension services became a separate section in 1973. Distance courses were developed on the main campus and serviced through the centres, which were established from 1971 onwards (*Table 10.1*).

From the outset, a separate unit operated distance and continuing education but with academic functions controlled by the teaching schools and departments. The Director of Extension Studies (later University Extension, and then Centre for Flexible and Distance Education) was responsible for distance education and the running of the Extension Centres led by directors of varying academic and administrative seniority. The Pro Vice-Chancellor (Academic) had overall responsibility for distance education in the Vice-Chancellor's Office. In subsequent periods, the Deputy Vice-Chancellor or Acting Vice-Chancellor took the role. This structure was thus decentralized with central support.

Limited capacity, lack of integration and ad hoc growth

Distance education grew rapidly (*Table 10.2*). Starting with only 154 students in 1971, extension enrolment grew by 47 per cent in the second year, despite a rudimentary infrastructure, forming 19 per cent of the total enrolment. By 1981, the sector had 1,443 students and constituted 42 per cent of the total enrolment. Then it grew at a much more manageable rate to the end of the decade. Growth jumped in the early 1990s, but then slowed as a result of the university's efforts to safeguard quality.

Table 10.1 Establishment of USP extension centres

Country	Year of establishment	Country	Year of establishment
Solomon Islands	1971	Niue	1977
Kiribati	1971	Vanuatu	1980
Tonga	1971	Tuvalu	1980
Cook Islands	1975	Nauru	1986
Samoa	1976	Marshall Islands	1993
Fiji	1976	Tokelau	1999

Source: Chandra, 2000: 8.

Table 10.2 Growth and share of distance education at the USP, 1970–2008

Year	External	Internal	Multi-modal*	Total	% external
2008	9,037	5,811	4,298	19,146	47.2
2007	9,695	5,822	4,475	19,992	52.1
2006	10,965	5,761	4,340	21,066	52.3
2005	10,974	5,694	4,296	20,964	53.2
2004	10,546	5,493	3,772	19,811	62.9
2003	12,372	5,093	2,211	19,676	64.4
2002	12,022	4,698	1,938	18,658	61.9
2001	9,953	3,756	2,363	16,072	61.2
2000	4,204	4,914	NA	9,118	46.1
1995	5,419	3,357	NA	8,776	61.7
1990	4,603	2,689	NA	7,292	63.1
1985	2,444	1,872	NA	4,316	56.6
1980	897	1,814	NA	2,711	33.1
1975	289	1,229	NA	1,518	19.0
1970	-	433	NA	433	

Source: USP Planning and Development Office.

Notes: Students from self-funding programmes such as the Master of Business Administration and the Professional Diploma in Legal Practice were excluded from 1998. Pre-degree students were excluded from 1991 as they were also self-funding.

* Refers to students who could be classified as both internal and external. The fact that some students were classified as both internal and external reflected the proliferation of options. Originally, the external mode implied distance courses, while internal implied face-to-face. Later, combinations of these modes were permitted. Statistics have been retrospectively adjusted from 2001, from which date there is no double counting. Some double counting may appear in the years prior to 2001.

NA = not available.

The early rapid growth reflected the fact that distance education was both flexible and inexpensive. It met the needs of people in the workforce who did not want to leave their jobs or their countries. The fees for distance students were only a fraction of those for on-campus students, and all fees covered only a fraction of the total cost of education.

Growth also occurred because distance education followed an open-learning philosophy, although entry was still not easy. However, distance education could not compete with the campus-based schools in funding arrangements. It was seen as an adjunct to face-to-face teaching, and was viewed by staff as a lower priority. Heads of department defended delays in the turnaround of assignments by arguing that staff had onerous on-campus commitments, clearly implying that they did extension work over and above their normal workloads.

Demand for greater priority

Renewed emphasis in distance education reflected advocacy by the Commonwealth of Learning (COL), growing interest from the UGC, and stronger leadership of the Distance Education Committee. Some of this advocacy was for learning and teaching that combined face-to-face and distance work. It used Internet components, print, and technology-enabled learning such as audio and DVDs. It also included the use of flexi schools: that is courses provided outside the normal teaching schedules.

As a result of the 1991 COL report (Renwick, King, and Shale, 1991), the university established a Telecommunications Policy Group chaired by the Vice-Chancellor. In 1992 the group decided to pursue an independently owned and operated system. The second major change was reorganization of the administrative and management structure for distance learning, with the establishment of the apex Distance Education Committee and rationalization of the different components of distance teaching and learning. The senior management signalled a determination to improve distance education and to ensure that staff gave greater attention to distance students.

Pressure also came from the UGC, which was not satisfied that the USP was giving adequate attention to distance students. The UGC report for 1997–1999 clearly indicated the UGC's wish for the university to make a bold attempt to transform itself into a flexible, multi-modal learning institution in which the regional nature would be enhanced and the smaller countries would receive adequate services. The chapter of the

report entitled 'Re-inventing the University' emphasized the need for the USP to evolve into a multi-point access university, served by modern and flexible arrangements for administration and decision-making and not simply extension centres (UGC, 1996: 24).

The University's first Strategic Plan (USP, 1998) provided another occasion to indicate firm intentions regarding distance education. The general directions of the Strategic Plan were translated into the Flexible Teaching and Learning Support Plan approved by the University Council (USP, 1999), which identified specific strategies and measurable outcomes. The Support Plan took advantage of impending improvements in the USPNet to pursue greater access and richer media content. The Plan had five themes: to increase access to distance education programmes, to promote innovation in course development, to promote innovative delivery mechanisms, to strengthen the role of University Centres, and to fine-tune the organizational structure and processes for University Extension.

A 2000 coup d'état in Fiji dealt a serious blow to the Strategic Plan since it created turmoil in the University. For distance education, however, the crisis gave momentum to new developments. A comprehensive review of distance and flexible learning (DFL) led by Fred Lockwood had been commissioned to assess both the University's DFL operations and, more importantly, the Strategic Plan objectives and Support Plan for Distance and Flexible Learning (Lockwood, Smith, and Yates, 2000). The report made 90 explicit recommendations, together with others in the Executive Summary that were omitted from the list of recommendations. In the latter were some of the more important and controversial ones, such as the appointment of a Pro Vice-Chancellor (Flexible Learning and Teaching), and the avoidance of teaching in face-to-face mode courses that were already being offered through distance.

A number of important initiatives were launched to follow up the Lockwood review. They included further improvements to the USPNet, expanded institutional research on learning and teaching, and improvements in the quality of services. The arrangements included systematized data on turnaround times of assignments, digital submission of assignments, and efforts to minimize turnaround times to very remote centres. A major aid project was funded by the Australian Government to assist in the implementation of the Lockwood review.

The USPNet

Effective distance education in the South Pacific presupposes effective and sustainable telecommunications systems. When distance education began at the USP, it made pioneering use of satellites. A rudimentary satellite-based network was launched in 1972 with assistance from the Carnegie Corporation and staff from the University of Hawaii. Later, the United States Agency for International Development (USAID) made a substantial grant of US$700,000 to finance terminals in 10 Centres (Renwick, King, and Shale, 1991: 12).

By the early 1990s, upgrading was clearly needed. The needs included independent ownership and operation, availability 24 hours a day, integration of voice and data, cost-effectiveness, reliability, and capability to expand and link with other systems. The university identified its vision for the USPNet (Chandra, 1992), but the next version of the USPNet did not become operational until 2000 because of difficulties in securing the needed resources. Its capital cost was about US$7 million, with an annual operating cost of US$450,000 to be met by the university.

Once these resources had been secured, the 2000 version of the USPNet broke new ground in telecommunications and learning technologies at the USP. Its features included:

- coverage of all 12 member countries, compared with less than half previously;
- integrated full-duplex voice, data, and video capabilities;
- the ability to beam live compressed video on three channels simultaneously via video capabilities, or alternatively a combination of video broadcasts with video-conferencing, all on 128 kbps channels;
- integrated telephony and fax services;
- full Internet services to all centres and campuses, initially from Fiji at commercial rates but later through the Australian Academic Research Network (AARNET);
- use of a global beam INTELSAT satellite for direct Internet subject to licensing;
- associated learning technologies and infrastructure at the campuses and centres. The campus-wide backbone connected all the main buildings of the university with fibre optics, giving full ability to carry data, voice, and video. The other two campuses were also upgraded to fibre-optic backbones. Three sites were made operational for live lecture transmission.

However, increasing demands meant that the frontiers had to constantly advance. By the mid-2000s, audio- and video-conferencing had become less reliable because of inefficient management of bandwidth and this unreliability made some lecturers and tutors reluctant to use them fully. Moreover, while the USPNet covered all campuses, it still did not reach the other islands or areas beyond the urban centres. The speed of e-mail from regional campuses had slowed to unacceptable levels due to technical difficulties and because of the significant expansion in use, especially the introduction of Moodle.[40] Ineffective monitoring and management of bandwidth made these difficulties even more pronounced.

With these constraints in mind, the USP Council made a new push in 2009 as part of its strategic repositioning. The USPNet 2010 was designed to improve the quality and flexibility of audio and video conferencing, to increase Internet speed,especially from regional campuses, to extend access beyond current campuses, and to allow the transmission of graphics-rich content to students (*Table 10.3*).

Leveraging technology – crisis, modes and models

The newly launched USPNet 2000 was given unexpected importance and demonstrated usefulness within the context of the May 2000 coup d'État in Fiji.[41] Many USP member countries withdrew students from the main USP campus in Fiji. The university knew that the USPNet had the capacity to support in-country learning and teaching, and the essential question was how the USP's face-to-face courses could be delivered to regional students who had returned to their countries. Since there was little capacity to mount these courses in face-to-face mode at the other campuses and centres, the authorities decided to use the USPNet and DFL capabilities. DFL print materials were used at regional sites, and audio-conferencing support was readily scheduled. Audio-conferencing has been a stable support for much of the print-based DFL courses since the 1970s. Over 20 years later, the relay of graphics via a web browser added another dimension to the basic audio-conferencing, commonly known as audio-graphics.

40. Moodle (Modular Object-Oriented Dynamic Learning Environment) is a free and open-source e-learning software platform, also known as a Course Management System, Learning Management System, or Virtual Learning Environment.
41. The first author was the Deputy Vice-Chancellor at that time, and this discussion is informed by his personal experience during this period.

Table 10.3 Components of the USPNet upgrade 2010

Component	Comments
Engineering review of configuration to establish technical efficiency and platforms	The review was undertaken to ensure that the technical configurations were optimal, and that the university was deploying the best technologies to optimize available bandwidth and avoid purchasing expensive additional bandwidth. An important policy lesson was the need for independent technical assessments of key infrastructural systems, and to avoid the most common response, which is to buy additional bandwidth.
Regional server solution for five major regional campuses	This solution provided servers at regional campuses with associated software that allowed localized management of domain names and better monitoring and management of bandwidth use. A policy implication is that the university needs to have tools to monitor and maximize the use of bandwidth. This is especially important as considerable bandwidth is often used in universities for activities not directly related to learning and teaching, research or consultancies.
Replacement of audio CTM (Click to Meet) and video platform to REACT platform	REACT was a new system that promised much better services for video and audio. The Fiji Ministry of Education was using this system, and the USP partnered with REACT to provide technical back-up to the Fiji Government in return for the use of the platform. The first use of the new system indicated a vast improvement in the performance of the video and audio component of the USPNet. REACT allowed more flexibility by permitting personal computers in the offices to be used instead of requiring dedicated studios.

Source: Internal USP documents.

While some of the practices used during this emergency found application even after the situation had normalized and regional students had returned to the Laucala campus, entrenched face-to-face traditions remained obstacles. Most teaching staff came to the USP with face-to-face experience, and were commonly sceptical about distance learning. A strong programme of induction, coupled with policy and performance frameworks, was used to promote speedier adoption of distance learning.

Among the innovations by the Centre for Flexible and Distance Learning (CFDL), formerly University Extension, was a learning management system (LMS – WebCT) launched in 2000 for its asynchronous (discussion forums, mail) and synchronous (chat) features that would allow lecturers and students to communicate with each other. Lectures were broadcast to the regional campuses and/or recorded and retransmitted at later times. Thus was the video-broadcast (VBC) mode born.

The VBC mode presented challenges in quality of delivery of video in the midst of varying connectivity by country. Some campuses had intermittent power supplies coupled with natural disasters such as cyclones and earthquakes. Unfortunately, the VBC mode was continuously plagued by technical, administrative, and pedagogical issues. Pass rates in the VBC mode were also unfavourable. Cases of outstanding performance by students in the VBC mode were rare, and varied from course to course. The hurried introduction of VBC due to the political crisis, inadequate USPNet bandwidth, problems of power supply at regional campuses, and inadequate coordination eventually led to its discontinuation.

In the wake of the 2000 Lockwood report, the Australian and Japanese governments supported projects to implement the recommendations. The Australian project aimed at a rapid increase in the number of courses offered by DFL and at improved course design and development. Australian assistance concentrated on institutional strengthening for policy, quality, programme development, staff development and costing. The Japanese Government funded an ICT Capacity Building Project from 2002 to 2004, which had a significant impact on the development of technological aspects of USPNet and the development of computing science and information systems courses. As a result, the e-learning mode developed and more DFL courses utilized technologies such as Flash, Microsoft Producer, Camtasia, and Impatica to enhance the learning experience of students through interactive experiences. This expedited the delivery of more computing science and information systems courses, which previously had been difficult to offer in DFL due to the rapid development that made print materials virtually obsolete even when newly written.

Introduction of Moodle

WebCT as the USP's learning management system at that time was proving a valuable learning and teaching tool, and more courses used it. However, licensing costs became exorbitant. Following a review of available learning management systems by Hunter and Austin (2004), Moodle became a prospective front runner when compared with other software. By 2006, the use of open-source software in the higher education community was becoming popular, and the School of Computing, Mathematics and Information Science (SCIMS) became involved in open-source programming and word-processing software such as Open Office. SCIMS

was also testing Moodle. At the same time, the University was becoming convinced that it needed a single learning management system. WebCT was phased out in 2007 as the USP moved to Moodle. Courses in Edison were also migrated, and by the beginning of 2008 one learning management system was in place for the USP. By 2009, 150 USP courses used Moodle to support students as a basic communication tool, a repository for additional learning content, and/or for fully online/e-learning delivery of courses (*Table 10.4*).

Table 10.4 Use of Moodle at the USP

Moodle courses by semester						
	On-Campus (face-to-face)	On-Campus/ DFL	DFL	Total courses	Total staff	Total students
Semester 1, 2007	3	5	-	8	8	1,201
Semester 2, 2007	15	30	8	53	65	6,144
Semester 1, 2008	31	32	6	69	86	6,277
Semester 2, 2008	50	34	8	92	77	8,478
Semester 1, 2009	58	52	6	116	170	10,399
Semester 2, 2009	76	20	12	150	194	12,047

Source: University of the South Pacific.

Moodle proved useful for its various tools, including self-assessed quizzes, discussion forums, assignment drop boxes, and the notes-uploading feature for lecturers. Access to computers and the Internet was on the rise as infrastructure and technology improved in the region and became more affordable. Respondents to a survey conducted by Whelan (2008) on the use of ICT in education in the South Pacific recommended providing free or low-cost access to Internet and computing equipment, particularly for rural areas and outer islands. The ICT services provided by the USPNet across the region explain much of the high level of Internet and computer access among distance tertiary students.

Internet courses

Internet courses at the USP began in the School of Law. Programmes were put online to improve access, particularly because law students could only do the first year of the programme in Fiji and had to go to Vanuatu to

complete the rest of the programme as face-to-face students. The fact that most law students were Fiji-based and preferred not to travel to Vanuatu, which they perceived to be expensive, was one driving force for the innovation. The prior technology experience of the Head of the School of Law facilitated the work.

Other Internet courses also grew. For example, the Graduate Certificate in Tertiary Teaching (GCTT) programme offered its content fully online and/or in print form, and the Master of Business Administration (MBA) programme used Moodle to support face-to-face teaching and in flexi-schools in Samoa, Tonga, and the Cook Islands. The CFDL supported the design and development of these Internet courses, with the faculties providing content expertise.

The further development of online courses was given impetus by the World Health Organization (WHO), which funded the development of fully-online and best-practice courses in English and science, and awarded scholarships for students to take these courses. The university also provided a grant to make the entire GCTT available online, and further funding was earmarked for a major conversion of print courses to online courses. In the past, overtures from the WHO had been turned down, but on this occasion they were welcomed by senior management.

The e-learning mode has addressed the rapidly changing technology landscape surrounding courses in computing science and information systems, and has permitted quick revision of course materials for students as a whole. The online submission of assignments has been efficient for receiving assignments and sending feedback, and the ever-improving virus scanning software has helped to make the task more efficient for lecturers. This use of technology has eased the problem of acute isolation.

Creative contexting

Any discussion of the trade-offs between face-to-face and distance learning must take into account the context in which learning and teaching take place. In the South Pacific the selection of appropriate and relevant tools to deliver course content relies on a number of factors. Some students are in comparatively large, well-populated and well-resourced islands with established road, sea, and air routes, but others are in scarcely visited atolls

and isolated outliers.[42] Balances must be found on costs and practicalities within the context of not compromising quality.

The experience of the Bachelor of Education (BEd) programme for primary teachers illustrates the trade-offs and synergies that characterize the DFL programme. Primary school teachers located across the region and in many cases living in isolated rural environments receive predominantly print materials as part of the BEd (Primary) degree programme. Some course packages also contain multimedia components such as CDs and DVDs. In 2009, none of the 12 courses in the BEd (Primary) programme had an 'active' online presence. While one course had a Moodle component, students accessed the page only to download reading materials during their fortnightly visits to urban centres from remote outposts. However, one course coordinator expected his students to be online in 2010 for selected activities.

Most USP students now have e-mail accounts, and more students are becoming part of social networks online. The use of Bebo, Facebook, and MySpace is now widespread amongst teenagers. This is in sharp contrast to the varying levels of infrastructure in the region, but inadvertently addresses the level of ICT literacy amongst students, and helps to bridge the gap between 'digital natives' and 'digital immigrants'. The USP is making headway in terms of rectifying ICT illiteracy, and in 2010 launched a compulsory course on information and technology literacy.

Ongoing research indicates that advances in mobile technology will provide access to the most remote outposts (Prasad, 2009; Fong, 2009). *Table 10.5* shows that the penetration of mobile phones in Fiji, Samoa, Tonga, and other Pacific countries is higher than the penetration of the Internet, indicating considerable opportunities to increase access to higher education. With widespread pre-pay services and competitive mobile phone prices, mobile-supported learning materials may become the most effective way to guarantee access to students in remote areas.

42. In Kiribati, Christmas Island lies approximately 3,242 kilometres east of Tarawa, the country's capital. Due to vast sea distances and air routes, assignments by students on Christmas Island which are due to be marked in Tarawa are routed from Christmas Island to Nadi Airport in Fiji before being sent to Tarawa for marking. They are returned by the same route (Personal communication by Kiribati Campus Director, Ueantabo Mackenzie, 2007).

Table 10.5 Mobile and Internet status in selected South Pacific countries

Country	Mobile phones per 100 inhabitants, 2007	Internet per 100 inhabitants, 2007
Fiji	63.2	9.4
Kiribati	0.7	2.2
Solomon Islands	2.2	1.6
Tonga	46.4	8.4
Vanuatu	11.5	7.5
Samoa	46.0	4.5

Source: International Telecommunications Union (ITU).

The university is also taking on board more strongly the practice of running flexible delivery courses at all the campuses. As *Table 10.6* indicates, the number of flexi-schools increased in 2009 following a decline in the two previous years. Greater incentives were given to schools and faculties, which were permitted to run these courses on a cost-recovery basis.

Table 10.6 Flexi-schools at the USP, 2006–2009

Semester	2006	2007	2008	2009
June – July (02)	13	18	14	17
November – February (04)	64	57	57	65
Total	77	75	71	82

Note: (02) and (04) indicate the semesters in which the flexi schools are offered according to the Student Academic Services coding system. Generally, for the rest of the USP it is understood that there are two semesters.

Policy lessons

The USP experience provides important lessons for other institutions. In particular, it contains insights into developing distance learning and leveraging technology in small island developing states (SIDS).

One of the most important institutional questions is how distance and flexible learning is organized in a dual-mode university. The USP has avoided a separation of distance learning from face-to-face learning. It started its operations on the basis of acceptance that courses in the two modes were of equivalent quality and must be examined by the same examiners and to the same standards. The decision to decentralize DFL

with strong central support avoided some problems, but the university did not succeed in offering all its programmes in DFL mode. For internal political reasons, it is vital that the leadership of DFL carry at least a professorial rank. Further, Deans, Heads of School and the Director heading the distance and flexible learning centre must recognize their strong mutuality. In 2009, the USP for the first time appointed a Director with professorial rank.

Technology is crucial to distance and flexible learning. On technology introduction, implementation, and use, strong lessons can be learned. It is vital to have university-wide groups to research and recommend technology systems and platforms, and for senior management to have people who understand technology. External reviews are important as routine strategy, and universities need to prevent staff from only adopting technologies with which they are familiar, rather than technologies that are cutting-edge or most appropriate for other reasons. Compatibility with existing technologies and software is vital. This often takes a great deal of energy, as sections and individuals sometimes have strong parochial interests.

Universities also need to weigh carefully whether they should purchase commercial products or use open-source software. The USP experience suggests that it is better to opt for open-source software wherever possible, given the increasing sophistication of such software, the synergy between open-source software and the university tradition of sharing knowledge, and the reality of high ongoing costs of commercial software. Moodle is an excellent example of open-source software that is serving the learning and teaching needs of many universities.

Equally, university managements must assure students and staff that sufficient resources will support new initiatives and achieve high quality. Unless this happens, students and staff will be sceptical about new developments and technologies. Incentives need to be provided where possible.

Good institutional research is critical. This was initially a shortcoming in the USP's approach, but was at least partly rectified. Research into learning styles, learning support, learning outcomes, technology trends, and demand patterns is crucial to the development of relevant, appropriate, and high-quality systems.

Technology and systems introduction, implementation, and ongoing strengthening call for good staff development, incorporating the building of both technology leaders and general staff. It is especially important to develop champions in schools and faculties because universities can only become truly centres of innovation if they develop a whole community of innovators across faculties.

Finally, efficiency and effectiveness of distance and flexible learning are crucial. The proper costing of DFL activities is vital. Private providers have led the way in the development of cost-effective methods of both course development and delivery. Publicly funded universities need to incorporate activity accounting in their routine work.

Conclusions

The USP planners had unusual foresight in seeking rapid development of opportunities for the thousands of students who would not be able to reach the main campus of the university. This translated into the early start of correspondence education, which has since undergone many transformations. It was equally obvious to the university that cutting-edge technology was needed to assist distance education. The USPNet is an integrated private network, meeting many of the needs of remote students while also making learning and teaching throughout the university more independent, flexible, and interesting.

The main challenge has been to overcome institutional tensions of transforming what was predominantly a face-to-face teaching university with a small distance education component into a real, integrated system that serves distance and flexible students just as well as it serves face-to-face students. The university is fully committed to reaching its destination of a modern, flexible, and responsive institution, known for its responsiveness and for the quality of its systems and service to students. The USP Strategic Plan 2010–2012 set a focused path, and the management is determined to ensure that the commitments are fully met. Much of the success will depend not on resources (which have been guaranteed for all the initiatives in the Strategic Plan), but on institutional systems that overcome the tensions and ambiguities of the past. In particular, the Centre for Flexible and Distance Learning and the faculties will need to work in a collaborative and integrated way, overcoming the feeling in the faculties that distance and flexible work belongs to the CFDL and therefore that they themselves do not need to provide leadership and

support. Equally, the CFDL will need to recognize that it must provide intellectual and technological leadership and assistance – and that the courses and programmes are the responsibility of the faculties.

The future parameters that will guide distance and flexible learning and teaching at the USP will emphasize quality, outputs, and impacts, focus and speed, and system-wide integration. They will also stress responsiveness to all stakeholders, and especially to students, and the best utilization of technology that is part of the university's international reputation.

References

Chandra, R. 1992. 'The telecommunications requirements of the University of the South Pacific'. Paper presented to the Conference on PEACESAT and Telecommunications in the South Pacific, Sendai, Japan, 25 February – 1 March.

——. 2000. 'From dual mode to multi-modal, flexible teaching and learning: Distance education at the University of the South Pacific'. Keynote paper at the Conference on Distance Education in Small States, University of the West Indies, Ocho Rios, Jamaica, 27–28 July.

Fong, E. 2009. 'Mobile technologies and their possibilities for the library, University of the South Pacific (USP)'. The Second International m-Libraries Conference, Vancouver BC, Canada. 23–24 June. Available at:
http://ocs.sfu.ca/m-libraries/index.php/mlib/mlib2009/paper/view/3

Hunter, C.; Austin, L. 2004. 'Supporting lecturers in their move towards a new learning environment'. Paper presented at the Third Pan-Commonwealth Forum on Open Learning, Dunedin, New Zealand, July. Available at:
www.col.org/pcf3/Papers/PDFs/Hunter_Austin.pdf

Lockwood, F.; Smith, A.; Yates, C. 2000. *Review of distance and flexible learning at the University of the South Pacific: A report to the Vice-Chancellor and senior staff of the University of the South Pacific*. Suva: Planning and Development Office, University of the South Pacific.

Morris, Sir C. (Chairman). 1966. *Report of the higher education mission to the South Pacific appointed by agreement between the Governments of Britain and New Zealand with the co-operation of the Government of Australia*. London: Her Majesty's Stationery Office.

Prasad, D. 2009. 'Negotiating geographical isolation: Integrating mobile technology into distance education programmes at the University of South Pacific'. In: *International Journal of Instructional Technology and Distance Learning*, *6*(4), 15–22.

Renwick, W.; King, S.; Shale, D. 1991. *Distance education at the University of the South Pacific*. Vancouver: The Commonwealth of Learning.

UNESCO. 2009. '2009 world conference on higher education: The new dynamics of higher education and research for societal change and development – communiqué'. Paris: UNESCO.ED.2009/CONF.402/2.

University Grants Committee (UGC). 1996. *Report: 1997–1999*. Suva: The University Grants Committee of the University of the South Pacific.

University of the South Pacific, The (USP). 1998. *USP Strategic plan: Planning for the fourth decade*. Suva: USP.

——. 1999. *Flexible teaching and learning support plan*. Council Paper C49/7/3. Suva: USP.

——. 2009. USP s*trategic plan 2010–2012*. Suva: USP.

Whelan, R. 2008. 'Use of ICT in education in the South Pacific: Findings of the Pacific eLearning Observatory'. In: *Distance Education*, *29*(1), 53–70.

11. Thinking through sustainable funding

Bhoendradatt Tewarie

The issue of sustainable financing for tertiary education in small states is a major challenge. Comprehensive statistical data on the theme are difficult to locate, and assessments that are pertinent to small states in general or for substantial groups of small states cannot be made with ease.

Nevertheless, tertiary education has been consistently identified as one of the most important factors of human capital development; and human capital in turn has been identified as a key contributor to both economic growth and economic recovery. There is a need, therefore, for small states to boost their capacity to collect data and to identify measures of human capital formation, deployment, loss, and impact that can be linked to other indicators of economic health and sustainable development. It is also important for small countries to link with each other and to world databases to ensure accuracy of data for comparative purposes.

Tertiary expansion and the funding challenge

The issue of sustainable funding for tertiary education in small states needs to be discussed within the context of rapid expansion of tertiary systems. The financial crisis of 2008–2009, which hit small states particularly hard (World Bank, 2009), underlined the importance of finding sustainable mechanisms for financing.

The demand for tertiary education is growing almost everywhere, and governments cannot by themselves afford to pay for the expansion. Altbach, Reisberg, and Rumbley (2009) highlighted the dramatic global rise of tertiary enrolment. Worldwide, the growth rose from 19 per cent of the age cohort in 2000 to 26 per cent in 2007. While the authors pointed out only a 2 per cent marginal increase for the same period in low-income countries, some institutions and regions achieved dramatic growth. One example is the University of the West Indies (UWI), which more than doubled intake between 2001/2002 and 2008/2009 from 20,000 to 43,000 students (UWI, 2008). Increased demand for higher education in small states, and the desire of countries to participate in the knowledge revolution, has led to the need for more investment in tertiary education.

The big challenge is how to pay for new physical plant and infrastructure, for increased and improved infrastructure, and for enhanced quality in a context in which expansion will lead to a more diverse range of institutional orientations and student bodies. Diversification commonly includes creation or development of programmes in professional domains which may be significantly more costly than traditional academic programmes.

Government funding for tertiary education is widely threatened not only by economic uncertainties, but also by the challenge which some governments face in determining where to place their emphasis within the education system.[43] In the face of government freezes or cutbacks, the challenge to individual institutions is not only to find alternative sources of funding but also to respond to increasing demands by governments for justification of existing funding. Universities have had to embark on cost-containment measures and on measurement of performance to justify requests for staff and research support. They have also commonly embarked on more flexible staffing arrangements which increase the role of non-permanent staff.

Moreover, the managerial requirements of universities have become fiercer as quantitative measures are now required to determine such issues as efficiency, effectiveness, return on investment, and competitiveness for research funds. In small countries with few institutions or only one main institution, the pressures for efficiency and effectiveness may not be as severe; but citizens will still demand value for money, and governments will still want to be satisfied that their money is being well spent.

Specific challenges of funding tertiary education in small states

Small states do not drive global economic and financial policy. They have to be alert to trends, and prepared to respond to dramatic shifts in the environment. Some small states, especially small island states, rely heavily on tourism. Other small states see financial services as a way to link

43. The Government of Jamaica, for example, has taken a policy decision to emphasize pre-school education and to ensure quality education for all at primary and secondary levels. However, the UNESCO Global Education Digest 2009 (based on figures for 2007) showed that public expenditure per student for tertiary education far outweighed that for primary or secondary education. This imbalance in cost is especially pronounced in developing countries.

productively with the global economy. In times of financial crisis and economic recession, such economies are commonly hit hard.[44]

At the same time, providing a full range of learning options and opportunities in small states can be very costly, and unit costs are likely to be higher than in countries with larger populations and higher rates of participation. At the macro level, limited financial resources, higher unit costs, and greater vulnerability to economic fluctuations in economies that are dominated by single commodities such as bauxite, sugar, bananas, or oil make financial sustainability a challenge under any conditions.

In addition, small states may be constrained in their access to both external and internal capital. This includes limitations in the number of private sector organizations. Institutions are more limited in the availability of wealthy alumni able and willing to be benefactors and in opportunities for income from contract research.

In such a context, strategic choices and the costs associated with them become paramount. Among the questions which need to be considered in a rational and proactive approach are:

1. How many students should be supported to study abroad and for what proportion of their costs?
2. How many students can be effectively educated by distance delivery and e-learning?
3. What is the most rational approach to development and expansion of the tertiary sector, and how will this be paid for? How can costs be shared in a harmonious strategy of win–win collaboration with a range of stakeholders?
4. If new institutions are required, what kind should they be and can a mix of public/private options be employed to share the cost?

44. Antigua and Barbuda, for instance, was hit hard by the financial crisis of 2008/2009, especially because Alan Stanford, who was prosecuted for creating a Ponzi scheme, was a major investor. But even a country such as Malta, now part of the European Union, must face challenges, and Oman must look to private sector investment and public–private partnerships (see *Chapters 7* and *8* in this volume). Even small states that are resource-rich can end up in a crisis due to price volatility. In Trinidad and Tobago in the 1980s, the government severely cut funding to the university and tuition fees were introduced for the first time at the UWI. The 2008/2009 financial crisis and its impact on Jamaica led to severe cuts by the Government of Jamaica to the UWI.

Determining policy and strategy prior to funding options

Beyond the financing challenge, small states may have other considerations. For instance governments themselves and the community at large may wish the state to be a key player in the evolution, management, and development of the tertiary sector. This may affect policy toward private institutions, foreign investment in tertiary institutions, and regulation and management of the higher educational system. In countries with small populations, the role of the state increases in prominence, and community interest often relies on state support and the ability of the state to balance competing interests.

A major issue is how a government views the role of tertiary education in its development vision. If it views tertiary education in terms of human capital formation, then the mix of means to achieve the goal – public or private, or distance or face-to-face – might not greatly matter. However, if a government and the people see institution building as essential to national development, the matter becomes not only one of cost, efficiency, and effectiveness but also of national identity, pride, and ideology.

A further concern relates to globalization. Small states have high emigration rates of skilled, educated people, and the more skilled the worker, the easier it is to migrate (Mishra, 2006: 16). Most small states have limited economic resource bases, and are insufficiently diversified to absorb wide ranges of highly qualified personnel. At the same time, in a competitive global economic system, magnets for talent exist in most industrialized societies. Governments may view this issue in terms of brain drain or return on investment. They may also want to create national talent pools which can themselves become an attraction to investment, fuel entrepreneurship, and facilitate diversification. An expanded pool of local graduates becomes a factor in attracting investment and facilitating competitiveness (Tewarie and Hosein, 2005).

A further question is whether tertiary education in small systems focuses on teaching and learning alone or also on research. If a small state sees its tertiary system as a knowledge system central to its transformation and sustainable development and as creating the conditions to enjoy respectful participation at the knowledge table of the world, then research will be an essential part of the tertiary education strategy. This raises questions not just about the purpose of education but also about the value of research, which will lead to the exploration of

issues related to relevance, innovation, entrepreneurship, business, and wealth creation.

The resolution of these issues which have implications for both policy and strategy is an important precursor to addressing the subject of financing and funding the system as a whole. This ultimately will affect the context and framework within which individual institutions address their funding and financing challenges. Policy and strategy should therefore emerge out of a philosophical framework which subsequently guides it.

Regional institutions and funding

Regional universities may be vulnerable since they depend on several governments for funding, and even commitment by governments to budgetary support does not always guarantee timely cash flow. Moreover, serving several countries does not necessarily guarantee a broader funding base or a deeper one beyond government sources. The University of the South Pacific (USP) and the University of the West Indies (UWI) are cases in point.

The University of the South Pacific

The main campus of the USP is in Fiji (population 844,000), but it operates through 14 campuses and a range of distance education options and sub-centres. Like institutions everywhere, it operates in a context in which global demands, regional realities, and national aspirations both collide and converge. With its main campus in Fiji, and Fiji being its largest funder and beneficiary, the challenge has always been how to meet the legitimate aspirations not only of the people of Fiji but those of all the other countries that are served by the USP.

The USP has always been fed by a flow of well-performing students from its high school systems, buttressed by an accompanying flow from a range of other post-secondary providers in a context of regional cooperation and mutual support of island aspirations and needs. Today, Fiji alone has two other universities, one established by the state through an amalgamation of existing tertiary institutions, and another older private institution which the state also supports, as well as a range of other state-supported post-secondary institutions. The USP Vice Chancellor has identified three issues with which the Government of Fiji has to wrestle: to continue to support a regional university with its

headquarters in Fiji; to begin funding a new state-owned university; and to continue to support the University of Fiji, which is privately owned, while rationalizing and managing the system to ensure quality.[45]

The USP, in a reversal of tradition, requested 2 per cent less funding as it moved into the 2010–2012 strategic planning period. This took into account not only the current financial and economic situation but also the formidable challenges which the governments of the region (and especially the Fiji government) faced in financing additional institutions. The USP had a budget of approximately US$70 million per year. About US$27 million came from government grants, which meant that US$45 million, or just over 60 per cent of its income, came from non-government sources. If the trend of reducing the annual budgetary requests to government continues, then the university will further reduce its dependence on the state and will need to increase and diversify its non-governmental sources of income.

Fiji has a tradition of sharing the cost of education between state, community, and families. It is difficult to say what range of options have been or will be employed by the USP to address the issue of sustainable funding in the context of receding subventions from government, increased demand, and competition for both students and resources. It is also difficult to assess how the Government of Fiji, or the governments of the countries which constitute the islands of the South Pacific, will address the issues of a meaningful and sustainable system. What is known is that they are operating with a vision and within a framework, and this, perhaps more than anything else, should bring some coherence and rationality to future development of the tertiary sector. Moreover, the issue of equity, especially as access increases, will demand some meaningful system of student support.

The University of the West Indies

The UWI, which serves 16 countries in the Caribbean through four campuses, 43 delivery sites, and a range of e-learning and distance education options, has been well supported by its member governments. While all beneficiary countries of CARICOM support the UWI, the bulk of the support comes from the governments of Jamaica, Trinidad and Tobago, and Barbados where the major physical campuses are located. These countries are also the main beneficiaries of the UWI campus

45. See *Chapter 5*.

presence on their territories, but the leadership and managerial elite of almost every country in the region has come from successive graduating classes of the UWI. This feature persists despite the fact that national institutions have emerged alongside the UWI.[46]

The UWI has a clear head start since it was established in 1948. Many governments in the smallest islands have been seeking to make the transition from community colleges (two-year post-secondary institutions) to universities, or to establish some kind of national institutional capacity to support tertiary education. Thus, the UWI finds itself challenged in the context of the emergence of national institutions on its main campus territories as well as in a context of emerging preference for national institutions in the smaller territories. National governments have to decide how both national and regional institutions are to be supported and in what proportions.

During the 1980s, when structural adjustment policies were pervasive in the Caribbean, tuition fees had to be introduced. The UWI engaged the multilateral banks for loan financing, established campus endowment funds, and in 1997 introduced strategic planning over five-year periods. In addition, various initiatives have been taken by individual campuses to diversify funding sources by engaging the private sector, commercializing specific activities, and being more entrepreneurial.

Proposals were made to align the budget to strategic plan priorities in 2004 (in support of the 2002–2007 strategic plan). In 2006, a concept paper on 'Funding the Enterprise' was prepared for consideration by the University Bursar in consultation with the Pro Vice Chancellor for Planning and Development (UWI, 2006). Three years later, the Vice Chancellor presented 'Practical Recommendations' to the University Grants Committee (UGC), which is chaired by a Prime Minister and is made up of Ministers of Education, to address the issues of sustainable funding by government and alternative sources of funding (UWI, 2009).

The student population at UWI more than doubled during the first decade of the century. Governments increased their financial support to address this growth, but the amount of direct funding to the UWI from non-government sources also increased and consequently the proportion of direct government funding decreased. In 2000/2001 the UWI spent

46. See *Chapter 4.*

US$239 million to educate 20,000 students, and in 2008/2009 spent US$423 million to educate 43,000 students. The government contribution in 2000/2001 was US$145 million and US$246 million in 2008/2009. Clearly the funding support did not keep up with the pace of student growth, and indeed per capita funding diminished. Except for 2000/2001, when government contributions stood at 60.7 per cent, the government contribution has averaged about 55 per cent.[47]

Major entrepreneurial initiatives have included the following:

- In 2004 the Principal of the UWI's St Augustine Campus created the Evening University, to cater for working adults, with a minimum of new overhead costs but with effective support from participating faculties. This initiative generated a sizeable income.
- In 2005, the same Principal entered an agreement with RBTT Bank in Trinidad and Tobago to purchase Roytec, a tertiary institution which had built up a relationship with the University of New Brunswick in Canada for the granting of degrees and diplomas. Roytec, later renamed the UWI Institute of Technology and Applied Business Studies, continues a constructive relationship with the University of New Brunswick and has made a strong annual operating surplus.
- In 2004, the Principal created a Business Development Office to support fundraising and to seek knowledge-intensive business opportunities. This has had modest success in project-based funding.
- The Institute of Business (now Arthur Lok Jack Graduate School of Business) was opened as an entrepreneurial initiative of UWI and the local private sector in Trinidad in 1990. It has been operating as a profit-making institution since 1994.
- The Principal of the Cave Hill Campus took the initiative in 2006 to transform a clinical medical facility in Barbados into a full medical school which would be self-financing. The school was financed by loans from local banks to be repaid from tuition fees and other sources.
- The Principal at the campus in Mona, Jamaica, also invested in a state-of-the art basic medical sciences facility to support expanded (foreign) intake into the medical school and the creation of a dental school. The basic medical science facility was expected to recover the investment and generate a surplus thereafter.

47. Calculations based on various financial reports to the UWI Finance and General Purposes Committee.

- On all campuses, dormitories, bookstores, guesthouses, and other commercial enterprises are run on a cost-recovery basis and generate a small surplus.

Beyond campus initiatives, the Vice Chancellor has strengthened the Institutional Advancement Unit, established a Regional Endowment Fund, and registered a consulting company which draws on faculty expertise to service income-generating contracts. These innovations initially had modest success, but later began to make greater strides. In 2007, the Office of Planning was expanded to include a 'development' responsibility. The Development Office subsequently engaged the International Finance Corporation (IFC) to secure a loan to support construction and infrastructure for the Open Campus, and engaged other multilateral institutions to secure project-specific grant funding. The Office of Research has also been actively working with Business Development Offices to secure funding for research projects aligned to the agenda and preferences of particular funding agencies and aligning faculty research interest with funding opportunities.

Four complementary approaches are apparent in these funding strategies. First are the entrepreneurial ventures which can be emulated by any state in similar or more innovative ventures. The second involves harnessing of commercialization opportunities in activities associated with a university. These are associated with income generation, profit making, and diversification of sources of income. The third involves the creation of structures and infrastructure to support fundraising events to engage possible donors and to attract research funding. The fourth approach involves stabilizing government funding and seeking to ensure the predictability of financial flows.

Examples drawn from the experience of larger and more developed countries may well provide options and make sense to small states in the context of funding and financing challenges. Bonds, securities to access private capital, investments by private equity firms in private institutions in anticipation of future profits, loans, and philanthropy are some of the options (Hahn, 2007). Some of these options have been pursued by the UWI while others have at least been contemplated. There is no reason why bonds or security instruments to raise private capital or loans cannot work in a small country or in a regional context. The challenge would be to find a workable format for repayment of the debt, but the value would be in the financial freedom and flexibility it would provide and the

predictable commitments to debt servicing. A complication would arise if loans were negotiated in a hard currency and severe fluctuations in exchange rates occurred between the currency in which the instruments were negotiated and the local currency, but this can also be offset by tying loan repayment to hard currency revenue streams. The extent to which private equity investment could be accommodated would depend on the policy position adopted by a particular country or institution, but equity participation in offshore schools has shown that such possibilities are workable in a small state, depending on the target market.[48] Moreover, permutations of equity participation, philanthropy, and loans can be explored, as in the case of the Arthur Lok Jack Graduate School of Business of UWI.

Financing the cost of tuition sustainably

In many small states tuition at tertiary level is free (which means that the state pays) or it is subsidized (which means that the state pays a part). Scholarships and bursaries provided either by the state, the educational institution, or from private sources are usually limited in number. Expansion of tertiary access inevitably means that tuition fees for an expanding number of students will have to be made available through some structured system. It is an unsustainable proposition that the government direct funding or subsidies, scholarships, and bursaries from whatever source would be able to continuously support a growing population of tertiary students and increased access annually indefinitely. It may well be inevitable that at least some countries will have to opt for an education loan system or taxation, or some combination of the two.

The significance of a loan system which targets the consumer of education is that it shifts the burden of payment by the student from the point of consumption to after graduation when the graduate is able to earn. But loans will only become attractive to students if they are tied to income (that is, income contingent). And taxes will only become acceptable if incomes are high enough to make taxes bearable and that means that an economy would have to have the necessary buoyancy and absorptive capacity to provide attractive incomes. An income contingent loan system in a small economy is likely to support access as well as equity (Wint, 2006). A graduate tax system will target graduates only when they develop earning capacity and in that sense is an equitable tax

48. Such experiments have been tried in Oman and are elaborated by Al Shmeli, *Chapter 8.*

if only in the context of working citizens who are graduates of tertiary level institutions (Hosein, Franklin, and Tewarie, 2007).

The significance of making tuition fees payable by the student is that it takes cost-sharing directly to the primary beneficiary while acknowledging that education is also a public good that must be supported by the state as well as private sector interests which are also beneficiaries of every throughput of graduates annually, and a national pool of graduates generally. Effectively run loan repayment systems and effective tax regimes can ensure that at least some of the financing of tuition fees for continuing waves of students can be met from an identifiable, even if not entirely predictable, source.

Thinking in terms of systems

A reality for small states is that they have to ask new questions, find new answers for old questions, and find solutions that have not been thought of before. Even more than larger states, small states have to look for strategies which share responsibility across national borders.

All small states and regions consisting of small states need to craft systems, building on what they have, which can be rationalized on the basis of financial sustainability. Such systems must be designed on the basis of cost-sharing with the assumption that government support is certain to diminish over time and that public–private partnerships are the beginning of the solution to the sustainable funding and finance dilemma.

Thinking in terms of systems will allow smaller countries and their leadership to conclude that while it might be impossible to build a world-class university in every country, it may be feasible to build a national tertiary system that is the best in the world for those that are served by the system in terms of relevance, responsiveness, and quality. Moreover, it may well be possible in regional contexts to strive for a world-class regional system enhanced by strong national systems. Development of strong, effective, competitive systems in this manner can only be achieved if synergies are created to offset the challenges of scale. This requires a genuinely favourable disposition toward collaboration which would then make effective coordination possible. In such an environment the issues of accreditation and a qualification framework to establish standards and portability as elements of a framework within which a system can grow and develop, can be addressed rationally.

Governance infrastructure to manage the system might well add effectiveness if the form of governance at this level links tertiary expansion and diversity of programming to labour market realities and developmental priorities nationally and regionally. Increases in output from the tertiary sector must be supported by expanding absorptive capacity in the national and/or regional economies. The education support system below tertiary at primary and secondary level must also be strengthened so that throughput from the secondary sector can meet the demands of an expanding sector. Moreover, gaps between the secondary and tertiary sectors will need to be bridged as well as gaps between government, university, and the industrial sector. An established national or regional agenda of priorities can in turn influence research priorities. Clear research priorities can lead to partnerships which include mechanisms for sustainable funding.

Conclusion

Small states must be clear on their objectives for development and integration with the global knowledge economy, and should derive policy and strategy from this philosophical clarity. The philosophical clarity must grow out of a realistic appreciation of where a country or region stands in relation to some key variables.

Realistic budgetary planning must accompany policy formulation and strategic intent, and this must inform practice on the ground as well as sources of income strategies to support the general thrust. System rationalization, harmonization, integration, coordination, and management are required to ensure minimal duplication and waste as well as coherence. Thereafter, a realistic approach to funding the higher educational enterprise can be taken by the country or region concerned.

This chapter has identified some options and precedents for higher education financing. The evidence is abundant that higher education makes a decisive difference in the development and transformation of economies. Sustainability requires predictable government support buttressed in most institutions by student support systems, family cost-sharing, community cost-sharing, public–private partnerships, entrepreneurial interventions, commercialization in higher educational institutions, and leveraging of regional and international partnerships. The future lies in sharing costs, diversifying income sources, creating

new sources of income, building partnerships at home and abroad, and creating wealth beyond teaching and research.

Government will always be a factor in higher education, but its role in financing is changing as the world changes. In most settings its funding role will diminish, even if its regulatory role through state-funded institutions increases. Small states, for which government funding has been a staple in higher education, face a formidable challenge in this regard. They have been coping, they have been drawing on what others have done, they have been creative, and they have been changing. With a systems approach and strategic interventions forming part of a coherent and collaborative agenda of developmental objectives and strategic planning at institutional level, stronger sustainability in funding and financing can be achieved.

References

Altbach, P.; Reisberg, L.; Rumbley, L. 2009. *Trends in global higher education: Tracking an academic revolution.* Report prepared for the UNESCO 2009 World Conference on Higher Education. Paris: UNESCO.

Hahn, R. 2007. *The global state of higher education and the rise of private finance*. Institute of Higher Education Policy: Global Centre for Private Financing of Higher Education.

Hosein, R.; Franklin, M.; Tewarie, B. 2007. 'Declining oil prices and funding tertiary level education in an oil exporting economy' (unpublished paper).

Mishra, P. 2006. 'Emigration and brain drain: Evidence from the Caribbean'. IMF working paper.

Tewarie, B.; Hosein, R. 2005. 'Tertiary education export strategy can build capacity in Caribbean region'. Paper presented at UWI/ University of Alberta conference on Remapping the Americas, UWI, St Augustine, Trinidad.

University of the West Indies (UWI). 2006. *Funding the enterprise: A concept paper towards the UWI's strategic plan 2007–2012*. Mona, Jamaica: UWI.

——. 2008. *UWI statistical review 2007–2008*. St Augustine Campus, Trinidad and Tobago: UWI.

——. 2009. *Funding the enterprise: Practical recommendations regarding the engagement of governments in facilitating and operationalizing alternative income streams for UWI.* Prepared by the Office of Finance. Mona, Jamaica: UWI.

Wint, A. 2006. 'Financing tertiary education in the Anglophone Caribbean: Transforming student loan systems'. In: *Caribbean Journal of Education*, Jamaica, *28*(2), 216–240.

World Bank. 2009. 'Small states and the financial crisis: Impact and World Bank response' (a brief prepared for the World Bank/IMF Spring meetings in April 2009). Available at: http://siteresources.worldbank.org/projects/resources/smallstatesandthefinancialcrisis0609.pdf

12. Enhancing coordination through regulation and quality assurance

Michaela Martin

Issues related to the coordination, regulation, and quality assurance of tertiary education are now given much greater attention than was the case in earlier eras. Three reasons explain the earlier low profile. Firstly, the public sector of tertiary provision in small states commonly consisted of a limited number of tertiary institutions, such as teacher training colleges, technical colleges, and nursing colleges, sometimes in addition to local or regional universities. These institutions often benefitted from strong autonomy, not least because the ministries of education had limited capacities for close steering of tertiary institutions.

Secondly, in many small countries post-secondary colleges were placed under line ministries, such as health, agriculture, and social welfare, to ensure that the training would comply in quantity and quality with the human resource requirements of the respective sectors. As a consequence, overall sector coordination and articulation of institutions could not be envisaged as a responsibility for education authorities, which was in any case difficult to achieve.

Thirdly, the number of private providers, including cross-border ones, was limited because by definition the market was limited and private higher education was in general less prominent. Applications to open cross-border institutions, such as medical colleges, could be addressed on a case-by-case basis, and did not really require a generic body of regulations. Also, the creation of franchised programmes could usually be negotiated directly between the local tertiary institution and the foreign provider, thus only involving public authorities to a limited extent.

Within the more recent context of expanded and diversified tertiary education in small states, issues of coordination, regulation, and quality assurance have become major challenges. Private providers, as well as cross-border for-profit operators offering franchised education, e-learning, and education via offshore campuses, have developed rapidly. Particularly in small states, such provision has been commonly

welcome as a means of providing access to a good-quality 'foreign brand' education.

However, the drawbacks and challenges have also become apparent. The standards of cross-border providers have not always been in line with those in the home base; and the contents of programmes have not always fitted the realities of the recipient countries. In addition, some cross-border providers have competed with fragile domestic providers, and have obstructed the development of domestic leadership.

A further concern relates to academic fraud, arising from increased internationalization of tertiary education. This is an especially strong concern in small countries, some of which have experienced problems when their country names have been used as the supposed origin of degree mills. An example of how close the Pacific Islands came to being duped by fraudulent institutions came to light in 2008, when some students arrived in Fiji from India wanting to enrol at the University of Pacific International.[49] This fraud was playing on the well-known University of the South Pacific (USP), and students indicated that they had been shown pictures of a large campus which probably was that of the USP. The website that they had used (www.universitypacific.com) had mobile phone contacts in Fiji, and the fax line was to the national electric utility in Ba. There is not, and never has been, a University of Pacific International (Chandra, 2009).

Small states have become particularly prone to the fraudulent use of their names since the corollary of small size is a limited pool of professional expertise. National authorities in small states cannot easily devote attention to monitoring such matters and to the production of reliable and publicly available information on the recognition and accreditation status of their tertiary education provision. National authorities are also faced with many instances of sub-standard providers wishing to operate from their countries. In some cases, these providers are unable to obtain accreditation in their home countries.

The new realities of the tertiary education sector in small states are linked to the expansion of student numbers, which requires stronger capacity to design and implement new structures and processes. Most small states are responding to these challenges by strengthening their

49. See details at www.diplomamillnews.blogspot.com/2008/06/indian-student-arrives-to-find-there-is-no.html

planning capacities, by creating national buffer bodies for coordination and monitoring of tertiary education, and by putting in place qualifications frameworks and quality assurance mechanisms as a means to integrate and validate the entire tertiary offer within a single system. In many of the larger small states, considerable diversification of the institutional fabric has taken place, to the extent that a tertiary education system with several layers has emerged. The Jamaican situation illustrates this phenomenon (*Box 6*).

Box 6. The diversified institutional fabric in Jamaica

Jamaica's tertiary education sector embraces over 50 institutions with a wide range of types. Some are universities, others are community colleges, and others are specialized institutions of various kinds.

More specifically, in 2005 Jamaica had 23 public and 29 private institutions (20 local and nine foreign). Part of the public provision was the University of Technology and the Mona Campus of the regional University of the West Indies (UWI). The private sector included one private university (Northern Caribbean University), and five theological colleges. Among the nine foreign institutions, six were labelled as universities, two as colleges and one as 'other private institution'. Ninety per cent of the programmes in the non-university institutions were below the Bachelor's degree level. The community colleges and teachers' colleges had developed an articulation arrangement with the two public universities.

In addition to these institutions were many distance education opportunities from cross-border providers. Tertiary education in Jamaica had developed far beyond the situation a few decades previously when the UWI was the only institution of significance.

Source: Summary prepared from Evans and Burke, 2006.

Strengthening of planning and administrative capacities for tertiary education

The strengthening of planning capacities has regained importance in many developing countries, where the impetus for an increased focus on planning is commonly rooted in policies related to the Education for All (EFA) movement. Following a period during the 1980s when the effectiveness of medium-term educational planning at the national level was questioned (Caillods, 1989), a revised consensus on aid modalities for the implementation of EFA policies made the existence of a national plan for education a precondition for access to certain international funds. In the

domain of basic education, this was the case for the Fast Track Initiative,[50] which provided funds to countries which had demonstrated needs and 'credible plans' to address them. Such sector plans usually made reference to tertiary education, even though the documents focused mainly on basic education.

In addition to broad education sector plans, specific plans for the tertiary education sector have been produced in an expanding number of small states.. For example, in 2007 the authorities in the Gambia produced a *Higher Education Strategy Paper 2007–2011*, and in 2008 their counterparts in Botswana produced a similarly titled *Higher Education Strategy*. This document paralleled the *Mauritius Education Strategic Plan* (2008), and was followed in 2009 by Malta's *Further and Higher Education Strategy, 2020*.

The preparation of a national strategic plan provides an opportunity for an in-depth analysis of the status of the tertiary education sector, and the creation of a systemic vision for its development in line with environmental change, national development priorities, and labour market needs. A strategic sector plan necessarily relates to the tertiary education policy, and looks into major systemic issues. It can thus address concerns with coordination and articulation of the sector institutions as a means of reaching sector objectives. It also identifies budgetary requirements, at least for the medium term, in line with the sector objectives. If planning is conducted in a participatory mode, together with the tertiary education sector, the ground is also prepared for the implementation of the strategy.

Similarly, the development of new administrative structures demonstrates an increased concern with coordinating tertiary education at the national level. During the 2000s, Brunei Darussalam and the Gambia were among countries which created higher education divisions in their ministries of education. This reflected recognition that tertiary education was a sub-sector which required a policy-making, implementation, and monitoring capacity.

Some of the larger small states, such as Botswana, Fiji, Jamaica, Malta, and Mauritius, have created national buffer organizations in charge of policy development, strategic planning, and monitoring. These

50. The Fast Track Initiative (FTI) is a partnership of developing countries and donors created to help low-income countries achieve the Millennium Development Goal of universal completion of primary education.

buffer organizations are commonly headed by renowned academics and supported by technical secretariats. They are thus perceived as being professional structures with a strong understanding of the internal functioning of the tertiary education sector.

Many of the administrative structures created in small states are multi-purpose bodies. They generally group a range of responsibilities related to the overall coordination of the tertiary education sector, such as policy design and implementation, monitoring and evaluation, and funding of the sector. Some of the buffers established in small states take over responsibilities for quality assurance. The example of Botswana is presented in *Box 7*.

Box 7. Botswana's Tertiary Education Council

Botswana's revised National Policy on Education (1993) set the tone for educational reform in the country. One significant development was the recommendation to expand the tertiary education market to include participation by private providers. The passing of the Tertiary Education Act by parliament in 1999 brought a new period of quality assurance in tertiary education institutions. The Tertiary Education Council, which was established as a regulatory authority, is mandated to promote and coordinate the growth of tertiary education, and to determine and maintain standards of teaching, examination, and research in tertiary institutions. Specifically, the Council is charged with the responsibility, inter alia to:

(a) formulate policy on tertiary education and advise government accordingly;
(b) coordinate long-term planning and overall development of tertiary education;
(c) promote coordination among tertiary institutions;
(d) advise government on the establishment of public tertiary institutions;
(e) receive and approve applications from persons seeking to establish private institutions;
(f) plan for the funding of tertiary education and research, including the recurrent and development needs of public tertiary institutions;
(g) review and approve programmes of study in respect of private tertiary institutions;
(h) accredit private institutions;
(j) ensure that quality assurance procedures are in place in all tertiary institutions; and
(k) ensure the audit of physical facilities and assessment of their adequacy in tertiary institutions.

Source: Botswana Tertiary Education Council website.

Developing qualifications frameworks in small states

National qualifications frameworks (NQFs) are part of another common strategy for coordination and integration of tertiary education. In many countries, NQFs are set up to permit better readability of diversified tertiary education. An NQF clarifies to stakeholders the path to a particular

qualification, the various routes from one qualification to another, and the basis for their recognition. NQFs also help to ensure the portability of tertiary education credentials, with a view to facilitating the mobility of students within tertiary education systems as well as outside them.

Early NQFs originated in the technical and vocational education sector. However, within the broader concept of tertiary education, university education is now more frequently covered under a single or otherwise linked quality framework. NQFs may have as a main purpose the provision of a map of qualifications and an indication of progression routes between levels and sectors, but they may also be used as a regulatory device to reform the existing offer (Tuck, Hart, and Keevy, 2004).

NQF bodies commonly operate a register of recognized qualifications offered by both public and private providers. Prior to registration on the NQF, an assessment process takes place, the aim of which is to establish whether a qualification complies with standards on workload, contents, and assessment methods. Increasingly, qualifications need to be presented in terms of learning outcomes which specify the knowledge, understanding, and skills to be acquired. In addition to their potential to map out a diverse academic offer, NQFs may thus also lead to the enhanced internal consistency of study programmes.

In the initial period from the mid-1980s, most NQFs were launched in countries with well-developed tertiary education provision. They were especially common in Anglophone countries where public authorities at the national level were only modestly involved in the management of qualifications. Since small countries have been more open to foreign providers than larger ones, they have also been eager to adopt qualifications frameworks. In particular, many of the small Commonwealth countries have developed NQFs, including Botswana, Maldives, Mauritius, Namibia, Samoa, and Seychelles.

Designing sustainable solutions for quality assurance systems

The establishment of external quality assurance (EQA) systems has been one of the globally adopted reform initiatives in tertiary education. While small countries have in the past been somewhat slower than other countries to establish EQA systems, they have recently shown particular eagerness to adopt this type of reform.

Box 8. The Samoa Qualifications Authority

Samoa is a small Pacific nation of some 180,000 people. Economic growth is heavily dependent on a few industries, especially tourism and fishing. Samoa's economy is dominated by subsistence village agriculture, which absorbs two-thirds of the workforce. Remittances from the many Samoans working overseas are an important contribution to the economy. While geographically isolated, Samoa has strong human resources training and transfer links to larger economies which offer regional and international opportunities for Samoan citizens with recognized qualifications – in particular New Zealand, Australia, American Samoa, and the USA.

The Samoa Qualifications Authority was established to bring coherence and to ensure that post-school education and training in Samoa was focused on national development goals. A related goal was to ensure that all learning is of good quality and valued, whether it takes place in formal training institutions, in the community, or in the workplace, and whether of a higher academic nature or more practically oriented. The Samoan authorities recognize that, especially in a small nation, all elements are important for national economic, social and cultural strength.

The following responsibilities are entrusted to the Authority through legislation established in 2006:

registration of providers (licensing),
accreditation of the institutions including staff and resources/facilities,
accreditation of programmes,
guidelines for the conduct of institutional self-evaluation,
coordination and conduct of external quality audit,
registration of provider qualifications in the Qualifications Framework,
developing and maintaining a qualifications register, and
facilitating international equivalence of national qualifications.

Source: Submission to the 2007 IIEP/COL Distance Education Course on EQA for Asia-Pacific countries.

The basic principles of 'good practice' in quality assurance are the same whatever the size of the tertiary education sector, but the size of the sector to some extent shapes the choices for the development of an EQA system. The creation of a quality assurance system in a small state comes with particular challenges. The development of a cost-effective support structure is one challenge; and another is the availability of qualified staff to operate the system. Also, small states need to be more sensitive to cross-border providers and foreign qualifications when defining the scope for quality assurance. A particular difficulty is establishing a pool of independent external reviewers, given the small tertiary sector they must be drawn from and the intimacy of small states in general, and particularly within the same professional field.

Policy-makers in small states who wish to establish quality assurance systems have several options. As with institutional models for tertiary education, one model for a cost-effective EQA structure could be called 'multi-purpose'. This model groups several functions, such as managing the qualifications framework, organizing a quality assurance scheme, and guiding the recognition process of foreign credentials. It has thus become a noticeable trend in many small states that qualifications frameworks and EQA mechanisms are established under one organization. This is the case in Maldives, Namibia, Samoa, and Seychelles, where programme accreditation helps to implement and give sense to the NQF. The reason for this is that quality assurance, registration, accreditation, and recognition form a logical chain, which requires similar or complementary competencies. Entrusting one organization with this set of tasks appears to be a recommendable strategy to enhance the cost-effectiveness of these bodies.

Another option for small states is the multi-level model, under which all activities related to quality assurance in the entire education sector are assembled under one body. Since ministries of education in small states are commonly in charge of the entire education sector, this model seems to have particular merits. It also has the advantage of increasing the potential for sector coordination through the determination of consistent quality criteria throughout the education sector.

Using regional solutions for some of the quality assurance mechanisms which are conducted only periodically, such as quality audit, is another option (Stella, 2008). This model is already in use in some regions. For instance, the University of the South Pacific has undergone a quality audit organized by the Australian Universities Quality Agency. Drawing on regional structures, for instance to recruit independent external reviewers, may offer much potential to overcome some of the constraints of small states. Given the already high levels of collaboration of quality assurance agencies within regional networks, regional pools of experts may be formed on which national quality assurance bodies could draw.

Finally, many small states use the quality assurance expertise of larger countries while still taking control of both the definition and assessment of quality standards via national schemes (Stella, 2008). This form of collaboration is applied in many contexts.

The diversity beyond basic options

Beyond the demonstrated similarities in the basic options adopted by small states for the establishment of their EQA systems, there is also considerable diversity.[51] In some countries, such as Barbados, Jamaica, Namibia and Seychelles, the EQA structure is an independent or semi-autonomous body. In other cases, it is a permanent committee or administrative unit either under the Ministry of Education (Cyprus, Saint Lucia) or more commonly a tertiary education buffer organization (Botswana, Mauritius). Some agencies function with already consolidated mechanisms, while most EQA systems have younger histories (e.g. the National Accreditation and Equivalency Council of the Bahamas [NAECOB], the National Accreditation Council [NAC] of Belize, and the National Accreditation Board [NAB] of Dominica).

With regard to the main orientations embraced by EQA structures in small states, most newly created systems give priority to control and put in place registration/licensing schemes for private providers. However, many are also evolving towards the development of a quality assurance mechanism which applies to the whole tertiary education sector. In a few small countries, a decision has been taken to keep the regulatory (licensing, recognition) and the quality assurance (accreditation, quality audit, review) functions separate. In a greater number of countries, both are located under the quality assurance structure because the small size of the country and the available expertise do not allow them to be separated.

The accountability purpose is mainly addressed with an already functioning or envisaged accreditation scheme. Some accreditation schemes in small states take programmes as the unit for analysis (for instance Jamaica, Mauritius, and Seychelles) while others focus on both institutions and programmes (Cyprus only for the private sector). The focus on programme accreditation seems appropriate for three main reasons. First, the relatively small number of programmes to be accredited justifies placing the locus of accreditation at this level. Second, accreditation at the programme level is more effective to enhance quality than institutional accreditation. And third, private providers may start new programmes, hence a system for quality control at the programme level, which is a persistent priority.

51. The information below was collected during an IIEP/COL Distance Education course on EQA for Higher Education in Small States, March-June 2009.

Table 12.1 Selected structures for quality assurance in small states

	Multi-functional quality assurance structure	Multi-level quality assurance structure	Regional solutions
Tonga	Tonga National Qualifications and Accreditation Board		Pacific qualifications framework under construction
Maldives	Maldives Accreditation Board		
Barbados	Barbados Accreditation Council		UWI, CARICOM
Mauritius	Tertiary Education Council		Southern African qualifications framework
Seychelles	Seychelles Qualifications Authority		Southern African qualifications framework
Dominica	National Accreditation Board		UWI, CARICOM
Bahrain		Bahrain Accreditation Council	
Saint Lucia		TVET and Accreditation Unit	UWI, CARICOM
Botswana	Tertiary Education Council		Southern African qualifications framework
Trinidad and Tobago	Accreditation Council of Trinidad and Tobago		UWI, CARICOM
The Bahamas	National Accreditation and Equivalency of the Bahamas		UWI, CARICOM
Samoa	Samoa Qualifications Authority	Post-school and training sector	Pacific qualifications framework under construction
Belize	National Accreditation Council		UWI, CARICOM
Namibia	Namibia Qualifications Authority		Southern African qualifications framework

Source: Constructed from information provided under the UNESCO-IIEP distance education courses on educational quality assurance conducted in 2008 and 2009.

Many EQA systems in small states focus only on private providers (such as licensing procedures, or in some cases accreditation schemes), but some have more comprehensive mechanisms that cover both public and private providers. Those that are more comprehensive tend to include

a review of institutions and programmes (for instance the Maldives) or quality audit (for instance Mauritius for public sector institutions).

The number and the geographical diversity of small states reflected in *Table 12.1* suggest that smallness is not necessarily perceived as an impediment to the development of quality assurance schemes. However, the sustainability of models remains to be tested. Most of the quality assurance structures listed are either new or not yet fully operational, even if legal frameworks have been in place for some time already. The delay between legislation and implementation seems to testify to the difficulties involved in setting up workable systems.

In most small states, an EQA system is a new element that has to insert itself into a network of existing organizations with pre-existing responsibilities. In particular, small states face the difficulty of implementing quality assurance schemes for tertiary education sectors with long-established traditions of institutional autonomy and a lack of collective concern with quality. For this reason, many small states start by establishing a legal basis for an EQA system so that the structure is entrusted with clear responsibilities and tasks. The creation of a legal basis may be preceded by an experimental phase so that the quality assurance system can prove to be workable. A legal basis should not become a straitjacket in case adjustments are needed.

Regulation of cross-border providers in small states

Cross-border provision covers many different realities and takes many different shapes. Classifications of cross-border provision distinguish between institutional and programme mobility (Knight, 2005). Institutional mobility includes branch campuses, independent institutions, acquisitions, and mergers; and programme mobility includes franchising, twinning, joint degrees, articulation, validation, and virtual/distance provision.

States of all sizes have taken a range of stances with regard to cross-border providers (Hosein, Chen, and Singh, 2004; Martin, 2007; Martin and Stella, 2008). While in general small states tend to be particularly open to cross-border provision, a range of patterns is evident. Barbados, for instance, does not provide fertile ground for cross-border provision since the government pays the full economic cost for its students enrolled in tertiary education using the traditional face-to-face modalities. In Jamaica, by contrast, diverse institutions have entered

the tertiary marketplace because the market is larger and the Jamaican Government has been relaxed about the matter.

Verbik and Jokivirta (2005) established a typology embracing four categories of regulatory modes. At one end is no regulation or control on foreign providers, in between are liberal and moderately liberal approaches, and at the other end are very restrictive modes. These four approaches represent only broad lines of action. They are linked to and cover many options. 'No regulation' (or *laissez faire*) is an option that strongly favours the development of cross-border provision, possibly under the 'widening of access' rationale. This option does not require the establishment or development of new administrative structures charged with quality assessment and monitoring and/or the provision of information to the public. However, it is risky because public authorities have no knowledge of a part of the tertiary education provision, or the way it affects and interacts with the public system. A regulatory approach has the potential to steer the cross-border provision in line with national policy objectives. In particular, a moderately liberal regulatory regime allows cross-border providers to be brought into line with national quality requirements. This is particularly evident when all national providers, both public and private, fall under the same quality assurance regime. In this case, healthy competition may be created between all providers and good practices exchanged. A tightly restrictive regulatory regime may restrain the development of cross-border providers, who may find it difficult to settle and develop within such a regulatory framework.

Marshall *et al.* (2008) reviewed foreign providers to Barbados, Belize, the British Virgin Islands, the Cayman Islands, Jamaica, Trinidad and Tobago, and Turks and Caicos. The governments of these countries had pursued different strategies with regard to foreign providers, ranging from tight regulation to open access. For a long time, many small states have adopted a default regime of no, or very low, regulation of cross-border provision. More recently, over and above the establishment of quality assurance systems, some have introduced registration requirements or regulation related to the conditions under which an institutional title (such as university) can be used.

One of the common conditions to receive registration is the accreditation status of institutions in their home countries. A specific case is Oman, where the Government developed a model whereby locally owned institutions could offer foreign programmes in conjunction

with credible international affiliate universities that confer the degrees. In addition to local diploma and degree programmes, Oman has over 200 diploma and degree programmes on offer, sourced from over a dozen countries (Carroll *et al.*, 2009). Cross-border programmes to be offered in Oman need an accreditation status from their home base, but they can receive recognition status in Oman if they can demonstrate that they comply with certain local quality standards.

Tension between regional and national coordination

The above discussion on cross-border provision shows the increasing extent to which small states are affected by the global higher education market. In addition, regional integration processes have become a significant feature on all continents. Small states may be part of regional integration processes together with bigger states, such as in the European Union or the Southern African Development Community. In other regions, such as the Caribbean, the Pacific, and the Gulf, they form the majority of states and thus have more weight. In all regional integration processes, cooperation agreements have many 'spillover effects' in the area of tertiary education. The recognition of qualifications from countries within the region is a necessary prerequisite to facilitate the free movement of labour and intra-regional mobility.

Given their direct relationship to regional mobility, regional qualifications frameworks have become an important area for cooperation. Examples are the European Qualifications Framework, the Southern African Qualifications Framework, and the Pacific Qualifications Register. Under the Pacific project, the aim is to work closely with all the member countries' national qualification bodies in trying to register and accredit all post-school qualifications into the Pacific Register.

In addition, multi-state initiatives exist such as the Transnational Qualifications Framework under preparation by the Commonwealth of Learning (COL), which is expected to function as the umbrella of umbrellas. Such initiatives aim at the establishment of generic level descriptors that provide a framework for more elaborate systems at the national level and as a translation tool. Its purpose is to show how a course in a given country fits into the qualifications framework in another.

Under the mobility and recognition imperative, there also exists considerable regional collaboration in the area of quality assurance. Small states in the West Indies and the South Pacific have longstanding

experience with regional collaboration through their regional universities, and indeed those institutions are playing a major role in the quality assurance of tertiary education in their respective regions. The Quality Assurance Unit of the University of the West Indies operates a system of reviews of different disciplines in a five-year cycle. The University of the South Pacific has a Quality Unit that monitors the quality strategy of the university. Because of the existence of regional universities, both the Caribbean and the Pacific regions can draw on institutional capacity to monitor the quality of affiliated institutions in the region, and build on institutional internal quality assurance when conducting external reviews.

In all regions, voluntary networks of quality assurance agencies have been created. Several of these networks have established codes of 'good practices' in quality assurance. The International Network for Quality Assurance Agencies in Higher Education (INQAAHE) and the European Association for Quality Assurance in Higher Education (ENQA) are examples. They provide guidelines to members of the networks, or even provide tools to assess whether they can be eligible as members. For example, quality assurance agencies can join the European Quality Assurance Register (EQAR) if they are able to demonstrate that they comply with the *Guidelines for Quality Assurance in the European Higher Education Area*.

Regional networks of quality assurance agencies share experiences or set up projects aiming at the extension of mutual support. In the Gulf, the Consultative Commission on Education of the Gulf Cooperation Council has proposed the establishment of an Academic Accreditation Board, and has formed a coordination committee for academic accreditation. Alongside these bodies are voluntary networks such as the Caribbean Area Network for Quality Assurance in Tertiary Education (CANQATE), which was created in 2002 to facilitate the sharing of information about quality assurance in the region and to disseminate good practices (CANQATE, 2009). The secretariat of the Caribbean Community (CARICOM) has also become involved, seeing quality assurance at the regional level as pertinent to the achievement of the Caribbean Single Market and Economy (*Box 9*).

Box 9. Regional quality assurance under CARICOM

Under the aegis of CARICOM, the Caribbean Accreditation Authority for Education in Medicine and other Health Professions (CAAM) was established in 2003. CAAM was created as a regional accreditation body after the General Medical Council (GMC) of the United Kingdom advised it that it would no longer accredit medical schools outside the European Union. CAAM accredits medical, dental, veterinary, and other health programmes leading to professional degrees required for practice in CARICOM Member States.

CARICOM has also made efforts to establish a broader accreditation agency in order to:

- establish an internationally recognized system of post-secondary and tertiary education for the Caribbean,
- promote the mobility of highly skilled individuals within the community,
- contribute to the economic and social development of the community, and
- ensure international recognition and agreements with state entities for reciprocal recognition.

CARICOM is also involved in the development of a framework for distance education. This is being facilitated by the Caribbean Knowledge Learning Network (CKLN), which has a CKLN Regional Institutional Strengthening Advisory Committee (CRISPAC). This Committee established a Quality Assurance Advisory Group in 2007, the membership of which includes the heads of the accrediting bodies as well as CARICOM and sector agencies such as the Caribbean Tourism Organization. CKLN has facilitated consultations which aim to develop a Framework for Quality Assurance in Tertiary Education in the Caribbean.

Sources: CARICOM Secretariat website; CAAM website; Parkins, 2008; information collected during the IIEP/COL online debate on External Quality Assurance in Tertiary Education, 8–19 June 2009.

In addition to the above-mentioned regional activities, in 2008 UNESCO launched an initiative aiming at the development of 'good practice' guidelines for quality assurance in small states. Also, INQAAHE has launched a project aiming at the identification of the specific needs for the capacity development of small states. These are notable initiatives in the area of quality assurance targeting the specific needs of small states.

Conclusions

The main purpose of this chapter has been to demonstrate that the growing diversification of the tertiary education landscape calls for new approaches and capacities in sector regulation, coordination, and integration. When taking a broad look at the reform initiatives in numerous small states, the creation of qualifications frameworks and quality assurance schemes appear as recurrent common elements. There are of course major trends in bigger states as well, but the particular constraints of small states call

for an even more careful consideration of options that are both cost-effective and sustainable.

Mention has been made of multi-purpose and multi-level structures for the running of quality assurance and qualifications frameworks. While many very small countries have recently enacted legislation which aims at the creation of local quality assurance systems, it is not yet entirely established whether such legislation can easily be put into practice, given the considerable expertise and resources required.

While it is understandable that decisions for registration and accreditation are often taken at the national level, the capacity to conduct assessment upon which recommendations are made to national authorities could be established at the regional level. Regional cooperation in the area of qualifications frameworks and quality assurance has a high potential, both as a means of pooling scarce resources, and also as a means of serving an intra-regional mobility agenda. It may be particularly useful to envisage quality assurance in small states as a multi-level exercise in which regional, national, and institutional authorities all play important roles.

Small states thus face a perhaps ever-more prominent tension of developing policy solutions that fit their particular needs and environments while working with regional or other multi-state initiatives which comply with broader agendas of economic development. The wider initiatives limit the national policy-makers' room to manoeuvre, but provide opportunities to bring national tertiary systems into line at the regional and even international levels.

References

Botswana, Tertiary Education Council. 2008. *The Higher Education Strategy*. Gaborone: Tertiary Education Council.

Caillods, F. 1989. 'Synthesis report of the workshop'. In: F. Caillods (Ed.), *The prospects for educational planning* (pp. 1–38). Paris: UNESCO-IIEP.

CANQATE. 2009. 'Caribbean Area Network for Quality Assurance in Tertiary Education'. Accessed 21 June 2009 from: www.canqate.org

Carroll, M.; Razvi, S.; Goodliffe, T.; Al-Habsi, F. 2009. 'Progress in developing a national quality management system for higher education in Oman'. In: *Quality in Higher Education*, *15*(1), 17–27.

Chandra, R. 2009. 'Higher education developments in Fiji: Global, regional and national imperatives and issues of quality and affordability'. Paper presented at the IIEP Policy forum on Tertiary Education in Small States: Planning in the context of Globalization. Paris: IIEP, 2–3 July.

Evans, H.; Burke, O. 2006. *National report on higher education in Jamaica*. Higher Education in the Caribbean Series No. 12. Caracas: UNESCO Instituto Internacional para la Educación Superior en América Latina y el Caribe (IESALC).

Hosein, R.; Chen T.; Singh R. 2004. 'The international supply of tertiary education and services trade negotiations: Implications for CARICOM'. Report prepared for the Caribbean Regional Negotiating Machinery (CRNM). St Augustine: University of the West Indies.

Knight, J. 2005. 'Commercial cross-border education: Implications for financing higher education'. In: *Higher education in the world 2006: the financing of universities* (GUNI Series on the Social Commitment of Universities 1) (pp. 103–112). New York: Palgrave.

Malta, National Commission for Higher Education 2009. *Further and higher education strategy 2020*. Valetta: National Commission for Higher Education.

Marshall, S.; Brandon, E.; Thomas, M.; Kanwar, A.; Lyngra, T. (Eds) 2008. *Foreign providers in the Caribbean: Pillagers or preceptors?* Vancouver: The Commonwealth of Learning.

Martin, M. (Ed.). 2007. *Cross-border higher education: Regulation, quality assurance and impact*. Volumes 1 and 2. Paris: UNESCO-IIEP.

Martin, M.; Stella, A. 2008. *Quality assurance in higher education: What are the options?* Paris: UNESCO-IIEP.

Mauritius, Tertiary Education Commission. 2007. *Strategic Plan 2007–2011*. Port Louis: Tertiary Education Commission.

Parkins, L. 2008. 'The English-speaking Caribbean: Regional and global context'. Paper presented at the Regional Conference on Higher Education for Latin America and the Caribbean. Accessed 21 June 2009 from:
www.cres2008.org/upload/documentosPublicos/tendencia/Tema06/Lorna%20Parkins.doc

Stella, A. 2008. 'Regional and multi-state solutions for small states and quality assurance of higher education'. Paper presented at the UNESCO expert meeting, Paris, 4–5 February.

The Gambia, Ministry of Education. 2007. *Higher education strategy paper 2007–2011*. Banjul: Ministry of Education.

Tuck, R.; Hart, J.; Keevy, J. 2004. The relevance of the National Qualifications Framework Impact Study to qualification framework development in the Southern African Development Community. In: *SAQA Bulletin*, *6*(2), 5–29.

Verbik, L.; Jokivirta, L. 2005. *National regulatory frameworks for transnational higher education: Models and trends.* Briefing Note 22. Observatory on Borderless Higher Education. Available at:
www.obhe.ac.uk/documents/search?region_id=&theme_id=&year=All+Years&keywords=&author=&document_type_id=1&search=Search

Part IV
Conclusion

13. Seizing opportunities and balancing constraints

Michaela Martin, Mark Bray

This book commenced with the small-states paradigm as it was developed in the 1980s and 1990s. This paradigm is relevant to education as well as to other domains, and to the tertiary sector as well as to other levels of education. One question is whether the constraints and opportunities faced by small states in the development of their tertiary education systems have changed since the turn of the century and, if so, how. The first part of this chapter comments on the changing landscape within which small states must currently operate. From these remarks emerge identification of old and new challenges, within which it is especially instructive to note the intersecting variables of size of population and extent of regionalization. The chapter concludes with some remarks on the roles of international organizations.

A changing landscape

With regard to patterns of geopolitics and international collaboration, this book has highlighted the significance of both globalization and regionalization. While the forces of globalization are not new to small states, their impact has become stronger because of increased international specialization of value chains and the need for small states to find niches in highly competitive and specialized markets. Changing trade regimes, and particularly the dismantling of preferential market entries for agricultural goods, affect some small states particularly strongly because of their relatively undiversified and vulnerable economies.

To some extent, regional integration movements around the world are themselves responses to globalization. They have the common objective of establishing internal markets within a region for the free movement of goods, services, and the labour force, and have significant spillover effects in the education sector. Policies which aim to foster the movement of professionals require mechanisms for the mutual recognition of qualifications. The resulting qualifications frameworks and quality assurance systems are evident in regions as diverse as Europe, the South Pacific, the Caribbean, and Southern Africa. The creation of internal markets thus affects the core of tertiary education systems.

Small states may find themselves in diverse positions vis-à-vis regional movements. They may be part of integration processes in which small states form the majority of countries seeking stronger collaboration. This is the case in both the Caribbean and the South Pacific, where regional universities were established to pool resources and create a critical mass for good quality tertiary education. Nevertheless, both Tewarie in *Chapter 4* for the Caribbean and Chandra in *Chapter 5* for the South Pacific described the tensions between campus and non-campus countries over developmental priorities. This tension takes additional dimensions when the 'larger' small states establish national universities alongside regional ones. The demonstration by such countries as Samoa, Fiji, Jamaica, and Trinidad and Tobago that national institutions can operate alongside regional ones encourages other countries to follow suit. For example, in the South Pacific the governments of Solomon Islands and Tonga have indicated their intention to create a national university; and in the Caribbean parallel moves have been signalled in Antigua and Barbuda, Barbados, Dominica, Saint Kitts and Nevis, and Saint Lucia.

Small states may be also part of regional communities in which they are a minority, such as in the European Union (EU), the Southern African Development Community (SADC), and the Economic Community of West African States (ECOWAS). In such settings, the scope for negotiation with larger states may be more limited than when small states form the majority in regional groupings. Nevertheless, the fact that the small states *are* states rather than just regions in larger countries gives them a voice which they would not otherwise have.

Other small states operate outside regional integration processes. In this case they may maintain collaboration with former allies and/or seek new allies to alleviate dependencies. As noted by Navoyan in *Chapter 9*, Armenia has maintained strategic partnerships with other former Soviet countries while opening new avenues for collaboration with Western Europe. This search for allies is expressed in the search for new models for Armenian tertiary education, and in particular the development of the quality assurance system.

In *Chapter 11*, Tewarie referred to the global financial crisis of 2008–2009. He noted a World Bank review which had shown that the crisis had affected small states more than larger countries. The report observed that this was hardly surprising since these countries were relatively susceptible to exogenous shocks, with economies that were

simultaneously open and unable easily to diversify and thus minimize risks. Small states are subject to diseconomies of scale, and cannot easily downsize functions.

The global financial crisis emerged at a time when the social demand for tertiary education had started to manifest itself strongly in many small states as a consequence of expanding or even universalizing secondary education. Tewarie highlighted the challenges for public budgets when governments wish to expand tertiary education. He stressed the need to diversify resources, not only to supplement public funding but also to increase resilience against the types of financial fluctuations that are common in small states.

The changing environment for tertiary education in small states must also take account of advances in information and communications technologies (ICTs). Many small states used to feel disadvantaged by the inability to maintain specialist libraries and by general remoteness. Increased connectivity has changed this situation. Indeed, with broadened bandwidth and growing Internet coverage even in remote environments, including on scattered islands, e-learning opportunities can be accessed with increasing ease. This can be done either on a private basis, where individuals can plug into commercial e-learning providers operating internationally, or institutionally, where local or regional higher education institutions offer more and new forms of distance learning opportunities. This book has noted that distance education solutions can effectively serve very small countries when offered by a regional university, which can build on the substantive know-how of established faculties and departments.

The development of the Open Campus Network of the University of the West Indies (UWI) and the USPNet of the University of the South Pacific (USP) illustrates the combination of regional approaches with new opportunities arising from ICT developments. Technology offers cost-effective solutions for increased access combined with good-quality delivery. Indeed, the rapid increase in student numbers of both regional universities has partly been achieved through the development of distance education opportunities in the non-campus countries where participation rates used to be relatively low. The increased extension of distance education opportunities to the non-campus countries is also a means of easing the tensions existing between the campus and

non-campus countries, and thus also an avenue for stabilizing the regional organizations.

Old challenges revisited

This book has revisited opportunities and threats arising out of the environment of small states. It has also looked at some of the structural challenges to tertiary education in small states, especially meeting social demand for quantity and quality, and developing sustainable research capacity.

With regard to the first, the continuous and yet accelerating pressure of growing social demand for tertiary education was examined by Martin in *Chapter 2*. Since small states, taken as a group, are more advanced in terms of the development of their primary and secondary education coverage than medium-sized and large states, most small states feel the pressure more strongly to expand access to tertiary education.

The options pursued to do so vary according to traditions, available resources, and opportunities for collaboration. The combination of local provision with the opportunity to study abroad remains a key strategy, but the overall trend is towards the development of domestic tertiary capacity, including at the most advanced level. In *Chapter 8*, Al Shmeli noted that during the 1980s and 1990s the Government of Oman saw opportunities to study abroad as a valuable investment, but that external study received less government support during the 2000s. By 2009, Sultan Qaboos University offered 18,000 places, while public and private providers in Oman together provided 80,000 places. The Omanis who go abroad now to study generally do so with their own resources rather than with government ones.

By contrast, Malta was integrating its provision with other parts of Europe. Malta has an ancient university and thus long-established traditions, but has chosen to participate in the Bologna Process and in other programmes which promote interflow of students. Sciberras, in *Chapter 7*, pointed out that Malta has more outgoing than incoming students, though incoming mobility was greater than outgoing mobility under the ERASMUS programme. With such forces, Malta's domestic tertiary sector grew by 40.1 per cent in the decade to 2008.

Another option is the development of cross-border, private education. Since small states tend to be particularly open to international

forces, they also tend to be especially open to cross-border provision of tertiary education. Indeed, the majority of small states see this either as a means to supplement their domestic offer or as an avenue to build capacity rapidly at a relatively low cost. Small states, particularly those in the Caribbean and also to some extent the Pacific and the Indian Ocean, have a long history of offshore medical faculties which were established on their territories decades ago. These institutions have mainly served foreign learners, but they have also served some domestic students. Other forms of cross-border provision are in both face-to-face and distance format.

In *Chapter 8*, Al Shmeli underlined that the Government of Oman has actively pursued a strategy to widen access via the promotion of private providers, while at the same time requesting such providers to establish institutional affiliation agreements with reputable overseas cross-border institutions. These affiliated institutions offer a wide variety of franchised programmes with qualifications delivered by the overseas institutions. This situation poses a new challenge related to the local recognition of qualifications earned from numerous overseas providers. It also poses challenges to the readability and national integration of such a diverse academic offer, and as a consequence to student mobility through the system.

In addition, within the context of enhanced privatization and cross-border provision are growing concerns about academic fraud. Small countries have experienced problems when their country names have been used as the supposed origin of a diploma mill. In *Chapter 12*, Martin cited an example from Fiji when students arrived from India wanting to enrol at the University of Pacific International. This institution does not exist, and the fraudulent recruiters were exploiting the name of the University of the South Pacific. Many other small states are also named by alleged diploma mills.[52]

Within this context, the issues of regulation and quality assurance have moved up on policy agendas. In *Chapter 12*, Martin observed that because small states are by definition limited in human resources,

52. For example, the 'Known Diploma Mills Resource Guide' available et http://204.12.48.240/wp-content/uploads/2009/12/Known-Diploma-Mills_5.pdf [accessed 9 August 2010] named institutions which claimed to be based in Antigua and Barbuda, the Bahamas, Belize, Botswana, British Virgin Islands, Cayman Islands, Cook Islands, Cyprus, Grenada, Guam, Kuwait, Montserrat, Netherlands Antilles, Niue, Norfolk Island, Saint Kitts and Nevis, Saint Lucia, Samoa, Seychelles, Swaziland, Turks and Caicos, US Virgin Islands, and Vanuatu.

mechanisms for regulation and quality assurance may be particularly weak. As a consequence, small states struggle with the establishment of regulatory and quality assurance systems which would not only ensure minimum quality levels but also offer recognition of qualifications earned from cross-border providers and protect consumers from bogus providers. For the establishment of such systems, small states are looking for cost-effective solutions, such as multi-level and multi-purpose professional bodies and regional cooperation.

Another major challenge identified in this book relates to the difficulties for small states in establishing a sustainable research capacity. In *Chapter 3*, Crossley highlighted the need. He stressed the vulnerability of small countries' agendas set by outsiders with reference to their own, larger-state circumstances. This point received elaboration in *Chapter 6* with specific reference to Saint Lucia. In that chapter, Louisy and Crossley argued that small states, in order to have their voices heard, must take part in international fora and come to the negotiating table with arguments and evidence-based positions. Since the layers of international cooperation have increased, the need for nationals with academic backgrounds has also increased. Saint Lucia is part of the Organisation of East Caribbean States (OECS), and the OECS is part of the wider CARICOM. If a small state such as Saint Lucia wishes to influence policies in these sub-regional or regional groupings, it must be able to draw on analytical work which would be best provided in an endogenous manner by a local tertiary education institution.

The challenges in research capacity are of course strongly related to capacity for postgraduate training. Even relatively large countries, particularly ones in the developing world, face challenges in developing and sustaining research capacity because of the difficulties in competing with the knowledge magnets in more resource-intensive industrialized countries. While there are no easy solutions, in *Chapter 3* Crossley referred to the need for small countries to be selective in their priority-setting for research capacity and to build on existing networks to provide opportunities for collaboration so that a detrimental isolation of research workers is avoided. In *Chapter 4*, Tewarie seemed to be referring to the argument that research capacity in certain areas needs a critical mass, which would be well placed in a regional institution. He observed that one of the strategic development avenues for the UWI was the development of postgraduate training and research capacity.

In *Chapter 8*, Al Shmeli added to this discussion by indicating that in Oman research priorities have been set in tight coordination with the overall development vision of the country which is aimed at developing science and technology to sustain industrial development, and enhanced oil recovery. A National Research Council was established in 2005 to provide overall coordination and policy development, and a system of research chairs in priority areas was created. While Oman is one of the larger and richer small states, the targeted approach to the development of research capacity may inspire other larger small-states.

Analysing intersecting variables

This book started from the assumption that reflecting on tertiary education in small states is a valuable exercise because small states form a group with some common characteristics. In tertiary education, these commonalities have much to do with the difficulties in organizing a diversified, cost-effective and high-quality provision. One major challenge is the scarcity of high-level academic human resources, another one a high level of brain drain, in particular of advanced human resources. Although the expansion of tertiary education, especially at the postgraduate level, enlarges the pool of such personnel, the expansion of systems also means that resources remain thinly spread.

This book has also noted that small states differ widely from each other. They differ by geographic location and natural characteristics, the language communities to which they belong, the availability of resources, the sizes of their populations, and the levels of regional and other collaboration. In order to discuss policy priorities and responses for the development of tertiary education, it is useful to combine two particular variables which seem to imply variation: population size and the level of regional collaboration.

With regard to population size, it may be recalled that 32 of the 89 states and territories listed in *Table 1.1* have populations below 100,000, and that 46 – more than half – have populations below 250,000. At the other end of the spectrum, only 19 states have populations between 1 and 3 million. The constraints associated with very small size within the group of small states are thus pertinent to the majority. In this book, the smallest small state examined in detail is Saint Lucia with a population of 170,000. Armenia and Oman have populations close to 3 million. From the discussions of these country cases, it is clear that the

policy priorities and responses differ widely. Further case studies would be desirable of countries even smaller than Saint Lucia.

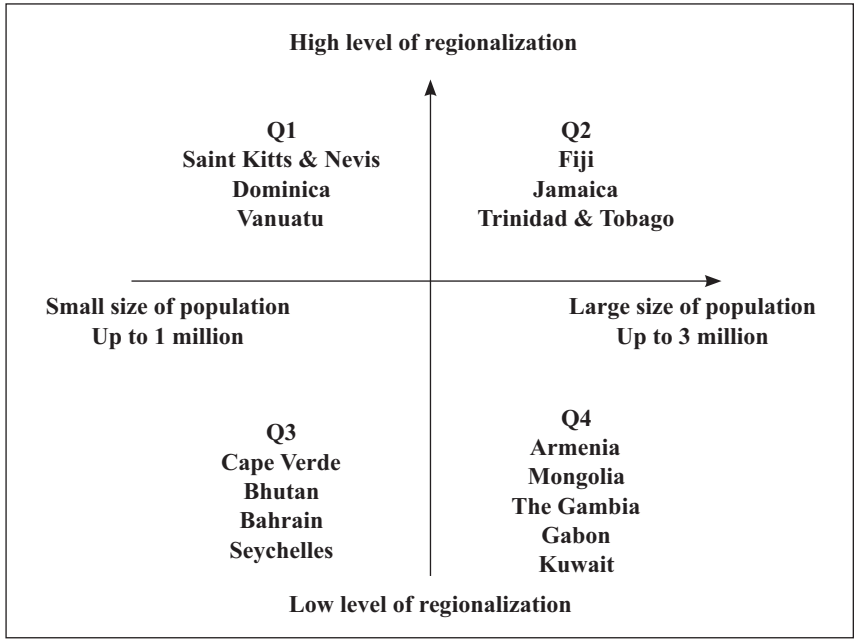
With respect to regional collaboration, the pooling of resources in regions where small states are dominant in numbers has been a longstanding policy response to overcome the constraints of smallness. As pointed out on many occasions, regional universities are the strongest manifestation of regional collaboration in the area of tertiary education. The most robust examples are the UWI and the USP. As noted by Bray in *Chapter 1*, the University of Botswana, Lesotho and Swaziland (UBLS) did not survive as a single unit, and the University of the Indian Ocean (UIO) did not in its initial years live up to the aspirations of its founders. More recently, regional cooperation in the area of tertiary education has taken new forms, including in e-learning, quality assurance, and qualifications frameworks through bodies such as the Association of Caribbean Tertiary Institutions (ACTI) and the European Association for Quality Assurance in Higher Education (ENQA).

Figure 13.1 maps a number of small states according to population size and level of regionalization, and presents four policy quadrants. *Quadrant 1* embraces the smaller of the small countries located in regions with strong collaboration. Most of these countries operate with one major multi-purpose tertiary institution in addition to benefitting from regionally organized public provision which is both face-to-face and at a distance. Since social demand is strong, the major policy challenge is to increase access while maintaining relevance for domestic development. The desire for cost-effective strategies to achieve a diversified human resource base forces them to assess options of the sort set out in *Chapter 1* of this book, that is, multi-purpose and multi-functional institutions in addition to the regional provision, including via e-learning and some cross-border provision. The main strategic priorities of countries in Quadrant 1 will be the strengthening of institutional capacities of the local multi-purpose tertiary institution in general and the development and retention of needed academic staff.

Increasingly, and as a response to national aspirations, very small states are envisaging a transformation of their post-secondary institutions into university-level institutions. This requires the institutions to teach at least some courses at the undergraduate level. However, due to capacity constraints such institutions may remain teaching-only, without significant research roles. The development of the national universities also requires redefinition of roles and responsibilities for the regional

institutions. The regional universities may provide support to the undergraduate programmes in national universities, and develop and organize e-learning opportunities for students in very small states. The regional universities may also concentrate on postgraduate programmes and research, as well as possibly offering quality assurance services for the programmes in the small countries.

Figure 13.1 Policy quadrants – combining population size with levels of regionalization



Quadrant 2 embraces the 'larger' small states which operate again in environments where regional universities play a strong role and where regional bodies already offer opportunities for coordination in certain areas. In these countries, tertiary education has already become much more diversified and has overcome many of the constraints of small size. The provision commonly consists of several public and private tertiary institutions of the university and non-university type together with various cross-border providers. The main options for expansion would lie in the development of a further segmented system of both regional and national public-sector players, together with a more or less developed private provision. Traditional academic courses may co-exist

with professionalized short-cycle tertiary education to respond to a diversifying labour market.

Within this constellation, it is likely again that the regional universities will concentrate on certain tasks, such as the provision of postgraduate education and research, while the national universities and community colleges will be less research-intensive and mainly function as teaching-only institutions. The diversification of tertiary education will increase the need for coordination and articulation to allow students to move through the tertiary system. There will also be an increasing need for the regulation and quality assurance of private and cross-border providers of tertiary education services.

Due to the imperatives of regional integration, quality assurance schemes and qualifications frameworks can be expected to play an even stronger role as a means to enhance the mobility of students and professionals. However, capacities in this domain will need to be developed at the national level so that regional and national regulatory and quality assurance structures can work together and share responsibilities.

Quadrant 3 embraces small and very small states with traditionally low levels of regional collaboration. Again, the size determines the options for institutional models (see Quadrant 1), with multi-purpose and multi-level (public) institutions appearing as the most cost-effective solutions. The trend of creating national universities manifests itself even more strongly since there are few regional opportunities for university-level tertiary education.

Opportunities for collaboration for the development of national universities cannot be found within regional universities, either. Countries in Quadrant 3 will more commonly need to rely on traditional partnerships, such as countries belonging to the same language community and larger neighbouring countries.

Given the lack of regionally coordinated tertiary education provision, Quadrant 3 countries will also remain more open to opportunities for cross-border provision as a means of developing their tertiary capacities. As a consequence, regulation and quality assurance will emerge as a stronger policy priority than in small states within a regional system. Since very small countries face difficulties in developing their national regulatory systems, and since regional collaborative frameworks are not well developed, solutions could be found in drawing on the resources

of neighbouring larger countries, of traditional partners or, if financially feasible, international commercial providers of quality assurance services.

Finally, *Quadrant 4* groups larger small states without strong regional institutions. Most have attained a certain level of institutional diversification, and require coordination and integration of the tertiary education offer. In order to respond to growing social demand, Quadrant 4 countries will need either to develop their public tertiary provision or, in the absence of a regional offer, rely on private and cross-border providers. This will again raise the importance of coordination and articulation among the domestic and foreign providers of tertiary education, as well as issues of regulation and quality assurance. In order to develop such schemes, these countries will be less supported by regional bodies, and thus be more amenable to international support for developing their regulatory capacities and quality assurance services. Possible solutions will be similar to those of Quadrant 3 countries.

Table 13.1 summarizes policy priorities and responses by type of situation. It shows that institution-building and regulation will remain policy priorities for small states in the near future, together with regulation as a response to growing levels of privatization of tertiary education. The need for integration and articulation arises as a new priority in the larger small countries. While regional solutions are not always readily set up for all small states, it can nevertheless be expected that, to avoid isolation, small states will increasingly be drawn into the regional integration movement, even if they form only a minority. As a consequence, they will benefit from the experience of larger states and be able to draw on existing structures for regulation and quality assurance, but also give away a share of their sovereignty.

Table 13.1 Comparative analysis of policy priorities and responses

	Quadrant 1: High regionalism/ low population	Quadrant 2: High regionalism/ high population	Quadrant 3: Low regionalism/ low population	Quadrant 4: Low regionalism/ high population
Policy priorities	Institution-building Regulation	Institution-building Regulation Integration and articulation	Regulation Institution-building	Regulation Institution-building Integration and articulation
Sources of solutions	National and regional solutions for regulation	National and regional solutions for regulation, integration, and articulation	Solutions for regulation from neighbouring countries and international quality assurance services	Solutions for regulation from neighbouring countries and international quality assurance services

The roles of international organizations

In closing, it is useful to reflect again on the roles of international organizations in advancing the interests of small states and in promoting productive relationships between states of all sizes. This particular book results from the initiative of UNESCO's International Institute for Educational Planning (IIEP), operating in conjunction with the Commonwealth Secretariat, the Commonwealth of Learning (COL), the Agence universitaire de la Francophonie (AUF), the World Bank, and UNESCO Headquarters. Among the IIEP's strengths is that it is truly global in mandate. Whereas the Commonwealth is primarily an association of Anglophone countries and the AUF primarily works with Francophone countries, IIEP is mandated to work with all 193 UNESCO Member States plus the seven Associate Members. The World Bank is similarly a global body, but as a development bank has a stronger focus on economic dimensions.

The international organizations have clearly demonstrated their usefulness over the decades. They have sponsored both conceptual and practical work, and have provided forums at which policy-makers, planners, and practitioners can converge to learn from each other. Much of this has been across regional boundaries, with colleagues from Africa, Asia, the Caribbean, Europe, and the South Pacific visiting each others' regions to gain ideas and to learn from experiences.

Of course most international organizations are themselves bodies which have been set up by Member States and which are governed by those Member States. In this respect, the small states have responsibilities

in addition to being beneficiaries. The move to sovereignty of many states during the last third of the twentieth century changed the nature of many of the international organizations. The small states have learned how to make use of their roles, both to contribute to wider social and economic agendas and to ensure that attention is given to their specific needs. The real world of geopolitics of course has many undercurrents and shifting balances, but small states may be a significant force within the dynamics of change.

In conclusion, it is useful to return to the title of this book: planning in the context of globalization. The nature and impact of globalization are themselves evolving, and will continue to change in ways that are not completely predictable. Small states often feel vulnerable in the wider picture, having to respond to actions taken by larger states and rarely themselves in control of forces. However, it remains the case that in many settings statehood is an asset – that small states have stronger voices than they would have if they were merely regions of larger states or suburbs in large cities. There are strong grounds for optimism that collaboration between small states and international organizations will help to make the world a better place not just for the small states themselves but also for the medium-sized and large states.

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Small states have in common a number of challenges and opportunities, including in the domain of tertiary education. They face particular constraints in the organization of tertiary education because of their limited pools of highly qualified human resources and the difficulties in achieving economies of scale in administration and management.

In many small states, the tertiary sector has undergone considerable change. Enrolments have grown rapidly, the institutional fabric has been diversified, and technology-based and networked models have been developed. Small states have also been part of expanded cross-border provision, much of it positive but some involving degree mills and other challenges.

This publication takes stock of recent reforms in the tertiary education of selected small states. It presents regional and national experiences from different development contexts. The book concludes with a discussion of policy issues, including sustainable funding and technological solutions to overcome the constraints of small states. It notes some ways in which the challenges facing small states can be turned into opportunities.

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