Educational Development in the Small States of the Commonwealth

Examination Systems in Small States:

Comparative Perspectives on Policies, Models and Operations

Edited by

Mark Bray and Lucy Steward

Commonwealth Secretariat

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Contents

List of Abbreviations

'A'	Advanced
AACRAO	American Association of College Registrars & Admission Officers
AEB	Associated Examining Board
AFC	Administration & Finance Committee
AICE	Advanced International Certificate of Secondary Education
BB-ICSE	Bhutan Board-Indian Certificate of Secondary Education
BBE	Bhutan Board of Examinations
BGCSE	Bahamas General Certificate of Secondary Education
BLS	Botswana, Lesotho and Swaziland
BSc	Bachelor of Science
CAPE	Caribbean Advanced Proficiency Examination
CARICOM	Caribbean Common Market
CGLI	City & Guilds of London Institute
CISC	Cook Islands School Certificate
CISCE	Council for the Indian School Certificate Examination
COSC	Cambridge Overseas School Certificate
CPE	Certificate of Primary Education
CSE	Certificate of Secondary Education
CXC	Caribbean Examinations Council
DNEA	Department of National Examinations & Assessment
EAEC	East African Examinations Council
ERTD	Examinations Research & Testing Division
FSLC	Fiji School Leaving Certificate
GCE	General Certificate of Education
GCSE	General Certificate of Secondary Education
GNP	Gross National Product
HIGCSE	Higher International General Certificate of Secondary Education
HNCE	Higher National Certificate of Education
HSC	Higher School Certificate
IAEA	International Association for Educational Assessment
ICSE	Indian Certificate of Secondary Education
IGCSE	International General Certificate of Secondary Education
ISC	Indian School Certificate
JCE	Junior Certificate Examination
JSC	Junior Secondary Certificate
LSSCE	Lower Secondary School Certificate Examination

MA	Master of Arts
MATSEC	Matriculation and Secondary Education Certificate
MEd	Master of Education
MES	Mauritius Examinations Syndicate
MUT	Malta Union of Teachers
NCGE	National Certificate of General Education
NEC	National Examinations Council
NUS	National University of Samoa
NZQA	New Zealand Qualifications Authority
NZSC	New Zealand School Certificate
NZUE	New Zealand University Entrance
'O'	Ordinary
PCE	Primary Certificate of Education
PSCE	Primary School Certificate Examination
PSSC	Pacific Senior Secondary Certificate
PTCO	Principal Test Construction Officer
SAARC	South Asian Association for Regional Cooperation
SC	School Certificate
SEC	School Examinations Committee
SPBEA	South Pacific Board for Educational Assessment
SPC	South Pacific Commission
SSC	Samoa School Certificate
SUBSEC	Sub-Committee of the School Examinations Committee
UBLS/SEC	University of Botswana, Lesotho & Swaziland Schools Examinations Council
UCLES	University of Cambridge Local Examinations Syndicate
UK	United Kingdom
ULEAC	University of London Examinations & Assessment Council
ULSEMC	University of London School Examinations Matriculation Council
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific & Cultural Organisation
UNICEF	United Nations Children's Fund
UODLE	University of Oxford Delegacy of Local Examinations
USA	United States of America
USP	University of the South Pacific
UWI	University of the West Indies
WAEC	West African Examinations Council
WASSCE	West African Senior School Certificate Examination
WSSC	Western Samoa School Certificate

List of Tables

List of Figures

Foreword

Examinations and certification are of critical concern to small states that are faced with the challenge of balancing the imperative of national goals and priorities with the pressures of external standards and criteria to ensure marketability of local qualifications. The challenges faced by small states to ensure that assessment and qualifications are carried out by methods that are relevant, efficient, economical and fair are compounded by difficulties that are inherent in their limited human and financial resources.

This publication is based on the papers presented at, and the deliberations of, a pan-Commonwealth workshop which took place in May 1996 in the context of the Secretariat's activities to facilitate capacity building for human development in small states of the Commonwealth.

The workshop in Barbados was an initial step to address the concerns of small states in this area of examination systems. The participants were senior officials in ministries of education, representatives of examination boards, and staff from companies that do business in the area of examinations in Commonwealth countries. The workshop provided an opportunity for the participants to focus on issues such as personnel and infrastructure required for the delivery of examinations; international recognition and national priorities; innovative ways of testing; security; and the use of technology to improve efficiency.

This publication elaborates these issues, and is intended for use by ministries of education, examination boards, and institutions. It should also be of value to persons who are conducting research and contributing to increasing knowledge of human development issues in small states. In addition, the Secretariat has been privileged to share its work in small states with other agencies, and hopes that this publication will help to increase awareness at the international level of an area of great importance to all countries, large and small.

I should like to thank Professor Mark Bray for the great effort he has made in synthesising the various issues and putting them into a conceptual framework. The Secretariat is indeed grateful for his assistance. Thanks also to the authors who gave their time and expertise to make this publication possible.

Professor Stephen Matlin
Director, Human Resource Division

Introduction

Mark Bray

This book is one of the products of a Commonwealth Secretariat project which was initiated within the framework of the Secretariat's longstanding concern with education in small states. The project was conceived in 1994, and included among its highlights a pan-Commonwealth workshop in Barbados two years later. The workshop was attended by over 50 people concerned with examinations systems in Commonwealth countries, and included officers responsible for examinations in small states in Africa, Asia, the Caribbean, Europe and the South Pacific. This book is partly based on papers presented at that workshop, but includes additional material that was commissioned to cover dimensions not otherwise addressed.

The Secretariat has a particular mandate to address the concerns of small states because they comprise a large group within the Commonwealth. Among the Commonwealth's 54 member states, 30 have populations below two million and 28 have populations below 1.5 million. These states are listed in Table 0.1, together with 17 non-sovereign associated states and dependencies which have populations below 1.5 million. Recognising the importance of these members, the Commonwealth has addressed the concerns of small states in all its major sectors of activity. Education stands out as a sector in which the Secretariat's conceptual and practical work has been especially noteworthy.

Focus and Conceptual Contributions

The Commonwealth Secretariat's focus on issues which are specific to the education systems of small states has dated from the early 1980s. In 1983 the Secretariat commissioned Colin Brock, then of the University of Hull in the United Kingdom, to undertake a survey of education in the small member states of the Commonwealth (Brock 1984). This was followed by a 1985 pan-Commonwealth meeting in Mauritius which, in the words of one participant, was "the watershed event which developed a coherent, common vocabulary to speak of the problem, outlined a nascent theory, and [helped establish] a professional network of colleagues" to analyse and improve education in small states (Higginson 1991, p.537; see also Bacchus & Brock

*Table 0.1: Commonwealth Independent States, Associated States and Dependencies with Populations below Two Million**

Country/Region	Population	Country/Region	Population
Africa		*Caribbean* (Contd.)	
Botswana	1,402,000	St. Vincent & Grenadines	110,000
The Gambia	1,019,000	Trinidad & Tobago	1,282,000
Lesotho	1,899,000	Turks & Caicos Islands†	13,000
Mauritius	1,111,000		
Namibia	1,565,000	*Europe*	
Seychelles	70,000	Cyprus	718,000
St. Helena†	6,000	Guernsey†	55,000
Swaziland	888,000	Jersey†	82,000
		Gibraltar†	32,000
Asia		Isle of Man†	64,000
Brunei Darussalam	281,000	Malta	371,000
Maldives	236,000		
		South America	
Caribbean		Falkland Islands†	2,000
Anguilla†	7,000		
Antigua & Barbuda	67,000	*South Pacific*	
Bahamas	266,000	Christmas Island†	1,000
Barbados	260,000	Cook Islands†	20,000
Belize	205,000	Fiji	796,000
Bermuda†	62,000	Kiribati	76,000
British Virgin Is.†	13,000	Nauru	10,000
Cayman Islands†	27,000	Niue†	2,000
Dominica	72,000	Norfolk Island†	2,000
Grenada	91,000	Samoa	163,000
Guyana	812,000	Solomon Islands	346,000
Montserrat†	10,000	Tokelau†	2,000
St. Kitts & Nevis	41,000	Tonga	93,000
St. Lucia	158,000	Tuvalu	9,000
		Vanuatu	161,000

* Most figures refer to the early or mid-1990s.

† Associated State or Dependency.

Sources: Commonwealth Secretariat (1995); various national sources.

1987). The Mauritius meeting clearly showed that, despite wide diversity in the countries' societies, economies and geographies, smallness was one determinant of common features in their education systems. The statement prepared by participants (Commonwealth Secretariat 1986, pp.5-6) pointed out that:

> The style of educational development ... is too frequently modelled on what is appropriate and fashionable in large states. Small countries are not simply a scaled-down version of large countries. They have an ecology of their own. We believe there is a cluster of factors which suggest particular strategies in the smaller states of the world.

Since the 1985 Mauritius meeting, the Secretariat's projects on education in small states have been more specialised. The main ones have focused on:

- the supply, training and professional support of educational personnel in multi-island countries (Commonwealth Secretariat 1987);
- the organisation of post-secondary colleges in small states (Commonwealth Secretariat 1988);
- the training of multifunctional administrators (Farrugia & Attard 1989);
- the organisation and management of ministries of education in small states (Bray et al. 1991; Bray 1991b);
- educational consultancy in small states (Lloyd & Packer 1994);
- examination systems in small states (Commonwealth Secretariat 1996); and
- management of tertiary institutions in small states (Commonwealth Secretariat 1997).

This book may therefore be seen in the context of a series of projects, and also within a broader literature focusing on the implications of size for various facets of educational development in small states.

On another dimension, the book extends the comparative literature on examinations. Noah & Eckstein (1992, p.3) have noted the general paucity of comparative studies in this field. Although a vast literature deals with examinations in particular countries, they observe, relatively little systematic cross-national comparative work has been conducted. The book of course only addresses one segment of the vast array of potential themes in the comparative study of examinations; but it addresses a topic which has previously been almost totally neglected.

Boundaries in Focus

Within the focus on examinations, the main concern of this book is on external assessments at the secondary level. This concentration was chosen because it is at this level that tensions between national, regional and international forces, which are a major theme of this book, are most clear. Although decision-makers in all countries must balance demands for local relevance with desires for international recognition of qualifications, this tension is particularly severe in small states. While giving particular attention to the secondary level, however, the book does also comment on examinations at the primary level. The differences in emphasis are another instructive domain of comparison.

Also demanding emphasis at the outset is that the principal concern in the book is with broad policy choices rather than with technical matters such as the mechanics of item-banking, moderation, criterion-referenced assessment, and group testing. Some technical issues are noted in so far as they are affected by the size of the system concerned. However, much of the technical literature that exists elsewhere (e.g. Bude & Lewin 1997; Green 1991; Luijten 1991; Keeves 1994; Walberg & Haertel 1990) is relevant to examination systems in countries of all sizes. Universally applicable material is in general outside the focus of this book, and is only noted when it is directly related to the issues particularly facing small states.

Further, the book focuses almost exclusively on Commonwealth countries. The chief exception is the chapter on Bhutan, which is not a member of the Commonwealth. The fact that most the countries which are the focus of detailed discussion have education and examination systems derived from British models provides a common basis for comparison. The fact that the book omits detailed study of countries which operate in francophone, lusophone or other traditions does mean that the picture covers only one group of small states (albeit the majority, since anglophone small states happen to be the most numerous). Inclusion of the chapter on Bhutan does not provide a strong contrast with the Commonwealth countries, first because Bhutan's education system gives a high priority to English even at the primary level, and second because pupils in the highest grades in Bhutan's secondary schools sit examinations set in India (which is a Commonwealth state). As a result, Bhutanese models resemble ones found in some Commonwealth states more closely than would be the case for models in, for example, in Liechtenstein, Sao Tomé & Principe, or Gabon. Having recognised this point, however, the fact remains that the book does provide detailed material for comparison of a wide-ranging group of small states in very different parts of the world.

Structure and Authors

This book is divided into five main parts, each of which deserves some commentary. The first part elaborates points sketched in this Introduction. It presents a conceptual framework, drawing on the existing literatures on education in small states and on examination systems. The conceptual framework provides a set of lenses through which to view the material in subsequent chapters.

Part II of the book, which is the longest, contains 10 case-study chapters of examination systems in particular countries. The countries have been grouped alphabetically within world regions. This grouping is chiefly a matter of convenience rather than because countries in particular geographic groups necessarily have more in common with each other than with countries in other geographic groups. However, the grouping does highlight the fact that the case studies are drawn from four very different regions of the world. With such a broad canvas it is possible to identify common features which affect all small states despite the diversity in the cultures, economies and political frameworks within which those small states operate.

An alternative way to have grouped the countries would have been in ascending order of population size. At one end of the scale would have been Samoa, with a population of just 163,000, and at the other end would have been Namibia with a population of 1,565,000. The issues faced by policy-makers in the smallest-of-the-small countries may be rather different from those in the larger ones, and to some extent it is necessary to identify a continuum in the ways that size affects examination systems. This is especially the case when considering economies of scale and the manpower demands of examination systems.

Part III of the book focuses on three important regional examining bodies. An extensive literature addresses attempts to meet the needs of small states through regional bodies (e.g. Atchoarena 1993; Bray & Packer 1993; Crocombe & Meleisea 1994; Crossley & Louisy 1994). The three chapters in this part of the book add to that literature, showing that regional bodies can certainly meet the collective needs of their members but also noting that regional bodies suffer major tensions and are sometimes imperfect solutions to the problems they confront. The chapters also show a range of alternative structures, for although all three regional bodies endeavour to meet the examining needs of small (and not so small) states through common frameworks, the compositions and modes of operation of the three bodies differ markedly from each other.

A further dimension to what is already a complex picture is introduced by the two chapters in Part IV of the book. These chapters focus on a pair of metropolitan examinations boards which operate in many countries.

Although the metropolitan boards presented here exist primarily to serve candidates in the countries in which the boards are based, each also plays a major international role. The international work of the New Zealand Qualifications Authority is almost entirely within the South Pacific; but that of the University of Cambridge Local Examinations Syndicate is worldwide. The ways in which the roles of these bodies have evolved over time, and in particular the ways in which the roles dovetail and/or overlap with those of regional and national examining boards, is of major importance.

The last part of the book contains a pair of chapters which summarise and conclude. The first of these chapters elaborates the conceptual contributions of the book; and the second draws out the more practical implications for policy at national, regional and international levels. It is impossible to resolve all tensions and create a perfect system; but this book does help highlight some successes, some problems, and some potential ways forward in the improvement of examination systems in small states.

Finally, a note should be presented about the authors of the chapters in this book. All are professionally involved in the examination systems about which they have written, and in most cases they are actually responsible for the administration of those systems. Moreover, all the authors of the country-chapters are nationals of the countries concerned. As such, they have been able to write with authenticity about the systems they describe.

Part I: Analytical Framework

Chapter 1:

Small States and Examination Systems — Concepts and Issues

Mark Bray

This chapter provides a framework for the rest of the book. It begins with some definitions before turning to reviews of existing literature first on education in small states and then on examination systems. The presentation of concepts and issues provides a set of perspectives with which to view the chapters in Parts II, III and IV of the book. The literature on small states highlights distinctive characteristics of economies, societies and public administration which have implications for the operation of examination systems. Also noted in this chapter are issues concerning control of examination systems, recognition and status of qualifications, and costs of operations. Among the threads which run through the discussion are tensions between international forces and national aspirations.

Some Definitions

Four words used in the title of this chapter, which is itself derived from the title of the whole book, require initial definition. These are 'small', 'state', 'examination', and 'system'. Definition is necessary in order to clarify further the focus and parameters of analysis.

Beginning with the word 'small', an initial problem is that the word is relative. In terms of national self-image, Nepal, for example, might feel small in comparison with neighbouring India, Pakistan and Bangladesh, but would feel large compared with Bhutan or Jamaica. Likewise, Jamaica might feel small compared with the USA, but would feel large compared with neighbouring Anguilla, St. Kitts & Nevis, and Dominica.

A second problem is that the word 'small' does not in itself indicate the criteria for measurement. Most of the literature on small states recognises that relative distinctions are important, but nevertheless uses absolute

indicators. Population is usually the main yardstick, and was the criterion identified in the Introduction to this book. Common supplementary criteria are geographic area and size of economy. One difficulty is that for individual countries, these three criteria do not necessarily coincide with each other in rank orderings. Thus Namibia, for example, may be described as a small state on the population criterion because it has only 1.6 million people. However, it is certainly not small in area, having a total land mass of 824,000 square kilometres. Likewise, the oil-rich states of Qatar and United Arab Emirates are small in population and area, but have substantial economies.

To tackle this difficulty, some analysts have created composite indicators (e.g. Brock 1984; Hein 1985; Shand 1980). The details need not be a concern here, since the composite indicators do not greatly facilitate the present study. Instead, it is sufficient to note that population has been taken as the principal criterion for this book, though reference is made to area and to size of economy when relevant. Although many previous works, including some by the present author (Bray 1992; Bray & Packer 1993) take 1.5 million people as the cut-off point in the identification of small states, most of those works recognise that the selection of cut-off points is arbitrary and that scale should to some extent be assessed along a continuum. For the present book, the cut-off point has been taken as a population of two million. This cut-off point has permitted inclusion of Namibia and other relatively large states in the discussion, the value of which will become evident when contrasting states which are among the smallest-of-the-small with states which are at the upper end of the range.

Concerning the term 'state', Dommen (1985, p.4) notes that, according to some analysts, a state should by definition have the attributes of a territory, a permanent population, a government, and the capacity to entertain relations with other states. However, Dommen then shows that none of these facets is entirely straightforward. Moreover, questions about where statehood begins and ends could be a focus for lengthy debate (see e.g. James 1986; Held et al. 1983). For present purposes, this debate would be an unnecessary distraction; and since the book is concerned with education rather than political science, it is possible to leave the boundaries of statehood vague. Indeed, for this book the dimensions of statehood have been stretched to their maximum to include discussion both of territories which are sovereign and of territories which are not. Thus in the context of this book, the issues concerning examinations in Dominica (a sovereign state) may be comparable to those facing neighbouring Bermuda (a UK dependent territory which nevertheless has a high degree of autonomy). A similar comment might be made about Tuvalu (a sovereign state) and Cook

Islands (a semi-autonomous dependency of New Zealand).

Thirdly, a few remarks are necessary on the concept of 'examinations'. For many people, the chief image conjured up by this word is of written tests which candidates are required to sit, distantly spaced from each other, under highly formal conditions which include measures to prevent communication between pupils and to control time strictly so that candidates must work at speed to supply precise answers. While this is the dominant image, it is of course not the only form that examinations may take. Examinations may be oral and practical as well as written, may demand project work undertaken in the candidates' own time, and may permit various forms of collaboration (see e.g. Luitjen 1991; Mathews 1985). Moreover, many examining boards use types of school-based assessment in which final results are determined at least partially by work conducted in ordinary classrooms during the course of one or more school years. Again, the mechanics of the different methods of examination are not the primary goal of this book. However, the diversity in forms of examinations must be recognised at the outset; and note will be made of the different forms when they are relevant to the issues specifically confronting small states.

Finally, a comment is necessary on the word 'system' as applied to examinations. This word describes a framework which operates at a level higher than the individual components (Archer 1984; Razik 1972). Individual schools and class teachers commonly have their own internally-operated examinations; but these examinations are not part of the present study except in so far as they are also components of externally-operated systems. Instead, the book is principally concerned with macro-level examinations set by specifically-designated examination agencies. Some countries are arenas in which many such agencies operate, in which case their arrangements for examining and certification may be viewed as multiple systems operating side by side.

Small States and their Characteristics

The existing literature identifies various characteristics which, to a greater or lesser degree, are part of the ecology of small states and which distinguish them from medium-sized and large states. Particularly relevant to the present study are certain characteristics of the economies, societies, and public (and quasi-public) organisations of small states.

The Economies of Small States

The nature of a country's economy has major implications for the nature of its education; and, conversely, the shape of educational development has major implications for the shape of economic development. Recognising

again the diversity of small states, there is an obvious economic difference between, for example, oil-rich Brunei Darussalam and impoverished Equatorial Guinea. There is an equally obvious difference between states which are able to operate regional economic organisations because they are clustered in groups, for instance in the Caribbean and South Pacific, and those which are isolated like Seychelles and Cape Verde. Again, the development of tourism may be possible in such countries as Barbados and Malta, but it is hardly a major option in Iceland or Kiribati. Nevertheless, it is possible to identify important common patterns, some of which are set out below.

Many writers on the economies of small states have viewed smallness as a problem. For example, Ward (1975) pointed out that many small states face supply constraints in land, labour, capital and entrepreneurship. States with small populations tend either to have small land areas or to have land which is desert or otherwise unsuitable for economic exploitation. They also have limited pools of labour, and therefore constraints on human as well as physical capital. Ward added that many small states also face demand constraints. Because domestic markets in small states are generally limited, the maximum scale of plant that can be introduced renders some productive activities completely uneconomical unless a substantial export potential is also available. As a result of these limitations, the rate of economic growth in a small state tends to be primarily a function of the growth of exports of goods and services. Exports are typically concentrated on one or two products, whereas imports are very diverse. The small-state economy is thus dependent on foreign trade, but lacks the capacity to influence prices or quotas in the international market (see also Baldacchino 1995; McGee & Tisdell 1990; Srinivasan 1986).

However, in some respects small size may be an economic advantage as well as a constraint. For example, as pointed out by Dommen & Hein (1985, p.166), "precisely because their economies lack internal linkages, there is little difficulty in designing a set of tax advantages which not only do not weaken the domestic tax base, but actually widen it beyond what the local economy could achieve". Accordingly, such states as Cayman Islands, Bermuda, Jersey, Vanuatu and Bahrain have established profitable tax-havens. Other small states utilise the attributes of sovereignty to sell 'flags of convenience' and passports; and in some countries even the sale of postage stamps generates substantial revenue (Baldacchino 1993, p.40; Connell 1988, pp.67-8). Also significant is that small states are likely to gain higher per capita receipts of foreign aid than are large states. This is partly a function of the strategic location of many small states, but also reflects their general visibility in international affairs (Bray 1992; Connell

1986; Poirine 1995).

The observations about human capital have particular importance to the present study and therefore deserve elaboration. States with small populations may of course have high average levels of education. However, the fact that the populations are small limits the likelihood of those populations containing specialists of the full range that might be expected in larger states. As well as affecting directly-productive sectors of the economy, this factor affects other sectors including examination systems. It means that the bodies which organise examination systems may not be able to recruit from the local populations all the highly specialised personnel that they consider themselves to need. In turn, this means that the examination bodies either have to find alternative sources of expertise, perhaps by sharing personnel through regional bodies or through recruitment of expatriates, or have to manage without the specialist skills.

A further factor related to both human capital and broad economics concerns emigration, which tends to be a notable feature of small states (Caldwell et al. 1980; McGee & Tisdell 1990). Emigration is caused by both push and pull factors. Especially when economies are weak, individuals may find their opportunities for personal advancement too restricted. This can apply to people of all education levels, but personnel with high-level expertise may find that the small infrastructures do not give adequate promotion opportunities and professional satisfaction. Such people may also emigrate in order to gain access to specialised laboratories, computers and libraries. On the side of the destination countries, fewer barriers are erected against nationals of small states because such nationals are limited in number and therefore less threatening than the populations of large states.

Policy-makers within the small states are generally ambivalent about high rates of emigration. On the one hand it deprives the home society of talented and ambitious young people, but on the other hand it is a social safety valve and can generate substantial domestic income from remittances. With reference to the Caribbean, McGee & Tisdell (1990, pp.86-7) point out that emigration reduces pressure in densely-populated islands and that educational strategies play a key role. Continuing emigration of trained personnel, they suggest, is not necessarily something to be stopped. Moreover:

> In a much more competitive climate for the export of surplus population, the level of education among prospective migrants may be an important selling point. The provision of education could even be recommended as a plank in a policy of population control, assuming that the needs of

domestic labor markets are being met simultaneously.

Emigration, and as a result income from remittances, has also been high in other parts of the world. In Cape Verde, for example, remittances in 1987 accounted for 15.4 per cent of Gross National Product (Lesourd 1991, p.123). When opportunities in the USA became constrained, policy-makers sought to diversify destinations. In 1987, the President of Cape Verde (quoted by Connell 1993, p.132) suggested that:

> we think that if we get organised, we will be able to go on counting emigration as a major component of our drive to regulate our economy.

Remittances have also been a major factor in several South Pacific states. Most dramatically, in 1989-90 remittances amounted to 59.6 per cent of Tonga's Gross Domestic Product and 35.1 per cent in Samoa (Appleyard & Stahl 1995, p.33). Particularly where policy-makers consider high levels of migration either inevitable or actively desirable, they are likely to gear at least the higher levels of domestic education systems, including examination requirements, to patterns in the migrants' most popular destination countries.

The Societies of Small States

Just as the economies of small states show wide diversity, so do the societies. But just as commonalities can be identified in small-state economies, so can commonalities be identified in small-state societies. This section identifies some of these commonalities.

Benedict (1967, p.45), in one of the early seminal works on this topic, pointed out that individuals in small-scale societies interact with each other over and over again in a wide range of contexts. This contrasts with large-scale societies, in which individuals are more likely to have impersonal or part-relationships. Benedict described social relationships in small states as 'multiplex' in that "nearly every social relationship serves many interests" (p.47). This feature has important implications, for it means that the decisions and choices of individuals are influenced by their relations in many contexts with other individuals.

Lowenthal (1987, p.39) has extended analysis of this topic, noting that inhabitants of small states learn to get along, like it or not, with people they will know in multiple contexts over their whole lives. To enable the social mechanism to function without undue stress, he suggests, they minimize or mitigate overt conflict and become expert at muting hostility, deferring their own views, containing disagreement, and avoiding dispute in the interests of stability and compromise. Such strategies of what Lowenthal calls

'managed intimacy' are necessary in contexts where people meet frequently, carrying different roles, in domestic and leisure contexts as well as in the work place.

Multi-faceted relationships are as likely to affect the lives of personnel in the education sector as in other domains. On the positive side, interpersonal connections can help in diagnosis of bottlenecks and in smooth running of systems. As noted by Farrugia & Attard (1989, p.24):

> Ideas, views, requests, complaints and proposals can be communicated easily and quickly and most probably personally to the official concerned. People know the abilities, needs and idiosyncrasies of each other and tend to act or react accordingly. Through close personal contact, people's reactions and feedback to political and administrative decisions can be gauged accurately so that political and administrative decisions are taken and implemented without long delays. Furthermore, because the feedback mechanism is often quick and efficient, policies and decisions which misfire can be re-evaluated, revised, modified, and in extreme cases completely reversed.

However, this also has a negative side. As Farrugia & Attard continue (pp. 24-5):

> The highly personalized societies of small states create problems when the policy making and the decision implementing process cannot remain anonymous. For example, the excise-duty official is well known to any businessman who cares; the chief income-tax assessor is also the president of the sports-club and lives in the next village; the wife of the Director-General of Education is the Chairperson of the Playing Fields Association and can be met at the monthly meeting. Mr. X and Ms. Y can be "accidentally" encountered every Friday evening at the local supermarket. Such informal contacts may be abused. Many necessary decisions and actions can be modified, adjusted and sometimes totally neutralized by personal interventions and community pressures. In extreme cases, close personal and family connections lead to nepotism and corruption.

Baldacchino (1995, p.271) has succinctly captured the social complexities by pointing out that in small states face-to-face relations are complemented by back-to-back relations. The ways that the features of small societies affect the operation of examination systems is among the themes that run through several chapters in the present book.

Social factors may also have implications for the macro-political frameworks of small states. Such states may find political cohesion through frameworks in which people are guarded in the ways that they express dissent; but once harmony has been ruptured, small states may be arenas for strident opinions and for attacks which hit much harder because opponents know each others' personal lives in much greater detail than would be likely in larger states (Dahl & Tuft 1973; Lemon 1993; Sutton 1987). At a more practical level, politicians in small states tend to exercise greater influence over administrators, frequently based more on personal than on party factors. Also, top political leaders in small states are likely to be more direct both in communication with one another and in supervision of their subordinates. These factors are as likely to influence development of examinations as well as other aspects in the societies of small states.

Finally, the peoples of small states tend to be acutely conscious of national identities, and to demand a much stronger degree of recognition in school curricula than would be demanded by numerically equivalent groups of people inhabiting provinces of larger countries or suburbs of large industrial cities (Bray & Packer 1993, pp.49-57). This fact imposes heavy pressures on curriculum units, authors of classroom materials, and publishers of textbooks, and also has major implications for examination systems. Questions in examination papers are commonly expected to have a clear relevance to the micro-societies which the examination systems serve.

Public and Quasi-Public Organisations in Small States

In most countries covered by this book, national examination systems are operated either directly by governments through their ministries of education or by quasi-public organisations such as the Mauritius Examinations Syndicate. For analysis of the operation of these bodies it is helpful to draw on the literature on public administration in small states (e.g. Ghai 1990; Murray 1981; Schahczenski 1990). Some of the comments about the availability of skilled expertise and about interpersonal relationships in small states have implications in this context which deserve elaboration and supplementation.

Empirical research has shown that small states tend to have dominant bureaucracies compared with larger states (Baker 1992; Warrington 1994). As noted by Bacchus & Brock (1987, p.3):

> In small states the size of the public service expressed as a percentage of the total population, tends to be disproportionately large. Further, the small number of clients for whom such services have to be provided makes it difficult for the administration of small states to enjoy

economies of scale.

Certain functions, such as preparation of development plans and budgets, and tailoring of computer programmes for processing data, have to be conducted whether the state is large or small. This point may also apply to the operation of examination systems. As will be explored in some detail in the rest of this book, some economies in staffing can be achieved by asking individuals to undertake multiple jobs; but there are limits on the extent to which this is possible.

Concerning the specific features of ministries of education in small states, review of organisation charts shows considerable variation (Bray 1991; Bray et al. 1991). Major differences may also be found in the structures of ministries in specific countries at different points in time. This is partly because structures reflect political considerations as well as organisational ones. However, it is nevertheless possible to identify some organisational principles. One is that although conventional perspectives stress that structures should begin with objectives rather than people, this is arguably less appropriate in small states than in large ones. Emphasis on objectives does warn against creation of posts merely because people happen to be available. However, the relative shortage of talent in small states requires some flexibility in structures and job definitions to make optimum use of available expertise. For example, if a good planner or a mathematics-curriculum specialist is promoted to Permanent Secretary, it may be essential for those skills still to be harnessed and for the organisation chart to be redrawn. By corollary, it is more desirable to define positions around the skills and competence of available personnel than to define ideal jobs for people who do not exist (Bray et al. 1991, p.54).

As well as identifying tasks which are undertaken in most ministries, one may identify functions which are not undertaken. In some cases, functions not undertaken by the Ministry of Education are shouldered by other ministries; but in other cases they are undertaken either by the private sector or not at all. Table 1.1 summarises the functions undertaken in 17 small-state ministries of education. The countries have been ranked in ascending population size, beginning with Montserrat and ending with Botswana. As might be expected, some specialist functions are found less commonly in the smallest states but more commonly in the larger ones. They include planning, inspections and guidance, and also examinations. At the same time, the ministry in the smallest country has some specialist functions which are not found in the ministries of some larger countries. These include planning, technical education and pre-school education. These features commonly reflect not only government policies but also the personal

priorities of the people concerned and the availability of suitable incumbents for the posts. The absence of an examinations unit in Montserrat can only partly be explained by the fact that the territory is a member of the regional Caribbean Examinations Council (CXC), for St. Lucia and Guyana, which were also CXC members, did have separate examinations units.

The ways in which public organisations in small states are shaped by personnel issues which are significantly different from those which shape comparable organisations in large states deserve elaboration. For instance, difficulties arise in preparation of job descriptions because officers in small bureaucracies commonly have to be more flexible than their counterparts in larger ones. The absence of an individual from a small ministry may have a greater impact than it would in a larger ministry. Thus officers in small ministries not only have to cover for colleagues who are absent, but may have to undertake many tasks that are additional to their 'normal' ones. Sometimes these tasks take them outside the ministry altogether, which may create difficulties in writing realistic job descriptions. As noted above, public organisations may also suffer constraints when recruiting staff from a small pool; and the nature of the internal social environment may be substantially different from that which might be expected in a larger state (Bray & Packer 1993, pp.85-91).

Further, extending the point made above about the closer links between politicians and bureaucrats in small states, it is worth noting the comment by Rodhouse (1991, p.212) about the "inevitable overlapping of political and bureaucratic activity". Elaborating, he explained that:

> This is one of the reasons why the processes of larger scale organisations cannot be easily applied in a small one. In my experience, small state politicians know — and want to know — a great deal about the activities of the bureaucracy, and involve themselves in the bureaucracy's decision making. Larger systems in which I have worked have been able to build 'protective' procedures which create some distance between the politicians and the civil servants. The nature of the society, the range of tasks to be undertaken, the narrower and to some extent sharper political focus in the small system all prevent such procedures arising.

A further dimension may be added by taking an example directly from the examinations sector. This example is from The Gambia, where, during the early 1990s, the links between the Minister of Education and the Head of the National Office of the West African Examinations Council (WAEC) extended even into the respective people's home. This was because the two

Table 1.1: Specialised Units/Posts in Selected Commonwealth Ministries of Education

Country	Plan-ning	Inspect-ions	Guid-ance	Curric-ulum	Exams	T'chr Trng	Tech. Educ.	Adult Educ.	Pre-School	Research/ Evaluat'n	Broad-casts	Libraries	Int. Aid Unit	Special Educ.	Bldg.
Montserrat	yes	no	no	yes	no	no	yes	no	yes	no	no	no	no	no	yes
Cook Islands	no	yes	no	yes	no	yes	no	no	no	yes	no	no	no	no	yes
Kiribati	no	no	no	yes	no	yes	yes	no	no	no	yes	yes	no	no	no
Seychelles	yes	no	no	yes	yes	no	yes	no	no	yes	no	no	yes	no	yes
Dominica	no	no	no	yes	no	yes	yes	yes	no	no	no	yes	no	no	no
Jersey	no	yes	yes	no	no	no	no	no	yes	no	no	yes	no	yes	no
Tonga	yes	yes	no	yes	yes	yes	yes	no	no	no	no	no	no	no	no
St. Lucia	yes	no	no	yes	yes	no	no	yes	yes	yes	no	yes	no	no	yes
Samoa	no	yes	no	yes	yes	yes	no	no	no	yes	yes	yes	no	no	no
Maldives	yes	yes	no	yes	yes	yes	no	yes	no	no	no	no	yes	no	yes
Brunei Dsm.	yes	yes	yes	yes	yes	yes	yes	no	no	yes	no	no	no	no	no
Barbados	yes	yes	yes	yes	yes	no	no	no	yes	yes	no	yes	no	no	yes
Solomon Islands	yes	yes	yes	yes	yes	no	no	no	no	no	no	yes	no	no	no
Malta	yes	yes	yes	yes	yes	no	yes	yes	yes	no	yes	yes	no	yes	no
The Gambia	yes	yes	yes	yes	no	yes	yes	yes	no	no	no	yes	no	no	yes
Guyana	yes	yes	no	yes	yes	yes	yes	no	yes	yes	yes	yes	no	no	yes
Botswana	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes	no	no	no	yes

Notes:
1. Data mostly apply to the early 1990s or late 1980s.
2. The countries have been ranked in ascending order of population size.
3. Functions have been indicated only according to whether they are specifically named in the title of a job or unit. Some functions, of course, are still carried out even though they are not identified in the title.

Source: Bray & Packer (1993), p.83.

individuals in question were married to each other. In large states, such intertwining of domestic and professional roles would be unusual; but in small states it is quite common.

Another personnel-related point concerns career paths for senior officers in small states. On the one hand, movement of one or two people at the top may trigger mobility for almost everybody else further down the system; but on the other hand, if people at the top do not move, the advancement of all those below them may be permanently blocked. While this is of course also a feature of some large organisations, in general the problem is much more acute in small ones. The Commonwealth Secretariat's project on ministries of education in small states particularly identified these conditions in The Gambia, Botswana, Jersey and St. Lucia (Bray et al. 1991, p.78). Seychelles, by contrast had a slightly different problem. Unlike the bottom-heavy administrative pyramids of many larger countries, Seychelles had a top-heavy one. Whereas in bottom-heavy systems individuals may feel frustrated because they see little chance of moving to the top, in Seychelles they were likely to be frustrated because individuals fresh from professional training started somewhere near the top and then found that there were few more steps to go. Such personnel challenges require special measures fitted to the demands of small states, and are as pertinent to examination units as to other specialist bodies.

A final point about public and quasi-public organisations in small states concerns innovation. On the positive side, in a small system a single individual may have a major impact. This is not only because that individual forms a larger proportion of the total organisation but also because the social fabric may provide supporting networks of personal contacts in the community of the type able to assist implementation. Coordination may also be easier in small states. Taking a specific example from the examination sector, Scott (1979, p.98), discussing the mechanics of a reform of secondary school examinations in Bermuda, highlighted the usefulness of being able to assemble all secondary school teachers in a single auditorium. Coordination may also be easier between policy-makers. On the negative side, however, small states may suffer from the lack of checks and balances. Commenting on this with reference to the small states of the South Pacific, Murray (1985, p.194) has observed that:

> An official — particularly a specialist — was able to claim an authority based on expertise and the critical climate in which ideas were tested was often lacking. A fisheries officer or poultry development officer might be on his own with no other expert to challenge his supposedly authoritative pronouncements.

Presumably such problems can arise in examinations as much as in other sectors.

Small States and International Cooperation

One way through which governments and other agencies in small states can tackle the constraints of size is through international cooperation. Such cooperation may be with other small states, or it may be with larger states; and cooperation may be restricted to partners in the same geographic region, or it may stretch further afield. The benefits and tensions of international cooperation deserve initial commentary to set the framework for some of the subsequent chapters in this book.

Beginning with broad international cooperation, one organisation having many small-state members, as already noted, is the Commonwealth. This body also has large-state members, and must pay attention to the needs of India (which has a population exceeding 800,000,000) as well as Tuvalu (with its population of just 8,000). The Commonwealth faces many challenges in the process of catering for its diverse membership; but the fact that it can help address the needs of small states has been amply demonstrated in many projects, of which the one leading to the present book is an example.

Other broad international bodies which embrace small states in their membership include the United Nations and its subsidiary organisations such as UNESCO, UNICEF and the World Bank (Harden 1985, pp.14-25; Rapoport et al. 1971; Sutton 1987). Several of these bodies have educational projects through which small states have been able to gain advice and technical support. The nature of these inputs has not always been fully satisfactory, and projects have sometimes suffered from large-state biases in conception and design. However, the United Nations organisations are important fora for small-state collaboration in education as well as in other spheres (Bray & Packer 1993, pp.132-6). In 1997, the Commonwealth Secretariat and UNESCO initiated a joint activity to address concerns of tertiary education institutions in small states.

Turning to regional cooperation, this strategy appears particularly attractive to the small states which are clustered in the Caribbean and South Pacific, but also has relevance to other parts of the world. Such bodies as the African Development Bank, the Council of Europe, and the South Asian Association for Regional Cooperation have small-state members as well as large-state ones. These bodies commonly have educational as well as other activities.

The most striking educational forms of regional cooperation by small states are the University of the West Indies, which was founded in 1948 and

currently serves 14 countries, and the University of the South Pacific, which was founded in 1968 and currently serves 12 countries (Caston 1993; Crossley & Louisy 1994; Sherlock & Nettleford 1990). Other examples of regional cooperation, which have particular relevance to the present book, are the Caribbean Examinations Council (CXC), the South Pacific Board for Educational Assessment (SPBEA) and the West African Examinations Council (WAEC).

However, regional cooperation is not without major tensions. Dolman (1985, p.50) has suggested that it may be considered:

> very much like eating spinach: everyone likes it in theory because it is good for you and makes you strong, but few like it in practice. Small island countries have tried hard to develop the taste for it and they cannot be seen to be against it. Their hope has been that regional integration would bring tangible economic benefits to the region, and indirectly to them. All too often, their hope has been a hollow one.

While the UWI and the USP have survived various political tensions, the same cannot be said of the University of Botswana, Lesotho & Swaziland, which was founded in 1964 (then called the University of Basutoland, Bechuanaland & Swaziland) but gradually fell apart in the face of increasing nationalism within the component states (Bray & Packer 1993, pp.66-7). Regional models are not always more cost-effective than national ones; and with regard to educational cooperation in the South Pacific, Taufe'ulungaki (1993) argues that regional activities and the sharing of regional personnel do not always guarantee better understanding of the problems of individual members. Moreover, in many regional bodies the benefits have accrued mainly to the larger partners rather than the smaller ones (Crocombe & Meleisea 1988, p.359; Dolman 1985, p.50). Tensions such as these are addressed in several chapters of this book with reference to regional examination bodies.

Examination Systems and their Characteristics

The literature on examination systems, even setting aside the effects of national scale, shows considerable diversity among countries with different historical traditions, systems of governance and political ideology (see e.g. Broadfoot et al. 1990b; Eckstein & Noah 1993; Kellaghan & Greaney 1992; Mathews 1985). Across linguistic traditions there are substantial differences in the English-, French-, Portuguese- and Spanish-speaking worlds; and even within English-speaking countries, with which this book is primarily concerned, major differences may be identified between emphases in the

USA, New Zealand, Sri Lanka and South Africa, for example (Broadfoot 1984; Göttelmann-Duret 1991; Nuttall 1986). Issues include the points in students' careers at which external examinations are taken, the balance between school-based and external assessment, the roles of teachers in setting and examining papers, and the procedures for determining standards. The relative merits of the various dimensions are commonly the focus of vigorous debate, and often have as much to do with politics as with pedagogy.

For present purposes it is not necessary to explore all dimensions of possible debate and controversy. Proceeding with the framework for analysis of the subsequent chapters in this book, it is most useful to comment in turn on the control and operation of examination systems, on the recognition and status of qualifications, and on aspects of costs and financing.

The Control and Operation of Examination Systems

Issues of control are central to almost all debates about examinations in both small and larger states. In extreme cases, as noted by Eckstein & Noah (1993, p.191), examinations can become "footballs in the broader field of national politics, punted hither and yon in the course of ideological clashes". This is because examinations are themselves instruments to control curriculum and teachers' activity, and therefore become targets for contending parties who seek to maintain or establish particular visions of what education and society should be.

In a related vein, Broadfoot et al. (1990a) pointed out the importance of controlling examinations for those who wish to reform other aspects of education. The authors observed (p.2) that:

> governments around the world are increasingly turning to assessment policy as a means of bringing about other desired changes in the system. A change in emphasis in the content or skills examined in a particular public examination paper, for example, can be a highly effective means of curriculum development.

This excerpt does not emphasise the political element, but it still recognises the fundamental importance of control.

While the quotation from Eckstein & Noah focuses primarily on national politics, the present study underlines the international element in issues of control. The fact that politicians and professional educators in small states may not control examinations means that the politicians and educators also do not control the curriculum. In this respect, the actors in small states may

consider themselves somewhat powerless compared with their counterparts in larger states.

Turning to the operation of examination systems, comparison of arrangements in different countries reveals five main models. Each of these models is found in one or more of the countries on which this book focuses.

In the first model, examinations are set by officers in government departments, most commonly within national ministries of education though sometimes at provincial or regional levels. This is the arrangement in France, China and Japan, for example (Eckstein & Noah 1993, pp.78-9), and, among small states, in the Bahamas, Bhutan and Namibia. Among the five models, this one gives politicians and senior civil servants the greatest control.

In the second model, examinations are operated by quasi-government agencies. Politicians and civil servants may still have some control, but it is less direct. An example of this model is the Hong Kong Examinations Authority, which was established in 1977 as an independent statutory body to operate the School Certificate examination previously run by the government, the Higher Level examination previously run by a local university, and the Advanced Level examination previously run by another local university (Hong Kong 1981, p.185). The Mauritius Examinations Syndicate is another example of this model.

In the third model, examinations are run by universities. The pre-1977 situation in Hong Kong was a case in point. Another example is the University of Cambridge Local Examinations Syndicate (UCLES), which was established in 1858 and has played a major international role, though does not now have as much direct university input as it used to. Other UK examinations are administered both locally and internationally by the University of London Examinations and Assessment Council (ULEAC); and domestically-focused UK boards include the Joint Matriculation Board [set up by the Universities of Manchester, Liverpool, Leeds and Sheffield], and the Southern Universities Joint Board for School Examinations [operated by the Universities of Bristol, Exeter, Reading and Southampton] (Bruce 1969, pp.83-6). The Oxford Delegacy of Local Examinations and the Oxford & Cambridge School Examination Board were founded respectively in 1857 and 1873 and have historically played a major role in some small states, but in 1995 were merged with UCLES. Among the small states covered by the present book, the Matriculation and Secondary Education Certificate (MATSEC) Examinations Board in Malta is an example of this model. The Board was set up in 1989 and is accountable to the Senate of the University of Malta.

The fourth model embraces private boards which are operated by non-

university bodies. Examples in the USA are the College Entrance Examination Board, the Educational Testing Service and the American College Testing Service (Eckstein & Noah 1993, p.81). Another example is the Associated Examining Board in the UK, and the City & Guilds of London Institute. The latter plays a strong role in some small states.

The fifth model is international in constitution and arises from active collaboration by governments of different countries. This is the model of the West African Examinations Council (WAEC), the Caribbean Examinations Council (CXC), and the South Pacific Board for Educational Assessment (SPBEA). The respective chapters on each body in this book show that these three bodies have rather different origins, compositions and modes of operation; but together they are a distinctive type of examining board.

The usefulness of presenting these models lies not only in the fact that to some extent they represent options for decision-makers in small states who wish to establish new examination bodies, but also that in some circumstances individual candidates can have access to examinations set by bodies of widely differing types. Thus, individuals within specific countries may have a choice of examinations set by government, quasi-government, university-related, or entirely independent examining boards. This choice is not open to all individuals in all countries, for much depends on the policies of the governments concerned and on the willingness of particular boards to reach beyond their immediate localities. However, in several of the small states covered by this book, individual candidates do have access not only to examinations set by national bodies but also to examinations set by external boards of various kinds.

Recognition and Status of Qualifications

One major question, both for candidates and for policy-makers, concerns the recognition and status of qualifications. Among reasons why Singapore adheres to the examinations set by UCLES is that the qualifications are widely recognised, very portable, and high in status. Governments of small states which are considering breaking away from external examination boards are always concerned about the ways in which their own qualifications would be perceived by employers, tertiary institutions, and the general public, not only within the country concerned but also abroad. To some extent, large may be considered beautiful, at least in terms of general acquaintance with a qualification. By corollary, individuals with qualifications issued by small examining boards may find that potential employers or tertiary institutions do not know how to assess the qualifications, and are unwilling to invest in the effort of finding out. In such cases, the default reaction may be one of suspicion — assuming that the qualifica-

tions are of low value unless there is evidence to the contrary.

The concern for high status and wide recognition of qualifications is likely to be particularly important to small states which export substantial amounts of labour and which require domestic qualifications to be recognised in destination countries. This does not preclude operation of national examinations, for it is often possible to reach agreement with external agencies on equivalencies, albeit at a price.

However, in some contexts the demands for delinking may preclude such arrangements and lead to more radical change. In this connection, experiences in Sri Lanka during the 1970s are worth recounting. With a population of 17 million, Sri Lanka is a relatively large country; but the issues raised during the 1970s illustrate tensions which may also affect small states.

In 1970, a newly-formed coalition government which included Trotskyist and communist factions noted Sri Lanka's dependence on external expertise and foreign aid, and asserted the need to develop indigenous skills and resources (Little 1990, p.15). The ideological complexion of the coalition favoured a weakening of the links between Sri Lanka and other countries on the grounds that they led to economic dependence and loss of national autonomy. The proposals included reform of the examination system, and after various political complexities resulted in 1972 in replacement of the system of Ordinary and Advanced level examinations by a system leading to a National Certificate of General Education (NCGE) and a Higher National Certificate of Education (HNCE). The new system tested students one year earlier than the old system, and effectively delinked Sri Lankan qualifications from international equivalents. The reform had important pedagogical objectives, but also aimed to serve "the causes of intellectual de-colonisation" (Lewin & Little 1984, p.71).

However, as the 1970s progressed the reform faced mounting criticism. One factor was that the middle classes, in particular, felt that the chances of their children studying abroad were being undermined. Lewin & Little (1984, p.74) report that:

> Arrangements were made for children of wealthy parents to sit the NCGE and simultaneously to work for the London and Cambridge overseas 'O' level to be taken in Madras or Singapore.

In fact, Sri Lankan 'O' levels were not automatically recognised in the UK. However, for historical reasons the qualifications carried some credibility domestically, and probably also internationally, not shared by the NCGE and HNCE. The result of mounting criticism was a conservative backlash which

in 1977 led to restoration of the old system. It is instructive that the issue of international comparability should carry such weight in a relatively large country. In smaller countries, the influence of external factors is commonly greater still.

Taking an example from a small state which is to some extent related, Crocombe & Crocombe (1994) have highlighted in the context of the South Pacific the ambivalence about the international acceptance and marketability of qualifications. On the one hand, they suggest (p.93):

> Students and their parents want qualifications that are as widely recognised as possible, as these facilitate higher salaries, higher status, mobility and migration.

On the other hand, governments may be concerned about loss of educated manpower through migration (p.94):

> Many governments prefer qualifications that are not widely marketable as this induces graduates to return [or stay at] home and accept more modest conditions.

As a result, the fact that the qualifications of the Fiji School of Medicine are less widely recognised than qualifications from Australia or New Zealand may, ironically, be attractive to governments from several small states in the region because the graduates are more likely to stay at home and are less likely to emigrate. As the Sri Lankan case indicates, such tensions may affect relatively large states as well as small ones; but they are likely to be particularly acute in small states, where every person counts and the loss of a single highly-trained person could be a major blow to a small community.

The Costs and Financing of Examinations

The economics of operating examinations are of course important in all systems, large and small. Perhaps they become especially important for small states, because such states cannot achieve economies of scale. Concern to keep costs down often militates against operation of systems which cater for the individual needs of particular small states. However, the topic is complex, and it should not be assumed either that the largest operations are the most cost-effective or that the smallest ones are the least cost-effective.

The chief items of expenditure in operation of examination systems are for durable items such as buildings and equipment, and for salaries, printing, coordination, monitoring, and other recurrent items. Buildings are not

usually a major issue, though examination boards must have secure premises where examination papers and other confidential items cannot be stolen. Large enterprises may be able to afford more sophisticated computers and other equipment than smaller enterprises, but in general the cost of such items has fallen to levels where even the smallest operations can afford the basic necessities. The invention of laser printers and photocopiers makes printing of examination papers of professional quality much easier and cheaper than it used to be.

Given that capital items may not be a huge item of expenditure, the main question becomes one of staffing. In this domain, much depends on assumptions about essential staff specialisms in examination bodies. Keeves (1994, p.99) is of the view that:

> In the training of staff for an examinations agency, there is a wide range of skills that must be possessed by different members of the staff.... There is a need for psychometricians and statisticians, for survey research specialists, educational research workers, publishing experts, art and graphics designers, computer programmers, people who can communicate effectively with the wider public, and production and distribution managers, as well as cost accountants.

Most people responsible for examination systems in small states would probably greet such a list with a mixture of envy and hollow laughter. First, beginning with simple availability of personnel, in very few small states would specialists be available to take up all these posts even if the money were available. As such, it would be necessary to employ expatriates, which in many settings raises uncomfortable political questions. Yet even if such people did exist and were employed, the question would remain how easily their employment could be justified. Even in regional operations such as the SPBEA, numbers are very small and staffing of the type envisaged by Keeves is out of the question.

Returning to the question of cost-effectiveness, however, it should not necessarily be assumed that regional examination boards are able to operate with lower unit costs than are national systems. The CXC, SPBEA and WAEC spend considerable amounts of money on coordination, having to pay close attention to political considerations in balanced regional membership and rotation of places of meetings.

Consideration of costs also determines some of the basic modes of operation, such as use of norm or criterion referencing. Discussing operation of the SPBEA, Johnston & Martinez (1995, p.3) indicate that although the Pacific Senior Secondary Certificate examination operates in

six countries, total candidature is only around 2000. Since the countries in which the examination is administered have an average per capita GNP of only about US$1000, financial constraints are severe and norm referencing has been chosen instead of criterion referencing simply because of the perceived costs of the latter. Considerations of cost also determine the number of subjects offered, staffing levels, and the extent to which national and regional boards can afford certain types of research.

Cost factors also affect the metropolitan agencies such as UCLES. These bodies do achieve some economies of scale, but are also under pressure to tailor their examinations to the specific circumstances of their client countries. Prominent examples through which such tailoring is achieved include the existence of the Higher International General Certificate of Secondary Education (HIGCSE) examination, which is only operated in Namibia, and the 'N' level examination designed for Singapore but now also used in Brunei Darussalam. Such tailoring to the demands of individual countries reduces the extent to which UCLES can achieve economies of scale through international operation.

Finally, a major factor in decision-making for many small states lies not only in absolute costs but in also in a concern to limit the extent to which resources flow out of the country in foreign exchange. Singapore and Brunei Darussalam are less concerned about this dimension since their economies are strong and have healthy in-flows of foreign exchange. However, it is likely to become an important factor in Namibia, where fees to external examination bodies have required external remittances of over US$2 million per annum.

Conclusions

This chapter has provided an analytical framework within which to assess the chapters which follow. The two principal strands of literature on which the chapter has drawn have focused on education in small states and on examination systems in states of all sizes. Merger of these two strands permits the reader to identify some of the features of examination systems in small states which are specifically shaped by the smallness of the countries concerned.

Each of the chapters which follows contains details which are specific to the countries or geographic regions which the chapters address. At the same time, readers will note a number of common themes. Juxtaposition of diversity and commonality permits deeper comprehension of the forces at work in each setting. Concerning models for examination systems, it is useful to distinguish between examinations set by national, regional and metropolitan bodies. Each model has advantages and disadvantages, and

each has to deal with tensions when balancing international forces with national aspirations. Among the common themes are concerns about recognition and status of qualifications, manpower, and costs.

The present chapter has therefore raised awareness of important themes in analysis. These themes will be taken up, and supplemented, in the two final chapters of the book. These two chapters will focus in turn on conceptual and on practical implications. They will note the contribution of this book to growing theories of education in small states, and will also highlight some of the steps which practitioners can take to tackle problems and improve operation of systems.

Part II: National Perspectives

Chapter 2: Botswana

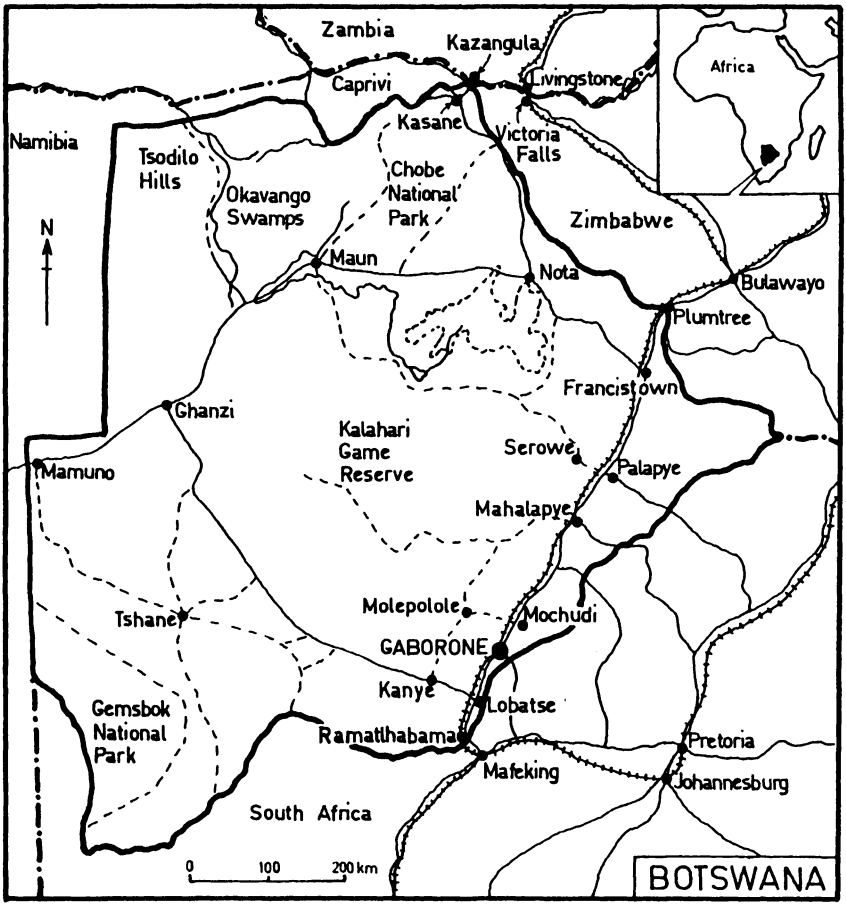
Serara Moahi

Population (1993): 1,402,000
Population Growth Rate (1960-93): 3.3% per annum
Land Area: 581,630 square kilometres
GNP per Capita (1994): US$2,590
Year of Independence: 1966
UNDP Human Development Index (1994): 0.673

Although Botswana has a small population, it has a huge area. The population is spread unevenly, with concentrations in the east and especially south east. Botswana's overall population density is just two persons per square kilometre.

During the colonial era, Botswana was known as Bechuanaland. The territory became a British protectorate in 1885, and was administered as one of the three High Commission Territories in southern Africa. The other two territories were Basutoland, which is now called Lesotho, and Swaziland. Links between the three territories have been sustained in the postcolonial era, and have been evident in examinations as well as in other sectors. Some important links also exist with South Africa and Zimbabwe.

At the time of Independence, Botswana was one of the poorest countries in Africa. However, subsequent decades brought dramatic economic growth. The economy was previously based on the nomadic herding of livestock and the cultivation of subsistence crops, but now a major contribution to Gross National Product is made by extraction of minerals. Most important are diamonds, copper-nickel and coal; but the country also has significant deposits of asbestos and manganese. Between 1960 and 1985, Botswana had the world's highest growth rate in per capita Gross Domestic Product — exceeding even the growth rate in the so-called 'miracle states' of East Asia (World Bank 1993b, p.3). Economic growth


Zambia
Kazangula
Caprivi
Livingstone
Africa
Kasane
Victoria Falls
Namibia
Tsodilo Hills
Chobe National Park
Okavango Swamps
Zimbabwe
N
Maun
Nata
Bulawayo
Plumtree
Francistown
Ghanzi
Kalahari Game Reserve
Serowe
Palapye
Mamuno
Mahalapye
Molepolole
Mochudi
Tshane
GABORONE
Kanye
Lobatse
Gemsbok National Park
Ramatlhabama
Pretoria
Mafeking
Johannesburg
South Africa
0 100 200 km
BOTSWANA

has facilitated expansion of education, which in turn has brought changes in the examination system.

Development and Structure of Education

Western-type education was introduced to the people of Botswana by religious organisations in the early 1800s, but grew slowly. By 1899 the territory still had only seven schools with 300 pupils. In 1910 a school inspector was appointed with responsibility for Bechuanaland, Basutoland and Swaziland, but he was resident in Basutoland and his main work focused on that territory (Parsons 1984, p.34). In 1929, Bechuanaland and Swaziland were given a separate inspector; and in 1935 that person was appointed the first Director of Education for Bechuanaland (Townsend Coles 1985, p.13). By that time the primary schools in Bechuanaland had about 12,000 pupils, but the territory had no secondary schools. Among the few students who did proceed to secondary education, the majority went to South Africa.

Education was still underdeveloped at the time of Independence in 1966. Botswana then had a population of 526,000 and 251 primary schools, but just nine secondary schools of which only two offered a full five-year programme. Being a small state, the scale of government was limited; and responsibility for education was assigned to the Ministry of Labour & Social Service. However, the place of education was given more prominence in 1967 when the body was retitled Ministry of Education, Health & Labour; and three years later a separate ministry was created solely for Education (Swartland 1991, p.27). This reorganisation both reflected and facilitated considerable growth of the education sector. Between 1966 and 1988, the number of primary pupils grew from 71,500 to 261,400, and the number of secondary pupils grew from 1,530 to 40,360. The latter figure is especially dramatic, showing an increase in enrolment by 26.4 times.

At the time of Independence, formal education was divided into three cycles. The primary cycle had seven years (Standards 1 to 7), junior secondary had three years (Forms 1 to 3), and senior secondary had two years (Forms 4 and 5). At the end of each cycle was a national examination which primarily served to select candidates for the next stage.

Since that time, the structure has been altered but then restored. The 1977 National Policy on Education (Botswana 1977) led to change from a 7-3-2 system to a 7-2-3 one. The two-year junior secondary programme started in 1985, and was followed by a three-year senior secondary programme in 1987. However, the 1994 Revised National Policy on Education (Botswana 1994) led to reintroduction of the 7-3-2 structure.

At the tertiary level, the University of Basutoland, Bechuanaland &

Swaziland (later called the University of Botswana, Lesotho & Swaziland) was founded as a joint enterprise for the three countries in 1964. In 1975, the government of Lesotho nationalised its campus, thus leaving only Botswana and Swaziland together. Finally this partnership also ended, leading in 1982 to formation of the separate Universities of Botswana and of Swaziland. Today the University of Botswana has over 2,000 students, though some students still go abroad since the university is unable to offer all specialisms. The duration of most degree courses at the University of Botswana is four years. Other tertiary institutions include the Colleges of Education and the Agricultural College.

Development and Structure of Examinations

Prior to the 1960s, Form 3 students in the three High Commission Territories took the Junior Certificate Examination (JCE) administered by the University of South Africa. Form 5 students sat the secondary school leaving examination administered by the Joint Matriculation Board, which was an examining body composed of representatives from all South African universities (Cieutat & Snyder 1975, p.6).

In 1958, the Directors of Education in the three High Commission territories were informed that the South African JCE would be discontinued. The Directors felt that this required action to form an alternative examination, and initiated moves which led to the formation in 1961 of the Basutoland, Bechuanaland & Swaziland High Commission Territories Examinations Council (Kellaghan et al. 1989, p.16). Subsequently, the Examinations Council came under the umbrella of what was then called the University of Bechuanaland, Basutoland & Swaziland; and in 1966, following the change in the name of the university, the Council was renamed the University of Botswana, Lesotho & Swaziland Schools Examinations Council (UBLS/SEC).

At first, the chief focus of the UBLS/SEC was the Junior Certificate Examination which it administered in each member country. Numbers were still quite small. In 1964, for example, 152 candidates from Botswana sat the JCE; and only 34 took the Cambridge Overseas School Certificate (COSC) examination operated by the University of Cambridge Local Examinations Syndicate (UCLES). The UBLS/SEC was based in Lesotho, and played a larger role in that country than in the other two. Although the Council administered the JCE for all three countries, for Lesotho it also administered the COSC, London General Certificate in Education (GCE) examinations, and teacher certification examinations. In Botswana and Swaziland, examinations other than the JCE were administered by their respective ministries of education.

In 1970, the governments of Botswana, Lesotho and Swaziland, together with the government of Malawi, established a Regional Testing Resource & Training Centre. This was a project funded through external aid and intended to develop capacity for national assessment programmes. It focused particularly on aptitude tests administered for selection at the end of the primary cycle. In Botswana, this test was known as the Primary School Leaving Examination (PSLE). At the end of the project in 1975, the governments of Botswana, Lesotho and Swaziland, through their regional examinations council, presented a proposal to expand external examinations and certification responsibilities of the UBLS/SEC (Cieutat & Snyder 1975). The plan was for the Council to take over all examination programmes in the school system, as well as the development of primary and secondary curriculum in the member states. The plan was partly based on arguments that a regional institution would be able to support the needs of small states more effectively and at lower unit cost than separate development of national capacity.

Like the university itself, however, the regional examinations body did not survive the political forces of separatism and the demand for stronger national relevance and control over curriculum. Whatever the technical and professional arguments, political factors caused the governments of the three countries to decide to work independently, albeit with collaboration and sharing of experiences when appropriate. In 1979, Botswana withdrew from the Council. Lesotho and Swaziland remained in partnership with a joint examinations syndicate responsible for standards in the primary and Junior Certificate Examinations in Swaziland, and for the Junior Certificate Examination in Lesotho. However, even in these countries additional bodies were created in order to strengthen local control. The governments established national examinations councils which were affiliated to the syndicate but which were administratively and financially autonomous (Kellaghan et al. 1989, p.17; McCabe & Mac Aogain 1989, p.13).

In the case of Botswana, the case for stronger national control over examinations had been made in 1977 by a National Commission on Education. The report of the Commission (Husén 1977, p.114) pointed out that plans for curriculum development could only be achieved if examinations and assessment were the servants of the curriculum. The report added that this is difficult to achieve if a country does not control the assessment of its own educational system:

> What may then happen is that an examination system run by an external agency may not assess performance in terms of curricular objectives set by an internal body. When secondary examinations are

> set by two different agencies, as is the case in Botswana, true control of the curriculum is indeed difficult. There is no doubt that part of the explanation for the discontinuity between Junior Certificate and Senior Certificate stems from the fact that Junior Certificate is a regional examination, offered in conjunction with Lesotho and Swaziland, while Senior Certificate is run by the [University of Cambridge] Local Examinations Syndicate.

Presenting the case for stronger national control, the Commission recommended creation of a Botswana National Examinations Council to provide direction on examination policy and independent oversight of the administration of the examination, and to maintain standards of marking. The Commission also recommended liaison with the University of Cambridge to prepare a joint School Certificate examination as the first step towards localisation.

Whilst acknowledging the importance of the long-term goal, in the first instance the government decided not to create the Botswana National Examinations Council or to localise the Cambridge Examination. However, the government did accept the Commission's recommendation to withdraw from the UBLS/SEC, and to create an examinations unit within the Ministry of Education.

In 1993, the government received the report of a second National Commission on Education (Kedikilwe 1993). This report reviewed the situation and again stressed the desirability of creating an autonomous National Examinations Council and of moving towards localisation of the Cambridge Overseas School Certificate Examination. The government decided against immediate creation of an autonomous council, but did agree to reshape and upgrade the examinations unit within the Ministry. The government also agreed to a localisation plan through which the first locally-designed COSC paper would be administered in 1998.

The Examinations Research & Testing Division

In 1992, the Directorate of Public Service Management published the report of an Organisation and Methods (O&M) review. The purpose of the O&M review was to improve the performance and effectiveness of the various government ministries. The report identified a need for "an appropriate location for the examination functions". It suggested that since examinations indirectly evaluate performance of the ministry and the schools as well as that of the pupils, the administration of examinations should be free from control or undue influence by other sectors in the Ministry of Education. The report also argued that a degree of autonomy was necessitated by the

need for security in the administration of examinations.

On this basis, and in conjunction with the recommendations of the 1993 National Commission on Education, the government decided to create an Examinations Research & Testing Division (ERTD) within the Ministry of Education. The division was placed in the Ministry headquarters, reporting directly to the Permanent Secretary. With the formation of the division, responsibility for national examinations was removed from the Department of Curriculum Development & Evaluation. The ERTD was perceived to provide the foundation for the eventual establishment of a national examining body. The structure also permitted recruitment of a larger number of specialist personnel. Recruitment was justified by an expected increase in the number of subjects to be examined at primary and junior secondary levels, as well as by planned localisation of the COSC examination.

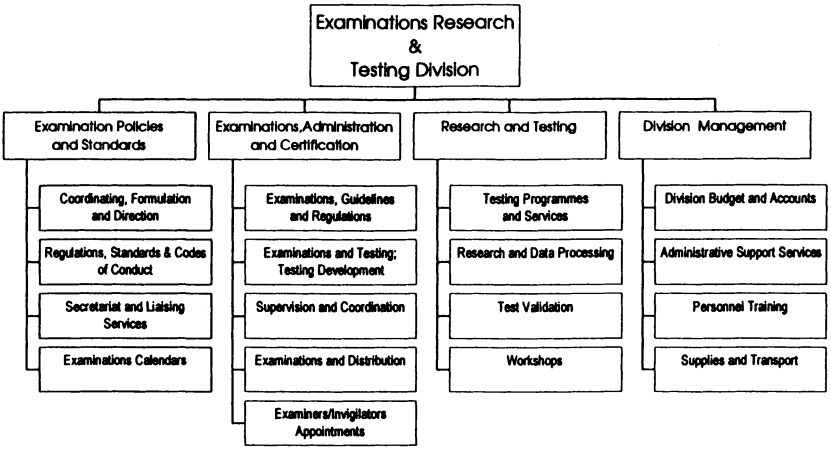
The ERTD came into operation in 1994. Its principal mandate is to prescribe procedures and methods for formative evaluation of students at the various school levels. The division also provides selection tests for clients such as the teacher training colleges and national health institutes.

The structure of the division is shown in Figure 2.1. It has three main professional sections, and one section for management. The roles of these sections are as follows:

- The *Examination Policies & Standards* section is responsible for policy development and implementation. The section also liaises with other parts of the Ministry of Education, with institutions, and with other educational authorities.
- The *Examinations, Administration & Certification* section provides the administrative machinery for the Primary School Leaving Examination (PSLE) and the Junior Certificate Examination, and in due course will cover the school certificate examination. It establishes guidelines for examination subject committees and examiners, ensures that requirements on appointment of markers and examiners are met, and supervises the marking of scripts. The section also publishes results and issues certificates.
- The *Research & Testing* section is responsible for all test development. Officers in this section provide technical input in the design of tests, maintain test standards, and provide technical support to examination committees, subject panels and in-service workshops on all matters related to assessment.
- The *Division Management* section provides administrative support. This includes transport, packaging, despatch and receipt of materials,

and general administrative services such as secretarial support and finance administration.

Figure 2.1: Structure of the Examinations Research & Testing Division, Botswana, 1996



Among the advantages of this structure is that integration of the formerly-separate Research & Testing Centre and the Examinations Unit has assisted coordination and removed artificial barriers. Also, the fact that the ERTD reports directly to the Permanent Secretary minimises the number of approval points, and increases access to top decision-makers. This access offers opportunities for direct representation of policy and resource needs. Further, the structure permits both expanded staffing and greater specialisation of functions.

The Format and Scale of the Public Examinations

The Primary School Leaving Examination tests candidates in five subjects, namely Setswana, English, Mathematics, Social Studies and Science. All subjects have multiple-choice papers, and in addition Setswana and English have essay papers. In 1995, 37,900 candidates sat the PSLE. Most of the Chief Examiners are Curriculum Development Officers in the relevant subjects. It has been considered undesirable for these people actually to set the examinations, so most papers are set by primary teacher-training lecturers or by Education Officers with primary teaching experience. Multiple-choice questions are trialled in a sample of schools selected across the different geographical and cultural regions and embracing different performance levels. Essay questions are not pilot-tested as a standard

practice, but only when there are unusual stimulus materials.

The subjects tested in the Junior Certificate Examination are shown in Table 2.1. The most popular subjects are Setswana, English, Mathematics, Intermediate Science, Social Studies, and Agriculture. In 1995, 35,400 candidates sat the JCE examination. JCE papers are set by committees rather than by individual examiners. The processes of trialling are similar to those for the PSLE. All JCE and PSLE examination papers are printed by a local government printer, but the machine-readable forms are printed outside the country. At the JCE level, one problem arising from the small size of the country has been the limited pool of appropriate people who could be appointed Chief Examiners. As a result, over time a small group of specialists has tended to develop a monopoly of control, and it has sometime become difficult to introduce new blood.

Table 2.1: JCE Subjects and Numbers of Candidates, Botswana, 1994

Subject	No. of Papers	School Candidates	Private Candidates	All Candidates
Setswana	3	31,468	4,917	36,385
English	2	31,687	5,068	36,755
Mathematics	3	31,687	5,002	36,689
Intermediate Science	2	31,687	600	32,287
Social Studies	3	31,687	4,890	36,577
Agriculture	3	31,684	1	31,685
Religious Education	2	10,473	3,727	14,200
Home Economics	3	8,364	4	8,368
Design & Technology	3	8,999	0	8,999
Art	3	5,158	0	5,158
Banking & Commerce	2	1,092	0	1,092
Design & Technology	1	11	0	11
Human and Social Biology	2	0	4,284	4,284
Private Agriculture	2	1	4,838	4,838

For the COSC, there were 7,800 candidates in 1995. Table 2.2 shows the numbers of scripts in each subject in 1994 and 1995. It also shows the proportions of scripts which were marked in Botswana. This is an important aspect of the localisation of the COSC, which is explained below.

Table 2.2: COSC Subjects, Scripts and Markers, Botswana, 1994 and 1995

	1994			1995		
	No. of Scripts	No. of Local Markers	% of Scripts Marked Locally	No. of Scripts	No. of Local Markers	% of Scripts Marked Locally
English Language 1	6,500	15	57	10,457	17	100
English Language 2	9,900	24	100	10,457	20	100
Literature in English	1,300	7	100	910	7	100
CRE	2,000	10	100	2,432	9	100
African History	2,450	20	89	2,698	20	100
World History	1,750	20	63	2,698	20	100
Geography 2	3,000	13	85	4,253	25	100
Dev. Studies 1 & 2	1,550	16	100	1,735	10	100
Dev. Studs Practicals	-	-	-	1,735	3	100
Mathematics 1	9,300	12	100	10,341	20	100
Mathematics 2	7,100	15	77	10,341	15	100
Agriculture	3,700	14	100	4,041	11	100
Biology Theory	3,000	16	100	3,185	20	100
Biology Practical	1,000	4	100	3,180	5	100
Human & Soc. Biology	800	4	100	1,321	4	100
Combined Science	3,900	12	100	4,379	10	100
Food & Nutrition	-	-	-	1,029	10	100
Fashion & Fabrics	-	-	-	685	4	100
Home Management	-	-	-	165	1	100
Art	-	-	-	831	12	100
Design & Technology	-	-	-	875	8	100

Staffing

The Examinations Research & Testing Division has an establishment of 23 professional and 38 administrative staff, but many of these posts are vacant. Table 2.3 shows the situation in 1995, when as many as 10 of the 23 professional posts were vacant. However, over half the vacant posts were new ones, and officers on study leave were expected to return to fill three of them. On the administrative side, only two posts were vacant.

Concerning staff qualifications, the general growth in human capital in Botswana is reflected in the fact that five of the 13 professional staff held Master's degrees. However, another five held only Bachelor's degrees, and three held only diplomas. The government's Department of Public Service Management has so far been unable to meet the training needs identified in the Division's five-year plan.

Table 2.3: Professional Posts in the Examinations Research & Testing Division, Botswana, 1995

	Filled	Vacant	Total
Professional			
Principal Education Officer I (Head of Division)	0	1	1
Principal Education Officer II (Principal Research Testing Officer)	1	0	1
Senior Research Testing Officer	2	6	8
Research Testing Officer	3	1	4
Assistant Research Testing Officer	2	0	2
Registrar	1	0	1
Deputy Registrar	1	0	1
Assistant Registrar	3	1	4
Principal Examinations Officer	1	0	1
Senior Examinations Officer	0	1	1
Examinations Officer	0	1	1
TOTAL	14	11	25
Administrative			
Senior Administration Officer	1	0	1
Administration Officer	1	0	1
Assistant Administration Officer	4	0	4
Senior Administration Assistant	10	0	10
Administration Assistant	9	1	10
Secretarial Staff	5	1	6
Personal Secretary	1	0	1
Machine Operators	5	0	5
TOTAL	36	2	38

A further problem concerns recruitment. As noted by Swartland (1991, p.30), individuals in a small ministry may feel frustrated by the lack of opportunities, especially in a specialist area such as examinations. Because of this, combined with the fact that salaries are lower than many alternative posts, the Division encounters difficulty in attracting well-qualified applicants. The expanded establishment of the ERTD does provide greater scope for advancement and for sharing of workloads, but, paradoxically, it exposes the difficulty of attracting suitable applicants in sufficient numbers.

Because of this shortage, officers must be multi-faceted. The enterprise cannot reach the scale found in large countries, and demands are exacerbated

by staff shortages. Thus the test-development unit, for example, has only seven officers to take care of all examination programmes, selection tests for tertiary institutions, and in-service training on such topics as school-based assessment for teachers and education officers. The result can be detrimental to productivity, leading to stress and over-work.

Localisation of the COSC

Thoughts about localising the COSC can be traced as far back as 1966. In that year, the first proposals were set forth for the eventual transfer of curriculum development and examination administration from Cambridge to local authorities (Cieutat & Snyder 1975, p.7). In 1973, John Deakin, former Registrar of the West African Examinations Council, prepared a report on "The Feasibility of Establishing a Regional School Certificate to Replace the Cambridge Overseas School Certificate Examination". The report recommended that localisation should begin in 1978 and be completed by 1982. However, the recommendation was never implemented because of the demise of the UBLS/SEC.

In 1982, the idea of localising the COSC through a regional examining agency was revived. The combined pressure for localisation came from ministries of education, the teaching profession and the community. It was argued that:

- examination and assessment procedures should reflect and respond to the particular needs of BLS countries;
- the quality of teaching would improve;
- continuity between 'O' level and the local JCE and PSLE examinations would be established;
- results could be published earlier;
- the cost of running the examination would drop;
- the BLS countries had sufficient manpower for localisation; and
- the UK was changing to the General Certificate of Secondary Education (GCSE), thus showing the need for some reform anyway.

However, the idea of localising the COSC through a regional initiative did not advance further. By 1988, both Lesotho and Swaziland had their own Examination Councils which preferred to operate independently. The government of Botswana did not at that point set up its own Examinations Council because the priority was to expand junior secondary education as part of the goal of universal access to basic education.

Botswana's intention to localise the COSC was, however, expressed in the 1985-91 National Development Plan (Botswana 1984). The government

realised that junior secondary expansion would change the nature of senior secondary intakes. The COSC curriculum and examination could have been considered suitable for the small proportion of high-performing students in the days of fierce selection, but was less suitable for the larger intakes now expected in senior secondary schools. In 1993, the government and UCLES entered a formal agreement to localise the COSC over a five-year period. This policy was endorsed by the 1994 Revised National Policy on Education (Botswana 1994).

The localisation programme between 1993 and 1995 may be described as the initial phase. It emphasised localisation of the marking of scripts and the preparatory processes which go along with it, such as administration of marking venues, payment of markers, preparation of standardisation packs, orderly and safe transfer of scripts to marking venues, and preparation of stationery and materials required in each subject. The next phase puts more emphasis on the development of an examination system *per se*. It will cover all the operational areas of a national examination programme, including setting of examination papers, data capture, processing and reporting, validation mechanisms, and the institutional framework within which the various operations and procedures are established. A phased-in approach will be used in the localisation of these operational areas. The focus will be on strengthened capacity in marking scripts, development of papers with checking and moderation by Cambridge, and establishment of examination procedures. Fifteen subjects were selected for localisation of paper-setting by 1998.

The next phase will begin with syllabus development. The plan indicated that syllabus development for the senior school would begin after completion of the 10-year Basic Education curriculum in 1997.

The main constraints in localisation concern availability of specialist expertise. Although the ERTD was allocated a substantial number of posts, the fact that many of them were difficult to fill was symptomatic of the problem. In addition, many of the markers are non-nationals who are employed on contract and who are likely in due course to leave the country. A further important aspect concerns security. Present provision is far below acceptable standards. This is a major issue, because the credibility of standards and procedures is at stake.

Conclusions

In spite of the controversy over the merits and limitations of examinations, they have consistently constituted a powerful component of educational programmes in Botswana as much as elsewhere. Over the years, the people of Botswana have debated the extent to which the education system does

prepare the nation's children to function as useful and productive members of society. In the debate, the match between the examination and the curriculum has been queried. Doubt has been cast on the extent to which the senior secondary curriculum and examinations provide a relevant basis for the overall national human resource development strategy which has been derived from national development needs. Nevertheless, the education system has been perceived as an important capacity-building activity for economic development.

The story of examinations in Botswana is an interesting combination of reliance on external bodies, cooperation in a regional body, and national self-determination. In recent times, the main external body has been UCLES, though various South African boards have also been important. The UBLS/SEC met some of its goals, but, more for political than for professional reasons, failed to provide a long-term answer to the country's needs. Subsequent regional initiatives have also failed to bear much fruit, and to some extent Botswana has attracted criticism from Lesotho and Swaziland for being unwilling to put its full weight into these initiatives (Ralise 1992, p.3). In this context, the main efforts in recent years have focused on development of national capacity. This has been easier to justify and to achieve as the system has grown, and plans now exist for full localisation up to school certificate level.

The government's long-term objective for senior secondary education as expressed in the 1985-91 National Development Plan was to meet the country's manpower needs with a particular emphasis on mathematics and science at the Form 5 level. This change in the curriculum or examination system was seen as a long term objective. Government was to proceed with caution and pragmatism towards the desired target of gaining flexibility in curriculum development at this level. No provision was therefore made to localise the COSC during this plan period. A commitment to the localisation of the senior school curriculum and examination appears in the 1992-96 National Development Plan, where a specific plan for localisation is laid out.

Chapter 3: Mauritius

Surendra Bissoondoyal

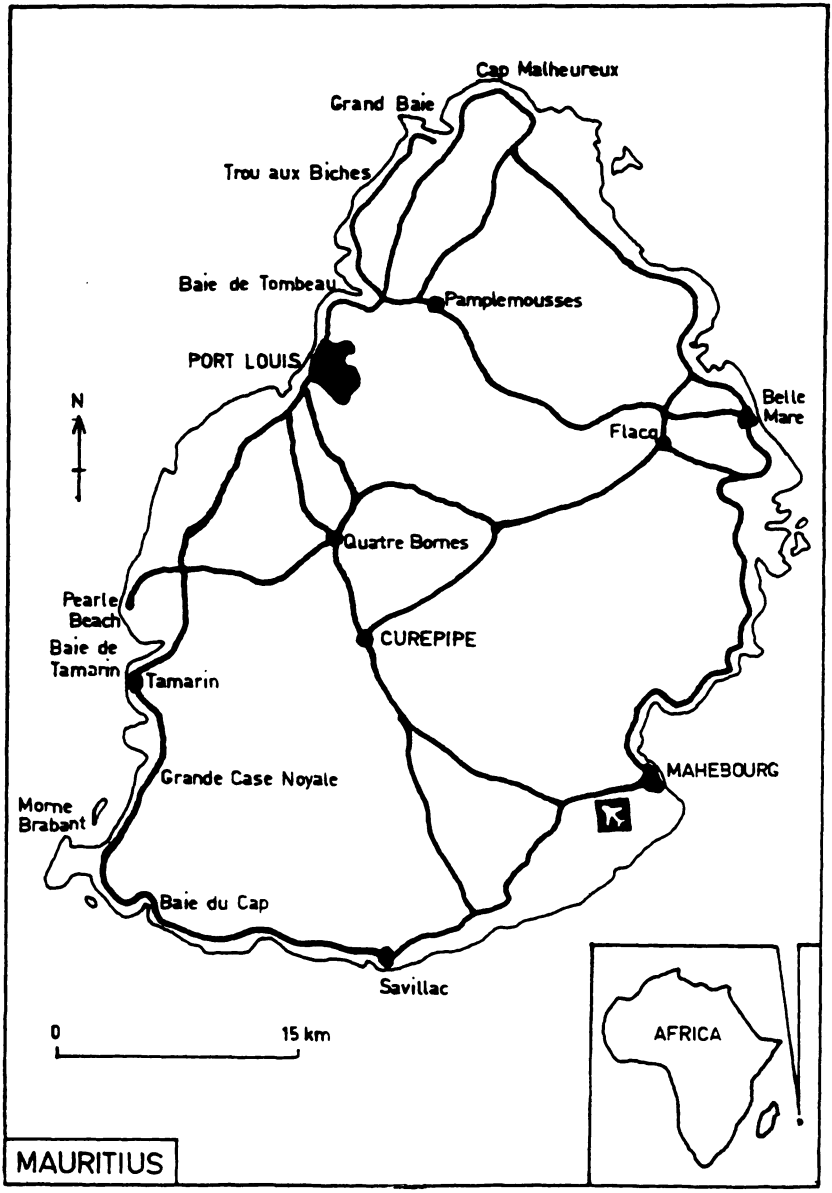
Population (1993): 1,111,000
Population Growth Rate (1960-93): 1.5% per annum
Land Area: 1,480 square kilometres
GNP per Capita (1994): US$3,500
Year of Independence: 1968
UNDP Human Development Index (1994): 0.831

Unlike most other colonial territories, Mauritius was uninhabited in the precolonial era. The island was probably visited by Arabs before Portuguese voyagers rediscovered it in 1510, but it was the Dutch who took possession of the island in 1598 and named it Mauritius. The Dutch left in 1710, and were replaced five years later by the French, who changed the name to Isle de France. In turn, the French were replaced in 1810 by the British. The British allowed the French language and culture to remain, but again named the island Mauritius.

The colonial processes created a multi-ethnic society. In addition to the colonisers themselves, slaves were brought from mainland Africa and from Madagascar by both the French and the British. In addition, Indian labourers were brought by the British to work in the sugar cane fields when the freed slaves refused to work there; and at the end of the nineteenth century Chinese traders arrived to set up small shops. These developments account for the multicultural and multilingual dimensions of Mauritius today. The majority of the people are Hindus, followed numerically by Roman Catholics, Muslims and Buddhists.

For many years the economy relied mainly on sugar. However, since independence the government has made a sustained effort to diversify the economy. A manufacturing Export Processing Zone was set up, mainly for production of garments. Also, tourism was developed; and recently the service sector, including offshore banking, has been encouraged.

The country's strong and continuing French legacy is reflected in the fact that most newspapers are in French and that the creole used in everyday interaction is based on French. However, the education system is based on British patterns. It has a six-year primary cycle which children normally


Cap Malheureux
Grand Baie
Trou aux Biches
Baie de Tombeau
Pamplemousses
PORT LOUIS
N
Belle Mare
Flacq
Quatre Bornes
Pearle Beach
Baie de Tamarin
CUREPIPE
Tamarin
Grande Case Noyale
MAHEBOURG
Morne Brabant
Baie du Cap
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AFRICA
MAURITIUS

enter at the age of five. This is followed by the secondary cycle, comprising five years to School Certificate (SC) and a further two years to Higher School Certificate (HSC). In 1996, Mauritius had 267 primary schools with 120,000 pupils, and 120 secondary schools with 90,000 pupils. The government now aims to give all children aged four to 15 access to education.

Mauritians place strong emphasis on education, and consider the certificates obtained at each level to be of major importance. This stress on examinations starts in the primary school. To gain admission to secondary schools, applicants must pass the Certificate of Primary Education (CPE) examination. The annual pass rate at the first attempt is usually about 65 per cent, but rises to 75 per cent with repetition. The top pupils are ranked in order of merit on the CPE results in order to determine admission to the most sought-after secondary schools. Pupils who do not pass the CPE examination at all are channelled into basic secondary schools for three years.

The Mauritius Examinations Syndicate

The Mauritius Examinations Syndicate (MES) was established in 1984. Prior to that time, operations were primarily conducted by the Ministry of Education in conjunction with the Ministry of Finance and various other bodies. The sharing of roles between ministries exemplified a type of operation which is fairly common in small states, which have small bureaucracies and must maximise use of scarce resources. The Ministry of Finance had the necessary data-processing staff and equipment which the Ministry of Education lacked. As the number of examinations grew, however, the government decided to establish a separate body. The MES was created by Act of Parliament, and is required to:

- organise and conduct such examinations as may be directed by the Minister of Education;
- conduct relevant research and related activities tending to promote the development of a sound system of examinations;
- award certificates; and
- cooperate with other examination bodies.

The name Syndicate was chosen for two reasons. First, the name had respectability through the long association with the University of Cambridge Local Examinations Syndicate (UCLES). Second, the word Syndicate conveyed an important message about cooperation with teachers and others engaged in the educational process.

An additional reason for creating the MES as a separate body concerned security in the examinations process. In 1981, question papers for the Cambridge SC and HSC examinations leaked in advance — to the extent that questions were printed in local newspapers a few days before the examinations were due to have been taken. Two years later, irregularities occurred with the CPE examination. Following these two leakages, the authorities decided that a single body with sole responsibility for administration would be better able to operate a secure system.

The hunger for certificates has prompted Mauritians to enter for many examinations offered by overseas bodies as well as local ones. Table 3.1 lists the main examinations administered by the MES on its own behalf and on behalf of other bodies. The numbers of candidates taking the different examinations is shown in Table 3.2. The largest numbers are for CPE, SC and HSC. Substantial numbers also sit accounting, Pitman (secretarial) and London Chamber of Commerce examinations. As the economy has diversified, examinations have also become needed in such areas as tourism, hairdressing, welding, and electronics. Developments in vocational education have led to National Trade Certificate courses for which the examinations are jointly administered by the MES and the Industrial & Vocational Training Board.

The governing body of the MES is a Board of nine persons. The Board lays down policy decisions and approves the budget, but leaves the organisation of examinations and the development of research to the Director, who reports to the Board.

The MES has had to meet the challenge of organising an increasing number of examinations since 1984 whilst giving special attention to security and reliability. It has gradually increased its staff from about 70 in 1984 to 220 in 1996. The staff includes 19 employees in the finance section (including responsibility for payment of fees and allowances to invigilators and others who are not employees of the MES), while others are engaged in establishment matters, storage, purchases, security, premises, and printing.

The CPE section has 15 staff, and the SC/HSC section has 22. This gives an indication of the number of persons involved in the conduct of examinations, which includes looking after accommodation, recruiting invigilators, marking, moderating, and corresponding with overseas bodies, schools and private candidates. The MES also has a research section with eight specialised professionals supported by 12 research assistants and data processors. All staff in the examination and research sections hold first degrees. Some of them also hold postgraduate qualifications, and a few are registered for M.Phil. and Ph.D. studies.

Table 3.1: Main Examinations Administered by the Mauritius Examinations Syndicate

1. Certificate of Primary Education
2. Cambridge School Certificate/Higher School Certificate
3. Association of Accounting Technicians
4. Association of Business Executives
5. Association of Health Care & Medical Records Officers
6. Association of International Accountants
7. Australian Insurance Institute
8. Chartered Association of Certified Accountants
9. Chartered Institute of Bankers
10. Chartered Institute of Management Accountants
11. Chartered Institute of Marketing
12. Chartered Institute of Transport
13. Chartered Insurance Institute
14. Institute of Actuaries
15. Institute of Administrative Management
16. Institute of Chartered Secretaries and Administrators
17. Institute of Company Accountants
18. Institute of Professional Managers and Administrators
19. Chartered Institute of Purchasing and Supply
20. Royal Statistical Society
21. Institute of Supervisory Management
22. London Chamber of Commerce and Industry
23. Pitman Examinations Institute
24. Royal Society of Arts
25. Society of Actuaries
26. Master of Business Administration: several universities
27. University of London: external degrees and diplomas
28. University of South Africa
29. Association of Business & Administrative Computing
30. Institute of Data Processing Management
31. British Computer Society
32. City & Guilds of London Institute (CGLI)
33. Joint MES/CGLI
34. Royal Institute of Chartered Surveyors
35. College of Estate Management
36. Engineering Council
37. Institution of Structural Engineers
38. Society of Engineers
39. Textile Institute
40. Conservatoire de Musique
41. Lycée Polytechnique
42. Institute of Commercial Management
43. Institute of Chartered Financial Analysts of India
44. Diplomas and degrees by distance education from Holborn College and universities including Southern Queensland, South Pacific and Durban Westville (South Africa).
45. Institute of Financial Management

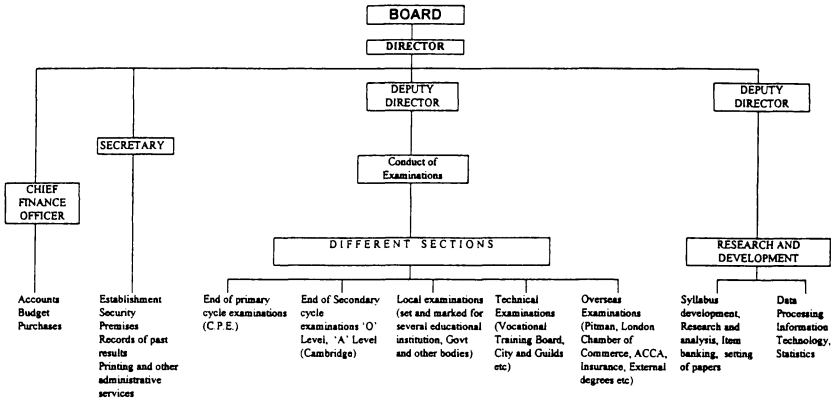
Table 3.2: Approximate Annual Number of Candidates for the Principal Examinations, Mauritius

Examination	*No. of Candidates*
Certificate of Primary Education	35,000
School Certificate (November & June)	18,000
Higher School Certificate (November & June)	8,000
Chartered Association of Certified Accountants	5,700
Pitman (three times a year)	5,000
London Chamber of Commerce (twice a year)	2,500
Local Vocational Examinations	2,000
City & Guilds (twice a year)	1,400
University of South Africa (Distance mode)	1,200
Other examinations: ranging from 500 candidates to only one	

It might be argued that the MES is over-staffed by comparison with other countries covered in this book. Certainly the MES has benefitted from the buoyant economy, which has meant that the organisation has not faced the financial stringency of some other countries. However, the fact that the MES has substantial research capacity is a feature to be noted and applauded. Also, the MES undertakes much work in curriculum development which, if not done within the MES, would have to be undertaken by other bodies. Another factor underlying the size of the MES is the need to have cross-checking through sharing of responsibility. An example is the need for three different people to hold keys to separate locks on the safes containing live examination papers. Such arrangements mean that individuals are less likely to be tempted to abuse the trust placed in them. Moreover, the administration of examinations for foreign institutions justifies employment of some of these staff and actually earns money for the MES. Were the MES to be engaged solely in the operation of domestic examinations, its tasks could probably be accomplished with only a quarter of its present establishment.

Figure 3.1 shows the structure of the MES. Particularly for reasons of accountability, it is very important to know the exact responsibilities of each officer and to whom each officer reports. The size of the operation permits more specialisation than is possible in most other small states.

Figure 3.1: Organisation Chart of the Mauritius Examinations Syndicate



Security

In a country which is not only small but also attaches a high premium to certificates, the organisation of examinations must be carried out with a high degree of professionalism and the utmost confidentiality and security. The CPE examination is the most demanding from this perspective. It is taken by the largest number of candidates, and is closely monitored by the public because it determines the secondary schools to which pupils may be admitted. For admission to the most competitive schools, the top 2,500 boys and the top 2,500 girls (out of about 15,000 boys and 15,000 girls) are ranked in order of merit. The public perception of which secondary school is the best is at the root of the ranking procedure, because there are two or three boys' schools and the same number of girls' schools to which nearly all candidates would like to gain admission.

To ensure a tight system, right from the preparation of the question papers through to the declaration of results, every possible measure to ensure a well-organised and secure examination system has to be followed rigorously. The security measures have several elements. Beginning with preparation of papers, not more than two highly reliable persons are involved in the setting of each draft, and the typing is done by two experienced Confidential Secretaries. In order not to involve more Mauritians, and to tap expertise not available in Mauritius, the papers are moderated by the University of London Examinations & Assessment Council (ULEAC). This arrangement was launched in 1994 following an allegation of irregularity in the examination process, although the irregularity was alleged to have taken place outside the MES on the day of the examination.

For greater anonymity and confidentiality, the MES has set up a bank of questions and complete papers. Resource persons, including lecturers at the Mauritius Institute of Education and primary school inspectors, have been trained to prepare questions and full papers. Experienced primary teachers also prepare individual questions to build up a bank of questions, though for security reasons they do not prepare full papers. Until 1993, the papers were printed by the MES. However, since about 10 people were involved in the printing and there was always the risk that one of them could leak the contents, the decision was taken to have the papers printed by a top United Kingdom (UK) security printer.

When the question papers reach Mauritius, they are accompanied by police officers to the MES, where they are kept in a strongroom. To gain access to the strongroom, three senior officers (including a security officer) holding different keys must be present at the same time. Other security measures, including burglar alarms, control access to those MES buildings which are not open to the public.

The next stage in the process requires security in delivery of papers to the 300 centres at which candidates sit the examinations. Papers are delivered to centres only on the day each examination is taken. In this respect, Mauritius has an advantage from being a country which is small not only in population but also in area. The papers are delivered by about 60 school inspectors and experienced headteachers. Each of these people delivers the papers for five examination centres to the supervisors of those centres. The supervisors are usually headteachers who are posted to schools other than their own.

At each examination centre, two police officers are posted to ensure that the examination is conducted in accordance with instructions. These instructions include requirements concerning the opening of the sealed question papers and the placing of completed scripts in envelopes which must be sealed immediately.

The marking of scripts is done centrally, with the index numbers of the candidates hidden during the marking exercise. Marking is done under the supervision of a Research Officer of the MES or a lecturer from the Mauritius Institute of Education. Teachers, headteachers and inspectors are also involved at different levels, and receive proper training in advance.

Finally, the marks are entered directly from each marking centre into the MES computer through dedicated telephone lines. Security arrangements ensure that the correct marks are fed into the computer. The marks are fed twice, by two different persons, for extra verification.

For other examinations, a slightly different security system is in place. For the SC and HSC examinations, which come from Cambridge, the

security system is the same as when CPE papers are received from the printers. However there are no policemen when the envelopes are opened in the centres, because the candidates are older and can verify for themselves whether the envelopes are properly handled.

Localisation and International Recognition

The education system of each country must be adapted to its requirements, environment, socio-economic context, and type of development desired. The examination system, being part of the education system, must respond to these demands. Assessment procedures and tools must also be reliable and valid, in order to secure recognition of qualifications both domestically and abroad.

The primary school curriculum was devised locally to respond to the country's environment and socio-economic requirements. However, some external inputs are considered desirable for quality-control and to maintain professionalism in the operation.

Before 1980, there were two examinations at the end of the primary cycle: a Primary School Leaving Examination and a Junior Scholarship examination for admission to the top secondary schools. The Junior Scholarship examination, like the Primary School Leaving Examination, had been organised locally until allegations of leakage were made in the 1960s. The responsibility for setting and printing the question papers was then given to Moray House College of Education in Edinburgh, Scotland, with which Mauritius had a link as some Mauritians had been there for teacher education courses. The arrangement also gave a form of credibility through its external nature. Despite their competence and experience, however, the foreign paper-setters were not really in a position to understand what was required of 11-year old children in Mauritius in all subject areas and particularly in Geography. Because of this, in 1980 the government localised the whole examination.

As noted above, in 1994 an external input was reintroduced, in the form of a contract with ULEAC, following widespread discussion again of the dangers of malpractice and leakage. ULEAC was chosen because although, like UCLES, it mainly operates at the secondary level, the organisation had some demonstrated expertise in primary school examinations in the UK. The arrangement was initiated not so much for international recognition but rather to increase security by reducing the number of Mauritians involved. However, the fact that the arrangement seems to ensure some international underwriting for the local examination operated by the MES is an added benefit.

Although in principle there is a case for the secondary education system

to be Mauritianised, there are also compelling reasons not to sever links with international bodies. It is true that countries smaller than Mauritius have developed their own education and examination systems. However, Mauritian society is conservative, and places high value on international links. For reasons of international recognition and portability of qualifications, Mauritians would prefer a certificate from Cambridge or London to a local one. At one point the UCLES examinations were criticised on several counts. The Economics papers were considered not to have enough local content or to be keeping up with changes in the Mauritian economy; the French papers were considered too easy for a society which uses French extensively in everyday life; and the Geography and History papers were also considered too distant from Mauritian contexts. However, UCLES has become more flexible than it used to be, and in recent years has found ways to respond to these shortcomings.

For these reasons, the SC and HSC examinations continue to be organised by UCLES. In fact, even when the UK moved to 'O' and 'A' levels, and recently to the General Certificate of Secondary Education (GCSE), Mauritius kept the old nomenclature of School Certificate and Higher School Certificate. The main reason was that the general public felt that the existing system was working satisfactorily and that there were no strong reasons to change it.

Another major advantage from adherence to UCLES concerns the range of subjects offered. Tables 3.3 and 3.4 show the numbers of candidates for the various subjects at SC and HSC levels. The range of subjects is very wide, particularly at the SC level. Many subjects have fewer than 100 candidates, and some have fewer than 10. Cost factors would make it impossible to offer these subjects if the MES took over the operation. UCLES is able to offer these subjects because the addition of candidates from different countries creates an economically viable operation.

However, attachment to UCLES does also bring some disadvantages. One, which is explained below, concerns cost; and another concerns relevance. Since UCLES examinations serve many countries, there are limits on the extent to which they can be tailored to suit individual clients. However, UCLES has worked hard to provide content in line with Mauritian requirements. For example, special papers are offered for Mauritian candidates in History, Geography and seven Asian languages. Syllabuses for these papers are developed by advisory committees in Mauritius, and, after discussion and advice from Cambridge, are approved as UCLES syllabuses. Mauritians are also involved in local marking of scripts in such subjects as Art, French and all the Asian languages. Although French is offered in the UK and internationally at both 'O' and 'A' levels by UCLES,

Table 3.3: Numbers of Candidates, by Subject, in School Certificate Examinations, Mauritius, 1992-95

Subject	*1992*	*1993*	*1994*	*1995*	*Subject*	*1992*	*1993*	*1994*	*1995*
Addit. Maths (code 4031)	6,004	6,576	6,547	6,814	Hinduism	737	910	905	890
Addit. Maths (code 4030)	1	3	2	4	World Affairs	9	4	4	3
Agricultural Science	71	17	0	0	History of Mauritius	82	43	23	39
Agriculture	160	247	369	437	Human & Soc. Biology	177	208	158	126
Arabic	27	28	28	33	Islamic Rel. & Cult.	219	262	209	225
Art	2,179	2,590	2,767	3,206	Law	26	25	24	1
Biology	2,335	2,648	3,015	3,635	Literature in English	101	121	118	148
Chemistry	2,856	3,310	3,730	4,385	Marathi	10	8	9	6
Commerce	3,550	3,621	3,115	2,836	Maths A (code 4021)	494	485	421	480
Commercial Studies	206	236	237	268	Maths D (code 4009)	2	1	0	0
Computer Studies	471	632	653	709	Maths D (code 4029)	12,165	13,043	12,808	13,608
Design & Communication	70	156	329	475	Metal Work	29	0	0	0
Design & Technology	67	119	205	236	Modern Chinese	28	14	15	18
Economics	7,042	7,023	6,030	5,910	Physics	1,887	2,193	2,363	2,848
Electronics	45	53	53	40	Principles of Accounts	9,653	9,858	9,184	9,176
English Language	12,887	13,787	13,485	11,440	Religious Studies (2040)	4	2	16	16
English Literature	3,743	3,258	3,117	3,401	Religious Studies (2041)	21	21	40	51
Fashion and Fabrics	163	215	213	246	Science	40	40	27	43
Food Studies	211	301	312	377	Sociology	220	260	220	283
French	12,630	13,512	13,220	14,081	Spanish	1	1	1	3
French Literature	2,704	2,734	2,957	3,402	Statistics	133	218	234	251
Geography	256	269	288	294	Tamil	28	34	19	22
Geometrical & Mech. Drawing	571	534	341	179	Telugu	16	23	11	14
German	43	33	35	29	Urdu	147	192	183	72
Hindi	1,914	2,110	1,991	2,080	Woodwork	64	11	0	0

Source: MES Statistical Handbooks.

Table 3.4: Numbers of Candidates, by Subject, in Higher School Certificate Examinations, Mauritius, 1992-95

Subject	*1992*	*1993*	*1994*	*1995*	*Subject*	*1992*	*1993*	*1994*	*1995*
Accounting	2,738	3,132	3,248	3,322	Hindi	221	295	364	359
Art	396	455	473	617	Hinduism	198	194	224	277
Biology	522	562	584	655	History	6	10	0	5
Chemistry	1,300	1,367	1,408	1,616	Islamic Studs.	21	22	29	33
Chinese	0	1	0	1	Law	4	2	6	0
Computing	0	0	0	23	Man. of Busin.	48	112	145	175
Design & Tech.	0	9	21	27	Marathi	0	2	0	2
Dress & Textile	38	49	50	52	Maths	3,111	3,615	3,719	3,850
Economics	1,884	2,165	2,094	1,923	Metal Work	6	0	0	0
English	297	261	275	290	Physical Sci.	3	5	8	7
Food Studies	39	46	43	58	Physics	901	943	977	1,074
French	1,321	1,450	1,567	1,776	Sociology	16	26	41	59
Further Maths	8	9	11	5	Tamil	4	1	0	0
General Paper	4,334	4,812	5,066	5,438	Telugu	1	2	2	2
Geography	50	49	44	39	Urdu	8	18	14	15

Source: MES Statistical Handbooks.

the level of the examinations is rather low for Mauritian candidates. Here again, UCLES agreed to the suggestions made by Mauritius to have special syllabuses in French for Mauritian candidates.

Costs

For the CPE examination, there were 30,000 candidates in 1995. Each candidate took four compulsory subjects, and 20,000 candidates took an Asian language as an optional fifth subject. Each question paper, in the form of a booklet to be used as an answer book, had 16 A4 pages.

The cost of setting the papers and having them moderated by ULEAC was approximately £30,000. In addition, the cost of printing 40,000 copies of each of the compulsory papers and 30,000 copies of the optional papers (190,000 booklets in all), and then air-freighting them, was approximately £100,000; and the cost of organising the examination was £250,000. Excluding the salaries of MES staff, this gives a total figure of about £380,000, or £13 per candidate. Addition of salaries of the permanent MES staff and other government expenditures would create a total of about £600,000, or £20 per candidate. Had the papers been printed in Mauritius, the work would probably have been done at about one third of the cost. The

ULEAC operation also required five officers to travel to London and work there for 10 days. All expenses are borne by the Government of Mauritius.

For the UCLES examinations, in 1995 there were 16,000 SC candidates and 6,000 HSC candidates. Students took an average of six subjects at SC and three or four subjects at HSC (the maximum being three 'A' levels plus two subsidiary subjects). The government paid UCLES £1,500,000 in fees for these two examinations. The local expenses of conducting the examinations were approximately £330,000. This means that the cost of organising the examinations, excluding both salaries of MES staff and the fees that the candidates paid to UCLES, was about £15 per candidate. Inclusion of MES salaries and other government expenses would raise this figure to about £23 per candidate. For other examinations conducted by the MES, the cost per candidate is higher because the MES cannot gain economies of scale.

At earlier points in the history of Mauritius, the outflow of so much foreign exchange would have been considered problematic. However, in the 1990s the economy is buoyant and the government no longer places restrictions on foreign exchange. The links with ULEAC and UCLES are expensive, but are considered by the government to be within its financial capacity and worth the price.

Conclusions

Mauritius is a small country which operates in a very international environment. It has scarce natural resources, relies on others for its technology, and imports a large proportion of its food. Mauritius also has a multi-ethnic society with widely divergent origins, and linguistic links with India, the UK, France, China, and some parts of mainland Africa.

The people of Mauritius have endeavoured to shape an education system which on the one hand reflects the society of which they are part, and on the other hand facilitates the international linkages which they consider to be important. The examination system reflects these two goals. At the primary level, the CPE is prepared by the Mauritius Examinations Syndicate but moderated, and in a sense underwritten, by the University of London Examinations & Assessment Council. At the secondary level, Mauritius adheres to the system operated by the University of Cambridge Local Examinations Syndicate. This arrangement is costly, but provides the benefits of international recognition and portability. Moreover, UCLES has been willing to tailor certain examinations to Mauritian needs, and the system gives candidates a far greater choice of subjects than would be possible were the whole system to be undertaken by the MES. The idea of Mauritianising the secondary school examinations has been discussed, and the MES does now have the technical capacity. However, it is doubtful whether Mauri-

tianisation would be cheaper; and the present arrangement confers other benefits.

During the years since 1984, the MES has itself undergone considerable evolution and expansion. It is now a substantial enterprise which, despite the smallness of the society it serves, is able to undertake many specialist services. The MES is of course a fairly expensive operation; but the government's international approach to development, to which the MES has made a contribution, has paid substantial dividends to the Mauritian economy. Moreover, by acting as the local agent for a large number of external agencies, the MES is able to earn money to cover its costs. From these perspectives, the MES must be seen as a successful model.

Chapter 4: Namibia

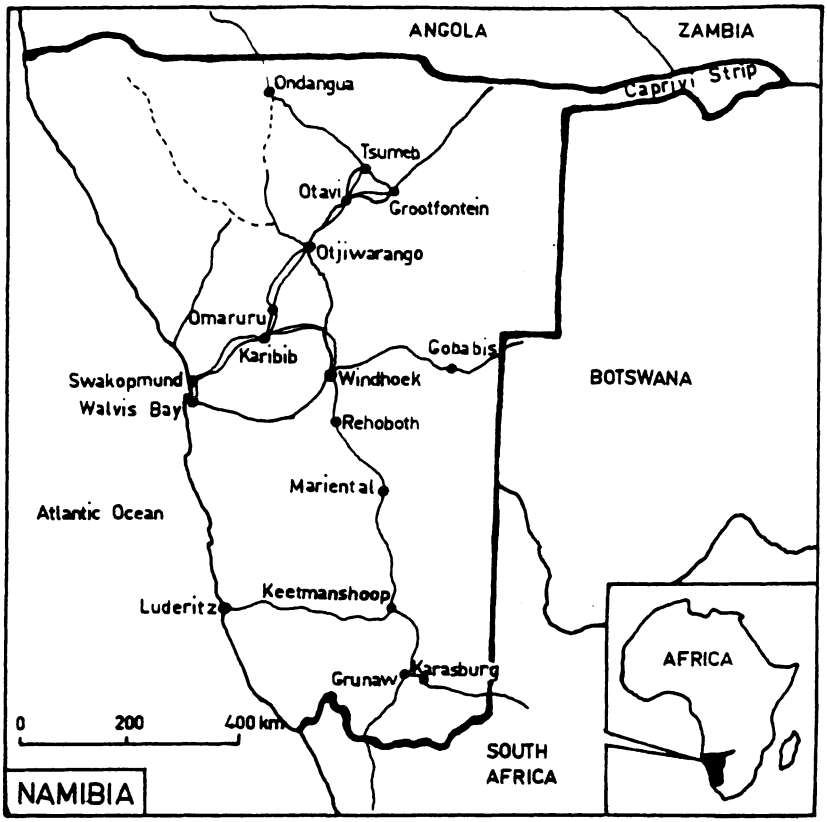
Jan Erasmus

Population (1993): 1,565,000
Population Growth Rate (1960-93): 2.6% per annum
Land Area: 824,292 square kilometres
GNP per Capita (1994): US$1,530
Year of Independence: 1990
UNDP Human Development Index (1994): 0.570

With a population of 1,600,000, Namibia might be described as a small state, even though it is certainly not small in area. The combination of small population and large area gives Namibia a population density of just 1.9 people per square kilometre, which, after Mongolia, is the second lowest in the world. The large area and low population density create major problems for administration of all kinds, including administration of examinations.

Between 1884 and 1919, Namibia was a German colony. After the end of World War I, the territory was forfeited by Germany and placed by the League of Nations under South African trusteeship. During the second half of the century this meant, among other aspects, that Namibia was subjected to the policies of apartheid. Also, the education system created by the South African regime was highly segmented. The fact that each community managed its own sub-sector according to its respective means led to wide disparities in staffing, types of schools, and academic achievement. Independence was achieved only after complex and bitter struggle in which the United Nations as well as various nationalist groups played a leading role.

In the era since Independence, the government has sought to reshape the education sector, and has stressed the key role of schooling in the emancipation of the communities which were previously disadvantaged. The priority given to education is evident from the allocation of 24 per cent of the government's total budget in 1994/95, a proportion which rose to 29 per cent in 1995/96. The latter figure brought investment in the education sector to a figure exceeding 10 per cent of Gross National Product, which was probably the highest proportion in the world. Given other pressing needs,


ANGOLA
ZAMBIA
Caprivi Strip
Ondangua
Tsumeb
Otavi
Grootfontein
Otjiwarango
Omaruru
Karibib
Gobabis
Swakopmund
Walvis Bay
Windhoek
BOTSWANA
Rehoboth
Marientat
Atlantic Ocean
Keetmanshoop
Luderitz
Grunau
Karasburg
AFRICA
0
200
400 km
SOUTH
AFRICA
NAMIBIA

however, it seemed unlikely that these proportions would be sustained for long.

The Education and Examination Systems

Prior to independence, Namibia followed the South African education system. That system included a Standard 8 Certificate Examination and a Senior Certificate Examination based on group requirements and norm-referenced standardisation.

Since 1990, the formal school system has been divided into four stages as follows:

- lower primary: Grades 1 to 4,
- upper primary: Grades 5 to 7,
- junior secondary: Grades 8 to 10, and
- senior secondary: Grades 11 and 12.

No external examinations are taken at the primary level. Selection for upper primary school is based 50 per cent on continuous assessment of school work, and 50 per cent on internal end-of-year examinations. Until 1998, a similar arrangement was used to select pupils for junior secondary schools, but the government decided in the early 1990s to operate an external summative examination at the end of Grade 7 from that year.

The external examination taken at the end of Grade 10 is called the Junior Secondary Certificate (JSC) examination. Students who proceed to senior secondary school then take examinations for the International General Certificate of Secondary Education (IGCSE) and/or the Higher International General Certificate of Secondary Education (HIGCSE), which are offered by the University of Cambridge Local Examinations Syndicate (UCLES). Both these examinations are taken at the end of Grade 12. The HIGCSE examination has been developed especially for Namibian candidates who wish to further their studies in South African universities and polytechnics, since the IGCSE is considered to have too low a standard for that purpose. The HIGCSE is not available in any other country, and is an example of the way that UCLES has been willing to tailor its work to meet Namibian needs.

In addition to this main system are some variations. First, for the JSC examination, special arrangements are made for blind and deaf students. Second, one private school offers Advanced-level examinations; and third, until 1998 six other schools which have particular links with South Africa were allowed still to offer the South African Senior Certificate Examination. For the rest of the country, this examination was phased out in 1994.

Table 4.1 shows the numbers of candidates sitting each examination in

1995. The greatest number, as might be expected, was at the JSC level. However, even at the Grade 12 IGCSE level there were over 10,000 full-time candidates. A large number of students also took the part-time Grade 12 South African examination.

Table 4.1: Numbers of Candidates sitting Examinations, Namibia, 1995

Examination	*Number of Candidates*	*Certifying Body*
JSC full-time	25,058	Namibian Examinations Board
JSC part-time	3,021	Namibian Examinations Board
JSC blind and deaf	7	Namibian Examinations Board
Grade 12 full-time HIGCSE	697	UCLES
Grade 12 full-time IGCSE	10,246	UCLES
Grade 12 full-time 'A' level	20	UCLES
Grade 12 IGCSE resit	2,848	UCLES
Grade 12 full-time Senior Certificate	168	South African Certification Council
Grade 12 part-time Senior Certificate	18,008	South African Certification Council
Grade 12 supplementary Senior Cert.*	3,480	South African Certification Council

* 1996 figure

Staff and their Responsibilities

In 1996, the staff structure of the Department of National Examinations & Assessment (DNEA) in the Ministry of Basic Education & Culture provided for 52 posts as indicated in Table 4.2. In addition, 20 Occasional Employees are appointed annually for about 10 months of the year. A new staff structure which is currently being negotiated is expected to provide for education officers who will be responsible for research and statistical analyses of examination data.

The posts are divided into two divisions. The Administrative Division is responsible for data processing and enquiries, reproduction, packing, despatching, financial control, stock control, transport, and administrative support. The Professional Division is responsible for assessment and test-item development, and for question-paper development and control.

The professional officers include the specialists in each subject. All hold at least a degree plus an education diploma or equivalent, plus teaching or teaching-related experience. All the education officers have attended the training programme organised by UCLES in Cambridge, UK. In turn, they have been responsible for training of teachers, with the assistance of UCLES subject specialists, through workshops. The education officers are members

Table 4.2: Staff Structure of the Department of National Examinations & Assessment, Namibia, 1996

1 Director	1 Principal Data Typist
1 Deputy Director: Examinations Admin.	4 Data Typists/Senior Data Typists
1 Senior Educ'n Officer/Subject Specialist	1 Clerical Assistant
6 Education Officers/Subject Specialists	1 Programmer (vacant)
1 Chief Systems Analyst	1 Registry Clerk
1 Chief Control/Senior Exams Officer	2 Lithographic Operators/ Senior Lithographic Operators
2 Control Officers	
1 Chief Clerk/Examinations Officer	1 Chief Caretaker (vacant)
13 Clerks/Senior/Assistant Exams. Officers	1 Messenger
1 Accountant (vacant)	2 Watchmen
1 Private Secretary	4 Driver
1 Senior Typist	4 Cleaners (2 vacant)
1 Typist/Senior Typist	2 Labourers

of appropriate curriculum panels in the Ministry's Curriculum Development Directorate. This ensures coordination of curriculum with assessment. Training in desk-top publishing during 1995 assisted improve-ment of the physical appearance of the examination papers. However, little research has yet been conducted, because the workload has not made it possible.

Because of budgetary constraints, the senior education officer and six education officers are each responsible for a number of subjects. This makes

Table 4.3: Subject Responsibilities of Specialist Officers, Namibia, 1996

Post	Subject Grouping	No. of Subjects*	No.of Papers
Senior Education Officer	Mathematics & Natural Sciences	6	44
1 Education Officer	Agriculture, Life Science, etc.	8	24
1 Education Officer	Crafts, Design & Technology	15	48
1 Education Officer	Humanities & Social Sciences	8	58
1 Education Officer	European Languages	6	106
1 Education Officer	African Languages	5	61
1 Education Officer**			

* The same subject at different grades and examination levels is counted as a single subject.

** This officer should also have responsibility for languages; but at the time of writing, the post was vacant.

their tasks extremely difficult, because they are not always specialists in these subjects. The distribution of responsibilities is shown in Table 4.3.

As noted above, some challenges arise from the geographical size of the country. Namibia is divided into seven regions, and each region has one regional examination official plus a clerk for examinations and assessment-related tasks. Each region also has a personal computer, which is linked to the headquarters minicomputer for the purpose of supplying information to candidates on credits accumulated and for checking entries. Decentralisation to the regional offices of responsibility for the conduct of examinations is costly, but has greatly improved commitment, involvement and solidarity.

Another indicator of the scale of operations is the volume of paper work. In 1995, the DNEA prepared and distributed 146 circulars containing directives for the conduct of examinations, marking of papers, retrieval of marks, interpretation of examination requirements, and release of results. Moreover, conduct of the external examination in March (the supplementary Senior Certificate Examination), an external examination in May/June (IGCSE resit) and six external examinations in November/December placed such a burden on the section responsible for packing and distributing materials that in 1995, 4,600 hours of overtime were required. During 1995, 7,778,700 question papers were packed and distributed to the seven regions. In addition, 3,634,000 circulars, old question papers and letters were packed and distributed to various destinations.

School teachers are employed for marking of JSC scripts, which is done centrally in Windhoek. For the 1995 end-of-year examinations, 745 teachers were withdrawn from schools for a period of one week each. School teachers are also employed as examiners in question-setting panels for the JSC and localised IGCSE/HIGCSE papers. University personnel are occasionally employed for vetting, but not for other tasks.

Methods for maintaining confidentiality of question papers include:

- use of sealed envelopes,
- use of couriers instead of the postal service, with examinations in steel containers and the keys sent separately,
- use of safes and strongrooms (with the requirement that only one person should have access to the safes of schools where external examinations are conducted), and
- use of reinforced steel doors and closed-circuit television (with 14 cameras) where papers are printed, packed and stored.

In addition, training on security as well as other matters is provided annually for regional staff, heads of centres, and invigilators.

Social and Political Factors

Although the population of Namibia is small, it is also racially and ethnically diverse. In the new political environment, this diversity must be catered for and respected. The long years of struggle against domination by South Africa have created a backlash against many of the social structures that existed before 1990. The examination system both reflects the changes and is an instrument for achieving a new society.

Among the first foci of the post-Independence changes was the JSC History syllabus, which has now been rewritten. Political forces have also required introduction of more Namibian languages as examinable subjects. When added to the existing diversity of European languages which are examinable subjects, the total list is formidable (Table 4.4). Preparation of all these examinations would be a strain for any system, but it is particularly onerous in a small one.

At the IGCSE and HIGCSE level, however, there exists a delicate balance between national and international forces. On the one hand is the clear evidence of local orientation in syllabuses, which UCLES has respected and facilitated; but on the other hand is a concern for the qualifications to be internationally recognised.

Moreover, the mere existence of the HIGCSE in Namibia is a reflection of competing forces. The University of Namibia allows entry on satisfactory IGCSE results, but South African universities require HIGCSE grades. The main reason that the Namibian government is willing to support the HIGCSE examinations is that the University of Namibia does not cover all fields of study, and the government therefore wishes some Namibians to study abroad. Since the HIGCSE was only introduced in 1995, at the time of writing it had not been tested for admission to institutions in the UK, USA or elsewhere. However, early indications are that it would be recognised for study in such places.

The IGCSE and HIGCSE are perhaps not quite as international as their names suggests. Of the 41 IGCSE syllabuses currently offered in Namibia, 17 are either localised or Namibia-specific. The remaining 24 are international syllabuses. The 17 localised subjects comprise 51 examination papers, while the total number of IGCSE examination components is 102. This means that the DNEA is already responsible for setting, marking and moderating exactly half of all the IGCSE examination papers offered in the country. At the HIGCSE level, only two of the 13 syllabuses are localised. However, even this is a significant element, and the Ministry aspires in the long run to localise all syllabuses at both levels.

Table 4.4: Languages Offered in External Examinations, Namibia, 1996

	Subject	No. of Papers
HIGCSE	English as a Second Language including Literature	3
	Afrikaans as a First Language including Literature	3
	English as a First Language including Literature	3
	German as a First Language including Literature	3
	French as a Foreign Language	2
	German as a Foreign Language	2
IGCSE	Oshikwanyama as a First Language incl. Literature	5
	Oshindonga as a First Language incl. Literature	5
	Otjiherero as a First Language incl. Literature	5
	Rukwangali as a First Language incl. Literature	5
	Setswana as a First Language including Literature	5
	Silozi as a First Language including Literature	5
	Afrikaans as a Second Language	5
	English as a Second Language	6
	Afrikaans as a First Language including Literature	5
	English as a First Language	6
	German as a First Language	6
	French as a Foreign Language	5
	German as a Foreign Language	5
	Literature B (English)	2
	Literature B (German)	2
Senior Certificate	Oshikwanyama as a First Language HG	3
	Oshindonga as a First Language HG	3
	Otjiherero as a First Language HG	3
	Rukwangali as a First Language HG	3
	Setswana as a First Language HG	3
	Silozi as a First Language HG	3
	Afrikaans as a Second Lang. HG + SG	2+2
	English as a Second Language HG + SG	2+2
	Afrikaans as a First Lang. HG + SG	3+3
	English as First Language HG + SG	3+3
	English as a Second Language incl. Literature HG +SG	2+2
Junior Secondary Certificate	Oshikwanyama as a First Language	3
	Oshindonga as a First Language	3
	Otjiherero as a First Language	3
	Rukwangali as a First Language	3
	Setswana as a First Language	3
	Silozi as a First Language	3
	Nama/Damara as First Language	3
	Afrikaans	3
	English	3
	Afrikaans as a First Language	3
	English as a First Language	3
	German as a First Language	3
	French as a Foreign Language	4
	German as a Foreign Language	4
	Latin	2

Note: HG = Higher Grade; SG = Standard Grade.

Costs

Namibia pays a financial penalty for not conducting its secondary school leaving certificate examinations entirely on its own. Table 4.5 summarises the fees for the 1995 IGCSE and HIGCSE examinations (paid to UCLES) and the 1994 Senior Certificate Examination (paid to South Africa). The UCLES fee was in fact a special rate, lower than the amount usually charged by UCLES. Nevertheless, the total amounts paid were substantial. The fee to UCLES was N$5.3 million (US$1.3 million), and the fee to South Africa was N$4.0 million (US$0.9 million). In addition are costs, which in 1995/96 amounted to N$25,000, arising from despatch of scripts marked in Cambridge and Cape Town. It is not certain that the examination would have been cheaper had Namibia conducted it all by itself. However, if the examination had been localised, the foreign exchange would have been retained in the country.

Table 4.5: Fees for IGCSE, HIGCSE and Senior Certificate Examinations, Namibia

	IGCSE & HIGCSE 1995	Senior Certificate 1994
Number of candidates	10,943	11,494
Fee per subject (average)	N$ 83	N$ 57
Average amount paid per candidate	N$ 487	N$ 344
80% subsidy paid by government	N$ 4,268,362	N$ 3,163,148
20% paid by candidates	N$ 1,067,090	N$ 790,787
Total	*N$ 5,335,453*	*N$ 3,953,936*
	(US$ 1,255,400	US$ 930,337)

As indicated above, 29 per cent of the total government budget was allocated to education in 1995/96. This amounted to N$1,100.0 million (US$258.8 million), of which N$21.2 million was allocated to the DNEA. From this amount, N$2.1 million was allocated to staff remuneration, and slightly over N$6 million to other services, particularly payment of examiners, markers and invigilators. Other costs were N$1.4 million for materials and supplies, N$0.5 million for transport, and N$0.4 million for maintenance.

The sums budgeted by the DNEA for the conduct of external examinations are shown in Table 4.6. These sums excluded fees but included the setting and moderation of papers and marking schemes, translation of

question papers and marking schemes, translation of papers into Braille and translation of scripts from Braille, adaptation of question papers for sight-impaired candidates, marking and moderation of answer scripts, control over markers and moderators, moderation of course work and oral examinations, grading meetings, remarking of scripts on appeal, and remuneration of invigilators and heads of centres. The fact that the JSC examination is marked centrally in Windhoek adds to the costs since the examiners, moderators and markers must be remunerated for travel and subsistence expenses.

Table 4.6: Budget for Conduct of External Examinations, Directorate of National Examinations & Assessment, Namibia, 1995/96

Grade 12 H/IGCSE examinations	N$ 313,394
Grade 12 full-time South African syllabuses	12,060
Grade 12 part-time South African syllabuses	1,690,976
Grade 10 JSC full- and part-time	2,517,082
Total	*N$4,533,512*
	(US$1,066,708)

As mentioned above, however, the government plans to phase out the South African Senior Certificate Examination. That will at least reduce one financial burden. It will also remove a major element in the existing complexity of operations.

Conclusions

Namibia has a demanding system of examinations, which has evolved rapidly and which is still in the process of change. Although Namibia's population is small, it has considerable diversity. This chapter has pointed out that despite the small population, the examination system is a major enterprise. Not only does it have a budget of N$21.2 million (US$5.0 million) plus N$1.9 million paid in fees by candidates, it also involves the annual despatch of 7.8 million examination papers and 3.6 million documents of other types.

Moreover, while Namibia is small in population, it is vast in area. This greatly adds to the complexities and costs of operating the examination system. The system relies on development and coordination of its seven regional offices, but also requires all marking of JSC examinations to be done centrally in Windhoek. The employment of 745 teachers for a period of one week each is equivalent to 14.3 person-years; and that figure

excludes both the time spent organising the event, the time that the 745 teachers spent travelling, and the time spent on original preparation of questions and papers.

Had the processes of history been different, Namibia might have been willing to join a Southern African regional initiative offering a joint examination along the lines of those offered by the West African Examinations Council or the Caribbean Examinations Council. Alternatively, Namibia might have been willing to continue extensive use of the examination system of its dominant neighbour. Yet the actual pattern of events has required policy-makers on the one hand to be self-reliant and on the other hand to seek partners further afield. UCLES has proved a willing and competent partner, and has played a key role not only in the provision of examination papers but also in training of local staff. However, even at the reduced rates charged by the Syndicate, UCLES services are costly. Although for the time being the Namibian government has been prepared to make education a major financial priority, it is doubtful whether education will be able to retain such a major share of the budget for an extended period.

Because of these factors, policy-makers will have to maintain the search for balance between competing goals. On the one hand is the desire to support local cultures; and on the other hand is the need to heed practicalities and costs in the operation of an examination system. Another delicate balance is between national identity and international connections. Because of the small population base which supports the University of Namibia, that institution is not large enough to provide all the specialisms needed by Namibia's economy and society. This means that a sizeable proportion of Namibians need to go abroad for further education, which in turn requires attention to the standards and external recognition of senior secondary examinations.

In the meantime, Namibia has already established an examination system of which it may be proud. The complexity and changing nature of the context within which this has been done underline the magnitude of the achievement. Challenges certainly lie ahead; but the quality of existing achievements give cause for optimism about the ability to confront those challenges.

Chapter 5: Bhutan

Sangay Dorjee

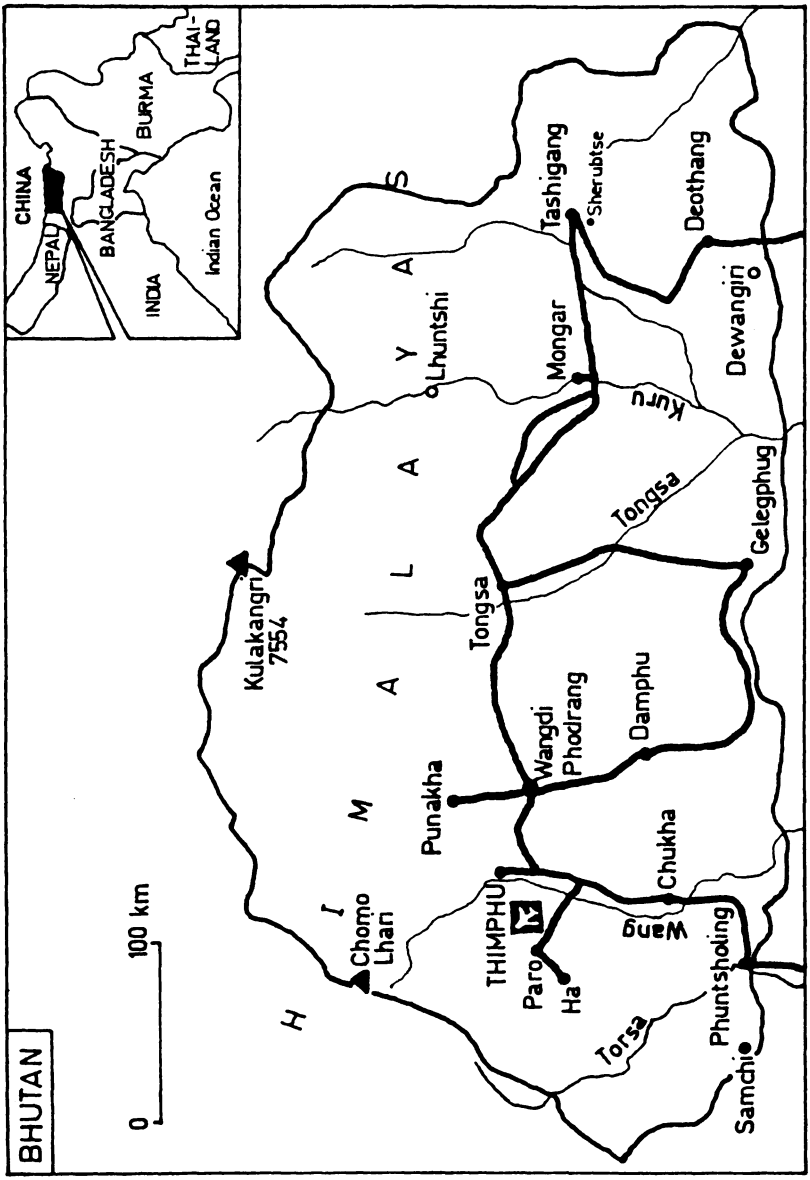
Population (1995): 675,000
Population Growth Rate (1960-93): 1.9% per annum
Land Area: 46,500 square kilometres
GDP per Capita (1994): US$425
UNDP Human Development Index (1994): 0.338

The Kingdom of Bhutan lies in the Himalaya range of mountains. Because of the mountainous terrain, only about 16 per cent of the land is cultivated. Nevertheless, agriculture is the dominant sector of the economy, accounting for nearly 40 per cent of Gross Domestic Product and employing about 78 per cent of the economically active adult population. Among recently-emergent sectors is power supply. With the commissioning of a major hydroelectric dam in 1988, Bhutan became a major exporter of power to India.

Unlike the other countries examined in Part II of this book, Bhutan is not a member of the Commonwealth. However, Bhutan's history has some links with the British empire; and the country has strong ties with India, which is a Commonwealth state. Moreover, Bhutan uses English from the earliest stages of primary school. It will be evident from this chapter that Bhutan's education and examination systems have features in common with many Commonwealth states.

The links with the British empire in Bhutan's political history were through the British base in India during the 19th and early 20th centuries. Skirmishes on Bhutan's southern border from the 1830s onward escalated into a conflict in 1864. An 1865 treaty restored friendly relations, but Bhutan lost a fertile strip of land in exchange for an annuity. A 1910 Anglo-Bhutanese Treaty placed Bhutan's foreign relations under the supervision of the Government of British India. Bhutan retained its independence, however, and like Nepal and Thailand was never formally colonised.

Following India's independence in 1947, the Anglo-Bhutanese Treaty was replaced by an Indo-Bhutanese Treaty of Friendship. Bhutan agreed to seek Indian advice on foreign relations, though remained free to decide


BHUTAN
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THAI-LAND
INDIA
Indian Ocean
H I M A L A Y A S
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Tongsa
Lhuntshi
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Dewangiri
Kuru
Tongsa
Gelegphug
Wangdi Phodrang
Damphu
THIMPHU
Paro
Ha
Chukha
Wang
Torsa
Phuntsholing
Samchi

whether or not to accept such advice. India has made major contributions to Bhutanese infrastructure, among which the road system constructed in the 1960s is particularly prominent. India is Bhutan's most important trading partner, and until 1974 the Indian rupee was the only medium of exchange. Bhutan now has its own currency, the ngultrum, but it is pegged at par to the rupee, and the latter continues to circulate freely as legal tender. Nevertheless, Bhutan has preserved its sovereignty, and in recent years the government has increasingly asserted its independence in the international arena.

The Education and Examination Systems

Bhutan's modern education system is relatively young. The first western-type institution was established in 1915, but schools remained very few in number until the 1960s. Even in 1996, moreover, the country had only 101 community (junior primary) schools, 154 primary schools, 20 junior high schools, and 10 high schools. The principal tertiary institution was Sherubtse College, which was affiliated to the University of Delhi.

The school system has a 1+6+2+2+2 pattern, i.e. one year of pre-primary, six years of primary, two years of junior secondary, two years of middle secondary, and two years of higher secondary education. English is the principal medium of instruction throughout the system. However, in the mid-1990s the government began to experiment with Dzongkha-medium education at the base of the system.

At the end of primary school, pupils take the Primary School Certificate Examination (PSCE), which is conducted by the Bhutan Board of Examinations (BBE). Until 1994, this examination was entirely based on external examinations except in the two language papers, where an internally-conducted oral assessment contributed 10 per cent of the final marks. In 1994, the proportion of school-based assessment was increased to 50 per cent of the final marks.

The curriculum for the junior secondary grades leads to the Lower Secondary School Certificate Examination (LSSCE). Assessment is based 80 per cent on the external examination, and 20 per cent on internal assessment. Students who remain in the system until Class X take the Bhutan Board-Indian Certificate of Secondary Education (BB-ICSE) examination, which is equivalent to Ordinary ('O') level in other countries. The next two years lead to the Indian School Certificate (ISC) examination, which is equivalent to Advanced ('A') level.

The ISC examination is set by an Indian examining board, and is based on Indian syllabuses. Students learn Indian history, geography and economics, with almost no Bhutanese adaptation. Because of shortages in

the number of available Bhutanese teachers for senior secondary schools, many pupils at this level are taught by Indian expatriate teachers.

The BB-ICSE, however, is a move towards localisation. The examination is now a joint operation between the Bhutan Board of Examinations and the Council for the Indian School Certificate Examination (CISCE). Prior to 1996, the examination was entirely operated by the CISCE, and, like the Class XII examination, was heavily dominated by Indian syllabuses. One reflection of this was the inclusion of Socially Useful Productive Work (SUPW) as a specific item for assessment. SUPW was introduced by the Indian government for its own schools during the 1970s in an effort to link schools more closely to their communities. SUPW has remained a subject in the Class X examination, but is now operated by the Bhutan Board of Examinations.

In addition to these major school-level examinations are several other demands on the Bhutan Board of Examinations. They include the examinations for the teachers' colleges and for the Rigzhung. The latter is an institution which focuses on aspects of Bhutanese language and culture, for which examinations are required at Classes X and XII. At one time the BBE

Table 5.1: Growth in Numbers of Examination Candidates, Bhutan, 1986-2002

	PSCE	LSSCE	ICSE	ISC	PTCE	ZTCE	Rigzhung X	Rigzhung XII
1986	2,014	974	277	113	n.a.	-	n.a.	n.a.
1988	2,860	1,076	334	127	n.a.	-	n.a.	n.a.
1990	2,261	1,164	515	145	n.a.	-	n.a.	n.a.
1992	3,321	1,326	570	175	89	-	42	8
1994	4,234	1,890	599	189	46	27	68	-
1996	5,805	3,678	1,141	268	49	42	71	17
1998*	9,482	5,805	3,678	1,395	-	-	35	71
2000*	11,223	9,482	5,805	3,678	-	-	62	35
2002*	13,675	11,223	9,482	5,805	-	-	-	62

PSCE = Primary School Certificate Examination; LSSCE = Lower Secondary School Certificate Examination; ICSE = Indian Certificate of Secondary Education; ISC = Indian School Certificate; PTCE = Primary Teachers' Certificate Examination; ZTCE = Zhungkha Teachers' Certificate Examination; n.a. = figures not available; - = examination not offered; * = projected

Source: Bhutan Board of Examinations, Thimphu.

also operated examinations for the Royal Bhutan Polytechnic, but now that institution conducts its own examinations.

Table 5.1 shows the growth and projections in the numbers of examination candidates since 1986. PSCE candidates nearly tripled between 1986 and 1996, and were expected to double again by 2002. Even more striking are the numbers of ISC candidates, which increased four-fold in the decade from 1986, and were projected again to increase eight-fold between 1996 and 2002. Most dramatic of all is the projected 21-fold increase in ISC candidates between 1996 and 2002. As of 1996, however, some operations were still small — below 300 candidates in the ISC examination, and just 17 in the Rigzhung Class XII examination.

History and Staffing of the Examinations System

The history of national examinations dates only from 1972, when the primary school leaving examination was created. At that time the examination was taken at the end of Class V.

During the initial years, the examinations were conducted by the then Directorate of Education. In 1976, an Examination Cell was established with an Assistant Controller of Examinations. Eight years later, the Examination Cell was separated from the Directorate and a Secretary appointed. Finally, in 1986 the Examination Cell was renamed the Bhutan Board of Examinations.

The BBE has a staff of civil servants whose work is overseen by a board. The Secretary (Head) of Education is *ex officio* Chairperson of this board, which has 11 members. Most of the other members are school principals and other senior officers in the government's Division of Education, which is itself part of the Ministry of Health & Education. The board of the BBE was created in 1993 in order to spread responsibility for direction of operations and to prepare for future autonomy of the organisation.

Although from 1972 to 1981 the primary and junior secondary examinations were conducted in Bhutan, the papers were prepared and evaluated in India. In 1982, scripts were for the first time marked in Bhutan. The marking was conducted in evaluation camps with Chief Examiners from India. Since 1984, the whole process at those levels has been conducted internally. This set a pattern for localisation which the authorities plan to emulate for the Class X and Class XII examinations.

The BBE suffers from severe shortages of resources, especially in staff. The establishment created in 1990 allowed for seven professional posts as shown in Table 5.2. However, at various points in history at least some were unfilled. At the beginning of 1996, for example, the Board had only

Table 5.2: Jurisdictions and Responsibilities of Professional Posts according to the Staff Establishment, Bhutan Board of Examinations

Secretary of the Board

a. Overall planning, policy implementation, and direction
b. Overall administration, including finance and budget matters
c. Professional and academic advice in evaluation, measurement and assessment for all units

Controller of Examinations [Vacant; duties managed by Secretary and two Assistant Secretaries]

a. General administration of Class X and XII examinations
b. Supervision of evaluation camps
c. Monitoring of other examinations

Assistant Secretary for Administration & Analysis

a. Overall administration of the Primary School Certificate Examination
b. Analysis of scores for all examinations
c. Computer maintenance of item bank

Assistant Secretary for Arts

a. Overall administration of Rigzhung examinations for Classes X and XII
b. Development and maintenance of item bank for Classes VI and VIII History, Geography, English and Dzongkha

Assistant Secretary for Biology & Chemistry [Vacant; duties managed by Secretary]

a. Overall administration of Class VIII Examinations
b. Development and maintenance of item bank for Class VIII Biology and Chemistry
c. Development and maintenance of item bank for Class VI General Science

Assistant Secretary for Pure Sciences & Mathematics [Vacant; duties managed by Secretary]

a. Overall administration of Royal Bhutan Police and Royal Technical Institute examinations
b. Development and maintenance of item bank for Classes VI and VIII Mathematics and Physics
c. Development and maintenance of item bank for Police and Technical Institute test papers

Subject Officer for Dzongkha [Vacant; managed by Assistant Secretaries in collaboration with Dzongkha Development Commission]

a. Overall administration of Rigzhung, Zhungkha Teachers' Certificate, and Classes VI, VIII and X Dzongkha examinations
b. In-service training for Dzongkha language teachers

Note: The table shows the establishment created in 1990. At the beginning of 1996, four posts were vacant. Arrangements to cover the tasks are indicated in parentheses.

three professional officers plus five support staff. The chief reason was a shortage of qualified personnel arising from a combination of the small size of the population and the recency of educational development. As in other small states, staff have to be multi-functional, and the job descriptions on paper do not completely correspond with reality.

Also notable in the establishment created in 1990 was an imbalance between treatment of Arts and Sciences. Whereas Arts had one Assistant Secretary, Sciences had two. This arrangement chiefly reflected availability of personnel at the time — a practice which is commonly frowned upon in large states but which is common in small states and may indeed be desirable because bureaucracies in small states must be flexible and in some circumstances must maximise the use of available human resources (Bray et al. 1991, p.54).

In line with this need for flexibility and periodic restructuring, in mid-1996 the subject specialists were redesignated Coordinators rather than Assistant Secretaries, and the posts of Assistant Secretary for Biology & Chemistry and Assistant Secretary for Pure Sciences & Mathematics were combined as Coordinator of Science & Mathematics. This made sense not only from the viewpoint of internal organisation of the BBE but also from a wider perspective since the schools were very short of such specialist personnel and could not easily afford to lose even a single person to the BBE.

Despite the general scarcity of well-educated nationals, the small team at the BBE is well qualified. Among the three professional staff employed in early 1996, the Secretary had a BSc degree majoring in chemistry, a secondary teachers' college diploma, and 12 years' teaching experience in junior high schools; the Assistant Secretary for Arts had an MA in education; and the other Assistant Secretary held an MEd in measurement and evaluation. The five support staff had Class X and Class VIII qualifications. One held the post of Assistant Computer Programmer, while the others performed secretarial and other support functions. Staff were generally recruited as generalists rather than specialists. Some specific training has been provided for BBE staff, but most skills have been acquired through on-the-job experience.

Also instructive, and relevant to the broader literature on public administration in small states (e.g. Baker 1992; Murray 1981) is the way that availability of staff has determined organisational roles. At the time that the establishment reflected in Table 5.2 was created in 1990, the Assistant Secretary for Pure Sciences and Mathematics had expertise to cope with the scientific and technical examinations of the Royal Bhutan Polytechnic. As a result, the BBE took on a role in that institution. But with the departure

of that officer, the BBE no longer had the necessary expertise and that particular function was dropped.

The problems posed by the shortage of personnel, particularly in subject specialisms, have been partially ameliorated through the help of Curriculum Officers, teachers and lecturers in the teachers' colleges and elsewhere. Model question papers are usually developed by teachers and lecturers, who are nominated by the Secretariat according to their experience and expertise. Marking is also undertaken by teachers and lecturers.

To keep costs down, the marking camps are generally used for in-service training in general principles of educational measurement and evaluation useful for classroom situations as well as specifically for marking examination scripts. In 1995, 43 per cent of Class VI teacher and 54 per cent of Class VIII teachers were directly involved in the evaluation processes. This is a very high proportion, which might be envied by larger states. The involvement of such large proportions of teachers helps to ensure close linkages between the examination processes and the realities of classroom operation.

Financial Constraints

The examination service has not attracted good funding from either the government or external donors. The government budget only covers operating costs, while the costs of equipment, workshops and publications are generally met by donors. Table 5.3 indicates the government budget for 1995-96. The largest items, excluding the salaries of full-time BBE officers and support staff which are not shown, are for travel and for printing.

In addition to these costs to the government are fees paid directly by candidates. The fee structure includes an overall fee for each sitting, plus a separate fee for each paper. In the past, the CISCE permitted Bhutanese candidates to pay the same rate as Indian candidates. This contrasted with the charges for candidates in other countries, who had to pay a higher rate. Since 1996 Bhutanese candidates have been charged the non-Indian rate, but the government has met the costs for ICSE and ISC candidates in public schools.

Complete localisation of the examination system will cut the flow of resources to India, but will increase the burden on the team in Bhutan. Moreover, ongoing links will be needed with counterparts in India and elsewhere, in order to maintain reference points concerning the nature and standards of examination. It is therefore uncertain that future localisation of examinations will be less expensive than the present system.

Table 5.3: Budget Estimates for Bhutan Board of Examinations, 1995/96 (Ngultrums)

1. Personal Emoluments and Evaluation Charges - Question-paper setting and moderation fees - Net salary payments to teachers and others for supervision and invigilation - Evaluation fee for ICSE projects in Economics, Geography, History and Computer Science, and practical examinations in Physics, Chemistry and Biology	500,000
2. Travel - Supervising examiners, invigilators, escort teachers - Visiting examiners for BB-ICSE and ISC practicals - Out-station students reporting to centres for Class VI and VIII examinations - Expenses for person on duty during printing of confidential papers and stationery	1,200,000
3. Printing Charges/Supply and Materials - Printing of question papers, examination stationery, certificates and statements of marks	628,000
4. Air Freight Charges - Charges and travel costs for BB-ICSE and ISC documents between Delhi and Bhutan	75,000
5. Operating Expenses and Transportation - Transportation of examination documents from press in India to Secretariat - Transportation of examination documents from Secretariat to/from examination centres and evaluation camps	70,000
6. Maintenance and Procurement - Office equipment	60,000
TOTAL	Nu 2,533,000 (US$ 79,530)

Social Factors and Security of Examinations

The small size and closeness of Bhutanese society poses a special problem in terms of maintaining social relationships but also confidentiality in examinations. Frequent visits and telephone calls by relatives and friends anxious for inside information during and after examinations are a continuing nightmare for BBE staff.

However, some measures adopted over the years have helped to maintain security and smooth operation. Teachers are nominated as paper-setters

through confidential correspondence, and they are prohibited from participating if their own children or close relatives are sitting the examinations in question. Final proof reading of papers and preparation on computer are done only by the three professional officers in the BBE, who are held fully responsible for any lapse in security.

The papers and examination stationery are actually printed in India. Although this arrangement increases the costs of transportation, it takes advantage of the large printing presses and cheap labour in India, and is not necessarily more expensive than printing domestically. The printing work is awarded on a confidential tender system. To maintain security, papers are collected from India by one of the BBE staff, and are brought to Bhutan only a few days before the date for each examination. On arrival, the packets containing papers and numbers are adjusted for each centre, and are immediately locked in metal trunks by Board staff. The trunks are then escorted by staff members to examination centres, and deposited in the care of the respective convenors a day or two before the examinations begin.

In addition, scripts show only index numbers rather than the names of candidates. Numbers are allotted to the examinees in advance upon receipt of the registrations from the schools, and are fed into the computer. During the evaluation camp, another set of computer-generated random numbers is used to replace the original numbers, in order to conceal the identity of the examinees from the examiners. This task is carried out by the managers, who do not themselves engage in marking. Raw marks are fed into the computer at the venue of the camp, and are cross-checked for final processing under the supervision of one of the officers. The staff return to the Secretariat only when the data have been processed and are ready for final printing. Finally, results are published in absolute confidentiality either during the weekends or outside working hours. These procedures are considered desirable not only to maintain security but also to save BBE staff from unnecessary social pressures.

Recognition and Localisation

The landlocked nature of the country and its dependence on its giant neighbour, India, cannot be ignored. Some independence is essential, however, and Bhutan is increasingly asserting its national identity and autonomy. This is the main reason for localisation of the ICSE examination, which in due course will be followed by localisation of the ISC. Nevertheless, policy-makers still heed issues of external recognition. Due to limitations in local capacity, many Bhutanese still need to go abroad for further studies and training. Indeed, given Bhutan's small size, this is likely to remain a permanent feature.

The certificates issued by the BBE are recognised within the country by both the government and private sector employers. Since they only cover the lower grades, recognition outside the country is not a serious issue.

The Class X examination still enjoys recognition in India as well as in Bhutan because it is operated jointly by the Bhutanese BBE and the Indian CISCE. The current arrangement was set up through a Memorandum of Understanding in 1993. Under this arrangement, the BBE is responsible for Dzongkha, History & Civics, Geography, and Socially Useful Productive Work; and the CISCE is responsible for English, Mathematics, Physics, Chemistry, Biology, Economics, and Computer Science. Staff of the CISCE come to Bhutan when needed to assist with training, and BBE staff periodically go to the CISCE for attachment courses. These visits of course have to be paid for, but are a valuable mechanism for effecting a smooth transition.

The 1993 Memorandum of Understanding indicated that the CISCE would "make all efforts" to secure recognition of the joint certificate by the Association of Indian Universities, the Universities Equivalence Committee, the Council of Boards of Secondary Education, the Central Board of Secondary Education, and all other state boards of education in India. The BBE expects to increase its share of the operation, with a target of full localisation by 2002. The Bhutanese government envisages that recognition by the Indian bodies will be maintained. The BBE, with the help of the CISCE, has already enrolled as an associate member (foreign country) of the Council of Boards of Secondary Education and of the Association of Indian Universities.

The Bhutanese government plans in due course to follow localisation of the Class X examination with localisation of the Class XII one. However, no timetable has yet been set for this. Major considerations include not only recognition but also manpower constraints. Unit costs of operating the examination would be high for the small number of candidates existing at the time of writing, but presumably will fall as the numbers increase.

At the time that Bhutan commenced its affiliation withe the CISCE, the latter was itself affiliated to the University of Cambridge Local Examinations Syndicate (UCLES). Bhutanese qualifications thereby gained an international currency through that further link. In due course, the CISCE felt able to operate on its own, outgrowing the need for the affiliation with UCLES. Now the BBE is beginning to operate on its own, outgrowing the need for the CISCE. The process perhaps resembles generations in a family, with Cambridge as the grandfather, the CISCE as the father, and the BBE as the son.

Conclusions

Bhutan has a relatively short history of formal education, and has been heavily influenced by patterns in India. Localisation of curricula has made considerable progress at the base of the system, but secondary schools remain dependent on India for teachers, books, syllabuses and examinations. This dependence becomes greater at each successive step up the system.

Nevertheless, localisation is under way at the Class X level, and in due course will follow at the Class XII level. The Bhutanese government has received support from Indian counterparts in these endeavours. In the long run, of course, the CISCE will lose business because of the localisation; but most Indian officials recognise that the process is not only inevitable but also desirable. Many officials view patterns in Bhutan in the context of their own localisation processes when Indian examination systems were created to replace those operated by Cambridge and other metropolitan boards.

Of course, localisation is not a simple task, and a balance has to be found between aspirations and the reality of practical constraints. Nevertheless, despite economic and manpower constraints, major progress has already been achieved. Provision of quality education which is comparable to regional and international standards continues to be a priority.

Also striking about the organisational arrangements in Bhutan is the amount that is achieved with a small professional staff. This partly reflects efficiency, but also reflects effective use of school-based personnel. As the operation expands, some increase in central staffing will be necessary. However, the benefits of a small team at the centre include not only cost-effectiveness but also high security and maintenance of confidentiality.

Further achievement of goals will require developments not only in examinations but also in curriculum development, instruction, and evaluation. In this regard, until the late 1980s developments in the examination system were lagging behind developments in other sectors. However, improvements have been achieved during the 1990s. Particularly important have been changes at the primary level, with the expansion of school-based assessment; but developments have also been significant at other levels. Among the most significant changes during the next few years will be dramatic growth at Grades X and XII.

Chapter 6: Maldives

Ibrahim Waheed

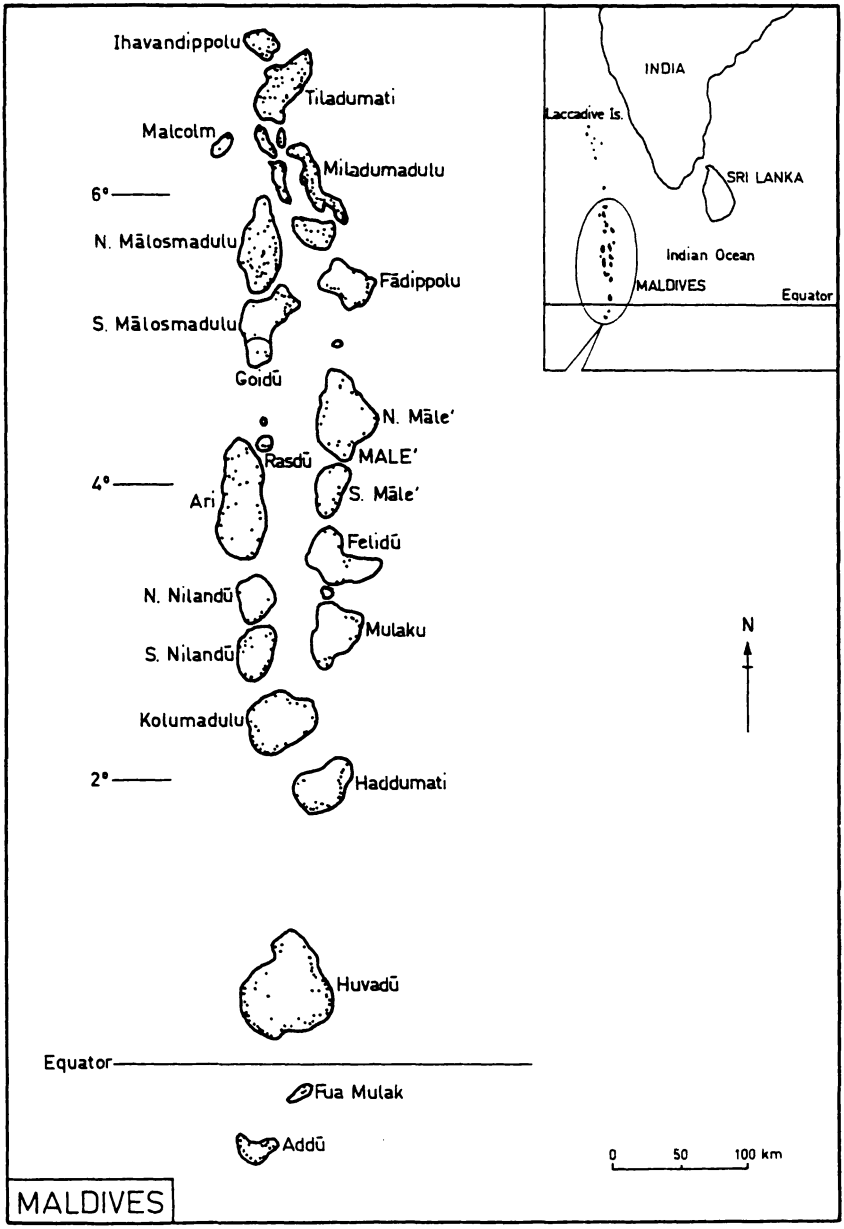
Population (1993): 236,000
Population Growth Rate (1960-93): 2.7% per annum
Land Area: 298 square kilometres
Sea Area: 100,000 square kilometres
GNP per Capita (1993): US$820
Year of Independence: 1965
UNDP Human Development Index (1994): 0.611

The Republic of the Maldives is spread out over a vast area of sea, but has a very small aggregate area of land. It is comprised of many islands, which number about 1,200. There is no other way but to state the number in these vague terms, since the islands appear and disappear at the whim of the elements, especially during the most active period of the monsoons. Only 202 islands are inhabited, and they are grouped into 19 administrative atolls.

Despite the fact that the Maldives is a developing country with hardly any natural resources other than sea and fish, the country has various distinctive features. The literacy rate approaches 98 per cent; there are no beggars; every Maldivian is a Muslim; and everybody speaks the national language, Dhivehi. Ethnic difference as a reason for enmity between people is normally brought to the attention of the average Maldivian only by the media. Girls are not kept away from school; and women are not kept away from public life. Unemployment is unheard of.

Another feature of the Maldives is its dependence on the rest of the world for almost everything. The staple food is imported rice. Spices and other condiments that usually make up the curry that accompanies the rice are also imported. Fruits and vegetables, milk, meat, poultry, eggs, and even certain types of fish (for those who relish sardines in tomato sauce!) are imported. Almost all consumer goods from sandals to satellite-dishes come in from outside. To pay for all this, Maldivians engage themselves in three major activities: fishing, shipping and tourism.

Yet while for the most part the Maldives is indeed the paradise that the tourist brochures say it is, the country is not without problems. The Maldives has been catching up with the rest of the world so fast that the


Ihavandippolu
Tiladumati
Malcolm
Miladumadulu
6°
N. Mālosmadulu
Fādippolu
S. Mālosmadulu
Goidū
N. Māle'
Rasdū
MALE'
4°
Ari
S. Māle'
Felidū
N. Nilandū
Mulaku
S. Nilandū
Kolumadulu
2°
Haddumati
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MALDIVES
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MALDIVES
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very pace of development has created problems. Members of the older generation complain about new-fangled devices, the Westernised attitudes of young people, and erosion of the cultural heritage. Other serious issues include the shortage of manpower for particular needs. For example, the burgeoning hospitality industry needs many professional and semi-professional workers from accountants to divers and barmen. The fishing industry needs engineers; and the shipping industry needs captains. Unfortunately, there are just not enough such people to meet the demand. Thus, the Maldives finds itself in the position of having to import many skills.

The Education and Examination Systems

The education system in the Maldives is a distinctive mixture of indigenous and foreign characteristics. The dominant values taught at school are Maldivian, but many schools teach in English. Moreover, at the secondary level the number of foreign teachers is greater than the number of Maldivian ones. Also, out of necessity a mix of local and foreign orientations is maintained in the system of public examinations.

Grades 1 to 5 comprise the primary cycle, for which some schools (particularly in the outer islands) teach in Dhivehi, while the others (particularly in the capital and more populous islands) teach in English. Grades 6 and 7 are the middle school stage, which again has a mix of Dhivehi-medium and English-medium schools. No public examinations are taken in the primary or middle schools.

Secondary education commences in Grade 8, at which point all instruction is in English. Most schools prepare their students to sit the University of London Examinations & Assessment Council (ULEAC) General Certificate of Education Ordinary (GCE 'O') level examinations, though one major institution prepares students to sit Arabic-medium alternatives. Grades 11 and 12 are the higher secondary school stage, during which students are prepared for the ULEAC GCE Advanced ('A') level examinations.

Being so small in population, Maldives does not have its own university. Students therefore go abroad for further studies, and require qualifications which are recognised by the institutions to which they seek entry. Maldivian students attend institutions in a wide range of countries, including Australia, Brunei Darussalam, Sri Lanka, the United Kingdom and the USA.

The range of subjects available in the ULEAC GCE 'O' level examinations is broad. It includes Accounting, Art & Design, Biology, Chemistry, Commerce, Computing Studies, Economics, English Language, English Literature, French, Fisheries Science, Geography, German, History, Human Biology, Italian, Mathematics, Pure Mathematics, Physics, Religious Studies,

Spanish, other modern languages, and integrated science. All subjects except one are Mode 1 subjects, which means that the syllabuses are set entirely externally. The exception is Fisheries Science, which is a Mode 2 subject in which syllabuses have been determined in the Maldives (with Canadian and UNESCO assistance) but the papers are set and graded by ULEAC. The examinations are held twice a year. In January 1996, 1,554 candidates from 19 schools sat the examination through 11 centres (Table 6.1).

Table 6.1: Major Public Examinations and Numbers of Candidates, Maldives

Examination	No. of Candidates	Date
International		
ULEAC GCE 'O' Level	1,554	Jan. 1996
ULEAC GCE 'A' Level	276	May/June 1996
UCLES First Certificate in English	179	Dec. 1995
UCLES Certificate of Proficiency in English	104	Dec. 1995
UCLES Cert. of Education in English Lang. Teaching	38	Nov. 1995
London Chamber of Commerce & Industry		Nov. 1995
National		
Civil Service Proficiency	156	April 1996
Secondary School Certificate	1,260	Dec. 1995
Higher Secondary School Certificate	143	Dec. 1995

The range of subjects is also wide in the ULEAC GCE 'A' level examination, though not all have high (or any) demand from Maldivian candidates. Subjects available include Accounting, Art & Design, Biology, Business Studies, Chemistry, Classical Civilisation, Design & Technology, Government & Political Studies, Graphical Communication, Greek, Latin, Law, Mechanics, Statistics, Applied Mathematics, Sociology, Russian, Economics, English Language, English Literature, French, Geography, German, History, Human Biology, Italian, Mathematics, Pure Mathematics, Physics, Religious Studies, Spanish, and other modern languages. The examination is held once a year. In May/June 1996, 276 candidates from two schools sat the examination through three centres (including two centres run directly by the Department of Public Examinations for private candidates).

In addition, since 1988 some students have sat the English-language

examinations set by the University of Cambridge Local Examinations Syndicate (UCLES). In December 1995, 179 candidates from three training institutions sat the First Certificate of English examination, and 104 candidates sat the Certificate of Proficiency in English examination. In addition, in November 1995 38 candidates from one institution sat the UCLES examination for the Certificate of Education in English Language Teaching. These examinations were based on international syllabuses published by UCLES.

The final set of international examinations attracting a significant number of candidates is administered by the London Chamber of Commerce & Industry. Subjects covered include Economics, Commerce, Typing, Shorthand, Secretarial Skills, Accounting, Auditing, and Business Management. The examinations are organised five times a year, and in November 1995 attracted candidates from five major institutions.

Contrasting with the international examinations are three major sets of national examinations. The Civil Service Proficiency examinations are held twice a year. In April 1996, 156 candidates sat this examination. Subjects included Mathematics, Government & Institutions, Dhivehi, Islamic Studies, Writing, and English.

Whereas the Civil Service Proficiency examinations mainly cater for adults who have studied in evening classes, the two other national examinations are for the school level. Both cover only two subjects, namely Dhivehi and Islamic Studies. Examinations for the Secondary School Certificate are held twice a year, and in December 1995 were sat by 1,260 candidates from 19 schools. Examinations for the Higher Secondary School Certificate are held once a year, and in December 1995 were sat by 143 candidates in two centres. Islamic Studies, as well as Dhivehi itself, is taught in Dhivehi. For this reason it operates separately from the ULEAC examinations. While it might seem clumsy to require students to sit examinations for two parallel sets of certification, the arrangement does seem to work.

Administration of Public Examinations

The Department of Public Examinations (DPE) was created as a specialised unit within the Ministry of Education in 1989. The Department has broader responsibilities than might be implied by the focus in its name on public examinations. This reflects a multifunctionality in bureaucracies which is common in small states. The Department is responsible for:

- administration of all national and international examinations held in the country,

- state approval of books apart from those written on religious themes,
- authorisation of teachers of Islamic Studies and Recitation of the Holy Quran, and
- endorsement and accreditation of academic credentials.

In 1996, the DPE establishment allowed for five professional staff, two administrative officers, and 12 clerks. The professional posts were for the Director, two Assistant Directors, and two Examinations Officers (one of which was vacant). Any professional service is of course only as strong as its staff, and the whole of the Maldivian public service suffered from a shortage of well-qualified applicants. In 1996, only one person in the DPE was a university graduate. One way to bridge gaps could have been to recruit expatriates who, as mentioned above, were prominent in the secondary schools. However, for reasons of national identity and control, the government preferred not to recruit expatriates for the Ministry headquarters.

Further constraints lie in the ancillary personnel needed to operate the examination system. The need for professional superintendents, invigilators, subject officers, moderators, markers and evaluators, together with the need for qualified educational planners and analysts, simply cannot be met. *Ad hoc* measures are usually taken to secure the cooperation of able persons who can work part-time with the DPE to meet some of the demands. In 1996, 34 people (all of whom were Maldivians) were on the books to provide assistance of various kinds.

In addition to the problems presented by the dearth of qualified professional staff, the DPE is challenged by the geography of the country. The DPE has no dedicated representations in any of the atolls, and has to depend on the Atoll Education Centres for administration of examinations.

The DPE also has to depend on schools and educational centres for facilities when it is time for candidates to sit the examinations. This poses problems to the DPE when schools have other priorities, such as social functions for which the same halls and furniture are needed.

Conclusions

The Maldives has a small population and limited human resources. In addition, the country consists of many islands, scattered over a huge area. These factors create major challenges to administration of all kinds, including administra-tion of examinations.

The lower levels of the education system are strongly oriented to Maldivian culture and national aspirations, but the higher levels have a more international orientation and rely on external examination bodies. The

country has no university of its own.

Chief among the external examination bodies employed by the Maldives is the University of London Examinations & Assessment Council. The country has a long relationship with ULEAC, though recent years have brought some questioning of the cost of the arrangement, which is a major drain on foreign exchange. The London examinations have some neutrality and status derived from distance (i.e. that London is far away). However, questions have also been raised about the relevance of the syllabuses. Only for Fisheries Science at 'O' level does ULEAC does do any special tailoring for the Maldivian context.

In addition, the Maldivian government operates two parallel examinations, in Dhivehi and Islamic Studies, to complement the ULEAC work. This arrangement satisfies national concerns for control of these subjects which have strong cultural relevance. However, the range of public examinations is quite broad, and is a heavy load for the Department of Public Examinations within the Ministry of Education. Moreover, to the mainstream activities of the DPE are periodically added additional ones. State approval of books and authorization of teachers in Islamic Studies are among these tasks. Also, in 1995 the Department organised a Shahada Thaanawiyya examination for students in the Arabic-medium secondary school; and the following year the Department was instructed to organise a Presidential Scholarship Award for students in Faafu Atoll.

Since the Maldives' neighbours already have well-established examination systems which serve their own needs, there seems little possibility of organising a regional examination system which would serve the Maldives' needs. The Indian ocean does contain other small states, including Seychelles and Mauritius which have related colonial legacies. However, Maldives has little contact with these countries, and air travel would only be through an indirect and costly route. For the foreseeable future, therefore, it would seem that the two main options for examinations in the Maldives are either for the DPE to take over all functions or for reliance on the metropolitan bodies to continue. Since Maldives has limited professional capacity, and since the authorities are anxious to retain international links and recognition at least for the major secondary school examinations, it seems unlikely, at least in the near future, that the Maldives will develop its own 'O' and 'A' level examinations. However, there is always scope for renegotiation of existing arrangements with ULEAC.

Chapter 7: Samoa

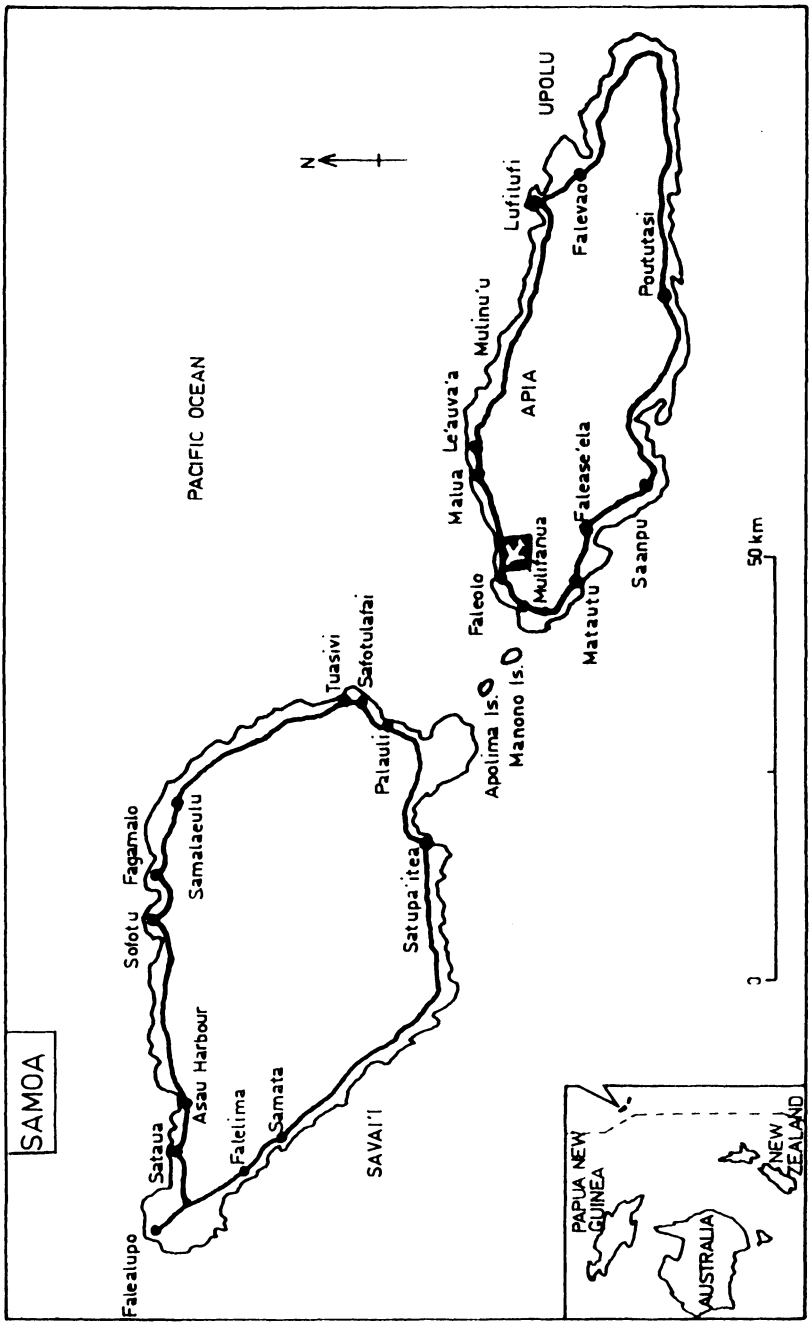
Lafi Sanerivi

Population (1993): 163,000
Population Growth Rate (1960-93): 1.2% per annum
Land Area: 2,842 square kilometres
GNP per Capita (1993): US$980
Year of Independence: 1962
UNDP Human Development Index (1994): 0.684

Historically and culturally, the islands of Samoa should be viewed in conjunction with their neighbours to the east known today as American Samoa. American sovereignty over the eastern islands was established in 1899. In the same year, the western group of islands became a German colony; but in 1914, at the commencement of World War I, it was annexed by New Zealand. At the end of the war, German control was formally terminated, and the islands were placed by the League of Nations under the trusteeship of New Zealand. Since 1962, Samoa has been a sovereign state. For the first three and a half decades of independence, the country was officially called Western Samoa. It was the first South Pacific island nation to become independent, to be a member of the United Nations, and to be considered a Third World non-aligned state.

Samoa comprises two large islands and several small ones. About half the labour force is engaged in agriculture and fishing. Within the other half, government and public enterprises account for the bulk of employment. The manufacturing sector is very small. A substantial annual income is derived from the remittances of Samoans who have emigrated to other countries. New Zealand used to be the most popular destination, but restrictions on immigration by the New Zealand authorities caused many Samoans instead to migrate to the USA, usually via American Samoa. Remittances commonly account for about one third of Gross National Product (Appleyard & Stahl 1995).

While from some standpoints Samoa might seem to be a country on the periphery, from other standpoints it is a centre. Samoa is the first port of call by ship from the New Zealand dependency of Tokelau, which has no airport, and most Tokelauans belong to the Congregational Christian Church


SAMOA
PACIFIC OCEAN
N
SAVAI'I
UPOLU
Falealupo
Sataua
Asau Harbour
Falelima
Samata
Sofotu
Fagamalo
Samataeulu
Satupa'itea
Palauli
Tuasivi
Safotulafai
Apolima Is.
Manono Is.
Faleolo
Malua
Le'auva'a
Mulinu'u
Lufilufi
Falevao
Poututasi
APIA
Mulifanua
Falease'ela
Saanpu
Matautu
50 km
PAPUA NEW GUINEA
AUSTRALIA
NEW ZEALAND

of Samoa. Tokelau has its own educational assessment system, part of which is mentioned in the chapter on the South Pacific Board for Educational Assessment (SPBEA) in this book, and is not dependent on Samoa in that regard. However, while the government of Samoa has to some extent taken New Zealand and other countries as models for its examination system, the governments of Kiribati and Tuvalu have recently begun in some areas to rely on Samoa. This provides an interesting perspective on interdependence in education systems.

Samoa is a member of the University of the South Pacific (USP), and hosts the university's Alafua Campus and Faculty of Agriculture. In addition, it has its own university, called the National University of Samoa (NUS). The NUS was founded in 1984 with the particular goal of fostering local culture. Samoa also sends many students to universities outside the immediate region, and particularly to New Zealand and Australia. Under bilateral and multilateral scholarship programmes in 1991, 265 Samoans were studying abroad. Fiji was host to 21.9 per cent, but New Zealand hosted 41.1 per cent and Australia 27.9 per cent (World Bank 1993a, p.67).

Development of the Education and Examination Systems

The origins of formal education in Samoa lie in the activities of various missionary bodies, particularly the Wesleyans and the members of the London Missionary Society. During the period from 1914, the New Zealand administration began to supplement mission schools with government institutions, and the system gradually expanded and reached higher levels. Secondary education dates from the early 1940s. As at the primary level, the first secondary schools were operated by the churches. However, the government founded Samoa College in 1953, and subsequently opened other institutions.

The expansion to higher levels naturally required attention to curriculum and examinations. At the primary level the New Zealand Proficiency examination was introduced for a few top students in one school which had a Standard 6 class; and in due course the secondary schools reached the point at which students could sit the New Zealand School Certificate (NZSC) and New Zealand University Entrance (NZUE) examinations. Up to the 1950s, most principals and teachers in secondary schools were from New Zealand, and their work was inspected and graded by New Zealand school inspectors on New Zealand standards. Hence the average Samoan parent came to accept, albeit tacitly, that to be educated meant passing a New Zealand examination after having gone through a peculiarly New Zealand educational process (Fuata'i 1993, p.19). During the initial decades following Independence the system remained dominated by standards set in New Zealand.

Only recently has this begun to change, and still the change is incomplete.

In 1996 the country had 157 primary schools (Years 1-8), 25 junior secondary schools, 20 senior secondary schools, and two secondary vocational schools (Table 7.1). At the primary level, most schools were owned by the government, but at the secondary level the churches played a major role. At the secondary level, classification of schools was complicated by considerable variation in the actual number of years covered by individual institutions (Table 7.2).

Table 7.1: Numbers of Schools, by Level and Agency, Samoa, 1996

	Government	Churches	Private	Total
Primary	140	15†	2*	157
Junior Secondary	22	3	-	25
Senior Secondary	3	16†	1*	20
Secondary Vocational	1	1	-	2

* One school has both primary and secondary divisions.
† Double counting may vary numbers.

Source: Department of Education, Government of Samoa, Apia.

Table 7.2: Class-Levels Covered by Secondary Schools, Samoa, 1996

	Government	Churches
Years 9-11	14	1
Years 9-12	8	8
Years 9-13	3	8
Year 13 only	-	2

Source: Department of Education, Government of Samoa, Apia.

The Year 8 National examination is used to select students from the primary level for the senior secondary schools. Most of the remaining students find places in the junior secondary schools, but a few leave the school system altogether. The Year 11 National examination is primarily for certification of completion of three years of secondary education.

The Samoa School Certificate (SSC) examination, formerly called the

Western Samoa School Certificate (WSSC) examination, was developed to take the place of the NZSC examination in 1989. The SSC examination selects Year 12 candidates for Year 13. Students who complete Year 13 may take the Pacific Senior School Certificate (PSSC) examination, which is set by the SPBEA and was designed to replace the New Zealand University Entrance examination.

Lest it appear from this list that all students have to sit all examinations, it should be explained that the Year 11 National examinations are taken by students who are not in the SSC streams, and the students in the SSC streams do not take the Year 11 National examinations. The approximate numbers of students sitting each examination are indicated in Table 7.3.

Table 7.3: Numbers of Candidates sitting External Examinations, Samoa, 1996

Examination	*Year (Grade) in which taken*	*Subjects offered*	*Number of candidates*
National	8	Samoan, English, Mathematics, Science, Social Science	4,300
National	11	Samoan, English, Mathematics, Science, Social Science, Commercial Studies, Home Economics, Industrial Arts, Agriculture	3,200
WSSC	12	Samoan, English, Mathematics, Science, Biology, Chemistry, Physics, Accounting, Economics, History, Geography, Typing, Human Biology	2,100
PSSC	13	Samoan, English, Mathematics, Biology, Chemistry, Physics, History, Geography, Economics, Accounting, Agriculture	800

Localisation, Ongoing International Links, and New Alignments

Although development of the WSSC was a logical step in the process of tailoring the curriculum to Samoan life and needs, urgency was added to the task by the announcement in 1982 that the South Pacific Option papers in the NZSC would be withdrawn in 1985. In the event, two extensions were negotiated so that the withdrawal was delayed until 1988; but the announce-

ment caused considerable activity in Samoa as well as in other South Pacific countries. The WSSC was developed with the assistance of the SPBEA, which itself had help from sources including the New Zealand government, to take the place of the NZSC.

Although the WSSC was launched in 1989, some papers were still purchased from the New Zealand Qualifications Authority (NZQA) rather than being developed locally. This arrangement permitted the Samoan authorities to phase in the localisation initiative, and to gain increasing expertise over time. The year 1996 was the last in which examination papers were bought from the NZQA. By that time, a sufficient pool of Samoan examiners had been formed; and in any case, by 1996 changes within the New Zealand education system had reached the point at which appropriate papers were no longer readily available for purchase.

Similar developments were taking place in Tuvalu and Kiribati. Like Samoa, these countries used to make use of New Zealand examinations; but as in Samoa, the changes in New Zealand forced the governments of those countries to seek alternative arrangements. Samoa and Kiribati now share School Certificate papers in Geography and History, which are set by the SPBEA for both countries. In addition, since 1993 Tuvalu and Kiribati have purchased WSSC examination papers in Accounting, Economics and Mathematics. These arrangements assist in regional sharing of ideas, and the direct purchase of papers helps generate some revenue for the Samoan government. Examiners and curriculum developers in Samoa do not feel constrained by the fact that the examinations are also used in Tuvalu and Kiribati, though they have to remember to tell the authorities in those countries when SSC changes are planned. Perhaps regrettably, there is no sharing of examinations, expertise or experience with American Samoa. Schools there follow American systems of assessment, and have rather different traditions.

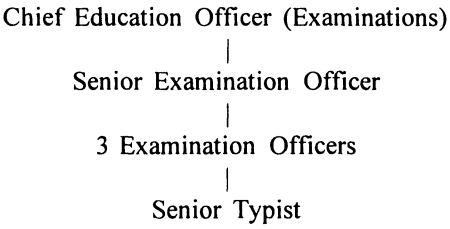
The development of the PSSC followed announcement that the New Zealand University Entrance Examination would no longer be available from 1986 (Livingstone 1995, p.83). Although the PSSC is a regional examination, the SPBEA has made efforts to tie the assessment to the national needs of member countries. One reflection of this is the inclusion of the Samoan language as a subject. One third of the assessment of Samoan is school-based. The PSSC has proven to be a good tool for balancing local aspirations with the need for international recognition. At least in the early history of the PSSC, however, staff at the National University of Samoa have perceived the qualification to have a lower standard than the NZUE, and to have blamed that fact on subsequent poor performance at the university (World Bank 1993a, p.53). Such perceptions must be considered, and

will require long-term monitoring because they affect the international as well as domestic credibility of the qualification.

Staff

The Examination Unit in the government's Department of Education was established in the 1920s by the New Zealand administration. Records of its early composition are difficult to trace; but it probably had only one officer to begin with, and from the 1970s had only two.

Figure 7.1: Structure of Examination Unit, Samoa, 1996



The demands of the SSC, in particular, have greatly increased the workload of the unit and have required extra staffing. Since 1989, the unit has had five professional staff plus one typist (Figure 7.1). The Chief Education Officer is the overall supervisor of the Examination Unit, and is accountable to the Assistant Director (Curriculum & Examinations). The Chief Education Officer is personally responsible for coordinating the SSC examination, and for liaison in the administration of the PSSC examination. The Senior Education Officer coordinates administration of the two National examinations (Years 8 and 11) with two Examination Officers. The third Examination Officer is responsible for the development and administration of the literacy tests in Years 4 and 6. The Senior Typist types all scripts, and with each Chief Examiner, lays out the examination papers until camera-ready stage.

Although the number of officers is small, the availability of personnel is also limited. This creates difficulties when seeking people with appropriate specialisms to fill vacancies. The Examination Unit has to work very much as a team, so that members can cover for each other at times that individuals are absent. In this respect, patterns in Samoa fit those in many other small states (Bray 1991b; Farrugia & Attard 1989).

As part of the SPBEA's assistance in the development of assessment

units in each member country, training attachments for some Samoan staff have been hosted and funded by SPBEA. These attachments have focused on both administrative and technical aspects of the operation of examinations. Other attachments have been organised by the Australian Council for Educational Research.

Most of the chief examiners and moderators for the National examinations are subject advisors in the Curriculum Unit or are staff of the teachers' college. Chief examiners and moderators for the SSC examination are recruited from among lecturers at the National University of Samoa and senior secondary teachers. Since the in-country pool is so small, some residents of Fiji and New Zealand have also been employed as moderators. However, this creates difficulties in coordination and also increases costs. The Examination Unit therefore aspires in the future to avoid this type of arrangement.

Teachers are also heavily involved. Indeed, in any one year, up to one third of the teachers may be employed as markers of examinations. This creates a close linkage between the examination process and classroom teaching, and also in effect provides some in-service training for teachers. Marking panels are designed to have eight teachers each. The Year 8 National examination has five panels, the Year 11 National examination has eight panels, and the Year 12 SSC has 12 panels.

Costs

In financial terms, the operation of the SSC and the PSSC is unquestionably much more costly than the old system of NZSC and NZUE. This is reflected in the size of the Examination Unit as well as in other expenditures.

At higher levels of the system, greater amounts are paid to examiners even though the number of papers is smaller. Thus, the unit cost for marking each SSC script is 7.00 Tala (US$3.20), compared with 2.00 Tala for each Year 11 script and 1.40 Tala for each Year 8 script. Respective payments to moderators at each level are 300, 75 and 55 Tala. In 1995, the cost of running the WSSC examination was estimated at 108,500 Tala (US$49,320), compared with 91,000 Tala for the Year 11 examination and 65,400 Tala for the Year 8 examination.

On the other side of the balance sheet is income from fees. Candidates for the SSC are charged 11.00 Tala as an overall fee, plus 16.00 Tala for each subject. Income from these fees more than covers the costs. For the Year 11 and 8 examinations, by contrast, the fees are only 3.00 and 2.50 Tala, which is not enough to cover costs.

For security reasons, the SSC examination papers are printed in Fiji. The SPBEA assists with the logistics of this. Although the arrangement

increases costs, it is considered a necessary policy. Total payments to the SPBEA were 65,800 Tala in 1995 and 92,200 Tala in 1996. As well as payments for specific services, this included the general subscription paid to SPBEA by all governments of member countries. PSSC candidates made additional payments to the SPBEA, at the rate of 30 Tala for registration plus 19 Tala per subject.

In 1995, the government issued a Statement of Economic Strategy which spelled out its commitment to promoting the private sector as the engine of economic growth. The statement indicated an intention to cut public expenditures, to charge higher fees for government services, and to privatise some elements of government operation. Since the SSC is a full fee-paying examination, the policy will not have an impact at this level. However, the policy may lead to changes in the fee structure for Year 8 and Year 11 examinations.

Conclusions

Although the education system in Samoa has a long history, for most of the present century it has been heavily dominated by patterns in New Zealand. Even after achievement of Independence in 1962, the curriculum in secondary schools remained dominated by the New Zealand School Certificate and New Zealand University Entrance examinations.

During the 1980s, this pattern began to change chiefly because of changes in New Zealand rather than in Samoa. The abolition of the South Pacific Options in the NZSC forced the authorities in Samoa to develop an alternative. The result was the WSSC at the school certificate (Year 12) level, and the PSSC at the Year 13 level. The government of New Zealand gave considerable assistance in this process, both directly to Samoa and through the regional South Pacific Board for Educational Assessment. The transitional period was demanding, but by 1996 the whole process had been localised.

The development of these local schemes has naturally been a costly exercise. It required enlargement of the examinations unit within the Department of Education, and it required specialist training for the staff of that unit. Again, the Samoan government has been fortunate to receive some external assistance from various donors; but the system has still encountered challenges arising from the small pool from which personnel could be recruited, and from the burden on the recurrent budget. Once again, the creation of the SPBEA has been a major element in the construction of a viable system.

At the same time, the fact that the governments of Kiribati and Tuvalu purchase papers in Accounting, Economics and Mathematics from the SSC

for their own use is an instructive form of regional sharing in which, to these countries, Samoa seems to have replaced New Zealand as a source of expertise. If it appears like a new form of dependency, at least the dependency is from another Pacific Island country with a related culture. The arrangement seems to be another dimension of the pragmatic form of regional cooperation which has developed to meet needs.

Finally, it is arguable that the Samoan education system is over-examined. In a system where senior secondary and tertiary places are limited, it is necessary to be selective at the upper reaches of the system. However, the introduction of Year 12 classes into a significant number of junior secondary schools paves the way towards the long term goal of abolishing the Year 11 National examination and concentrating on the Year 12 SSC examination. This would certainly reduce one of the burdens on the Examination Unit — a task which is especially desirable in a small state.

Chapter 8: Bahamas

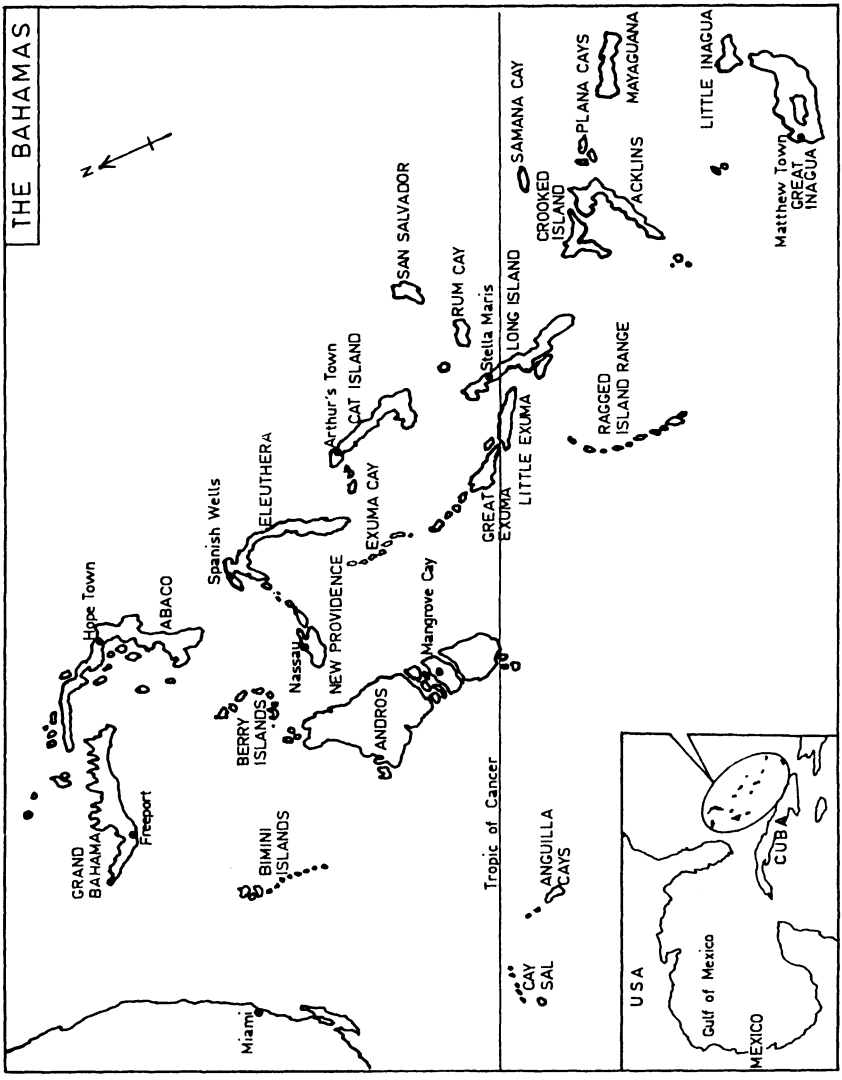
Leroy Sumner & Leonora Archer

Population (1993): 266,000
Population Growth Rate (1960-93): 2.7% per annum
Land Area: 13,940 square kilometres
GNP per Capita (1994): US$11,500
Year of Independence: 1973
UNDP Human Development Index (1994): 0.894

The islands which form the Bahamas are about 700 in number, of which 29 are inhabited. The islands stretch as an archipelago over 750 kilometres in the Western Atlantic Ocean, just south of Florida in the USA. Travel between them is mainly by air, but an inter-island mail boat also operates. The main island is New Providence, which is home to 60 per cent of the population and on which is situated Nassau, the capital. About 72 per cent of the population are black, 13 per cent are white, and 14 per cent are mixed.

The Bahamas became a British colony in the 18th century, but throughout the colonial period was also heavily influenced by its proximity to the USA and its place on the sea routes. A parliamentary system was created in 1729, though universal adult suffrage was not introduced until 1962. The country gained Independence in 1973, and is now a parliamentary democracy in which the UK monarch remains the constitutional Head of State but is represented by a Governor General. The country is officially known as the Commonwealth of the Bahamas. When applied in the national context, the word Commonwealth has a different meaning from that in the international context. In the sense that the Bahamas is a member of the Commonwealth of Nations (the Secretariat of which has published this book), it is a Commonwealth within a Commonwealth.

The per capita income in the Bahamas is the highest among independent Caribbean states. The economy is based mainly on tourism and off-shore banking. Tourism, especially from the USA, generates about half of total Gross National Product, and employs about half the total workforce. Some steps have been taken to encourage light industries, particularly production of salt, cement, pharmaceuticals, rum, and beer.


THE BAHAMAS
N
GRAND BAHAMA
Freeport
Hope Town
ABACO
Spanish Wells
ELEUTHERA
BERRY ISLANDS
BIMINI ISLANDS
Nassau
NEW PROVIDENCE
ANDROS
Mangrove Cay
Arthur's Town
CAT ISLAND
EXUMA CAY
SAN SALVADOR
RUM CAY
Stella Maris
LONG ISLAND
GREAT EXUMA
LITTLE EXUMA
SAMANA CAY
CROOKED ISLAND
PLANA CAYS
MAYAGUANA
ACKLINS
RAGGED ISLAND RANGE
LITTLE INAGUA
Matthew Town
GREAT INAGUA
Tropic of Cancer
ANGUILLA CAYS
CAY SAL
Miami
USA
Gulf of Mexico
MEXICO
CUBA

This chapter presents an overview of the system of examinations in the Bahamas, and places particular emphasis on the Bahamas General Certificate of Secondary Education (BGCSE) examination. The BGCSE was launched in 1993 in collaboration with the University of Cambridge Local Examinations Syndicate (UCLES). The endeavour illustrates one of the forms of partnership which small states can undertake to meet their needs.

The Education and Examination Systems

Education in the Bahamas is highly developed. It is compulsory between the ages of five and 14, and post-compulsory enrolment rates are high. The Bahamas has a 6+3+3 structure of schooling, i.e. six years of primary, three years of junior secondary, and three years of senior secondary schooling. Students who proceed to higher education go to institutions which include the College of the Bahamas, the Bahamas Hotel Training College, the Bahamas Baptist College, and the Bahamas Institute of Technology. The performance of primary students is formally assessed at the ends of Grades 3 and 6. At the end of Grade 9, junior secondary students take the Bahamas Junior Certifi-cate examination. At the end of Grade 12, senior secondary students take the BGCSE examination.

The history of external examinations in the Bahamas dates back to the first half of the 20th century, when UCLES provided external examinations at three levels, namely preliminary, junior and senior. In 1945, the Board of Education introduced a Primary School Leaving Certificate Examination to replace the Cambridge Preliminary Examination. In 1953 the Bahamas Junior Certificate Examination replaced the Cambridge Junior Certificate Examination, and the Cambridge Senior Certificate became known as the Cambridge Overseas School Certificate (COSC). This examination catered for the small portion of the school-aged population which was academically ambitious.

Two major problems arose concerning the COSC. The first was that certificates were awarded on the basis of a group of subject passes, and failure in one paper meant failure in the entire examination. The second was that the timetable did not match the school calendar operated by the Ministry of Education. Because of these constraints, in the early 1960s several schools switched to the General Certificate of Education (GCE) Ordinary ('O') level examinations offered by the University of London. In addition, some students sat the examinations of the Royal Society of Arts, Pitmans, the City & Guilds of London Institute, and the Associated Examining Board; but others left school with no national or international record of achievement.

Within the United Kingdom (UK), the fact that the GCE was oriented

towards academically-able students led to development of the Certificate of Secondary Education (CSE) for pupils with less academic orientations. In the 1970s, one school in the Bahamas entered students who had completed five years of secondary education for the UK CSE examinations. The school later abandoned this practice, though educators in the Bahamas continued to see the elitist nature of the GCE system as a problem.

Concern about these matters led the government in the mid-1970s to embark on reform. In 1975 the government announced intention to introduce a national secondary school certificate examination for secondary school leavers, and shortly thereafter established a Testing & Evaluation Unit in the Ministry of Education to oversee the changes.

In parallel, changes were occurring in the structure of examinations in the UK. The CSE had fallen out of favour because it seemed to label holders as lower achievers, and had become a second-class examination. The 1980s therefore brought moves in the UK to combine the GCE and the CSE into a General Certificate of Secondary Education (GCSE). The University of London Examinations & Assessment Council (ULEAC) informed the Bahamian government that its GCSE examination syllabuses would be developed with the UK context in mind, and that the content of some syllabuses might be unsuitable for students in other countries. Moreover, the government was informed, the scheme for assessment would be difficult or impossible to implement in centres which were not organised in consortia according to the UK pattern. Further, certain subjects would cease to be available in 1987, and more would cease to be available in 1988. This created considerable uncertainty about access by Bahamian students to the UK GCSE, though the GCE 'O' level continued to be offered for overseas students who wanted it.

The combination of dissatisfaction with existing arrangements and the change within the UK propelled the Bahamian government further along the road to reform. A new Bahamas General Certificate of Secondary Education was designed which, like the UK GCSE, embraced a wider span of subjects and abilities than the old GCE.

The Nature of the BGCSE Examination

The BGCSE caters for 80 to 85 per cent of the school population. When the BGCSE was launched in 1993, examinations were provided in 22 subjects, which included technical and vocational as well as academic areas. In 1996, the number of subjects stood at 26, with the possibility of further increase.

The BGCSE is intended to:

- promote curricula which are relevant to the culture of the Bahamas;

- encourage pursuit of a rounded education which encompasses the basic academic disciplines;
- serve as a reputable measure of attainment which can be used both for employment and for further study; and
- be applicable to the majority of school leavers.

The examination ensures proper differentiation so that candidates across a wide ability range are able to demonstrate knowledge, abilities and achievements.

Pupils' results in the GCE were graded on a five-point scale, A to E. The BGCSE retained equivalent points (so that, for example, a C in the GCE was equivalent to a C in the BGCSE), but added two further points so that the BGCSE was graded on a seven-point scale, A to G. Candidates whose performance does not merit a G grade do not receive a certificate. Some subjects, for example Literature, History, and Art, offer common papers and are graded on A to G scales according to the level of response or level of ability. Other subjects, such as the Sciences, Languages and Business Studies, offer a core or common paper for which Grades C to G only are applicable. Candidates seeking a high grade in these subjects must write extended papers designed to test performance at the A or B levels.

The examinations also make use of coursework in the form of projects, samples of written assignments, fieldwork, and practical work. The coursework component permits the assessment of skills not easily assessed under normal examination conditions. Not all subjects have coursework components; but where it is applicable, the coursework is mandatory and contributes 20 to 30 per cent of the final grades. Coursework is assessed by classroom teachers and subsequently moderated by external examiners.

The BGCSE is criterion-referenced. Instead of grades being awarded to pre-determined percentages of candidates, the examination syllabuses provide descriptions which state in detail the skills and mastery required in order to achieve each grade level.

Linkages with other Examining Boards

The above account shows that the Bahamas has long had linkages with several examining boards in the UK. At various points, the Bahamas has also had linkages with the Caribbean Examinations Council (CXC).

Chapter 12 of this book explains that the CXC was formed in 1972, with its headquarters in Barbados, by agreement between 15 Commonwealth states and territories. While viewing itself as a Caribbean country, the Bahamas has always had a slightly distant relationship with other Caribbean countries. The Bahamas did join the University of the West Indies when it

was formed in 1948, but was not part of the 1958-62 Federation of the West Indies, and did not join the CXC. However, examination officers in the Bahamas do liaise with CXC officers in professional matters. During preparation for the BGCSE, for example, various Bahamian examination officers attended meetings of the CXC which helped to sensitise the Bahamians to the difficulties of developing and managing school examinations. Bahamian officers also benefitted from CXC experience in technical aspects of testing and teacher training.

The main linkages for the BGCSE, however, are with UCLES. The Bahamian government entered a contract through which UCLES agreed not only to provide training and consultancy services but also to underwrite the examination. Although the UCLES role is not recognised in the title of the qualification, it is recognised on the certificate itself. The BGCSE certificate shows the crests of both the Bahamian government and UCLES, and is headed with the words "Ministry of Education, The Commonwealth of the Bahamas in collaboration with University of Cambridge Local Examinations Syndicate".

Local, Regional and International Recognition

The BGCSE attempts to ensure that assessment procedures reflect relevance to the Bahamian situation, and maintains standards that enable it to have both local and international currency. From an internal perspective, its standards are no less exacting than those of the overseas examinations which have been respected and relied upon for much of the 20th century. The BGCSE is recognised by the Public Service, and used for employment and for entry to local tertiary institutions.

For local recognition, but even more for regional and international recognition, the role of UCLES is very important. Each year, UCLES prepares a statement on equivalence. For example the words on the 1994 statement were that:

> The University of Cambridge Local Examinations Syndicate has taken measures to ensure that the standards of achievement represented by Grades A-G in the BGCSE examination for 1994 in the subjects listed below are equivalent to those represented by the corresponding grades in the International General Certificate of Secondary Education (IGCSE) and the UK General Certificate of Secondary Education (GCSE).

The Ministry of Education considers this assurance a very important element which underpins the status of the BGCSE. No formal articulation has been established with CXC awards, but the BGCSE is accepted by regional

institutions including the University of the West Indies. The certificate is also accepted by tertiary institutions in other parts of the world.

The Mechanics of Introducing the BGCSE

The preparatory phase prior to the first BGCSE examination lasted five years and required considerable planning. In order to strengthen capacity at the Ministry of Education, an intensive training programme for Curriculum & Test Development personnel was implemented. Between 1988 and 1991, 20 subject specialists attended a three-month training programme in Cambridge on the theory and practice of assessment organised by UCLES. In addition, two people attended a one-month course on the administration of examinations; and 24 workshops were conducted by UCLES between 1989 and 1993 in areas such as item writing, test construction, and the use of micro-computers in the administration of examinations. Training was also provided in the Bahamas on the production of syllabuses, question papers, marking schemes, and coursework booklets.

After this intensive training period, draft syllabuses and specimen papers were prepared in 22 subjects and distributed to education officials and staff of government and independent schools, tertiary institutions and businesses. The UCLES team of moderators agreed that revisions based on feedback provided desirable standards which were on par with those of similar examinations, and then gave approval for printing.

In preparation for the 1993 examinations, senior education officers continued to visit schools to facilitate the implementation of the syllabuses and the coursework procedures. Subject workshops were organised to focus on item writing and assessment guidelines. Examiners and markers were trained in the conduct of and preparation for coordination meetings, standardisation of marking procedures, and preparation of examination reports. After grading of examinations, general school reports outlining strengths and weaknesses inherent in candidates' responses were prepared and distributed. These reports include suggestions for improving performance of students.

In order to promote the examinations, the Public Information Unit of the Ministry of Education launched a comprehensive programme which included the distribution of pamphlets, posters and bumper-stickers for cars, preparation of newspaper articles, radio and television programmes, a community forum, an employers' forum, and PTA meetings and Town meetings. Opportunity was also taken to explain the examination at various exhibitions; and UCLES assisted in promoting the examinations at international levels.

Among the challenges for implementation was the archipelagic nature

of the country. Since some islands were not readily accessible to all subject officers, exposure to teaching strategies, coursework procedures and examination techniques was limited some remote areas. Moreover, in spite of the intensive media coverage during the five years preceding the first BGCSE sitting, the general public seemed to lack in-depth information about the composition and characteristics of the BGCSE. It was obvious to the Ministry that education of the public must be ongoing.

Review of the subject syllabuses also indicated a need for changes. Deletions and additions of subject content were necessary, and adjustments in time allocation for some question papers were needed. Schemes for assessment for certain subjects were unsuitable or inadequate; and some syllabuses did not fully reflect the philosophy of the BGCSE of being skills-based and catering for the large majority of school leavers. Syllabus revision must therefore involve representatives from all categories of end users. This will ensure that a sufficient body of knowledge and range of skills have been induced, the assessment procedures reflect the educational goals and that provisions are made for wide cultural and geographical diversity that exists even in a country with a population of just a quarter of a million.

Conclusions

Like most other colonies, the history of education in the Bahamas has included strong reliance on examining boards based in the metropolitan country. In the Bahamian case, Cambridge played a dominant role from the 1940s, was to a large extent replaced by London in the 1960s, but came back in the late 1980s. The return of UCLES was in a partnership with the Bahamian government in the construction of an examination specifically tailored to Bahamian needs.

The inputs from UCLES are not cheap, but they are of high quality and are especially important at this point in history. UCLES provides technical expertise which would not be obtainable domestically. Also of great importance is the fact that UCLES underwrites the BGCSE, thereby assuring the public of the quality of the credential.

Once the BGCSE has become established, it likely that the role of UCLES will change. As Bahamian officers and teachers gain more experience, the external inputs will become less necessary. However, it remains to be seen whether the inputs of UCLES will be phased out altogether. The education system of the Bahamas is small, and the country is currently unable to meet all its technical needs from local personnel. It seems probable that at least some external linkages will be retained.

The challenges facing the BGCSE have been considerable, for the archi-

tects and implementers have had to deal with an archipelagic country in which islands are separated by considerable distances and in which cultures are diverse. Also, the small size of the population has meant that personnel to run the system have had to be recruited from a very small pool. The fact that so much has been achieved despite these challenges makes the successes of the BGCSE all the more noteworthy.

Chapter 9: Guyana

Mohammed S. Khan & Juliet Persico

Population (1993): 812,000
Population Growth Rate (1960-93): 1.1% per annum
Land Area: 214,970 square kilometres
GNP per Capita (1993): US$350
Year of Independence: 1966
UNDP Human Development Index (1994): 0.649

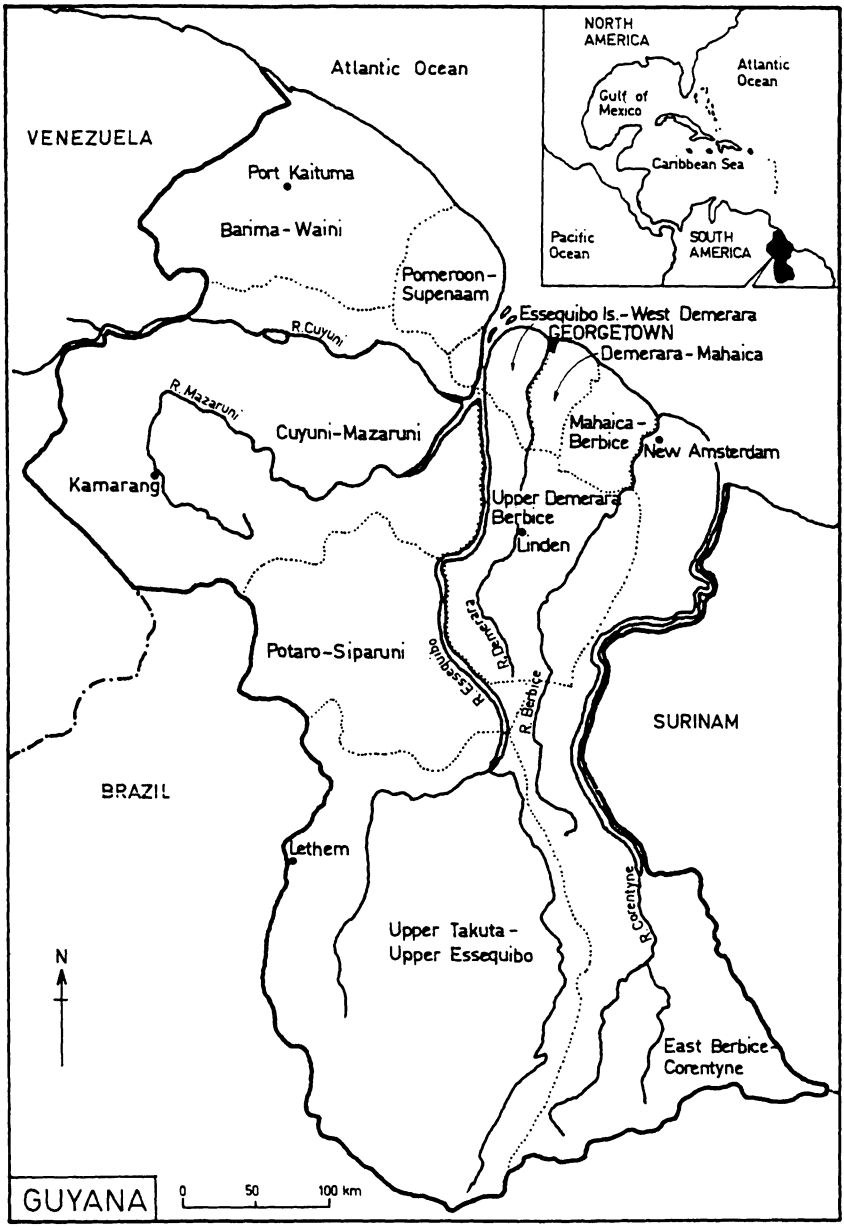
Guyana forms part of the northern Guiana shield, which extends from Suriname through Guyana to the eastern portion of Venezuela. The landscape is dominated by an extensive network of rivers which gives its name to the region. Guiana comes from an Amerindian word meaning 'land of many waters'.

During the late 18th and early 19th centuries, colonial control over what is today called Guyana changed hands many times. In 1780 the British captured the territory from the Dutch, but three years later were expelled by the French. In 1796 parts of the territory were again surrendered to the British, but in 1802 these parts were returned to the Dutch. Finally, in 1814 the three main sections of the territory were ceded to Great Britain. They were later united as British Guiana.

The colony at this time specialised in the production of cane sugar and cotton using black slave labour. With the abolition of slavery in 1833, the African slaves established themselves as peasant farmers on government land and abandoned the sugar estates. In an unsuccessful attempt to solve the ensuing labour shortage, the colonists imported first Chinese and Portuguese Madeiran and later Indian indentured labourers. Descendants of the Indian labourers now form about 51 per cent of the total population. Descendants of the Africans form about 38 per cent, while the remainder are mainly descendants of the Chinese, Europeans and Amerindians.

Guyana's official language is English, and although the country is situated on the South American coast, it has much closer political and cultural ties with other English-speaking Caribbean countries than with its Spanish- and Portuguese-speaking neighbours.

Today's economy depends heavily on sugar, bauxite and rice. The


NORTH AMERICA
Atlantic Ocean
Gulf of Mexico
Caribbean Sea
Pacific Ocean
SOUTH AMERICA
Atlantic Ocean
VENEZUELA
Port Kaituma
Barima-Waini
Pomeroon-Supenaam
Essequibo Is.-West Demerara
GEORGETOWN
Demerara-Mahaica
R. Cuyuni
R. Mazaruni
Cuyuni-Mazaruni
Mahaica-Berbice
New Amsterdam
Kamarang
Upper Demerara Berbice
Linden
R. Demerara
R. Essequibo
R. Berbice
Potaro-Siparuni
SURINAM
BRAZIL
Lethem
R. Corentyne
Upper Takuta-Upper Essequibo
N
East Berbice-Corentyne
GUYANA
0 50 100 km

country is endowed with extensive minerals and forests, but these resources remain largely unexplored because of lack of infrastructure. Since the 1970s the country has experienced prolonged and serious economic difficulty. This started with the sharp increase in oil prices, and was exacerbated by a fall in the prices of key exports. Guyana's per capita income is now among the lowest of the countries of the Western Hemisphere.

The Education and Examination Systems

Despite the many problems facing the country, most children between the ages of four and 14 receive some type of schooling. Education is provided at all levels from nursery to university.

At the end of the primary cycle, pupils sit the Secondary Schools Entrance Examination set by the Ministry of Education. This is not a pass/fail examination, and all pupils are given places in junior secondary schools, senior secondary schools or community high schools. Approximately 15,000 pupils aged 10 to 12 sit this examination each year. The examination consists of two papers each in English language, mathematics, science, and social studies. The first paper comprises multiple choice items, while the second paper has essays and structured items.

The main secondary school examinations are the Secondary Schools Proficiency Examination set by the Ministry of Education, the Secondary Education Certificate Examination set by the Caribbean Examinations Council (CXC), and the General Certificate of Education (GCE) Ordinary ('O') and Advanced ('A') level examinations set by the University of London.

The Secondary Schools Proficiency Examination is taken by students in community high schools, and is in two parts. Part 1, which is written at the end of the third year of the programme, consists of multiple-choice tests in English language, mathematics, general reasoning, and social studies, together with an essay in English. Approximately 6,250 students sit this examination each year. Part 2 examines only the pre-vocational subjects, and is taken at the end of the fourth year of the programme. Candidates can take up to two pre-vocational subjects from a choice of agricultural science, business education, craft, and industrial arts. The examination consists of multiple-choice tests. Schools are required to submit pupils' scores on continuous assessment in the practical aspects of the subjects selected during the two years prior to the examination. Approximately 3,250 students take this part of the examination each year. Upon successful completion of both parts, students are awarded a diploma.

The Secondary Education Certificate Examination set by the CXC, as well as the GCE 'O' level, is taken by fifth formers in junior and senior

secondary schools. The CXC offers examinations in about 30 subject areas. Most students take between four and seven subjects, including English language and mathematics. Approximately 5,500 school candidates and about 1,800 private candidates sit for the CXC examination each year.

The GCE 'A' level examination is taken by students in the sixth forms of secondary schools. The subjects offered include mathematics, biology, chemistry, physics, accounting, and economics. Each year, about 120 candidates take this examination.

At the post-secondary level, the Ministry of Education offers the Guyana Technical Education Examination for students attending the four technical colleges. Vocational subjects such as electrical engineering, mechanical engineering, welding, plumbing, masonry, and land surveying are examined at both craft and technical levels. Approximately 1,400 students take this examination each year.

Another post-secondary examination is for the Trained Teachers' Certificate. This examination is taken by students at the Cyril Potter College of Education on completion of their training. The curriculum at the college includes education theory and practice, psychology, English language, mathematics, science, and social studies. Students can opt for training as nursery, primary or secondary teachers. Training for secondary schools includes prevocational subjects such as agricultural science and industrial arts.

Historical Evolution

The Secondary Schools Entrance Examination was introduced by the Ministry of Education in 1972. At that time, it consisted of multiple-choice tests in English language, mathematics, and verbal reasoning. Later, science and social science were added. During the early 1980s, verbal reasoning was dropped, and from 1986 an essay in English was included. Essays in science and social science were added in 1996. Inclusion of the essay papers reduced the proportion of multiple choice items in each subject from 60 to 40 per cent.

Prior to the introduction of the Secondary Schools Entrance Examination, pupils sat the Common Entrance Examination. That examination consisted of standardised texts in English, mathematics and verbal reasoning purchased from Moray House College of Education in Edinburgh, Scotland, and from the National Foundation for Educational Research in England. The Common Entrance Examination was launched in 1962, and operated until 1972. Before the creation of the Common Entrance Examination, pupils sat the Government County Scholarship examination, which was introduced in the 1930s to identify able boys and girls from the 'lower

orders' for education at the two elite secondary schools. A total of 12 pupils selected from each county were awarded scholarships every year to these schools. Only pupils with a high chance of success were permitted to write the examination.

In addition, the elite secondary schools and most private secondary schools usually conducted their own entrance examinations to select students. However, they also made use of the results of the Government County Scholarship examinations to award partial or full scholarships to students who had scored over 60 per cent in the examinations.

With the granting of aid to private secondary schools, the government was able to increase the number of free-place awards to secondary schools. The Common Entrance Examination was introduced in part to facilitate the selection of free-place awardees for government-aided secondary schools.

The Secondary Schools Proficiency Examination was introduced in 1977 to replace the Preliminary Certificate Examination, which was also set by the Ministry of Education. The examination was taken at the Grade 8 level, and consisted of tests in English language, English literature, mathematics (including algebra and geometry), and general knowledge. Students who remained in all-age schools after completing that examination also wrote the examination set by the College of Preceptors in the United Kingdom.

The Secondary Education Certificate examination of the CXC was preceded by the GCE examinations introduced in 1951. From that year until 1963, students sat either the University of London or the Oxford & Cambridge GCE examinations. Also, from the 1940s until 1960, some students sat the Cambridge School Certificate examination. However, from 1963 only the University of London GCE examinations were followed.

The Guyana Technical Education Examination replaced the examinations set by the City & Guilds of London Institute. The latter had been introduced in Guyana in 1949, and continued until 1982. The Guyanese qualification is accepted by the University of Guyana and by foreign tertiary institutions as equivalent to the City & Guilds certificate.

Mechanics of the System

Three units in the Ministry of Education are responsible for the administration and preparation of examinations. They are the Examinations Division, the Test Development Unit, and the Cyril Potter College of Education.

The Examinations Division is responsible for arrangements for the examinations. These include the receipt of entries, distribution of syllabuses and timetables, liaison with centres, identification of local examiners, supervisors and invigilators, distribution and collection of examination materials, and publication of results. The Division is headed by the Super-

intendent of Examinations, and the 19 other staff comprise two assistant superintendents, three typists/clerks, 11 clerks, and three ancillary staff.

The Test Development Unit is responsible for the test components of all the locally-set examinations, i.e. the Secondary Schools Entrance Examination, the Secondary Schools Proficiency Examination, and the Guyana Technical Education Examination. The unit has 10 staff, comprising a Chief Test Development Officer, six Test Development Officers, and three clerks or typist/clerks. Although the Test Development Unit is slightly larger than the Examinations Division, the fact that both have small teams of professional staff creates difficulties at times of recruitment. This is partly because of the workload, but also because of perceived limitations on career mobility within a small team.

The Test Development Unit also relies heavily on assistance by primary and secondary teachers and by university, teachers college and technical school lecturers. As well as promoting desirable linkages within the education system, this arrangement makes optimal use of the scarce manpower available in a small state. Teachers and lecturers submit items to the unit for possible inclusion in examinations. The items are then refined by the unit and pretested. Secondary school teachers and lecturers also serve on subject committees in their respective geographical areas. Representatives from each area make up the National Subject Committees which liaise with the Test Development Unit in the construction of tests for each subject and in the marking of scripts after the examination.

The Cyril Potter College of Education has overall responsibility for teacher training in the country. Consequently, it is also responsible for the examination for the certification of teachers. College lecturers prepare the tests, which are moderated by lecturers in the Faculty of Education at the University of Guyana.

Proper security arrangements are essential if the integrity of examinations is to be maintained. Persons to be involved in examination work — in setting tests and as examiners, supervisors and invigilators — are chosen carefully and are briefed on the need for confidentiality. If they have close relatives writing the respective examination, they are not permitted to work for that examination. At the Examinations Division, Test Development Unit and Cyril Potter College of Education, question papers are prepared and stored in special high-security areas. During the writing of examinations, question papers for outlying areas are stored in special boxes in police stations rather than schools, and a supervisor is appointed to oversee the collection and return of materials to the boxes.

Conclusions

Guyana has a substantial system of examinations which combines assessments set by local, regional and metropolitan bodies. Some metropolitan examinations have been localised, and students in Guyana no longer sit, for example, the City & Guilds examinations. Guyana is a member of the CXC, and benefits from the professionalism and economies of scale of that organisation. Also, some students still take the GCE examinations of the University of London. The examination system that has emerged since Independence can be regarded as truly reflective of nationalism, but also within a pragmatic framework which allows a continuing role for the non-local other bodies.

Various reforms are being considered for the future. They include replacement of the Secondary Schools Entrance Examination by a system of continuous assessment, and replacement of the Secondary Schools Proficiency Examination by a National Secondary Certificate. Also being considered is a National Secondary Schools' Certificate for secondary Form 5 pupils. However, the advantages, disadvantages and mechanics of this proposal still need to be worked out in detail.

Chapter 10: Trinidad & Tobago

Janet Stanley-Marcano & Mervyn C. Alexander

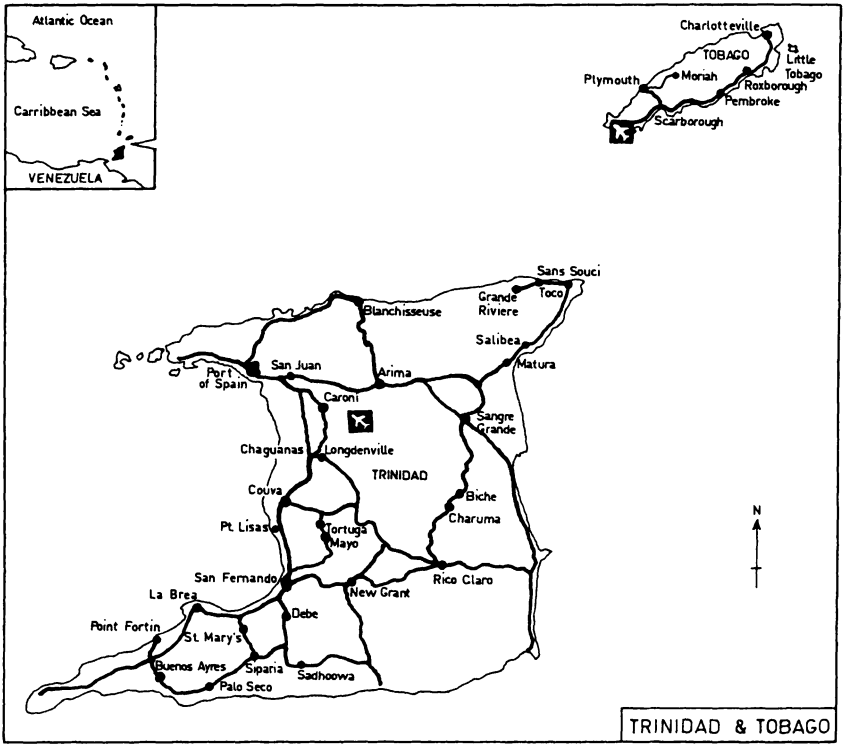
Population (1993): 1,282,000
Population Growth Rate (1960-93): 1.3% per annum
Land Area: 5,128 square kilometres
GNP per Capita (1993): US$3,730
Year of Independence: 1962
UNDP Human Development Index (1994): 0.880

The Republic of Trinidad & Tobago comprises two islands. Trinidad is by far the greater, with 4,828 square kilometres, while Tobago has 300 square kilometres. With a population of nearly 1.3 million, Trinidad & Tobago is one of the larger countries in the English-speaking Caribbean.

The islands of Trinidad and Tobago were discovered by Columbus and claimed for Spain on his third voyage in 1498. Whether he named Trinidad after the day of the Holy Trinity or after the group of three hills that he saw from the sea is disputed. Tobago's name is said to be a corruption of the word 'tobacco', which used to be grown there. British rule began in Trinidad in 1797 and in Tobago in 1802, and the two islands were united for administrative purposes in 1888.

In 1958, Trinidad & Tobago joined with nine other Caribbean countries to form the Federation of the West Indies. The Federation collapsed three years later, following Jamaica's withdrawal. Dr. Eric Williams, Prime Minister of Trinidad & Tobago, responded negatively to the request from the remaining leaders to keep Trinidad & Tobago in the union, making his now-famous reply: "One from ten leaves nought". Trinidad & Tobago proceeded to independent sovereign status in 1962.

The country was once considered one of the more prosperous in the Eastern Caribbean because of its oil resources. However, being by world standards an insignificant producer of oil, Trinidad & Tobago has been unable to influence the commodity's price. As a result, the national economy has been strongly affected by the price of oil on the world market. During the period 1974-82, the country benefitted from the increased price of oil that the Organisation of Petroleum Exporting Countries was able to


Atlantic Ocean
Carribbean Sea
VENEZUELA
Charlotteville
TOBAGO
to Little Tobago
Plymouth
Moriah
Roxborough
Pembroke
Scarborough
Sans Souci
Toco
Grande Riviere
Blanchisseuse
Salibea
Matura
San Juan
Port of Spain
Arima
Caroni
Sangre Grande
Chaguanas
Longdenville
TRINIDAD
Couva
Biche
Charuma
Pt. Lisas
Tortuga
Mayo
San Fernando
Rico Claro
New Grant
La Brea
Debe
Point Fortin
St. Mary's
Buenos Ayres
Siparia
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N
TRINIDAD & TOBAGO

demand. This allowed the government to embark on significant investment in heavy industry and in economic and social infrastructure including education. However, the decade from 1982 was characterised by slump and the need for considerable readjustment, and only in the 1990s did Gross Domestic Product again begin to rise. The economy remains dominated by oil, but also has substantial components from manufacturing, agriculture, tourism and other services.

The Education and Examination Systems

The education system comprises (i) two years of early childhood care and education for about 40 per cent of children aged three and four; (ii) seven years of primary schooling, divided into two Infant and five Standard levels, for children aged five to 11; (iii) two post-primary grades for those who fail to gain access to secondary school; (iv) five secondary grades for successful candidates in the Common Entrance Examination; and (v) two years of Sixth Form leading to the Advanced ('A') Level examinations.

In addition, the National Training Board, which was established in 1970, has facilitated the development of technical/vocational education. Craft and technician courses are conducted in technical institutes, junior secondary schools, senior comprehensive schools, senior secondary schools, composite schools, and one vocational centre. Courses have also been developed for trade centres and youth camps.

Table 10.1 shows the principal examinations and the numbers of candidates in 1996. Trinidad has long links with the University of Cambridge Local Examinations Syndicate (UCLES), and was the location of the Syndicate's first overseas centre. UCLES examinations were taken in Trinidad in 1863, just five years after the establishment of the Syndicate itself, and are still taken in Trinidad today. However, they operate alongside other examinations set by national and regional bodies. The Secondary Education Certificate examination, operated by the Caribbean Examinations Council (CXC) and launched in 1979, has displaced the UCLES examination as the major assessment at the fifth forms of secondary schools. The CXC examinations are tailored to local and regional needs, and also have high international standards. Trinidad & Tobago has commonly presented the largest number of candidates in CXC examinations, frequently exceeding even the numbers from Jamaica (which has twice the population size). Private candidates usually take the examinations of the University of London rather than UCLES since the London regulations are better suited to their circumstances.

Table 10.1: Major Examinations, Trinidad & Tobago, 1996

Level	*Examination*	*Candidates*
Primary	Common Entrance Examination	29,700
Post-primary classes (for 11 plus)	Primary School Leaving Examination	7,055
Adult education	Primary School Leaving Examination	487
Junior secondary	Junior Secondary School Examination	11,461
Senior secondary	Secondary Education Certificate	36,832
Sixth form	Cambridge Ordinary	7,500
	Cambridge Advanced-Ordinary	2,494
	Cambridge Advanced	3,150
Private candidates	London Advanced	344
	London Ordinary	931
Technical Institute, Vocational Centre, Trade School	National Examinations Council	
	Craft-level	5,261
	Technician-level	1,936
Teachers' College	Teachers' College Examination	409
Private schools/ tutors	University of London LLB Years 1 and 2	493

The Programme of Free Education

During the 1970s, the government of Trinidad & Tobago embarked on an ambitious programme of free education for all citizens at both primary and secondary levels. This scheme was financed by oil revenues, and covered teachers' salaries in assisted primary and secondary schools, and refund to the management of assisted schools of two thirds of the annual costs of maintenance and repairs. It also included an additional allocation to the budget of government senior and comprehensive schools, calculated on the basis of the number of students registered for craft and technical programmes. Today, however, the flow of such resources is much diminished. Principals have to supplement their school funds through various projects.

As part of the programme of free education, the government undertook to pay the examination fees of all graduating students in fifth and sixth forms in government and assisted secondary schools. In due course, students

in private secondary schools were also included. However, in 1980 the fall in oil revenues forced the government to cut the education budget. Since 1985, fees for fifth form students have only been paid if those students have attended 75 per cent of classes in their chosen courses by the end of the Easter term, and passed a qualifying examination proving their successful preparation for the external examination. Also, since 1991 students in all newly-registered private secondary schools have been required to pay their own examination fees.

While some provisions have been cut, however, others have been expanded. Since 1980 the government has operated a scholarship programme for university students who are successful in the 'A' Level examination. In 1996 the number of scholarships was increased from 50 to 60, and plans were announced for further expansion. Scholarship holders are contracted to return after completion of their studies, to serve the country for a period equal in length to the duration of their course of studies funded by the government. This provision is part of the attempt to stem the 'brain drain' of professionals who have migrated to North America and the United Kingdom in increasing numbers since the late 1970s.

Mechanics of the System

With the exception of the examinations of the National Examinations Council (NEC), all the tests named in Table 10.1 are administered by the Examinations Section of the Ministry of Education. In 1996, the section had 33 permanent staff and four temporary assistants. The Secretariat of the NEC deals with all national examinations at the craft and technician levels. The Chief Examiner is responsible for all aspects of these examinations, from the development of tests to the issue and publication of results.

The Supervisor of Examinations, in addition to other duties, is Local Secretary or Registrar for several regional and international bodies including the CXC, UCLES and the University of London. In these duties the Supervisor of Examinations is responsible for the administration of examinations, but not for test construction or measurement and evaluation processes.

Expertise to conduct examinations is available at all levels: national, regional and international. However, a distinction must be made between the ability to construct and develop tests along with the necessary measurement and evaluation skills, and the expertise needed to administer tests under conditions that are fair to all. Insufficient expertise is available for the development of tests and for measurement and evaluation services in the national level. The Secretariat of the National Examinations Council and the Division of Educational Research & Evaluation need strengthening in this respect. The Chief Examiner, and to a lesser extent the Supervisor of

Examinations, coopt personnel from other sections of the Ministry of Education and the Faculty of Education of the University of the West Indies, which has a campus in Trinidad, for help in these areas.

The Common Entrance Examination is set by the CXC. In this respect, the regional organisation is meeting national needs. Before the CXC took over this task, the examination was set by the Educational Testing Service in Princeton, New Jersey, USA. As already noted, the CXC has also replaced UCLES as the main examining agency at the secondary fifth form. However, although the CXC is much closer to home in respect of geographical location, and has a better understanding of local needs, it still does not and cannot perform as a local organisation.

Nevertheless, the CXC has done extremely well in gaining the confidence of a large number of clients during its comparatively short history. It also has advantages in financial terms, especially since the rate of exchange to purchase Barbados dollars is much more favourable than that for pounds sterling.

In the mid-1990s, the CXC decided to launch as a pilot project from 1998 a Caribbean Advanced Proficiency Examination (CAPE). If successful, this examination will make further in-roads into the number of candidates sitting the Cambridge and London examinations. In the first instance, CAPE is being made available in seven subjects at 'A' Level: Communication Studies, Caribbean Studies, Functional Spanish, History, Information Technology, Mathematics, and Statistical Analysis. The processes of developing the examination have been complex. However, the positive aspects of CXC's operations over the short period of its existence far outweigh the negative ones and CXC should therefore be given encouragement to proceed with CAPE.

Conclusion

In Trinidad & Tobago, national, regional and international examinations operate side by side. Each plays a role, and the authorities have built a structure geared to harmonise the activities of the various bodies. National examinations dominate the lower levels of the education system, while regional and metropolitan examinations are more evident at the upper level.

This arrangement has evolved over a long period of time. The history of UCLES examinations in Trinidad is well over a century old; and Trinidad & Tobago has been an active partner in CXC affairs from the very beginning, over a quarter of a century ago. National examinations also have a long history. This long history provides stability, though of course

patterns will continue to evolve as broader circumstances change. The main issue likely to dominate debate during the next few years will be the role and status of the CXC Caribbean Advanced Proficiency Examination.

Chapter 11: Malta

Ronald G. Sultana

Population (1995): 371,000
Population Growth Rate (1960-93): 1.0% per annum
Land Area: 316 square kilometres
GDP per Capita (1995): US$7,200
Year of Independence: 1964
UNDP Human Development Index (1994): 0.887

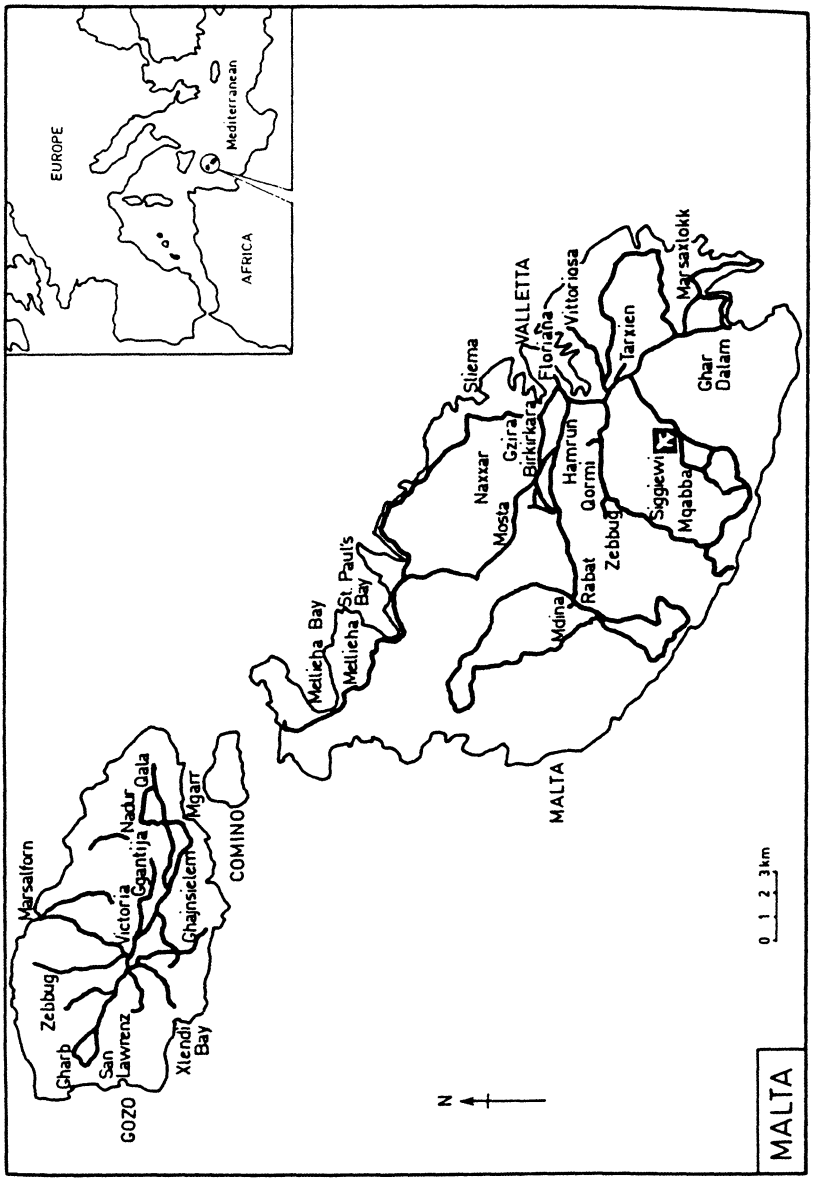
This chapter begins with an overview of features of the Maltese education system which are relevant to discussion of examinations. It then presents in detail the origins and development of the assessment system, its functioning and status, and its impact on teaching and learning. The implications of small size are brought out at various points, but are highlighted towards the end with particular emphasis on issues of visibility, accessibility, resourcing, role overload, and research capacity.

Education in Malta: An Overview

Education in Malta came into its own after World War II. Prior to that, educational provision had generally lagged when compared to developments elsewhere in Europe. An educational structure had gradually evolved by the mid-19th century, with a Director of Elementary Schools being appointed in 1844, pedagogy being taught at the University of Malta, and a number of influential education reports being commissioned by the British colonial authorities. However, the local and traditional power blocs were not persuaded that their interests were best served by the extension of an elementary education to all (Sultana 1992a).

Expansion of educational services followed the 1924 Compulsory School Attendance Act, but the law applied only to those who actually began primary schooling. Many children could not be admitted, and it was not until 1947 that mass elementary schooling came to its own. Secondary schooling for all was introduced in 1970; and significant expansion is currently occurring in higher education, which now caters for 16 per cent of the age cohort.

Key features of the Maltese education system include:


EUROPE
Mediterranean
AFRICA
MALTA
GOZO
COMINO
Marsalforn
Zebbug
Ghajnsielem
Victoria
Gharb
San Lawrenz
Xlendi Bay
Nadur
Qala
Gantija
Mgarr
Mellieha Bay
Mellieha
St. Paul's Bay
Sliema
Naxxar
Mosta
Gzira
Birkirkara
VALLETTA
Floriana
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- Strong *reliance on the United Kingdom* for educational models, policy-making strategies, textbooks, and expertise. However, there have been occasional attempts to search for inspiration from mainland Europe, and Malta has applied for admission as a full member of the European Union (Sultana 1995).
- A *centralised state education system*, plagued by a heavy-handed bureaucracy (Farrugia 1992; Fenech 1994). However, the tradition of top-down policy making has over the past two decades been challenged by devolution of power to local authorities and emphasis on dialogue and participation with the grass roots. The shift has led to the setting up of School Councils (Sultana 1994a), and the transfer of more responsibilities to parents, teachers and heads of schools.
- A *stratified and selective state school system*, which practises streaming from the fourth year of primary school, and which distributes students on the basis of an 11-plus examination into academic 'junior lyceums', 'area secondaries' and 'opportunity centres'. Trade schools recruit students for technical education from the latter two sectors at the Form III (14-year old) level. The state school system receives an average of 10 per cent of the total national budget, and, with 4,900 teachers, is the largest employer on the islands (Central Office of Statistics, 1994).
- *Extensive educational services* that have had to expand very rapidly as Malta integrated itself in the modern world economy in a relatively short time scale. The rapid expansion has strained human and material resources to the extent that promising innovations have tended to fizzle out due to the inability of the country to match widening provision with increased and continued resourcing. Because of these dynamics, depth has often to be sacrificed for breadth. This has been as true of the examination system as of other sectors.
- A *strong private school system*, catering for nearly 30 per cent of students and consisting of independent and Catholic church schools. The latter are heavily subsidised by the state, following an agreement in 1991 whereby expenses of church schools were to be met by the government in return for the transfer of church land to the state. Policies adopted in private schools severely constrain the latitude of the state education sector in developing its own educational vision. They have contributed to the intensification of inter- and intra-school streaming, selection and channelling strategies, and to a culture of competitive achievement that exalts testing and examination above the needs and development of the child (Cassar 1991; Sammut 1995).

Evolution of the Examination System

The examination system at the secondary (involving Form V students aged 16) and post-secondary (18 year old students who have spent two years studying in Form VI) school levels has recently been reformed. As is often the case, change has brought to the surface many old assumptions and beliefs. The key to understanding this reform is the shift from local external examinations (Matriculation, in the 19th century) to foreign external examinations (General Certificate of Education [GCE] in the mid-20th century) and back to local external ones in 1992.

From the 19th to the mid-20th century, the Malta Matriculation examination regulated entry to the University of Malta. At the end of the 19th century, English School Certificate Examinations run by Oxford and London Universities were also introduced. These credentials could be used to gain government and private employment. However, the Matriculation remained compulsory for access to the University until the 1950s, when the British examination system adopted the GCE at 'Ordinary' and 'Advanced' levels (Zammit Mangion 1992, p.347). The British reform was adopted wholesale in Malta, and Matriculation examinations were phased out with the exception of a few subjects such as Maltese and Religion, and later Italian and Arabic. Most students sat for either the Oxford or London University Examinations, although in the 1960s science students began sitting for examinations set by the newly-formed Associated Examining Board of the UK.

Many factors account for the way in which foreign external examinations came to determine students' occupational and education futures. Not the least was the colonial mentality that 'British is best', or at any rate 'better'. Another factor was the general feeling that only examinations set and marked abroad could be reliable and valid, given patronage and clientele networks that, while prevailing in most Mediterranean countries, have often been thought to be exacerbated in Malta due to the archipelago's small size (Boissevain 1965; Zammit 1984).

The number of students taking the GCE examinations has increased steadily since the introduction of compulsory secondary education for all in 1970, to the extent that around 4,000 attempt their 'O' levels at the June session every year. Table 11.1 shows the increasing investment in credentials at both 'O' and 'A' levels in core subjects between 1969 and 1990.

Other types of examinations are available to Form V students following technical options in trade schools and technical institutes, but these numbers are much smaller. Technical institute students generally sit for examinations run by the City & Guilds of London Institute, while trade-school students

are awarded school-based certificates. Trade schools have also prepared their students for local Trade & Journeymen's examinations set by appropriate Boards established principally by the 1952 Industrial Training Act. Such examinations lead to the award of Wiremen's Licenses, and to licences to operate as off-shore sea-craft pilots. Recently, trade schools have begun to prepare students for the City & Guilds of London Institute examinations at Craft level.

Table 11.1: Numbers of Students Sitting 'O' and 'A' Level Examinations, Summer Session, Malta, 1969-90

	1969	1975	1980	1985	1990
English 'O'	1,749	2,989	2,870	3,273	4,074
Mathematics 'O'	1,214	2,087	2,039	2,348	3,186
Maltese 'O'	1,444	2,164	2,495	2,634	3,160
Physics 'O'	477	637	564	1,419	1,958
English 'A'	163	300	304	243	319
Mathematics 'A'	106	205	242	439	444
Maltese 'A'	358	239	283	223	369
Physics 'A'	125	283	341	373	525

Source: Mallia (1994), pp.76, 79.

Changes in the UK, and their Repercussions on Malta

The historical overview presented above highlighted the dependence of Malta's examination systems on those developed in the UK. The general feeling was that Malta did not have the capacity to compete with the GCE Boards in test design, setting of papers, marking, and the evaluative research that ensured high standards. Added to that, emigration and study abroad began to feature highly in post-war Malta (Attard 1994), and GCE 'O' and 'A' levels provided international currency which Malta Matriculation examinations could never hope to match. Finally, and perhaps most importantly, the setting and marking of papers in distant England gave GCE examinations a legitimacy which local examinations could not have. This was partly because of a prevalent colonial mentality, but also because distance assuaged fears regarding the leakage of papers prior to examination sessions, and preferential marking in a context where everybody seemed to know everybody else.

This does not mean, of course, that GCE examinations were perceived by the public in a totally positive light. The examinations were a heavy financial burden both on families and on the state. Each student sitting for eight to ten subjects at 'O' level paid over Lm100, representing well over a third, and in many cases over a half, of a family's monthly income. GCE examinations also drained foreign currency — a sum that Zammit Mangion (1992, p.354) calculated at between Lm0.5 to Lm0.7 million (close to US$2.3 million) per annum. In addition, strong nationalistic feelings in post-independent Malta, together with a Labour government policy to wind down privileged relations with the UK, led to frequent criticisms of cultural imperialism in the education sector, with the GCE examinations being the most tangible indicator of the island's dependence on its previous colonial masters.

For a long time however, the ability of the GCE examinations to respond to concerns about standards, international recognition, and 'fair play' meant that the negative aspects of foreign external examinations which were not sensitive to local realities or cultural sensibilities were endured. The UK GCEs had such a strong legitimacy locally that, as Zammit Mangion (1992, p.354) points out, no government felt quite ready to tamper with them. As a result, he noted, the Maltese "never fully exploited the facilities which the English examining boards would have been ready to provide to tailor their examinations (even through 'special papers') to Maltese needs".

The situation might well have continued had there not been a reform in the UK examination system in the 1980s, which saw a merging of the GCE examination with the Certificate of Secondary Education (CSE) through the introduction of the General Certificate of Secondary Education (GCSE). The CSE had been developed in England to cater for students with low academic ability, so that the top grade of a CSE examination was equivalent to the lowest GCE 'O' level pass mark. The CSE had never been adopted in Malta, and therefore the earlier reforms in England had not had repercussions on the local education system. However, the GCSE was predicated on a new set of criteria that were not quite consonant with educational policy and practice in Malta. GCSE shifted from norm- to criterion-referenced testing; it introduced course-work and teacher assessment as part of the examination system; it reformed syllabuses and curricula to make them more responsive to perceived UK needs; and it ensured that each student would leave school with some kind of record of achievement (Broadfoot 1986, 1989). New economic realities such as massive youth unemployment meant that most students were obliged to stay on longer at school, rendering the 16-plus examination less important, and making it crucial, for legitimisation purposes, to develop assessment

procedures which were more positive and educational in their orientation.

After studying the new examination system, the Maltese government decided not to adopt the GCSE mode — a decision which was facilitated by the fact that UK examining boards continued to offer GCE examinations to overseas students and centres. The Maltese government noted that the GCSE was tailored to respond to British needs, and that the weighting given to oral assessments and to coursework required extensive collaboration between local teachers and examining boards. This would have been a difficult and complex challenge given the culture of centralisation that then prevailed (Fenech 1994). However, the fact that Malta could not accommodate UK reforms did highlight the desirability of the country developing its own system of examinations. Malta could have continued with the special arrangements made for non-UK candidates; but the changes within the UK stimulated rethinking of patterns and of the relationships between examinations and Malta's 1988 Education Act and a National Minimum Curriculum.

In 1988 a board was set up informally at the University, with representatives from academic staff and the government's Department of Education, and was given the task by the Rector to devise an examination system based on the International Baccalaureate philosophy. The board worked in parallel to the official Matriculation Board, but a year later the two boards were amalgamated to form a Matriculation and Secondary Education Certificate (MATSEC) Examinations Board. This body was instructed to develop an examination system which would in due course replace the foreign GCEs at both ordinary and advanced levels, and which would reflect the shift in educational philosophy. The new examinations were therefore to:

- reward achievement rather than selection;
- give more importance to subjects that did not make up the core academic curriculum;
- cater for a wider ability range of students (while the GCEs catered for about 20 per cent of students, the new examinations were to cater for 80 per cent);
- widen access to post-secondary and tertiary education to bring Malta on a par with European levels (to the extent that the number of post-compulsory age students rose to 60 per cent, and the number of university students quadrupled between 1987 and 1992).

The Present Examination System

The MATSEC Board set up in 1989 is now responsible for two exami-

nations: the Secondary Education Certificate (SEC) Examination, aimed at 16-year old students at the end of their compulsory schooling cycle in Form V, and the Matriculation Examination, catering for Form VI students. Details on the two examinations are presented below.

The Secondary Education Certificate Examination

Since 1992, secondary school students have had the option to sit for either the new local SEC examinations or the foreign GCE examinations which have been allowed to continue as an alternative route. While the UK GCSE was not adopted locally, the 'spirit of GCSE' (cf. Brown & Wilde 1988) has been very much behind local initiatives. Indeed, a brochure advertising the SEC Examination almost quoted GCSE documents when claiming that its philosophy was to reward candidates on the basis of "what they know, what they understand, and what they are able to produce" (p.5). Interviews with members of the various boards and committees associated with the new examination system revealed that the GCSE has been influential, not only in philosophical underpinnings but also in syllabi and structure of operations. As a member of the MATSEC Board pointed out, Malta does not have the human or material resources to carry out all the preparatory research and the constant evaluation of the system to ensure progress from year to year. Such progress could be ensured by looking closely at a dynamic system and adapting it to local needs.

As with the GCSE, the SEC Examination differs from the previous GCE examination in that it is not solely meant to give access to post-secondary courses, but is rather intended to give certificates to all students finishing the five-year secondary education course. Thus, while previously only about 20 per cent of students in each age cohort used to sit for GCEs, the SEC Examination caters for about 80 per cent of the cohort. It includes students from trade schools, who previously tended to finish 11 years of schooling without any formal credentials since they were not prepared for GCEs and were therefore automatically excluded from the university track (Sultana 1992a, 1994b).

Like the GCSE, the new examination ranks students on a wider range of attainment (1-7). Initially the intention had been to have one paper for each subject, with questions becoming increasingly difficult to cater for the higher ability student. However, the new format SEC Examination opted for two two-hour papers in each subject, with Paper 1 being common to all students, falling within the ability range of all candidates, and in most cases including an aural/oral/practical/coursework component. Paper 2 entails a choice to reflect different abilities, and teachers are expected to advise students whether to attempt Paper 2A or 2B. Paper 2A has more demanding

questions than those in Paper 1. It is designed for the more academically able candidates, and it is targeted at those who expect high achievement and who want to proceed to higher education in the subject. Paper 2B has less demanding questions.

Candidates have to indicate which Paper 2 they wish to sit when they register for the SEC Examination, and no change is allowed after the registration period. Candidates sitting for Paper 1 and Paper 2A may qualify for grades 1 to 4. The results of candidates who do not obtain at least a grade 4 remain unclassified (U). Candidates sitting for Paper 1 and Paper 2B may qualify for grades 4 to 7. The results of candidates who do not obtain at least grade 7 remain unclassified (U). Grades 1 to 5 give students access to Form VI, while lower grades enable students to apply for courses in some post-secondary institutions, and employment in a range of occupations.

A key challenge for the MATSEC Board is to contest a view widely held by parents and students that grades 6 and 7 are worthless and equivalent to a failing mark. There have also been criticisms by the Malta Union of Teachers (MUT) that the system which requires candidates to declare in advance whether they intend to tackle Paper 2A or 2B creates stress on students, parents and teachers. While the MATSEC Board noted this, it decided that the choice between the two papers should stand, since "it was felt that in the long run candidates were likely to get used to making an evaluation of their own abilities before applying for the examination in order to choose the paper most suitable for them" (Minute 96, meeting of 11 February 1994). In connection with this, Darmanin (1995) has also argued that the choice between papers traps students, as well as their teachers and parents, in making 'dispositional adjustments' according to beliefs about ability. Students labelled poor achievers will tend to self-select — and be channelled by parents and teachers — to the easier paper, irrespective of their real potential. This leads to a closing of options rather than to the intended opening of opportunities. As with many other aspects of the examination reform, research needs to be carried out to evaluate and monitor the educational and social effects that the choice of papers has on students.

The similarity between the SEC and the GCSE has been highlighted, and indeed in this as in other cases (Sultana 1992b), educational innovations carried out in the UK tend to be adopted locally, even though economic and cultural realities do not coincide. That adoption is not automatic or slavishly imitative: rather, different ideological appeals are made to justify and legitimise similar policies and practices. The MATSEC Board has emphasised that the SEC Examination dovetails with the National Minimum Curriculum introduced in Malta in 1988. As the MATSEC Board's brochure

advertising the SEC Examination declares (p.1), the SEC complements the requirements of the National Minimum Curriculum by providing a common assessment system of an impartial standard, supplying examinations appropriate for students with different abilities, and incorporating recent trends in educational thinking.

The 1996 regulations for the SEC Examination stipulate that two sessions will be held: one in May and a supplementary session in September. The range of subjects offered is quite wide. The subjects offered at SEC level are:

> Accounting, Arabic, Art, Biology, Business Studies, Chemistry, Classical Culture and Civilisation, Commerce, Computer Studies, Economics, English Language, Environmental Studies, French, Geography, German, Greek, History, Home Economics, Italian, Latin, Maltese, Mathematics, Physics, Religious Knowledge, Russian, Social Studies, Spanish, Technical Design, and Textiles & Design.

Students sitting for the supplementaries can opt for Paper 2B if in the June session they took Paper 2A and failed. Around 5,000 candidates registered for the SEC Examination in May 1994.

The Matriculation Certificate Examination

The examination relevant to students completing their Form VI studies also features strongly in the reforms. It reflects a new conceptualisation of education so that, in the words of the MATSEC Newsletter (No.37, 1994):

> requirements for entry into the University [have been] adapted to conform with the new pattern of education that is being generally adopted in Europe and elsewhere at the post-secondary pre-tertiary level.... This pattern requires all students to show competence in a language, a human studies subject, a science subject and possibly a technology or applied arts subject, as well as evidence of aptitude to integrate the different subjects in as personal and creative a fashion as possible.

The key to understanding the reforms at the Matriculation level is the shift from an English-type to an International Baccalaureate-type examination. The former has long prevailed in Malta, and consists of in-depth specialisation in which pupils study three or four subjects drawn from the humanities, the sciences or the social sciences (cf. Husén et al. 1992, p.237). These types of 'A' levels had been introduced in Malta in the late 1950s

and, as in the UK, were regarded as standards of excellence, the foundation of university degree courses, and the best means for selection for higher education (Muscat 1995).

The English answer to the broader continental curriculum consisted in the introduction, in 1989, of Advanced Supplementary examinations. These were to be taken in conjunction with 'A' Levels, and required half the teaching and study time though retaining the same level of difficulty and attainment. Students could replace one of their 'A' levels by two or more Advanced Supplementary subjects. This innovation was never imported to Malta, and the only effort to broaden the Form VI curriculum has been through the introduction of the inter-disciplinary Systems of Knowledge paper (Muscat 1995, p.53).

Table 11.2: Subjects offered in the Matriculation Certificate Examination, Malta, 1996

Group 1:	Maltese, Arabic, English, French, German,* Greek, Italian, Latin, Russian,* Spanish*
Group 2:	Accounting, Economics, Geography, History, Marketing, Philosophy, Religious Knowledge, Sociology
Group 3:	Applied Mathematics (Mechanics), Biology, Chemistry, Environmental Science,** Physics, Pure Mathematics
Group 4:	Art, Computing, Engineering Drawing, Graphical Communication, Home Economics & Human Ecology,* Information Technology, Music

Plus (for all groups): Systems of Knowledge

* offered at Advanced Level only
** offered at Intermediate Level only

The examination reforms at this level now propose a further broadening. Subjects at the Matriculation Certificate Examination are taken at two levels, Advanced and Intermediate. This allows a degree of specialisation in any one of the four areas in which the subjects have been grouped, even though the examination is considered as one whole. Candidates are required to take two subjects at Advanced Level and three at Intermediate level, together with Systems of Knowledge, which was introduced in 1989. The Advanced Level Matriculation is equivalent to previous 'A' level examinations. The overall grade (A, B, or C) is based on performance in the examination as a whole, and the certificate indicates a Pass with Distinction or with Merit in

subjects taken at Advanced Level. The grouping of subjects is shown in Table 11.2. About 2,800 candidates registered for the Matriculation Examination at Advanced and Intermediate levels for the May 1994 session.

Mechanics of the System

The MATSEC Board is chaired by the University Rector and accountable to the University Senate. The Board has three members of University academic staff appointed by Senate, three members from the government's Division of Education, and one member nominated by and from the members of the Private Schools' Association. The MUT is represented by a member in an observer's capacity. The Registrar of the University acts as secretary and has an advisory role. The Department of Education's Registrar of Examinations is invited to meetings in order to ensure continuity in policy-making between examinations taken by students at other stages in their education.

At the time it was established, the Board was to mandated to:

- set the policy in connection with these examinations;
- determine and implement measures, ensuring that the new examinations reflected current developments in assessment techniques;
- approve syllabuses;
- ensure validation and accreditation of the examinations, both locally and abroad, and establish links with foreign boards;
- award certificates to successful candidates; and
- be responsible for the financial management of the examinations.

A Support Unit was also set up as an executive body with an Academic and Administrative arm or division. The Unit acts as the Board's main contact point with teachers, prospective candidates and the general public. It includes experts in test-construction techniques and in principles of examining, as well as a sample of experts in the different disciplinary domains to be examined. The Unit also keeps close contact with external examining boards, especially from European countries which are considered educationally in the forefront.

Key personnel in the Support Unit include the Head of the Academic Division, the coordinator of the Administrative Division, the Principal Test Construction Officer, and the Principal Subject Area Officers (Arts and Science). In principle, the role of these respective officers has been very clearly defined, though role overload hampers the carrying out of some of the tasks outlined on paper. For instance, the Head of the Academic Division is responsible for overall monitoring of the examinations and the

coordination of the work of the Principal Test Construction Officer (PTCO) and the two Principal Subject Area Officers and their staffs. The PTCO advises all Panels on matters concerning assessment, thus ensuring that all examinations set by the Board reflect professional norms. The PTCO is expected to train staff, paper-setters and markers in assessment techniques, collect and analyse data concerning the examinations, and initiate appropriate research. The Principal Subject Area Officers on their part are expected to develop curricula and coordinate the academic content of the examination process in the subjects falling under their competence. They direct the Panels for each subject on all matters concerning syllabuses and examinations. They also monitor meetings of Panels, liaise with teachers and personnel in the Division of Education, organise seminars and short programmes, and collate and analyse information on curriculum development in their subjects.

Subject Panels make up the third level of the pyramidal structure. Personnel in the Subject Panels devise syllabuses, set papers, and mark scripts. Separate committees fulfil the three different roles, though a single person can belong to more than one of the three committees or sub-panels. In this way, persons who are debarred from setting and marking papers, for example because they are related to candidates, may still help with devising of syllabuses. All three committees or sub-panels are chaired by the same person in order to ensure coordination.

Staffing Partnerships

Unlike previous examination systems that prevailed in Malta, the Secondary Education Certificate and the Matriculation Certificate place a premium, at least on paper, on a partnership between University, Division of Education (especially the Curriculum Development, Implementation & Review Department), and classroom teachers in both state and private schools. This is reflected in the composition of the MATSEC Board which is chaired by the University Rector and made up of an equal number of representatives from the Division and the University. The attempt to develop partnership is also evident in the fact that responsibility for the Syllabus Panels is generally shared equally by persons from the Division and the University.

These are significant developments given that in most cases, University and Division staff relations have been marked by competition and mutual disregard rather more than collaboration. Matriculation examinations, for instance, were previously set and marked by the head of the respective subject department at University, with no consultation with the officials of the Division of Education. GCE examinations were administered by the Division of Education and the Registrar of Examinations attached to that

Division, with practically no involvement on the part of the University. One way of explaining this mutual exclusion is by noting that small states, by definition, cannot offer a wide range of promotion prospects to positions of great responsibility, since these are limited in number (Farrugia 1991, pp.588-9). In a 'face-to-face society with back-to-back relationships', competition is strong for scarce resources — which include status as well as material rewards. In turn, this competition often leads to claims that territorial expertise has been infringed, and renders collaboration more difficult than in larger social units.

The demands that the new national examinations have made on local staff at all levels has made collaboration essential, and indeed meetings of the MATSEC Board occasionally make reference to Ministerial appeals for strong working relationships between the Division and the University (e.g. Minute 37 of Meeting on 19 Nov. 1991). However, this collaboration has not quite worked as planned. Most of the Education Division personnel interviewed felt that under the aegis of the University, and despite their strong representation on the official bodies of the examinations, all they could do was to "air their views", and that in many cases their opinions were in fact ignored. They generally presented the University as "an empire" dominating most aspects of the new examinations, and resented what was ultimately felt to be an impositional rather than a collaborative structure.

On their part, some University academic staff felt that the Division of Education had never been enthusiastic about local examinations, had never quite identified with them, and had expected the venture to fail. In addition, academic staff criticise the Division of Education for functioning too much as a hierarchical bureaucracy. Because of its bureaucratic features, the University staff who wish to collaborate with practising teachers sometimes find themselves having to work instead with senior education officials, who, they feel, cannot draw on direct contact with students and classrooms when they come to develop syllabuses and set papers.

Teachers have also generally felt that they have not been involved in this partnership with the University on an equal footing. Minutes of a meeting held on 25 July 1994 by a working group nominated by the MUT Council to study the new examinations noted, among other things, the lack of consultation on the part of the MATSEC Board with student bodies, parents' representatives and the teaching profession generally. The group also recommended that the MUT Council "note the arrogance of the University authorities in deciding upon such educational matters affecting the teaching profession and the educational system on the assumption that they are not Union matters" (Minute 5a). Given that the MATSEC examinations are premised on an appreciation of the input that teachers can make in the

assessment of their own pupils, the rifts between the University on the one hand, and the Division of Education and its teachers on the other, present a real obstacle to progress.

Quantity of Staff

The operation of examinations on a national scale has severely strained the staff involved. While positions have been created for the Principal Subject Area Officers for the Arts and the Sciences, most personnel have taken on new responsibilities in addition to ones they already had. This applies also to the members of the MATSEC Board and to teachers in schools.

As has been noted, each subject is administered by separate sub-panels for syllabuses, paper-setting and marking. Paper-setters and markers are difficult to find given the extremely stringent criteria that have to be satisfied in order to ensure reliability, fairness and confidentiality. The criteria stipulate that, given the close networks between people on the islands, paper setters and markers related to or who teach (or give private tutoring to) candidates sitting the examination session in question should be excluded from the task. The difficulty of finding staff fulfilling the criteria is especially acute in relation to subjects which are chosen by small numbers of students, where expertise in the area is occasionally only held by their own teachers.

Candidates sitting for examinations use index numbers, which are translated into office numbers by the MATSEC administrative staff. Though this system slows down the process considerably, it ensures that only personnel at the central office know which number represents which candidate. It thus further ensures the anonymity of candidates, and that candidates do not approach markers to exert pressure and influence grading.

Partly for educational reasons, but also because of limited resources, teachers have responsibilities in assessing their own students. This is to some extent due to the fact that as with the UK GCSE there is an emphasis on developing integrated skills, so that a student "knows, understands and can do" (Brown & Wilde 1991, p.124). There is therefore an emphasis on a practical component and project work in subjects such as the sciences and systems of knowledge, and an oral element in the assessment of language learning, in which teachers assess their own students. Teacher involvement in assessment has been bitterly contested by the Malta Union of Teachers on a number of grounds. While the union has agreed with the educational purpose underpinning the innovation, it has insisted on the need for support staff and qualified technicians in laboratories and workshops to help teachers fulfil the new demands placed upon them.

Quality of Staff

The working group set up by the MATSEC Board in 1991 to study personnel requirements and costings of the new examination system noted immediately that "the present lack of professional expertise in the field of assessment presents a serious threat to the validity and accreditation of the examination". It therefore recommended that "close linkages be established, as a matter of urgency, with a more professionally oriented examination body". The lack of local expertise in the field of assessment led the working group to conclude that it was "advisable to adopt and adapt models developed in other countries, rather than attempt to develop completely indigenous models", noting that access to British expertise and use of UK textbooks indicated that an adaptation of the GCSE-type examination would be the most feasible under the circumstances.

The question regarding the availability of local expertise in the running of the new examination can be addressed by a brief inventory of personnel with the relevant qualifications at the different levels outlined earlier. The MATSEC Board itself has two members from the academic staff with some formal training and many years' experience related to assessment and examinations. The most expert and senior of these two is also the Principal Test Construction Officer in the Academic Division of the Support Unit. The other is the Head of the Academic Division. Both have access to foreign (mainly UK-based) experts, and such contacts have been used formally and informally to resolve challenging situations. In addition, both have drawn on international (and particularly UK) educational literature to adapt practices and policies to the local situation. Specialists in assessment and examination techniques employed by the Division of Education have also been consulted on a regular basis by the MATSEC Board, and have been co-opted as members of different sub-committees.

The Support Unit personnel have been recruited following calls for applications for positions, posts that have thus far included the Head of the Academic Division, the Principal Test Construction Officer and the Principal Subject Area Officers (Arts and Science). The latter are currently registered for part-time doctoral studies.

Seminars for teachers involved in different ways with the new examinations have been organised on a regular basis by the MATSEC Board in collaboration with the Education Division. The 'ripple' strategy was generally adopted, with meetings being organised in different phases with Assistant Directors of Education, Principal Education Officers, Education Officers and Education Assistants; Heads of Schools and Guidance Teachers; Assistant Heads of Schools; and then subject groups for teachers. These are generally information-giving meetings rather than training programmes, and

while the Support Unit seems to have done a good job in using the media to inform the general public about the mechanics of the new examinations as well as the philosophy behind them, they have been less successful, given the administrative work load they have to shoulder, in developing the human resources and skills necessary for the successful implementation of the new examination system.

Indeed, early in the running of both Matriculation and SEC examinations, differences in the number of candidates awarded particular grades among the large-entry subjects were noted (cf. Minute 197, MATSEC Board meeting of 28 Sept. 1992), and the need for greater expertise in educational assessment was registered. The PTCO therefore does meet the Markers' Panels regularly in order to train teachers in the utilisation of set procedures and criteria for grading scripts. However, the general opinion of all those interviewed is that the greatest weakness of the new examinations is the lack of adequately trained personnel, to the extent that no serious monitoring of the system is taking place.

The charge of lack of monitoring is applicable to all levels. Given the shortage of human resources, people involved with the MATSEC examinations have seen their role expand so drastically that they cannot afford time for evaluation. In addition, the number of subjects being offered at the SEC level has increased so quickly that work has multiplied without the concurrent increases in human resources. The administration of the annual exercise is very time consuming, and with so little time between organisation and implementation, that interviewees spoke of "management by crisis", being completely taken up by "coping", and having no time for the academic development of those they should be training. This means that there are no clear lines of responsibility and accountability, since monitoring is practically impossible. Paper setters, for instance, have no clear criteria on how to decide which questions are more and which less difficult, and how to place these in Paper 2A or 2B of the SEC examination. There is also the general feeling that teachers involved in assessing coursework and projects have tended to give very high marks to their own students. The Malta Union of Teachers, while understanding the educational value of teachers' input in the overall assessment exercise, has consistently argued for better training of staff so that tasks are carried out in a more uniform and professional manner.

Local and International Recognition

Despite the lack of formal monitoring of the new examination system and the problems that the shortage of human resources engender, the general impression among all persons interviewed as well as among students, parents

and teachers is that the 'indigenisation' of the examinations at the secondary and post-secondary level has been successful. Students sit for these examinations quite willingly, and the number of pupils opting for foreign-based examinations has steadily decreased. The Division of Education, having unofficially remained sceptical and non-committal vis-à-vis the new examinations, in 1996 officially endorsed and adopted SEC syllabuses.

Criticisms in the press have been levelled against various aspects of the system, but the most strident of these referred to fees that had to be paid rather than to the philosophy or credibility of the examinations. The opposition Labour Party has, through its education spokesperson, generally highlighted the need for more information about the MATSEC examinations to reach the public, and severely criticised administrative mistakes. However, while these mistakes have received some publicity over the media, they have not quite jeopardised the MATSEC examinations' credibility.

That credibility has been reinforced by studies carried out by the PTCO which show that students sitting for both local and foreign examinations in the same subject tend to do as well or as badly in both, which of course suggests that Maltese examinations are pegged at the same standard as the UK-based ones. Indeed, there is some evidence that in some subjects at least, local examinations are of a higher standard than, say, the London-based examinations. A sign of the general acceptance of the public of the local examinations is that there was no protest at all when the University announced in 1996 that only candidates having the new Matriculation Certificate would be eligible for entry to the Faculties.

Despite the public's faith in the new system, generated, as one interviewee suggested, by the fact that the certificates 'do the trick' — that is, give students access to further education and to employment — the very people involved in seeing the reforms through are concerned about the extent to which educational goals are, in fact, being reached. In the words of a Division official, "the public might be reassured, but the educationists are not".

The international recognition of the local examinations has been facilitated by equivalence agreements with the Council of Europe, UNESCO and similar organisations, so that local credentials are generally transferable abroad. Universities retain the right to investigate more carefully what a certificate means in order to ensure equivalence of skills with other candidates embarking on graduate or post-graduate degrees. Arguably, the proof of the reliability of the local examinations is the fact that Maltese students are accepted for graduate and post-graduate studies in universities the world over, and generally give a very good account of themselves.

Costs

The total cost of running the examination system was, according to University Senate reports, close to Lm200,000 (US$545,000) in 1994, and estimated to exceed Lm250,000 in 1995. Fees for sitting examinations represented the only source of finance, and the total value fees was about Lm50,000 less than costs. Shortfalls have so far been covered from the University budget. Initially, students were asked to pay Lm8 per subject, but following protests by students, who took to the streets in great numbers, the Minister of Education agreed to lower the fees (Table 11.3). The reduction of income subsequent to the lowering of fees meant that the financial resources required to support the planned expansion of the pool of human resources were not there.

Table 11.3: SEC and Matriculation Examination Fees, Malta, 1996

Registration fee	Lm3.00
Advanced Matriculation Examination	
per subject	Lm8.00
per practical examination	Lm2.00
Intermediate Matriculation Examination	Lm7.00
Secondary Education Certification Examination	
per subject	Lm5.00

An alternative mode of operation for the MATSEC examinations would entail having the Board function as an autonomous structure, independent of the Ministerial prerogative to set fees, and thus in a position to run the system in a financially self-sufficient manner. This proposal by a member of the MATSEC Board was never adopted, probably because it runs counter to the dominant culture in Malta where the state is expected to take on, or heavily to subsidise, expenses related to social services including education.

Impact on the Education System

There has been, to date, no full-scale evaluation of the effects and impact of the new examinations system on educational practice as a whole. Because the examinations are so new, it is too early for research on, for example, the extent to which students are in fact profiting from the opportunity to get useful credentials. Nevertheless, it is possible to make some initial observations.

Starting with the SEC examination, it seems that there have been

important repercussions on educational practice in schools, with more attention being given to coursework as a legitimate component in the continuous assessment of students. Project and practical applied work has also been valorised in a system which is best described as magisterial in style, with lecturing pedagogy and note-taking being the most common form of pedagogy. Interviews with different members of the MATSEC Board indicated that, given the strength of the examination culture in Malta, where teachers teach — and are expected by students and parents to teach — with examinations in mind, then a change in the mode of assessment has an important 'backwash' effect. There is hope that teachers will be encouraged to use modern and interactive methodologies in the classroom.

Moreover, since syllabuses are set locally, educationists have been able to include elements of Maltese and Mediterranean realities across most subjects. In some areas, such as environmental studies, social studies and history, the subject matter revolves almost totally around Maltese concerns. This is crucial not only for political and ideological reasons, but also for educational ones. Students can more easily relate to the curriculum if it resonates with themes and concerns they encounter in their everyday life, and learning is more likely to happen when there is a connection between schooling and students' frameworks of relevance.

Another positive effect of the SEC examination has been the extension of the range of curriculum subjects offered to students. In principle, the MATSEC Board has to react to curricular initiatives in schools, so that if a new course of studies is offered to students in a particular school, then the latter can ask the Board to prepare an SEC paper in that subject. Previously, schools based their curricula and syllabuses, not to mention teaching strategies, with an eye on GCE requirements. With the new system, schools can be much more proactive in the development of curricula, syllabuses and pedagogy.

While there is still a definite reliance on the UK for textbooks, in the past few years local authors and publishers have invested in production of high quality texts in many curricular areas. Since these texts are tailored to SEC and Matriculation requirements, they prove a valuable resource for teachers and students. More are being published each year, to the extent that they now cover subjects such as sociology and philosophy even though these are peripheral subjects generally chosen by only a few students each year.

It is interesting to note that, once again in connection with the variable of size and its influence on education systems, expertise in a particular subject tends to be concentrated in a small pool of human resources. This to the extent that the MATSEC Board at one stage prudently decided that

books written by members of Syllabus Panels should not be included as textbooks. In a microstate, where expertise in any one area is scarce, it is common to find authors being leaders in their own field in a professional/ teaching capacity as well. That prudence has had to be put aside given, once again, the impossibility of alternative action.

The matriculation examinations will also have an impact on the education system, even though they in fact only came fully into their own in 1997. It is clear, for instance, that attitudes towards the Form VI curriculum and examinations will have to change drastically. As the Head-master of the state sixth form has noted (Muscat 1995, p.53):

> It will no longer profit students to cram A-level studies, by means of private tuition, to take the examination before the end of the course. It will no longer be possible to specialise in three related subjects to the complete exclusion of all else. The broader curriculum will require a broader vision. It will also mean that the culture of 'getting rid' of parts of the curriculum as one goes along will have to stop.

Another repercussion arises from the fact that the new International Baccalaureate-type Matriculation examinations have a wider range of subjects than the previous UK A-level type examinations. This means that fewer hours are spent on subjects taken at the intermediate level, which could have implications for university courses which presume that students have a certain depth and breadth of knowledge in that particular subject matter before they enter university.

Small-State Factors

At various points, this chapter has indicated ways in which Malta's small size has influenced the conceptualisation and implementation of the examination system. Given the centrality of scale as an explanatory variable in this book, it is important to draw together the strands that have been identified in this regard. Of course, causal explanations in the social sciences are always advanced tentatively, and no strong claims are made here that one can positivistically extract 'size' from the complexity of social situations, processes and dynamics in the same way that one can isolate elements in a laboratory. The contention is, however, that scale *tends* to be one of the crucial variables that influences social action (or stasis), and hence *tends* to determine which course of action, from a range of strategies and alternatives that are available, one in fact does choose. The following remarks focus on visibility, accessibility, resourcing, role overload, and research capacity. None should necessarily be considered problematic or

challenging, given that small size can, in itself and in some circumstances, be a strength.

Visibility

Small social units like Malta tend to be characterised by a high visibility factor, whereby citizens tend to know each other not only because they are related in some way, but also because social interaction often cannot be avoided. People know each other, often on a first name basis; and while this militates against the anomie that is often felt in larger, more impersonal systems, it does create problems when practices developed in states with anonymous relations are imported by contexts characterised by familiarity.

Visibility can be a constraining factor when it comes to education generally, and examinations more specifically, in that it is difficult to legitimise trial or pilot projects, given that these receive attention at a national level. The high visibility of any new policy leads to a situation in which parents whose children have not been included in the pilot project may feel that they are missing out on something. Governments of small states often feel obliged to implement innovations on a nation-wide basis. This stretches scarce resources to such an extent that issues such as monitoring and evaluation are neglected in the pressure to perform the mechanical task of setting up the required structures.

Visibility affects the extent of credibility that examinations have with the public. When the Maltese used to sit for GCE examinations set and marked in England, the general feeling was that such examinations were impeccably administered, even though in reality problems similar to those encountered locally arose. With the GCE examinations, as with most systems, papers were sometimes misplaced, the wrong paper was occasionally sent to students, and so on. However, these errors did not create quite the same furore because they were committed by impersonal authorities in distant Britain. Parents, students and teachers are more inclined to criticise and denounce mistakes committed by people they know, and by education authorities that are as accessible as they are visible.

However, visibility need not always be a disadvantage in a small state. With reference to examinations, for instance, teachers who accept to set and mark papers in contravention of rules — specifying that they must not be related to candidates, and must not have had them as students in the subject over the 12 months preceding the examination — are very quickly caught. So too are other irregularities, such as when a teacher gives short shrift to assessment duties related to coursework.

Accessibility
Visibility and accessibility are closely related dimensions in the formation of open social networks. As Farrugia (1991, p.590) points out:

> People are known to each other so that the state ministers, high government officials, churchmen, influential businessmen, and their functionaries are accessible either formally or unofficially. Individuals who seek a favour or who wish to register grievances can 'arrange' an encounter with the appropriate officials at a christening party, a family wedding or a village function. The community networks allow the average citizens to communicate their ideas, requests and complaints to the appropriate officials quickly and often personally.

The MATSEC Board members frequently find themselves in the position outlined by Farrugia. They have been colleagues with — and, in some cases, even taught by — teachers, heads, and parents who are now their 'clients'. During interviews, Board members reported that they often receive phone calls and letters from these clients, and pressure is exerted directly on them to take one course of action rather than another in the organisation of new examinations. Members also find themselves susceptible to lobbies, especially from the private-school sector, as to which textbooks to choose, or which subjects to add to the curriculum. While accessibility of administrators could enhance direct democratic practices, it could also reach a point where educational leaders feel constrained when making decisions which, while educationally sound, are not popular with teachers and parents. Sometimes, moreover, individuals and/or groups gain advantage over others through personal or work-related links with those running the examinations.

Resourcing
As Bray & Packer (1993, p.237) point out, although most small states have very restricted bases of human and material resources, they have to provide as diverse a set of educational services and facilities as is provided in countries which are much larger. Regardless of its size, Malta has to:

- cater for all the curriculum areas and subjects by setting syllabuses and examination papers;
- draw on a relatively small pool of teachers to develop appropriate curricular material;
- choose paper setters and markers from that limited pool;
- administer the different phases of the examinations on an annual basis;
- publish results;

- monitor the effectiveness, reliability and validity of the examinations;
- cater for the special needs of groups of students;
- handle requests for revisions of papers;
- provide supplementary examination sessions each year; and
- make sure that the public has the correct information about the examinations, through the use of the media and through face-to-face meetings with interested parties.

Compared to larger countries, Malta has to provide the same range of services with a much smaller population base. The demands on financial and human resources are therefore proportionally more acute in small states. This has implications for the quality of the service offered, as well as for the extent of implementation of the planned innovations.

Role Overload

Intimately related to the resourcing challenge is that of role overload, or what is often referred to in the literature on small states as 'multi-functionality' of personnel. This was put to the author very directly by a Principal Subject Area Officer in answer to a question regarding his role. His exasperated response was:

> I administer and handle finance.... I'm a messenger, driver, clerk, secretary... I pay teachers ... and I feel that intellectually I've been flushed down the drain! I have to do everything.... What I *don't* have is a deputy, and time to think about what I'm doing and where it's all going, even though I work Saturdays and Sundays on this!

Most people involved with the MATSEC examinations echoed feelings of frustration that they did not have the opportunity to specialise and to focus on their set tasks in order to do as good a job as they wanted. Demands related to the examination system increased, but often the human and financial resource base was not broadened to take this increase into account.

Research Capacity

One result of poor resourcing and of role overload is that personnel end up concentrating on maintenance rather than evaluation. The key concern is to put the system in place and to keep it going, and little time, energy or resources are left to carry out evaluative research in order to spot problems, monitor progress and improve overall performance. Nothing inherent to small states necessarily renders such evaluative research impractical. In Malta, it is easy to imagine a situation where undergraduate and graduate

education students, who are required to submit dissertations in partial fulfilment of their degree requirements, can carry out aspects of the research that needs to be done, under the supervision of experienced members of academic staff. Some preliminary research has been carried out in this manner, and has looked at issues of reliability and validity in the setting of papers in subjects such as Mathematics and Physics. Until now, however, the demands have been such that staff have not been able to plan, let alone implement, major evaluative projects.

Conclusions

It is in responding effectively to these challenges that the decision taken in Malta to indigenise the secondary and post-secondary level examination system will pay off in educational terms. Decision-makers in Malta did not follow the example of the Caribbean Examinations Council or the South Pacific Board for Educational Assessment and develop regional examination systems. This is largely due to the fact that geographical and cultural distances between Malta and Cyprus and Gibraltar, for instance, would make such a venture complex and unlikely to prosper.

Yet despite the constraints of size, and the apparent lack of alternatives available to small states, Malta has succeeded beyond the hopes and expectations of many in the country in setting up a promising and independent examination structure which has set into motion synergies affecting various aspects of the local education system. The new examinations have given the Maltese policy-makers the opportunity to be more autonomous in establishing an organic vision for educational practice on the islands. They have also encouraged development of curricula and textbooks that take local culture and realities into account; and they have expanded the professional roles of teachers, who are partners in the assessment of their own students. Along with these aspects, the examinations are likely to modify the traditional and deeply engrained pedagogical culture of magisterial lesson delivery. Also important, the examinations have much reduced an annual haemorrhage of foreign currency that Malta could ill-afford. And finally, they have achieved credibility among parents, teachers, students and employers, and are exchangeable on the world market of credentials. All these achievements are no mean feat.

Part III: Regional Bodies

Chapter 12: Caribbean Examinations Council

Roy Augier & Dennis Irvine

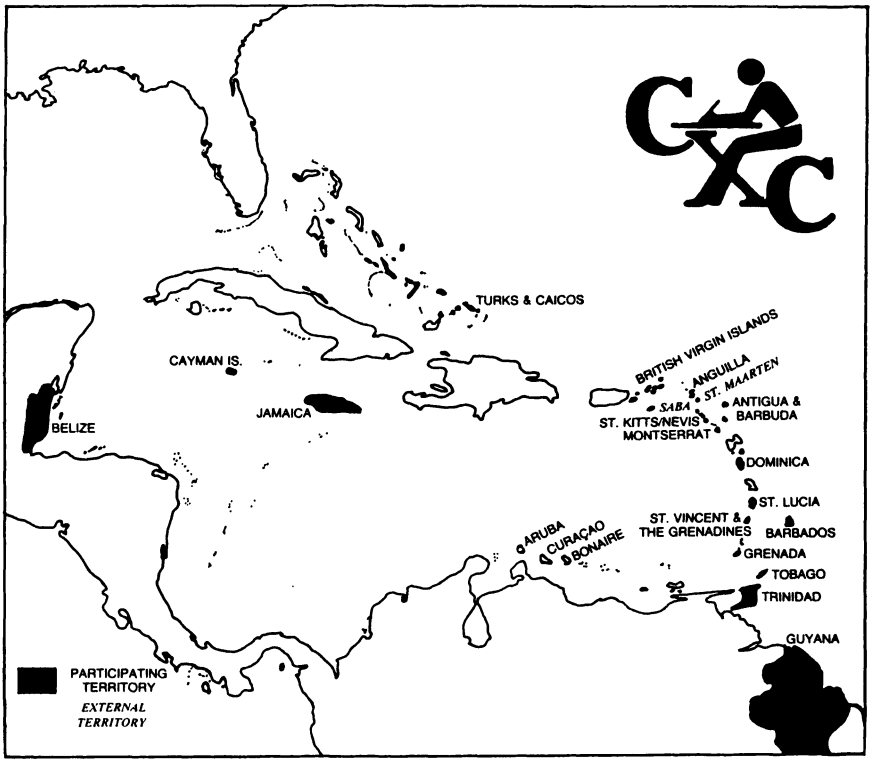
The idea of forming an organisation to take charge of examinations in the Caribbean dates back to 1946. A proposal initiated in that year was part of a move to promote collaboration throughout the English-speaking part of the region, which in 1958 culminated in a federation of all English-speaking territories except the Bahamas and British Guiana.

The federation collapsed in 1962 because of demands for stronger national autonomy, but the governments of the English-speaking territories retained a policy of cooperating in some sectors in order to provide services which were deemed desirable but which were thought at that time to be beyond the resources of any one territory. This was described as functional federation, but was not as simple and straightforward as it sounds. Governments or sectional interests in the territories were by no means unanimous about what services were desirable yet beyond the capacity of this or that government on its own.

Among the most notable examples of collaboration was the University of the West Indies (UWI), which had been established in 1948. Preservation of this regional institution was no doubt made easier by the establishment of campuses in Barbados and Trinidad in addition to the one in Jamaica. The Caribbean Common Market (CARICOM), the headquarters of which were in Guyana, was another form of cooperation. This chapter focuses on a third regional initiative which has stood the test of time: the Caribbean Examinations Council (CXC).

Birth of the CXC

If the willingness to explore functional federation enabled the idea of a regional examination to be put on the agenda, the initiative of putting the proposal before governments came from Eric Williams, Prime Minister of Trinidad & Tobago. Williams was not the only one of his generation who had expressed opinions about the effects of overseas examinations on what was taught in Caribbean secondary schools. However, he had examined its


TURKS & CAICOS
CAYMAN IS.
JAMAICA
BELIZE
BRITISH VIRGIN ISLANDS
ANGUILLA
ST. MAARTEN
SABA
ANTIGUA & BARBUDA
ST. KITTS/NEVIS
MONTSERRAT
DOMINICA
ST. LUCIA
ST. VINCENT & THE GRENADINES
BARBADOS
GRENADA
ARUBA
CURAÇAO
BONAIRE
TOBAGO
TRINIDAD
GUYANA
PARTICIPATING TERRITORY
EXTERNAL TERRITORY

cultural consequences systematically while he had been a professor of history at Howard University in the USA, and had published a book on education which took account of the cultures of the peoples of the Caribbean (Williams 1950). At that time, the major secondary school examinations were set by the University of Cambridge Local Examinations Syndicate (UCLES).

As a Prime Minister and one of the leading advocates of functional federation, Williams was able and willing to promote the idea. The CARICOM Secretariat was his instrument, and the CARICOM Secretary-General was personally involved in the establishment of the CXC. The Secretariat organised the three meetings at which the terms of the agreement to establish the CXC were negotiated.

Functional federation was the context, but pedagogical considerations made the timing of the CXC's establishment opportune. All governments in the region had decided to increase the number of students in secondary schools. The governments were thus confronted with the consequences of extending the range of abilities in the schools while examining performance by tests which were effectively sieves for selecting who could go to university. The result was a long tail of failures, even though the word 'fail' was no longer used. The effect of what seemed a final judgement on the candidates' intelligence was felt by teachers to damage individuals and, by extension, whole societies.

By the time Caribbean teachers had become publicly critical of this aspect of the General Certificate of Education Ordinary (GCE 'O') level, the British had already sought to address the issue by providing an alternative examination, the General Certificate of Secondary Education (GCSE). By the late 1960s this had been in existence long enough to be judged unsatisfactory as a solution to Caribbean problems. It provided a certificate that lacked prestige because it was considered second-class.

In addition, teachers had for some time been exchanging ideas about the UCLES syllabuses, especially in English, Geography, History and Mathematics. Some suggested changes, particularly in History, had been accepted by UCLES. In general, UCLES senior staff were receptive to proposals for modification to syllabuses by Caribbean teachers. So, even before the discussion among governments was initiated by Trinidad & Tobago and CARICOM, teachers and others were discussing what was taught in the classroom, as well as the results of the forms of testing used by the overseas boards.

Many people underestimated the reluctance of some senior officials and their political chiefs. Nevertheless, after a prolonged series of meetings the terms for establishing the Council were agreed. The headquarters were to

be in Barbados, and an administrative operational centre was to be established in Jamaica. Creation of the Jamaican office, later called the Western Zone Office, was part of the package to persuade Jamaica to join the organisation and to permit the headquarters to be in Barbados. The Western Zone Office greatly added to the costs, especially in the early years when it had relatively little to do. However, history has demonstrated the value of this part of the original structure.

The Agreement was to be acted on when all the parties had signed. By 1972, this had taken place; and in January 1973 the first Council meeting was held in Barbados. The Standing Committee of Ministers responsible for Education met in Guyana in 1974 to consider the direction the Council should take. Agreement was eventually reached, but not without lengthy argument, strong language, and even the occasional loss of temper. The first Registrar was appointed in 1974; and the first subject panels were set up in 1975. The latter were to have syllabuses ready for schools to begin teaching in September 1977, so that the first examinations in English, Geography, History, Mathematics and Integrated Science could be offered in 1979.

Membership and Structure

The members of the CXC are officially known as Participating Territories. Fifteen such territories were members from the outset. The only territory to have been added to full membership is Anguilla, which joined in 1989. CXC examinations are also now offered in two External Territories, namely St. Maarten and Saba which are parts of the Netherlands Antilles. Arrangements were first made for St. Maarten in 1985, and for Saba in 1995.

However, CXC membership has not had an entirely steady pattern. In 1977, the government of Cayman Islands withdrew from CXC membership and instead affiliated with an examination board in Wales. This move was partly motivated by concern over Jamaica's dominance of CXC affairs, especially because at that time Jamaica was perceived to have many vigorous advocates of communism and black power. By the 1990s this concern had subsided, and following reapplication for membership Cayman Islands again joined the CXC in 1993.

Information on the populations and colonial histories of the Participating and External Territories is presented in Table 12.1. In population, they range from 2,415,000 in Jamaica to just 1,000 in Saba. The majority are independent sovereign states, but five are still UK dependencies and two, as already mentioned, are Netherlands dependencies.

The CXC has no quotas, either formal or informal, on the nationalities of its professional staff. Some consideration is given to geographical distribution during recruitment, but the principal consideration is always the

Table 12.1: Populations, Constitutional Statuses and Colonial Histories of CXC Participating and External Territories

Country/ Territory	*Population mid-1990s*	*Present Constitutional Status*	*Outline Colonial History*
Anguilla	7,000	UK dependency	UK (1650-1967); independent as part of St. Kitts-Nevis-Anguilla, but separated in 1980 and again became a UK dependency
Antigua & Barbuda	67,000	Independent sovereign state	UK (1632-1981)
Barbados	260,000	Independent sovereign state	UK (1627-1966)
Belize	205,000	Independent sovereign state	UK (1862-1981)
British Virgin Is.	13,000	UK dependency	UK (since 1666)
Cayman Islands	25,000	UK dependency	UK (since 1670)
Dominica	72,000	Independent sovereign state	UK (1763-1978)
Grenada	91,000	Independent sovereign state	France (1650-1763); UK (1763-1974)
Guyana	812,000	Independent sovereign state	UK (1814-1966)
Jamaica	2,415,000	Independent sovereign state	Spain (1509-1660); UK (1660-1962)
Montserrat	12,000	UK dependency	UK (since 1783)
Saba*	1,000	part of Netherlands Antilles	Netherlands (since 1816)
St. Kitts & Nevis	41,000	Independent sovereign state	UK (1783-1983)
St. Lucia	158,000	Independent sovereign state	France (1642-1814); UK (1814-1979)
St. Maarten*	25,000	part of Netherlands Antilles	Spain (1633-1648); Netherlands (since 1648)
St. Vincent & Grenadines	110,000	Independent sovereign state	UK (1763-1778); France (1778-1783); UK (1783-1979)
Trinidad & Tobago	1,282,000	Independent sovereign state	UK (1797-1962)
Turks & Caicos Is.	10,000	UK dependency	UK (since 1766)

* External Territory

Note: The outline history excludes many details. For example, during the 18th and 19th centuries, claims over parts of Guyana changed many times according to the vicissitudes of European politics and varying dominance by the Dutch, French and British.

Sources: Commonwealth Secretariat (1995); Box & Cameron (1989).

professional expertise of applicants. At the same time, various economic factors shape the pools of applicants. Almost all the staff in the Western Zone Office are Jamaicans, in part because Jamaican salaries have been too low to attract significant numbers of applicants from other countries. The staff at headquarters in Barbados is more representative of the region, but Barbadian regulations have discouraged applications of non-Barbadians by imposing obstacles to local employment of spouses. Nevertheless, this has been expected to change following passage of legislation granting diplomatic immunities and privileges for CXC officers, and following lifting of restrictions on the movement of CARICOM nationals in the region.

Although no quotas exist for employment of professional staff, membership of the Council of the CXC and of various committees is carefully balanced to ensure representation by all Participating Territories. Some recognition is given to population size, though the principle of equal participation by the various units is stronger than the principle of proportional participation.

The Council of the CXC has power to coopt additional members but at a minimum must include:

- the Vice Chancellor of the University of the West Indies;
- the Vice Chancellor of the University of Guyana;
- three representatives of the UWI appointed by the Vice Chancellor, regard being given to the geographic distribution of the campuses;
- one representative of the University of Guyana appointed by the Vice Chancellor;
- two representatives appointed by each of the Participating Governments of Barbados, Guyana, Jamaica and Trinidad & Tobago, and one representative appointed by each of the other Participating Governments; and
- one representative of the teaching profession appointed by each National Committee from among its members.

Policy is determined by the Council, which meets annually.

The work of the Council is conducted through the Administrative & Finance Committee (AFC) and the School Examinations Committee (SEC) and its Sub-Committee (SUBSEC). The AFC does not have a fixed membership, but had 12 members in 1996 and conducts the Council's business between meetings of the Council. The SEC has power to coopt additional members, but at a minimum consists of:

- the Chairman of the Council or his Deputy who shall be Chairman;

- four members representing universities (three from the UWI, one from the University of Guyana);
- one Technical Administrative Officer selected by each Participating Government from its Ministry or Department of Education; and
- one member of the teaching profession nominated by each National Committee.

The SUBSEC deals with technical and professional matters between the annual meetings of the SEC. It also has power to coopt members, but must include:

- the Chairman of the Council;
- the Past Chairman;
- one representative of SEC from each of the two universities;
- one representative of SEC appointed by each of the Participating Governments of Barbados, Guyana, Jamaica, and Trinidad & Tobago; and
- four members from the remaining territories.

In addition, the CXC constitution provides for National Committees, established by each Participating Government in its territory and comprising representatives of the Ministry or Department of Education, the teaching profession, the universities in the area, and the general community. The Chairman of each National Committee is normally appointed by the Participating Government from among the members of that National Committee.

Subject panels are appointed by the SEC to advise it on all matters concerning the subjects under their control. The panels draw up syllabuses, recommend methods of testing, receive criticism, comments and suggestions, and consider examiners' reports. Each subject panel normally has six members of the education profession drawn from throughout the region, but the panels are permitted to coopt people for specific meetings. At least three members of each panel must be practising teachers of the subject at the level at which the syllabus is aimed.

The members of the Examining Committees, who are appointed by SUBSEC, set question papers, prepare marking schemes, and supervise the marking by examiners and assistant examiners. Their work is assisted by the Measurement & Evaluation Division of the Registry.

The Examinations

In the early history of the CXC, participants agreed that the Council should provide an examination to replace the GCE 'O' level. A proposal for an

examination at age 14+ held the floor for a time; but the decision to replace the fifth form examination was stimulated by the view of many participants that "we should get on with it", and commence what was long overdue as soon as possible. For a while, members considered whether the Council should begin by taking over the administration of the existing GCE 'O' level examination; but two impediments to this proposal were identified. Firstly it would make no sense to call the result of such an arrangement a Caribbean examination; and secondly, the matter would have to be negotiated with Cambridge, and there was no telling how long that would take.

The compelling argument to break loose from Cambridge was the desire for syllabuses with a Caribbean content where possible, and, where not (as in mathematics), for ways in which the tests might take account of cultural factors such as language. To achieve changes in teaching, syllabus content, and testing (which then seemed radical), the decision-makers were reconciled to a longer gestation period.

The teachers and educational administrators in the Caribbean were not isolated from the main items of discussion taking place in the UK and USA. Many had studied in the UK and USA (especially the University of London Institute of Education and Columbia Teachers College), and had visited the UCLES offices in Cambridge on short attachments. They were therefore familiar both with the English criticisms of the English system and with the solutions proposed, some of which UCLES was adopting for English schools. As such, the Caribbean benefitted from being part of the general discussion of problems in the UK and USA which seemed to follow from the decision in these countries to provide secondary education for a major part of the 11-16 age cohort.

One aspect concerned the long tail of failures and ways to deal with it. The "two examinations" solution that had been tried in the UK had clearly not worked, so this was evidently not a model to be followed. The consensus among Caribbean educators was that everyone could not somehow be assessed within the framework of a single paper. Yet the Council had been instructed by the policy makers to examine the whole range of abilities as far as possible, in ways that were appropriate and that were calculated not to damn candidates to the ranks of the unemployable. The challenge, therefore, was how to safeguard the general interests of the majority, yet ensure the ascent into the hallowed halls of University by an examination acceptable to Matriculation Boards not only of Caribbean Universities but also of those in Canada, the UK and the USA.

In the event, it was decided to have examinations at two levels, designated General Proficiency and Basic Proficiency. The General Proficiency syllabuses aimed to enable students to acquire concepts, principles, skills

and competencies required to obtain a sound foundation for further study of the particular subject area. The Basic Proficiency subjects were designed to provide skills and attitudes associated with secondary courses in specific subjects. The scheme was intended for students who wished to study subjects at secondary level but who did not intend to study the subjects at higher levels. The CXC designed common syllabuses for the two proficiencies, with one paper in common, and the other components catering to different levels of intellectual demand.

Attractive as the solution seemed when designed, and there remain persuasive and cogent arguments in its favour, the Basic Proficiency was never a complete success. Although the arrangement did achieve some of its aims, the major one was never realised because the school population has mainly by-passed the examination. By failing to provide an avenue to employment, which had less to do with the quality of the examination than with the prevailing economic conditions, the Basic Proficiency failed to meet the test of parity of esteem. From the pedagogical perspective, it has barely fulfilled the aim of moderating early specialisation. This was to be accomplished by introducing General Proficiency candidates to subjects at a lower level of demand and, in so doing, encouraging them to seek a more rounded education.

One directive to the Council that was very much ahead of its time was to integrate technical and vocational subjects with academic ones. This led to the adoption of the Technical Proficiency category of examinations, which was and is the basis for further academic study as well as a route to providing competency in particular skill areas. The Technical Proficiency syllabuses enable students to acquire skills that serve as a foundation for further study and training, for example in the business sector. The qualifications obtained are pre-technician and have the same status as the General Proficiency qualifications. The Technical Proficiency scheme reflects the importance attached by policy makers, employers and the public for young people to acquire the foundation of a wide range of skills needed for a changing labour market. Here again, however, the success has only been partial because the examination is not the only determinant of this. In the final analysis, the matter has to be resolved by the attitude of the society in which the schools and the Council exist, and an inherent conservatism in Caribbean Society has made the CXC's innovations difficult to implement.

At the outset, the CXC made the decision to use criterion-referencing rather than norm-referencing, and to make school-based assessment an integral part of the testing policy. Criterion-referencing was in practice not easy to achieve. Not only do old habits die hard, but the desire of parents and children to have a certificate which had international currency from the

beginning led to an indirect but clear indication from one of the major supporting governments that the General Proficiency should be seen as equivalent to the GCE 'O' level examination, which was itself at that time norm-referenced.

To achieve its goals, the Council contracted UK Chief Examiners, mainly from Cambridge, during the formative years to participate in the paper setting, moderating, marking and grading. In this respect, as with other aspects of administration, undoubtedly the Council was right to seek help overseas, as it also did with the Educational Testing Service in Princeton, USA. The need for help was never questioned. What the Council did not want was an institutional relationship with Cambridge of the type which the West African Examinations Council had negotiated.

Other help from Cambridge came in the form of training of markers, which started before 1979 and took the form of the marking in Barbados of some 'O' level scripts by Caribbean teachers under the supervision of Cambridge examiners. The goal of inducing confidence in sceptical persons, or at least politicians subject to lobbying by such persons, required the overseas chief examiners to certify in writing that the boundaries for Grades I and II were drawn where they would have been drawn by them had they been grading for their overseas boards. The move to a criterion-referenced system was thus the subject of constant debate in the early years, and although this is now less intense, especially because criterion referencing has been increasingly adopted by overseas boards, the fact that CXC's examinations are criterion-referenced has to be constantly brought to the attention of paper setters and graders.

School-based assessment was one of the banners of innovation under which the Council marched in its formative years. It was a frequent boast and pardonable exaggeration that in implementing the idea, the CXC was ahead of the English boards. However, the innovation required Council staff to engage in demanding forms of moderation, and teachers have grown increasingly restless as the number of subjects demanding school-based assessment has grown. The teachers claim to be burdened beyond tolerable limits by the number of assignments they have to mark and record. However, the Council remains fully committed to school-based assessment, and efforts are constantly made to assist schools and teachers with its implementation.

The decision to use a criterion-referenced system influenced the decision on the grading system. The Council agreed to report results on a five-point overall grade, on the grounds that the smaller the number of grades employed, the less complex would be the task of carrying forward criteria and grade boundaries from one year to the next. For purposes of equating

with the overseas ABC grades, the CXC Grade I was assigned equivalency with A and Grade II with B and C combined. The equating exercise had the unfortunate effect of placing a question mark on CXC's Grade III, which from the outset had been defined within the CXC criterion-referenced framework as being an acceptable grade for some forms of further study and for employment. However, in promoting the worth of a Grade III, CXC has succeeded to a greater extent than in the other innovations. This is because the governments of Barbados, Guyana and Trinidad & Tobago have accepted the grade as meeting their requirements for employment in the civil service. The private sector in the meantime remains ambivalent, and its recruiting officers seem generally to pay little attention to the nuances of certificates.

In addition to the five-point overall grade, the Council decided to provide information on candidates' strengths and weaknesses through the use of profiles. Grades I-V were thus accompanied by profiles A, B, C and D representing respectively above average, average, below average, and not assessed. Grades V and D were both recorded as N/A, meaning that the candidate has not provided the examiners with enough evidence to permit an assessment. Because of difficulties in harmonising five overall grades and four profile grades, especially in relation to harmonization at Grades I to III and A, B and C, the Council decided from 1998 to report on a six-point scale for both grades and profiles.

A major development launched in the mid-1990s after extensive consultations in the 1980s, is the establishment of a Caribbean Advanced Proficiency Examination (CAPE) which has been designed to replace the Advanced ('A') level examinations set by the Cambridge and London examinations boards. The architects created a unified system of certification of both examined and accredited courses designed to encompass current arrangements in the 'A' level classes, and to serve equivalent stages of programmes in community colleges and other tertiary institutions across the region. The development of this examination was facilitated by a grant of US$3 million from the European Union. The project funded by this grant was launched in 1996 in order to allow the new examination to be offered from 1998.

Also worth mentioning is that the CXC gives some assistance to governments in the construction of national examinations. Two examples are the Common Entrance Examinations set in Trinidad & Tobago (see Chapter 11) and in St. Lucia. These activities to some extent resemble the support given to national bodies by the South Pacific Board for Educational Assessment. Two countries in region — Jamaica and St. Kitts & Nevis — operate national secondary school leaving examinations which parallel the CXC

ones. CXC has given occasional professional advice to the Jamaican Ministry of Education on its examinations. Both Jamaica and St. Kitts & Nevis have benefitted from the many workshops organised by CXC to provide training in question-setting and marking.

Growth and Regional Distribution of Examination Entries

The CXC started with five subjects in 1979, but by 1997 was providing examinations in 20 subjects at General Proficiency, 18 at Basic Proficiency and three at Technical Proficiency. Technical and vocational subjects accounted for 11 of the total in the General Proficiency examination, 11 in the Basic Proficiency, and all of the Technical Proficiency subjects. Candidate entry for the main sitting in May/June reached nearly 98,000 in 1996. Overall subject entries exceeded 354,000.

CXC additionally offers examinations in January in a limited number of subjects. In 1997 they were English, Mathematics, Principles of Business, and Principles of Accounts. In 1996, candidate entry in the January examinations was 10,586.

Table 12.2 shows the regional distribution of candidate entries. By far the largest numbers were from Jamaica and Trinidad & Tobago, each of which provided over a third. At the other end of the scale, in the June examination six of the 16 Participating Territories, and also the two External Territories, each provided less than 1 per cent. The figures were not completely proportionate to population sizes in the countries concerned. For example, Jamaica had nearly twice the population of Trinidad & Tobago, but had similar numbers of candidate entries. Likewise, Barbados and Belize had similar population sizes but sharply differing proportions of candidates. The differences partly reflected variations in secondary school enrolment rates, but also variations within the countries in access to the examinations of other boards. For example, large numbers of candidates in Jamaica continued to take examinations set by UK and other examining boards rather than by the CXC.

Recognition, Security and Integrity of the Examinations

When the CXC was established, one of the principal concerns of parents, teachers and students, and hence of the participating governments, was whether the Council's certificates would be recognised by overseas universities, and in particular those in Canada, the UK and the USA which have been destinations for further education by many Caribbean students. The acceptance of the certificate by the University of the West Indies and the University of Guyana was assured by involving their staff in syllabus development from the beginning.

Table 12.2: Candidate Entries by Territory in CXC Examinations, January and June 1996

	January Examination		June Examination	
	Number	%	Number	%
Participating Territories				
Anguilla	63	0.6	162	0.2
Antigua & Barbuda	121	1.1	993	1.0
Barbados	897	8.5	6,296	6.4
Belize	20	0.2	1,821	1.9
British Virgin Islands	11	0.1	260	0.3
Cayman Islands	0	0.0	313	0.3
Dominica	204	1.9	1,440	1.5
Grenada	260	2.5	2,248	2.3
Guyana	389	3.7	7,562	7.7
Jamaica	3,762	35.5	37,284	38.2
Montserrat	9	0.1	123	0.1
St. Kitts & Nevis	131	1.2	812	0.8
St. Lucia	794	7.5	2,730	2.8
St. Vincent & Grenadines	206	1.9	2,098	2.2
Trinidad & Tobago	3,633	34.2	33,199	34.0
Turks & Caicos Islands	85	0.8	289	0.3
External Territories				
St. Maarten & Saba	1	0.0	81	0.1
TOTAL	10,586	100.0	97,711	100.0

Source: Caribbean Examinations Council (1996), pp.8, 9.

Parents and students with their eyes focused overseas were placated (or at least not provoked into public statement of anxiety) by the employment of chief examiners from the UK. However, more had to be done. In 1978, as soon as it appeared that there was adequate documentation to support requests for recognition, letters were written to the boards in the UK and to universities in Canada. The responses were gratifying, though not uniform. The majority accepted General Proficiency Grades I and II for entry to courses. The University of London began by accepting only Grade I, though added Grade II some time later. The University of Cambridge said that it would be guided by the practice of other UK boards. The Canadian universities one by one accepted both CXC grades for matriculation purposes. In the USA, recognition of grades was effectively achieved

through CXC's membership of the American Association of College Registrars & Admission Officers (AACRAO). The Association is a clearing house for information about the worth of unfamiliar qualifications. By explaining what the CXC was doing and gaining the confidence of the AACRAO, the Council's certificate surmounted the barriers created by the differences between the US system of secondary education and that of the English-speaking Caribbean. By the 1990s, recognition of CXC qualifications had ceased to be problematic. Holders of CXC certificates have become the living proof of the quality of CXC grades.

If recognition of certification was perhaps the foremost concern when the CXC was founded, the security and integrity of examinations were not far behind. In these small societies, it is difficult for anything to remain a secret for long, and there was an understandable fear that the CXC's papers would suffer from leakage. In the event, the number of security breaches has been small, though in the absence of comparable data from other examining boards the media and the public have tended to exaggerate their occurrence.

The measures taken to ensure the security and integrity of the Council's examinations include requirement that:

- at the time of service, chief examiners must not be classroom teachers;
- examination papers are printed by security printers overseas;
- papers are marked at centres, to which markers are brought; and
- the examinations are administered in each territory through a local Registrar who, except in Jamaica, is a civil servant in the Ministry or Department of Education. In Jamaica, the examinations are administered by an overseas examination office, which carries out a similar function for the London and Cambridge examining boards.

The Council began with one centre, and now has four. The intention is to involve in a secure manner as many teachers as possible from the different territories. This is seen as a way to promote in the classrooms first-hand experience of the examination process, and also a way to give teachers an opportunity to exchange information and understanding.

The Council organises periodic meetings with Registrars to keep abreast of the problems of administering the examinations in the different territories. Each local Registrar is responsible for registration of candidates, distribution of question papers, employment of invigilators and supervisors, the movement of school-based assessment records and assignments, the movement of scripts to marking centres, and the distribution of certificates.

Finance

The Council gains its annual revenue from two main sources: examination fees and government subventions. In 1996, income from examination fees, in Barbados dollars, was BDS$11,609,680 (US$5,804,840) while income from subventions was BDS$4,987,000. Earnings from consultancies and related services were small, but were projected to become more significant in the future. In addition, the Council receives periodic support from external aid agencies, including the Caribbean Development Bank and the Commonwealth Fund for Technical Cooperation.

The fees of all candidates in some Participating Territories are paid by their governments. However, other candidates must pay their own fees. The latter group includes Jamaica, which, as noted above, has the largest number of candidates. For political reasons, for an extended part of the 1990s the Council had to freeze fees even though an increase could have been justified on economic grounds. The level of government subventions had been held constant for an even longer period, i.e. since 1981. Against this background, the fact that the CXC is a vibrant organisation with major achievements to its credit is all the more remarkable.

A further complexity has arisen from the fact that some currencies in the region, particularly those of Jamaica and Guyana, have not been freely convertible for much of the CXC's history. However, the governments of both countries have been very cooperative, and have made their payments in Barbados dollars when required. On the occasions of large devaluations, the Council worked out a payment schedule which permitted the relevant governments to meet their obligations over time. The Jamaican government was unable to make a similar arrangement with the Cambridge and London examining boards, which assisted the Jamaican authorities to see the value of the Caribbean partnership. Moreover, the CXC keeps its fees permanently below those of UCLES, which helps retain demand for CXC examinations.

Table 12.3 presents a breakdown of expenditure in 1996. As might be expected, salaries of permanent staff were the largest item, though they only comprised 30.1 per cent. The other large items were the marking exercise, fees to examiners, and printing of examination papers. The fact that meetings consumed only 4.5 per cent deserves emphasis. To keep costs down, the full Council meets only once a year. The Administration & Finance Committee and the Sub-Committee of the School Examinations Committee each meet about three times a year; and subject panels meet according to fixed schedules either to review syllabuses when needed, or for special purposes relating to the examinations. The figure for meetings in the CXC budget does not include the extra costs that governments may incur

when hosting meetings, but it includes all other expenses for meetings.

Table 12.3: Operational Expenditures, Caribbean Examinations Council, 1996 (Barbados Dollars)

	BDS$'000	%
Fees to Examiners	1,332	9.0
Examination papers and printing	1,210	8.2
Marking exercise	3,073	20.7
Salaries of permanent staff	4,466	30.1
Salaries of seasonal staff	672	4.5
Stationery, telephones, advertising	376	2.5
Office accommodation	390	2.6
Postage and local travel	335	2.3
Meetings	661	4.5
Computer services	408	2.8
Research and development services	184	1.2
Consolidations and new development	1,022	6.9
Non-recurrent	200	1.3
Miscellaneous	494	3.3
TOTAL	14,823	100.0

Source: Caribbean Examinations Council (1996), p.27.

Conclusions

Since its establishment in 1972, the CXC has been a major embodiment of regional cooperation. The geographic, political, social, nationalistic and individualistic problems which seem to bedevil attempts at cooperative enterprises everywhere have not been absent from the CXC. However, the CXC has now established itself as a major institution within the domain of education in the region. CXC's success, and its many achievements to date, are a tribute to the belief in the organisation, and a commitment to it, shown by the extended CXC family, embracing policy-makers, staff, examiners, markers, principals, teachers and countless volunteers providing services of one kind or another.

Among the significant developments in the first 25 years of the Council's history have been development of the General, Technical and Basic Proficiency examinations and, more recently, the Caribbean Advanced Proficiency Examination. Early concerns about standards and external

recognition of qualifications were dealt with effectively during the 1970s and 1980s. Politically, the CXC has expanded its influence by welcoming Anguilla as a full Participating Territory and St. Maarten and Saba as External Territories.

At the same time, the CXC has sought, and largely found, an appropriate niche in the balance between national and metropolitan examinations. Some countries of the region have decided to operate their own national examinations at various levels, and in some case have been assisted in this task by the CXC; and in some countries metropolitan examining boards, including those of the Universities of London and of Cambridge, have continued to operate alongside the CXC. As the context and the needs continue to evolve, the CXC will also continue to evolve. Meanwhile, as a body which is now over a quarter of a century old, the CXC has both developed a maturity and earned respect as a way through which small states can collectively meet needs which the majority would be unable to achieve on their own.

Chapter 13:

South Pacific Board for Educational Assessment

Trevor Rees & Gurmit Singh

This chapter documents the history and explains the mode of operation of the South Pacific Board for Educational Assessment (SPBEA). It observes the complexity of the environment within which the Board works, and the ways in which the SPBEA has helped operate with a wide range of partners.

The constitution of the SPBEA distinguishes between members and observers. The Board has 11 members and one observer. Ten of the members are countries, namely Fiji, Kiribati, Marshall Islands, Nauru, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu and Samoa. The eleventh member is institutional, namely the University of the South Pacific (USP). The observer is Niue.

The member countries are all small but are diverse in their population sizes and colonial histories (Table 13.1). The population range is from 2,000 in Tokelau to 750,000 in Fiji. The 10 countries include nine sovereign states and one dependency. Among the sovereign states, four were dependencies of the United Kingdom (UK), one was a dependency of New Zealand, one was a dependency of the USA, one was an Australian dependency, one was an Anglo-French condominium, and one was a monarchy over which the UK had control of foreign affairs. These colonial histories have left legacies in education as well as in other sectors. Influences from New Zealand remain strong in the educational affairs of many Pacific-island states, including ones which were never formal dependencies of New Zealand. Influences from Australia are also significant.

The SPBEA serves its members in different ways. For six of them — Kiribati, Solomon Islands, Tonga, Tuvalu, Vanuatu and Samoa — it operates a regional examination leading to the Pacific Senior Secondary Certificate (PSSC). In this respect the role of the SPBEA is similar to that of the Caribbean Examinations Council and West African Examinations Council. However, the SPBEA did not originally operate a regional examination. Rather, its principal role, which it still plays today, was to support the national examinations of its member states.

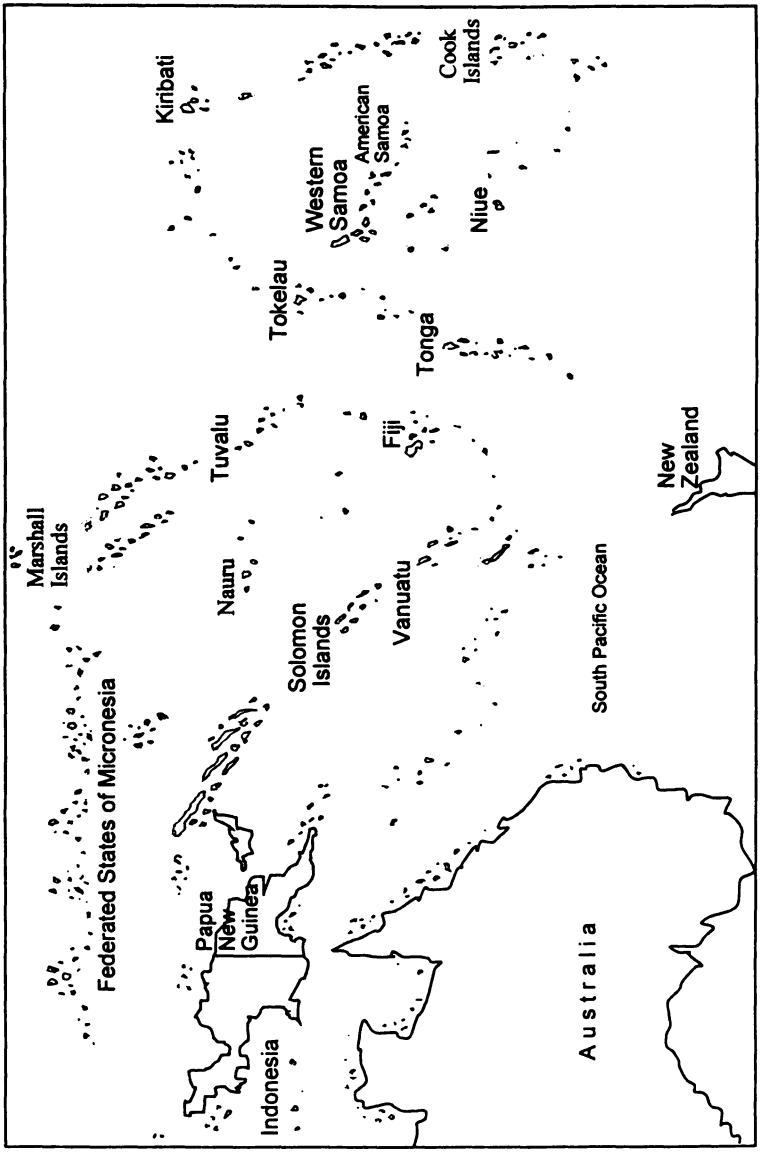

Marshall Islands
Federated States of Micronesia
Kiribati
Tuvalu
Nauru
Tokelau
Western Samoa
American Samoa
Cook Islands
Niue
Tonga
Fiji
Solomon Islands
Vanuatu
New Zealand
Papua New Guinea
Indonesia
Australia
South Pacific Ocean

Table 13.1: Populations, Constitutional Statuses and Colonial Histories of SPBEA Member States

Country/ Territory	*Population mid-1990s*	*Present Constitutional Status*	*Outline Colonial History*
Fiji	796,000	Independent sovereign state	UK (1874-1970)
Kiribati	76,000	Independent sovereign state	UK (1892-1979)
Marshall Islands	45,000	Independent sovereign state	Germany (1886-1918); Japan (1918-47); USA (1947-86)
Nauru	10,000	Independent sovereign state	Germany (1888-1914); Australia (1914-68).
Samoa	163,000	Independent sovereign state	Germany (1899-1914); New Zealand (1914-62)
Solomon Islands	346,000	Independent sovereign state	UK (1893-1978)
Tokelau	2,000	Dependency of New Zealand	UK (1889-25); New Zealand (since 1925)
Tonga	93,000	Independent sovereign state	Treaty gave UK control over foreign affairs (1901-70)
Tuvalu	9,000	Independent sovereign state	UK (1892-1978)
Vanuatu	161,000	Independent sovereign state	Anglo-French Condominium (1906-80)

Note: The outline history excludes many details. For example, it also omits mention of Japanese occupation, e.g. of Solomon Islands 1942-44; and during the 19th and early 20th centuries many islands were affected by lesser treaties which are not mentioned here.

Sources: Commonwealth Secretariat (1995); Douglas & Douglas (1989).

Origins and History of the SPBEA

The Pre-history of the Board

Up to the 1970s, most island states in the South Pacific used metropolitan examinations. In the British Solomon Islands Protectorate, the New Hebrides (now Vanuatu) and the Gilbert and Ellice Islands (now Kiribati and Tuvalu), most students took the Cambridge Overseas School Certificate (COSC) examination administered by the University of Cambridge Local Examinations Syndicate (UCLES). In contrast, most candidates in Tonga, Niue and

Samoa took the New Zealand School Certificate (NZSC) examination. Many schools in Fiji presented candidates for the Cambridge examinations in the 1960s, but transferred later to the NZSC. One reason was that the school year was the same in both New Zealand and Fiji, and the examinations were therefore administered at a more convenient time (Tavola 1991, p.70).

During the late 1960s, a groundswell of opinion developed in favour of examinations oriented more closely to the circumstances of the island countries. The three main factors contributing to this groundswell were:

- an increase in the size of Form 5 populations, which meant that more students left school at that stage and the examinations could no longer be seen mainly as a selection device for further education;
- curriculum development activities in the region, which demonstrated the advantages of locally-relevant objectives and resources; and
- the movement towards, or attainment of, sovereignty in a number of countries, and a consequent desire for national aspirations to be reflected more clearly in education systems.

The South Pacific Commission (SPC), which had been founded in 1947 to give technical advice and to disseminate social, cultural and economic information throughout the region (Douglas & Douglas 1989, p.658), organised periodic regional seminars for Directors of Education. The second such seminar, in 1964, resolved (a) to set up a working party to investigate the possibility of establishing a regional examination board, and (b) to request the metropolitan examining boards to provide alternative papers for Pacific Island candidates. While the nature of UCLES activity did not change radically, by the time of the next SPC seminar in 1969, the authorities in New Zealand had indicated willingness to make special arrangements. However, the introduction of these arrangements was delayed in order to avoid interference with a regional curriculum development unit funded by UNDP/UNESCO. This unit was intended to produce a new and comprehensive curriculum for Forms 1 to 4 in a number of countries, and project planners were considering extension to Form 5. The unit was housed at the University of the South Pacific, which had been established in 1968 with membership of 11 countries and territories (Caston 1993; Crocombe & Meleisea 1988).

The possibility of a regional examination board was again considered in the early 1970s by John Deakin, who was a former Registrar of the West African Examinations Council and at that time was employed in London by the Centre for Educational Development Overseas. Deakin visited Fiji in 1971 as a consultant to the Fiji government, and was asked in addition to his

other duties to consider the desirability and feasibility of setting up a South Pacific Examination Board. After some consultation, he concluded that there was a need for a regional examination at the upper secondary level based on local prescriptions. He considered, with some reservations concerning costs and maintenance of standards, that operation of a regional board would be both desirable and feasible. Deakin returned in 1973 at the invitation of the USP Vice Chancellor. After further consultation and investigation, Deakin confirmed his original proposal, and made a formal recommendation that the Board be created under the aegis of the University of the South Pacific.

Deakin's 1973 report was discussed widely in the region. Some respondents favoured the idea, but others were opposed. Those in favour accepted the logic of Deakin's proposals. Opponents were concerned about possible university domination, the effect of regional awards on national education objectives, and the financial implications. No agreement was reached, and the proposal was shelved.

By this time, however, it was clear that the UNDP/UNESCO project was unlikely to extend to Form 5. In 1973, the New Zealand Minister of Education announced that alternative papers for the NZSC examination, designed to be more suitable for Islands candidates, would be prepared as a matter of priority. He acknowledged that the initiative was not an ideal long-term solution, but wished to show responsiveness to the regional request. The New Zealand government's Director-General of Education followed up the Minister's announcement by writing to the Directors of Education in the Pacific. He stated that the alternative papers would be optional and of equal standing with the New Zealand papers. He indicated further that the School Certificate facility would continue to be available to South Pacific students so long as it was useful, or until suitable alternative arrangements could be made.

These proposals were duly considered by Directors of Education at subsequent SPC regional seminars. In 1974 the Directors requested the New Zealand authorities to prepare papers tailored to the needs of the Island countries in English, Science, Mathematics and Social Science. Meanwhile, the Directors considered ways to enhance national capacity to support governments wishing to operate their own examination systems. A 1975 SPC sub-regional meeting recommended the formation of a South Pacific Board for Education Co-operation with this goal in mind. This body was expected to serve the 11 countries of the USP region rather than 27 countries served by the South Pacific Commission (which included French Polynesia, New Caledonia, Papua New Guinea, and various other places). An Institute of Education had been created at the USP, and was seen as the potential centre for some of the envisaged tasks.

In 1978, a meeting convened by the SPC in Fiji took the proposals to the next stage. The meeting decided that:

- a body should be created to assist countries to develop assessment procedures towards national education certificates, with this task being reflected clearly in the title South Pacific Board for Educational Assessment;
- the Board should be autonomous and located in Suva, Fiji;
- initial expenditure should be met by the South Pacific Commission;
- the SPC would approach the governments of Australia, New Zealand and the UK, seeking aid to meet 75 per cent of the recurrent budget;
- governments in the region would meet the remaining costs of the recurrent budget (initially shared on an equal basis, but revised in 1987 to reflect varying population sizes); and
- the programme of alternative papers being provided for South Pacific candidates in the NZSC examination would be investigated in relation to the functions of the Board within two years of the Board beginning operation.

The governments of Australia, New Zealand and the UK did agree to initial funding, and the government of Fiji provided a building. In 1979 an agreement to establish the Board was signed by representatives of the governments of Cook Islands, Fiji, Kiribati, Solomon Islands, Tonga, Tuvalu, Nauru, Niue and Samoa. With ratification by eight governments, the Board was finally established in 1980. The governments of Nauru and Niue decided not to participate at that time but to keep the question of involvement at a future date under review.

First Decade

The Board got off to a good start, though soon encountered major problems of staffing, uncertainty of mission, and internal dissent (Rees 1991). One question concerned the boundaries in the roles of the SPBEA and of the Institute of Education at the USP, which was also mandated to undertake regional work in educational assessment. In 1981, the Board agreed with the Institute that the former would be concerned with national assessment while the latter would focus on the classroom level. While these boundaries overlapped, the formula was mutually acceptable and set the stage for continued cooperation between the two bodies.

In 1982, the Board was given further reason for existence by an announcement by the New Zealand government that the South Pacific Option papers in the NZSC examination would be withdrawn in 1985. Such

action effectively signalled the end of the NZSC in most of the Board countries, and raised serious questions about national examinations at that level. SPBEA visits to member countries had suggested that most members required specialist training in design and development of examinations. The intended withdrawal of the South Pacific Options accentuated the need for rapid and effective in-country training to enable credible alternatives to the NZSC to be in place by 1985. Some participants suggested at this time that the SPBEA might take on the role of an Examinations Board at the Form 5 level, though the idea was not in fact implemented.

In the event, the New Zealand authorities were persuaded to postpone the abolition of the South Pacific Options, first until 1987 and then until 1988. These postponements were made at the request of several member states through the Board. However, a separate decision in 1985 also to end the New Zealand University Entrance (NZUE) examination was implemented in 1986. This again arose chiefly because of developments within New Zealand itself. The authorities in New Zealand were conscious of responsibilities to South Pacific countries, and because of that did indicate that until 1988 they would provide separate interim examinations for the countries that had participated in the NZUE, i.e. Cook Islands, Fiji, Tonga and Vanuatu. However, the authorities also stressed that they would not permit the needs of the South Pacific countries to delay reform in New Zealand itself.

Postponement of the abolition of the South Pacific Options and willingness to make interim arrangements following the dismantling of the NZUE was especially desirable because in 1984 the Board itself went through a crisis. Following allegations of serious breach of honesty and confidentiality, three members of the four-person secretariat, including the Director, were dismissed. In the same year, for unrelated reasons, the UK funding which had covered 25 per cent of the budget was terminated.

Because of these factors, the Board was in danger of collapse even before it had demonstrated its usefulness. However, the governments of Australia and New Zealand remained firm in their support, and the need for a Board to conduct regional work remained self-evident to most observers. Fortunately, 1985 brought replacement staff of high calibre, and a renewed sense of purpose and professionalism. A review of the Board which had been commissioned following the 1984 events gave unequivocal support and also set out a variety of assessment options (Elley 1985a). Some financial assistance was gained from the Commonwealth Fund for Technical Cooperation, and subsequently also from UNDP/UNESCO. Morale within the Board was also improved in 1985 by an indication from the government of Tokelau that it intended to apply for Board membership. In due course this

application was approved, and Tokelau joined the Board in 1986.

Among the recommendations of the Elley report was an emphasis on regional examining. While this received broad support, however, perspectives were not united. In 1985, the government of Fiji indicated that when the New Zealand papers ceased to be available, it intended to operate its own examinations. This was a blow to those who had hoped for a common Form 5 examination, especially because Fiji's non-participation seriously undermined the potential visibility, acceptability and financial viability of such an examination.

At the Form 5 level, therefore, the continuing role of the SPBEA was seen as support for national initiatives. The government of Tonga established its own School Certificate examination, and the SPBEA assisted the governments of Kiribati, Tuvalu and Samoa to find a set of existing New Zealand papers which could be combined with SPBEA ones in English, History and Geography to meet at least short term needs. Under this rather complex arrangement, the SPBEA also agreed to process results and issue certificates bearing the names of the countries concerned.

Meanwhile, discussion continued on the question of replacement for the NZUE examination. The eventual result of these negotiations was the Pacific Senior Secondary Certificate. The PSSC was launched in 1989 for candidates in Kiribati, Solomon Islands, Tonga and Samoa. In addition, the PSSC also now serves candidates in Tuvalu and Vanuatu.

The Second Decade

The second decade commenced with further expansion of membership of the Board. Vanuatu joined in 1990, Marshall Islands joined in 1991, and Nauru joined in 1994. The addition of Vanuatu raised the question of language skills among SPBEA staff, for Vanuatu's colonial legacy included francophone as well as anglophone assessment systems. Marshall Islands was anglophone, but its inclusion in the membership was significant for different reasons. As a former dependency of the USA, Marshall Islands had a rather different colonial history and orientation in its education system (Relang 1992). Moreover, the location of Marshall Islands north of the equator indicated that the SPBEA was extending its influence beyond the narrowly-defined boundaries of the South Pacific.

In 1991, a major review of the SPBEA's work was commissioned in order to assess past achievements and weaknesses and act as a guide to the future. The review (Renwick & Eyers 1991) applauded the role that the Board had played during the 1980s. Noting the ways that the patterns had evolved with the expansion of national education systems and the phasing out of the New Zealand examinations, the report underlined the value of the

SPBEA as a source of expertise. Indeed, the report added (p.11), "if SPBEA did not already exist it would by now have become necessary to invent it".

The review suggested (p.3) that the most significant development in the SPBEA's history had been the decision to become an examination authority. That comment certainly had some validity, for the PSSC examination added a major and highly visible dimension to the work of the Board. However, the PSSC examination serves only six of the Board's member countries, and the Board has continued to provide support and training for national examinations at primary as well as secondary levels for all its member countries.

The Renwick & Eyers review also commented on the role of externally-funded projects in the work of the board. The most important of these was a UNDP/UNESCO project launched in 1987 to support national school certificate examinations, establish the regional Form 6 examination, provide training in examination techniques, establish a regional item bank of examination questions, develop standardised test batteries, and improve the predictive value of selection examinations. These goals were clearly within the remit of the Board, and the project provided valuable funding and staff. Other projects were funded by the Commonwealth Fund for Technical Co-operation, the UK Overseas Development Administration, and various other bodies. Among misgivings expressed in the Renwick & Eyers review was that these and other externally-funded projects were not clearly separated in financial accounts, and that the supplementary activities sometimes led to the danger of distraction from the main goals.

The Board took this observation seriously, and since that time the accounts and other reporting mechanisms have been organised to show more clearly the nature of external inputs and the place of projects as opposed to core activities. At the same time, the SPBEA has continued to value the externally-funded project work, which it sees both as an expression of the sponsors' confidence in the Board and a source of both personnel and other resources for Board activities.

Another major development at the beginning of the SPBEA's second decade was the decision by the USP Council to cease teaching its Foundation Year course on the USP's main campus. When the USP had been founded in 1968, very little Form 6 teaching was being conducted in the region outside Fiji. Accordingly, the USP Council decided to teach its own courses on the main campus. The two-year course mirrored the academic standards of the New Zealand secondary school leaving qualifications. The first year, which came to be called Preliminary, was equivalent to the NZUE examination, and the second, Foundation, was equivalent to the New Zealand Universities Bursary & Scholarship Examinations year. The

Preliminary Year was phased out from the USP in the mid-1980s; and when the Fiji government expanded the operation of Form 7 classes in its own secondary schools, the viability of the Foundation Year at USP was called into question. The USP continued to offer the Foundation Year as an extension course, and while individuals in some member countries found that less satisfactory, they were ultimately given little choice. The SPBEA came into the picture in so far as its role was to assist member countries with their examination processes, and this included the new Fiji Form 7 Examination.

Mechanics of SPBEA Operation

The major examinations set in SPBEA member countries during 1995 are summarised in Table 13.2. The table shows considerable diversity, and underlines the complexity of the task which the Board is mandated to undertake.

The Board's secretariat in the mid-1990s consisted of a director, five professional officers, and six support personnel. For specific tasks, the core officers may be complemented by recruitment of consultants. The SPBEA constitution stipulates that where qualifications and experience are comparable, preference in filling vacancies will be given to nationals of the region. The PSSC workload, especially that relating to setting examination papers in various subjects, conducting examinations, marking scripts, etc., is contracted out to selected examiners and other professionals. The actual administration of examinations in each location is also shared with user countries.

In common with similar examinations, the PSSC follows an annual cycle which includes periodic changes to subject prescriptions, test-paper writing, moderation, printing, and distribution. When the examination has been conducted, the scripts must be marked, results processed, and certificates issued. After item analyses and other computer-derived data have been consulted, a full report on performance is sent to all user countries.

The SPBEA has gradually increased its self-financing components, and funding specifically for the PSSC is mainly through candidates' fees (paid in some instances by the governments of participating countries). Close attention is given to curriculum developments in the region and further afield, including the growing role of teacher-supplied internal assessments, and pains are taken to keep the examination as up to date as possible.

National examinations around the region are the responsibility of examining units within ministries. These units rely heavily on a limited pool of local expertise that, as in other small states, is spread to cover a wide spectrum of other administrative functions. Training within such units

Table 13.2: Major Examinations in the 11 SPBEA Member States, 1995

Country/Territory	Name of Examination	Year/ Grade	Number of Candidates
Cook Islands	Cook Islands Year 6	6	331
	Cook Islands School Certificate	11	210
	New Zealand School Certificate	12	186
	New Zealand Form 6 Certificate	13	85
	New Zealand Bursary Examination	14	30
Fiji	Fiji Intermediate Examination	6	16,200
	Fiji Eighth Year Examination	8	13,500
	Fiji Junior Certificate	10	11,600
	Fiji School Leaving Certificate	12	9,000
	Fiji Form 7 Examination	13	2,000
Kiribati	Common Entrance Examination	7	2,000
	Kiribati Junior Certificate	10	600
	Kiribati National Certificate	12	400
	Pacific Senior Secondary Certificate	13	100
	Foundation Programme	14	30
Marshall Islands	High School Entrance Test	8	1,330
Nauru	Nauru Primary School Certificate	6	170
Solomon Islands	Solomon Islands Secondary Entrance	6	12,000
	Form 3 Examination	9	2,000
	Solomon Islands School Certificate	11	1,200
	Pacific Senior Secondary Certificate	12	150
	Foundation Programme	13	40
Tokelau	Tokelau Form 5 Examination	10	30
Tonga	Secondary Entrance Examination	8	3,500
	Tonga School Certificate	11	1,900
	Pacific Senior Secondary Certificate	12	820
	New Zealand Bursary Examination	13	120
Tuvalu	Tuvalu Year 8 Examination	8	190
	Fiji Junior Certificate	10	40
	Tuvalu School Certificate	11	40
	Pacific Senior Secondary Certificate	12	40
Vanuatu	Vanuatu Year 6 Examination	6	4,490
	Vanuatu Year 10 Examination	10	950
	Pacific Senior Secondary Certificate	12	160
	New Zealand Bursary Examination	13	80
Western Samoa	Western Samoa Year 8 Examination	8	2,330
	Western Samoa Junior Sec. Certificate	11	3,030
	Western Samoa School Certificate	12	2,350
	Pacific Senior Secondary Certificate	13	690
	University [of W.S.] Preliminary Year	14	n.a.

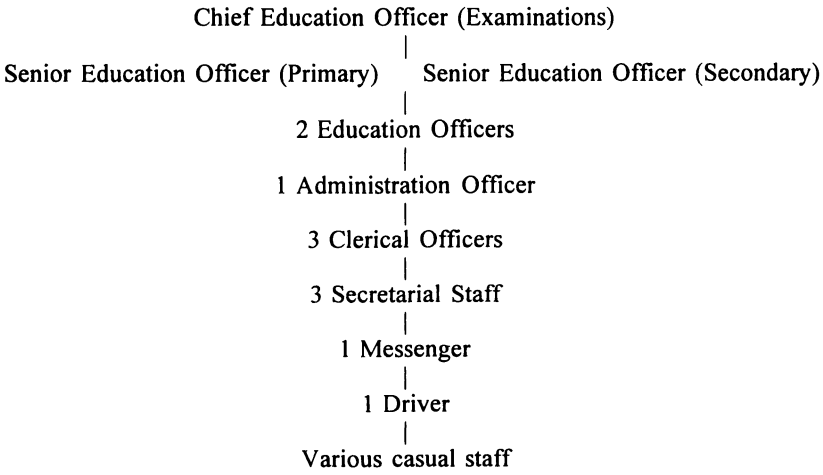
Notes: Data for Cook Islands are included because in 1995 it was still an SPBEA member. Cook Islands withdrew from SPBEA membership in 1996. Data for Vanuatu refer only to the anglophone system. In 1995, the country now officially called Samoa was officially called Western Samoa.

is generally on the job, unless a person has been previously identified for assessment work and has been sent overseas as a preparation. Training has also been provided by the University of the South Pacific and in workshops conducted by the SPBEA.

The national examination units in Pacific-island countries share several other features:

- They are small, and tend to concentrate on the administrative aspects of examining.
- They collaborate closely with curriculum developers and practising teachers in developing examination papers. This collaboration operates within either a panel system in which members meet in a group (for example in Fiji) or an examiner/moderator system in which draft examination papers are produced by examiners working alone and then passed to moderators (for example in Tonga).
- The units generally fall under the aegis of the national education system itself (though Vanuatu, where an Examinations Board operates, is an exception), and therefore have limited autonomy.

Figure 13.1: Structure of the Examinations Unit in one SPBEA Member Country, 1996



A typical national examination unit in the region would be made up of a number of education officers or teachers (designated as examination

officers) together with support staff and basic physical facilities and resources. One rather large unit, which runs five national examinations annually, is structured as shown in Figure 13.1.

One specific constraint arising from small scale concerns pre-testing. The general practice in the region is not to pre-test because in small societies security breaches are particularly liable to occur.

Local, Regional and International Recognition

Recognition of the formal credentials awarded in the Pacific involves a number of inter-related factors. Within countries, the value of a certificate may be judged by its subsequent utility. In many respects this means whether or not the credential can be used for entry to further education or to obtain employment. In Kiribati, Vanuatu, Solomon Islands and Marshall Islands, where secondary education is not yet universally available, by far the most important certificate for the majority of candidates is the one which allows the holder to proceed to secondary schooling. Selection examinations in such countries are under constant scrutiny by parents, whose dominant concern is fairness.

In the past, selection exercises probably left much to be desired from the standpoint of technical inputs into test papers and in procedural matters like the standardisation of marks. The arcane nature of the work, especially in a close-knit environment, held out possibilities for cheating and nepotism. Currently, with the increasing existence of trained examinations officers operating from assessment units, many of them equipped with computers, the selection process is generally seen by the public as 'contentious but fair'. Where cheating and other unprofessional conduct has come to light, this has sometimes resulted in the officers responsible being dismissed from their posts and even prosecuted.

Typically it is at the School Certificate level that the recognition of national qualifications has had most attention. The Pacific, in common with other parts of the world, has experienced credential inflation. Thus for example the holder of a Fiji Junior Certificate (Form 4) could until recently have reasonably expected to enter paid employment of some kind on the basis of the award. Today, the certificate has virtually no value in this respect, since societal expectations and those of potential employers have risen considerably. Nowadays, a school leaver would need to possess a certificate at the Form 6 level to seek a comparable job. An often overlooked aspect of this is that any local credential below a given level is acceptable only if it meets the internal needs of the country. Hardly anyone except intending migrants would take an overseas Form 5 examination. Thus the external recognition and acceptability of qualifications outside a

country is of little, if any, consequence.

One partial exception, which is particularly worth noting in the context of analysis of small states, is the fact that some Tuvalu students take the Form 4 Fiji Junior Certificate (Table 13.2). This, however, is not in order to secure international recognition. Rather, it reflects the personnel constraints of a microstate. The Tuvalu government directs students to take the Fiji examination simply because it does not wish to operate its own credential at this level. The example highlights the relativism of scale: Fiji (population 750,000) is small compared to New Zealand (3,455,000) or Australia (17,300,000), but it is huge compared to Tuvalu (population 9,000). Yet even the government of Tuvalu insists on operating its own school certificate at the Form 5 level.

The main user of national certificates at the regional level is the University of the South Pacific. The University recognises the Fiji School Leaving Certificate (FSLC), the Fiji Form 7 Examination and the Pacific Senior Secondary Certificate. Such recognition in the case of the Fiji examinations derives from the perception that the country has the resources to operate a credible certification process at this level. For the PSSC, the recognition derives from the status of the SPBEA. Candidates seeking admission to universities outside the region are generally able to use their qualifications in the same way as they can within the region.

In summary, issues of recognition are not as complex as might be imagined. At the primary/secondary selection point (where selection occurs), all is well so long as the public has confidence in such selection. Similarly, when School Certificates are almost exclusively used for national purposes, the public in a sense takes what is offered — something like the value of a national currency. At tertiary entrance level, recognition in the region and internationally takes the form either of the PSSC regional certificate or of national Form 6 awards like the Fiji FSLC.

Costs

The costs of examining in the region are difficult to estimate as a separate component of education budgets since practices vary considerably from country to country. In some states a block grant is given to an examination unit, out of which all costs of examining are to be met. Where shortfalls occur under this system, supplementary grants are sought but not always provided. Another arrangement, where examinations are not regarded as separate entities, is to consider the expenses of administering them to be part of normal annual education costs.

At the upper end of education systems, where examinations are considered to be of extra importance, candidate fees are charged. In some

cases these fees are paid by individual students, whilst in other systems such expenses are paid for by government. However, as noted by Renwick & Eyers (1991, pp.50-1):

> for as far ahead as anyone can see, activities such as the PSSC examination will cost vastly more to run than can be recouped from fees. Unit costs per candidate cannot avoid being very high compared with virtually every other examinations authority known to us.

Renwick & Eyers added (p.51) that one of the SPBEA's main responsibilities is to be responsive to the needs of its member countries.

> Given the very small size of the education administrations of its member countries and the problems they face setting up and running efficient assessment and data processing operations, the SPBEA Secretariat is likely to be called upon in unpredictable ways to provide 'fire fighting' services. In the spirit of co-operation to be found in the region, it is not an option to ignore such requests, but they add 'costs' to SPBEA which, in a world of perfect cost efficiency, would be passed on to the recipient administration.

Nevertheless, the SPBEA may be considered highly cost-effective in terms of the work done with a very small number of staff. The credit for this should chiefly go to the dedication and professionalism of the staff concerned. After the hiatus of 1984, the Board was fortunate to be able to recruit high calibre staff and to retain their services. One measure to ensure cost-effectiveness has been the policy to recruit personnel who have subject specialisms as well as substantial assessment experience and knowledge.

Through economies of scale, the SPBEA is able to deliver services at a much lower cost than would be incurred if national governments each tried to provide the services on their own. However, one ongoing problem has been to persuade governments of member countries to pay their annual dues in full and on time. Some governments do pay regularly, but others do not. In 1996, the government of Cook Islands withdrew from the SPBEA, citing the costs of membership, in the context of a domestic fiscal crisis and close ties to the New Zealand assessment system which meant that SPBEA inputs were relatively minor, as the main reasons. The Board has been able to secure inputs from donors of various kinds, and still receives two thirds of its income from the governments of Australia and New Zealand. However, the Board cannot rely on such assistance for the long term. Continuing effort is needed to show governments the value of the SPBEA, and to

persuade them to meet their financial obligations.

Political and Social Factors

Though not always stated explicitly, national identity and status provoked by political, social and cultural considerations have permeated all educational matters. One sees the reflection of these factors in the labels adopted by Elley (1985b) to describe the examination options he considered to be available to Pacific countries at that time. He used the expressions "whole-hearted nationalism", "whole-hearted regionalism" and "partial regionalism".

South Pacific countries have responded to those options in different ways. The government of Fiji took an aggressive localisation approach at an early stage. The Fiji Junior Certificate Examination, taken by Form 4 students, was introduced in 1955 to replace the Cambridge Overseas Examination (Tavola 1991, p.67). However, higher levels remained dominated by Cambridge and later by New Zealand examinations. The phasing out of the NZSC South Pacific Options and the NZUE, combined with domestic political factors, provided impetus for change. In 1985 the Minister of Education (quoted in Singh 1985, pp.114-5) set out the dominant motivation as follows:

> It is my view and that of Government, that the people of Fiji must have paramount say in the development of our curricula. Hence it is my intention to utilize all the skills available in this country. For the first time in 1989 all our examinations will be our own. And those who like to use fashionable terms, for them I might say, we would have been completely decolonised by that stage, in educational terms.

The Minister, presumably referring to Tuvalu in particular, recognised that Fiji played a service role for candidates from some other countries who took Fijian examinations. He indicated that he would still welcome external candidates, but that he intended to guard jealously the autonomy that he wanted for Fiji in its examination system. The Minister also recognised that assistance would be required with the process, and that part of this help might come from the SPBEA. However, he stressed, the SPBEA would not have any control over Fijian examinations. This sentiment was entirely acceptable to the SPBEA, which welcomed and supported the initiative (Rees 1985, p.75).

The government of Cook Islands also undertook early localisation of some examinations though, because the system is tied much more closely to New Zealand, did not follow this to higher levels. The Cook Islands School

Certificate (CISC) at Form 4 level was developed in the mid-1970s (Johnson 1985). At the outset, the certificate was ignored by students who were aiming for the New Zealand School Certificate at the end of Form 5, with the result that the CISC gained the reputation of being only a second-class qualification. Because of this, the government decided to require all students to sit the CISC, even if they later took the NZSC. Amongst other uses, the CISC was a vehicle for requiring students to study the Maori language. With the changes in the NZSC in the 1980s, policy makers in Cook Islands decided to retain ties with the New Zealand system from Form 5 onwards. Cook Islands now operates its Senior Secondary School qualifications through the New Zealand system administered by the New Zealand Qualifications Authority and, as mentioned above, withdrew from SPBEA membership in 1996.

The government of Solomon Islands also made a relatively early move, this time at the Form 5 level. The Solomon Islands School Certificate was launched in 1978. The initiative was unusual in that the examination was created first and was only subsequently followed by curriculum reform to match the examination. While this does not seem a procedure to be recommended, in the Solomon Islands case it seems to have worked out quite well.

In contrast, Tonga followed a different path. With the phasing out of the NZSC and NZUE, the government of Tonga developed its own school certificate which was entirely based on Tongan curricula. However, whereas Fiji operated its own Form 7 Examination and other countries continued to use the USP Foundation Year curriculum through extension studies, Tonga entered into an arrangement with the New Zealand Qualifications Authority to establish a seventh form which prepared students for the New Zealand Universities Bursary & Scholarship Examinations. Renwick & Eyers (1991, p.28) reported that:

> The Tongan Director of Education knows that, in an important respect, the seventh form award will be much more difficult than the fifth form award to 'Tonganise'. The numbers to be examined will be smaller and it will be more difficult to find enough local people to provide the full range of knowledge needed to set and moderate papers and mark examination scripts.

The government of Tonga therefore sought to balance efforts to localise its system with links both to New Zealand and the rest of the system through the PSSC.

Also under the heading of social factors are day-to-day aspects of the

operation of examinations. All Pacific-island teachers and educational administrators face pressures which arise from their social and cultural situations. One reads in the local newspapers of examination paper 'leakages' from the custody of appointed supervisors, and even of traditional gifts being offered to the staff of examination units to 'help' in their children's selection. Fortunately, the vast majority of examination personnel perform their work professionally and fairly in spite of these and similar pressures.

Conclusions

Predictions are both difficult and dangerous to make: difficult because the gift of prophecy is not all that common, and dangerous because the possibility of error is always present. The situation is especially hazardous when looking at the variety of examination systems currently operating in the region. However, some generalisations are possible.

One can be fairly sure that the strong educational influence of New Zealand and Australia will continue for some time to come. The trend in both of these countries is towards criterion-referenced examinations and student profiling. This trend is almost unconsciously being transferred to the Pacific through the ongoing influence of externally-recruited curriculum developers working in the region. Internal assessments, which currently comprise 40 per cent of the total in the PSSC, are also being given more emphasis. This increases strain on teachers, who have to provide reliable figures and reports, and also on the SPBEA, which has to ensure inter-school and inter-country comparability of standards.

Given the slender economic resources of most island states in the Pacific, overseas aid is likely to be needed for the foreseeable future. Increasingly, the donors are looking hard at the results of aid provided. This has led to increased attention to standards and to the efficiency of education systems. Relating this to examinations, one might predict that instead of leaving standards in education to look after themselves in the belief that the general level of education is always rising, examiners will increasingly be asked to provide hard data on student achievements. This will mean much greater attention to establishing acceptable standards, both nationally and regionally, and devising reliable mechanisms for the monitoring of such standards. Some signs of this systems approach to examinations are already clearly discernable.

The SPBEA got off to an uncertain start during the 1980s, but has now clearly demonstrated its usefulness. It is a cost-effective organisation, which both supports national governments and delivers an important regional credential. The gradual expansion of membership has been an encourage-

ment, though the withdrawal of Cook Islands in 1996 was a disappointment to many. The application for membership by Marshall Islands, with its rather different colonial history and education system, was particularly significant.

However, 'regionalism' in the sense of educational co-operation, runs a very poor second to 'nationalism'. Over and over again, in spite of many arguments to the contrary (such as economics of scale, 'Pacific Way', and greater global impact), the governments of island states prefer to take a national stance in their assessment progress rather than a regional position. The creation of national certificates at Form Five level is but one example of this phenomenon. The regional PSSC should thus be seen as running against this general trend; but for that reason alone its future might seem tenuous. Were one of the larger countries to opt out of the PSSC, the economic viability of the operation would again be called into question. This situation has the positive effect of keeping the SPBEA operation efficient and sensitive to the needs of clients, because SPBEA officers know that they cannot afford to be complacent. However, it also creates tensions within the organisation. The SPBEA performs many functions in addition to the PSSC; but the PSSC is the most visible single product of regional cooperation.

Chapter 14:

West African Examinations Council

Matthew Ndure

The West African Examinations Council (WAEC) was created in 1952 to serve the Gold Coast (present-day Ghana), Nigeria, Sierra Leone, and The Gambia. Liberia became the fifth member in 1974. This chapter presents aspects of the history and operation of WAEC, particularly from the perspective of its smallest member, The Gambia. The chapter illustrates the benefits and costs for a small state in a regional partnership which also embraces much larger states.

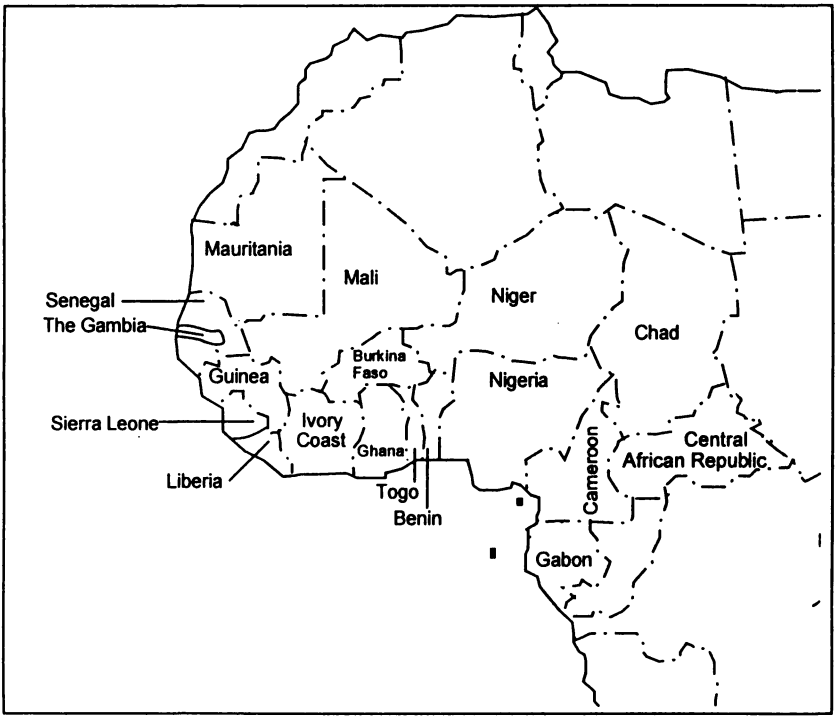
Four of the five WAEC member countries are former British colonies which inherited education systems influenced by models in the United Kingdom. Ghana attained independence in 1957, Nigeria in 1960, Sierra Leone in 1961, and The Gambia in 1965. Liberia's history is rather different, but it has in common with the other four a strong role for English in its education system. Liberia was founded in 1847 as an independent republic by liberated slaves from the southern United States, and its education system has been heavily influenced by American traditions.

Table 14.1: Populations of Member States of the West African Examinations Council

Country	Population
Nigeria	105,300,000
Ghana	16,400,000
Sierra Leone	4,300,000
Liberia	2,800,000
The Gambia	1,000,000

Note: Figures refer to the year 1993.

Source: United Nations Development Programme (1996), p.179.


Mauritania
Mali
Niger
Chad
Senegal
The Gambia
Burkina Faso
Guinea
Nigeria
Sierra Leone
Ivory Coast
Ghana
Cameroon
Central African Republic
Liberia
Togo
Benin
Gabon

The five member states of WAEC are widely divergent in population size (Table 14.1). By far the largest is Nigeria, with an estimated population exceeding 105 million. Ghana comes next, with approximately 16 million people. It is followed in order of population size by Sierra Leone, Liberia and The Gambia.

This chapter begins with the history of WAEC. It then indicates the types of examinations that the Council conducts, and the structure of WAEC administration. Turning specifically to The Gambia, the chapter then outlines changes in the Gambian system of education, and the ways that WAEC examinations fit in. Subsequent sections address issues of staffing and costs, and the final section summarises and concludes.

The History of WAEC

The origins of WAEC go back to 1948. In that year, the University of Cambridge Local Examinations Syndicate (UCLES) and what was then called the University of London School Examinations Matriculation Council (ULSEMC), which were the main external agencies responsible for school examinations in the British West African colonies, discussed with officials of Departments of Education in those colonies the future of examination policies. Following this discussion, G.B. Jeffery, Director of the University of London Institute of Education, was invited by the Secretary of State for the Colonies to advise on a proposal that there should be instituted a West African School Examinations Council. This initiative was part of a broader effort to foster regional collaboration in several social and economic sectors. After a three-month visit to The Gambia, the Gold Coast, Nigeria and Sierra Leone, Jeffery submitted a report which strongly supported establishment of an examinations council and which made detailed recommendations on its composition and duties.

The Jeffery report was adopted without reservation by the four West African governments, and an ordinance establishing the West African Examinations Council was drafted by the West African Inter-Territorial Secretariat. The ordinance was passed by the Legislative Assembly of the Gold Coast in 1951, and later made effective by similar enactments by the other three governments. The ordinances charged the Council to determine the examinations required in the public interest in West Africa, and empowered it both to conduct such examinations and to award certificates.

The Council headquarters were established in a specifically-designated building in Accra, capital of the Gold Coast. The Nigerian government also made available a block of offices in Lagos, which became the seat of the Deputy Registrar. In Sierra Leone and The Gambia, the Council initially worked through the respective government Departments of Education,

though was allocated separate offices in Freetown in 1958 and in Banjul in 1973. A WAEC office was established in Monrovia, capital of Liberia, in 1976.

The first WAEC meeting was held in 1953 in Accra. It was attended by 13 nominees of the participating governments, and by 10 observers. It was also attended by three nominees of the Secretary of State, namely the Chairman of the Council, A.N. Galsworthy (who was also Chief Secretary of the West African Inter-Territorial Secretariat); J.L. Brereton, secretary of UCLES and representing the University of Cambridge; and G.B. Jeffery, representing the University of London.

The formal participation of representatives from the Universities of Cambridge and London was of considerable significance since it was a mechanism to promote linkage between WAEC and the UK examination boards. At its inception, WAEC had been instructed to ensure that its certificates would not represent a lower standard of attainment than equivalent certificates of examining authorities in the United Kingdom. The participation of senior representatives from the Universities of Cambridge and London helped to achieve that goal. The UK examination boards gave WAEC important technical assistance in its early years, and the linkage also gave credibility to the new organisation. For the first 30 years of WAEC's life, both UCLES and ULSEMC had seats on the Council. By the 1980s, however, WAEC was considered able to stand on its own feet, and the continued formal linkage with these UK examining bodies was no longer felt necessary or appropriate.

Examinations Administered by WAEC

WAEC administers four types of examinations, namely:

- national examinations,
- regional (international) examinations,
- examinations conducted in collaboration with other examining bodies, and
- examinations conducted on behalf of other examining bodies.

The national examinations are prepared for the specific member countries which they serve, and reflect the policies, needs and aspirations of those countries. The regional examinations are developed centrally for candidates in several or all member countries. Examinations conducted in collaboration with other bodies may be tailored for the specific circumstances of the recipient countries, whereas examinations conducted on behalf of other bodies are mostly designed by those bodies as standard examinations for

candidates anywhere in the world.

Table 14.2 presents statistics on the Council's own examinations in 1994. It shows that some examinations were for primary and middle schools, while others were for secondary schools, and one was for graduates

Table 14.2: Examinations Operated by the West African Examinations Council, 1994

	Candidates
National Examinations for Primary and Middle Schools	
The Gambia: Primary School Leaving Certificate Examination	11,939
Ghana: Basic Education Certificate Examination	198,812
Liberia: Junior High School Certificate Examination	7,845
Sierra Leone: National Primary School Examination	23,145
Regional Examinations for Secondary Schools	
Joint School Certificate & GCE 'O' Level: May/June for sch. candidates	
The Gambia	1,580
Sierra Leone	9,836
Joint School Certificate & GCE 'O' Level: Nov./Dec. for pvt. candidates	
The Gambia	193
Ghana	55,253
Sierra Leone	895
GCE 'A' Level: May/June examinations for school candidates	
The Gambia	233
Ghana	11,309
Sierra Leone	701
GCE 'A' Level: Nov./Dec. examinations for private candidates	
The Gambia	16
Ghana	16,871
Sierra Leone	29
National Examination for Secondary Schools	
Ghana: Senior Secondary Certificate Examination	78,875
Nigeria: Senior School Certificate Examination (school candidates)	573,078
Nigeria: Senior School Certificate Qualifying Examination (sch. cands.)	1,263
Nigeria: Senior School Certificate Examination (private candidates)	523,509
Nigeria: Senior School Certificate Qualifying Examination (pvt. cands.)	490
Liberia National Certificate Examination	1,217
Liberia Senior High School Certificate Examination	3,655
Other Examinations	
Ghana: Teachers' Final Certificate 'A' Examination	2,847

Source: West African Examinations Council (1995), pp.73-78.

of teachers' colleges. The WAEC examinations for candidates in primary schools were provided only for The Gambia and Sierra Leone. In the other countries, the equivalent examinations were set under the auspices of internal bodies. At the secondary level, WAEC examinations were set for School Certificate/General Certificate of Education (GCE) Ordinary ('O') level at the end of secondary Form 5 for candidates in The Gambia and Sierra Leone. Candidates in those countries who had proceeded to two further years of study in secondary schools sat the GCE Advanced ('A') level examination. Ghana and Nigeria had moved to a different school system, having restructured from 6+5+2+3 (i.e. six years of primary, five years of junior secondary, five years of senior secondary, and three years of university) to 6+3+3+4. In Ghana the 'O' level examination had been phased out for school candidates, and 'A' levels were due to be phased out; while in Nigeria both examinations had been discontinued. In their place, new national qualifications had been introduced for each country.

Another feature of Table 14.2 which deserves attention is the balance between regional and national examinations. In the year to which Table 14.2 refers, the proportion of candidates taking regional examinations was small. This was chiefly because Nigerian candidates no longer sat the regional 'O' and 'A' level examinations. Nigeria's Senior School Certificate Examination had first been offered in 1988, and had progressively replaced the regional examination. Thus in 1991/92 the proportion of candidates taking the regional examinations was just 8.8 per cent, but the previous year it had been 39.8 per cent, and in 1987/88 it had been 71.5 per cent (Table 14.3).

In the short term, educational restructuring in Ghana contributed to the small proportion of candidates taking regional examinations. Like Nigeria, Ghana moved to a 6+3+3+4 model; but the Ghanaian authorities decided that they wanted a Senior Secondary Certificate Examination which focused closely on Ghanaian syllabuses and which had a core and electives which differed from those in Nigeria. Ghana's examination was first offered in November/December 1993. Table 14.3 shows that in absolute terms the number of Ghanaian candidate taking regional examinations rose continuously over the eight-year period from 1987/88. However, in the latter part of the period numbers were not as great as they would have been in the absence of the new national examination. As the number of Ghanaian school candidatures for the 'O' and 'A' levels was phased out, eventually the examinations were taken only by private candidates in Ghana and by school and private candidates in Sierra Leone and The Gambia.

However, the proportion of candidates taking regional examinations was planned to increase again towards the end of the decade. Following the

Table 14.3: Percentage of WAEC Candidates taking Regional Examinations, 1987/88 - 1994/95

	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95
Gambia	1,121	1,203	1,242	1,165	1,227	1,271	1,604	2,060
Ghana	58,102	59,932	65,578	68,416	77,562	105,365	129,374	152,702
Liberia	4	4	3	-	-	-	-	-
Nigeria	763,096	522,563	685,857	506,697	-	-	-	-
Sierra Leone	14,274	13,770	13,767	13,102	10,457	10,615	11,413	11,457
Total regional	836,597	597,472	766,447	589,380	89,246	117,251	142,391	166,219
Total candidates	1,170,477	1,262,690	1,526,461	1,479,793	1,011,133	1,329,619	1,572,010	1,709,965
Regional as % of total	71.5	47.3	50.2	39.8	8.8	8.8	9.1	9.7

Source: West African Examinations Council (1992), pp.23-4; West African Examinations Council (1995), pp.21-2.

leads of Nigeria and Ghana, in 1988 authorities in The Gambia also decided to restructure their education system. At that time The Gambia, had no university, so the structure was 6+3+3+2 rather than 6+3+3+4, with the final two-year segment still leading to 'A' level. With at least three countries firmly moving to the 6+3+3 system, and the possibility that Sierra Leone would follow suit, WAEC decided to develop a regional examination for senior secondary students. In 1996, WAEC announced that the West African Senior School Certificate Examination (WASSCE) would be available, and that the first cohort would take the examination in 1998. The expectation was that this regional examination would replace the national senior school certificate examinations taken in Nigeria and Ghana, and would also be taken by candidates in The Gambia and Sierra Leone.

Liberia was to some extent a special case deserving further explanation. During the first half of the 1990s, Liberia suffered from a civil war and few students sat examinations of any kind. However, even when affairs were stable, few Liberian students sat regional examinations because, in line with dominant traditions in the USA, much assessment was continuous and school-based. Nevertheless, in the mid-1980s WAEC designed a Liberia Senior High School Certificate Examination. Although in 1989/90 just three candidates in Liberia sat WAEC-operated regional examinations, 26,263 candidates sat WAEC-operated national examinations.

Also worth noting in Table 14.3 is fluctuation in the total number of candidates. The figure rose from 1,170,477 in 1987/88 to 1,526,461 two years later, but then fell again to 1,011,133 in 1991/92 and rose again to 1,709,965 in 1994/95. These figures themselves compare with 1,553,000 in 1980/81, but 2,030,088 in 1981/82 (WAEC 1982, p.25). The fluctuations reflect a combination of domestic crises within member states, restructuring of education systems, and decisions by national governments to place certain examinations under domestic rather than regional control. Thus, one reason why the 1981/82 figure was high was that at that time WAEC administered Nigeria's National Common Entrance Examination for primary school graduates, which in 1981/82 had 707,000 candidates. The Council has usually endeavoured to assist national governments when they have declared a desire to take over their own examinations, but the fluctuations have created considerable administrative difficulties.

WAEC also operates some examinations in collaboration with other bodies. For example, in The Gambia and Sierra Leone, the Council works with the City & Guilds of London Institute, the Royal Society of Arts, and the Pitman Institute. The Council also administers the selection examinations for the primary teachers' course at The Gambia College, and for entrance to The Gambia Technical Training Institute and the School of

Nursing. In Sierra Leone, the Council administers the Civil Service Entrance Examination. The Council plays a role in shaping these examinations as well as in the mechanics of administration.

Finally, WAEC administers various examinations on behalf of other examining boards. Table 14.4 itemises the 'miscellaneous examinations' listed in the Council's 1995 Annual Report. Twenty one examining bodies are named on this list, with the largest number of candidates in Ghana.

Table 14.4: Examinations Administered by WAEC on Behalf of Other Examining Boards, 1993

	Number of Candidates			
	Nigeria	Ghana	Sierra Leone	The Gambia
Associated Board for the Royal School of Music	5	85	-	-
Associated Examining Board	-	-	-	1
Association of Accounting Technicians	-	-	144	-
Association of Business Executives	6	28	-	3
Association of Cost and Executive Accountants	-	-	-	8
Chartered Association of Certified Accountants	-	337	51	7
Chartered Institute of Management Accountants	-	324	3	-
Chartered Institute of Marketing	-	872	-	-
Chartered Insurance Institute	-	-	8	3
Engineering Council Examination	12	-	-	-
Institute of Building 5	2	1	-	
Institute of Chartered Secretaries & Administrators	-	353	-	4
Institute of Data Processing Management	-	138	3	-
Institute of Fire Engineers	82	-	-	-
Institute of Purchasing and Supply	67	-	-	-
Institute of Shipbrokers	-	3	-	-
Open University of the United Kingdom	-	-	-	1
Royal Institute of Chartered Surveyors	4	-	-	-
Society of Actuaries -	9	-	-	
University of London	16	3	1	1
University of London Examinations Board	-	-	137	7
Others	2	1	-	22
TOTAL	*199*	*2,155*	*348*	*57*

Source: West African Examinations Council (1995), pp.52-3.

Administration of the Council

The Council is headed by a Chairperson, who is not a full-time employee

but who has a Chief Executive called the Registrar. According to the Convention adopted in 1982, five members of the Council should be nominated by the Federal Government of Nigeria, four by the government of Ghana, three by the government of Sierra Leone, and two each by the governments of Liberia and The Gambia. Membership also includes a representative from each university or university college in the WAEC member states, plus 24 members elected by the National Committees. The 24 members in the latter category comprise 10 persons from Nigeria, seven from Ghana, three from Sierra Leone, and two each from Liberia and The Gambia. The majority of people elected by National Committees represent the interests of secondary schools.

Much of the Council's work is conducted through committees. At the Council level are the Examinations Committee, the Administrative & Finance Committee, the Appointments Committee, and the International Tenders Board. National Committees have their own committees for administration and finance, appointments, tenders, and particular types of examinations; and under the Nigeria National Committee is a set of State Committees.

The Council's Examinations Committee has a number of international Subject Panels, the membership of which is drawn from universities, technical colleges, and schools. Representation on the Subject Panels is generally on an equal basis for each country. However, membership of the other central committees reflects the size of each country. The Gambia, being the smallest member, has the smallest representation. The Council's Standing Orders have clearly-defined procedures on voting, but over the years the Council has developed an unwritten understanding that issues should be resolved by consensus. Because of this, the small size of The Gambia's representation has not created significant problems.

The 1982 WAEC Convention stipulated that the Chairman of Council would be permitted to hold office for a maximum of three years from the date of election. The Convention also stated that the nationality of the Chairman would rotate between member countries. The Standing Orders stipulated the following cycle: Nigeria, The Gambia, Liberia, Ghana, and Sierra Leone. The aim of rotation was to ensure that each member country is given a fair chance to take this leadership position. The system has its critics, particularly because the countries are of widely divergent sizes; but the Standing Orders reflect a principle of equity which takes countries as equivalent units for this aspect of decision-making.

Evolving Patterns of Education in The Gambia

As already mentioned, the education system in The Gambia has been

restructured to a 6+3+3+2 pattern. In 1988 the government stated that:

> the first nine years will be conceived as a broad and basic education which in the long-term should be accessible to all Gambian children. For the short and medium-term this will not be possible and there will continue to be a selection procedure at the end of grade 6. At the end of grade 9 a further selection will take place to admit students to three years of [senior] secondary school. Students taking (GCE) 'A' level will continue into grades 13 and 14.

The Common Entrance Examination was replaced by a Primary School Leaving Examination at the end of Grade 6, which was followed by the Junior Secondary School Certificate Examination at the end of Grade 9. The first cohort of students from Grade 12 sat the West African Senior School Certificate Examination in 1998. However, the policy makers decided to retain the Sixth Form after that stage because many Gambian students require 'A' level certificates for entry to universities in Europe and elsewhere.

In 1995, the Gambian higher education picture began to change with launching of a University Extension Programme operated in conjunction with St. Mary's University in Nova Scotia, Canada. This programme gives Gambian students the opportunity to conduct undergraduate work within The Gambia itself. However, the programme offers only some arts, science and commercial courses. Plans have been announced for establishment of a national University of The Gambia; but even when this goes ahead, it will remain impossible for students to study locally for all courses. Some Gambian students can go for further studies in Nigeria and Ghana; but the authorities still wish them to have access to other countries.

Tables 14.5 and 14.6 show the numbers of candidates in The Gambia taking individual papers in the 'O' and 'A' level examinations in 1994. Particularly striking are the small numbers in some subjects. In the 'O' level examinations, the May/June sitting was for school candidates, and the November/December sitting for private candidates. Even in the May/June sitting, only five candidates took Arabic, 11 took Clothing & Textiles, and 15 took Auto-mechanics. Numbers were even smaller in the November/ December sitting. Likewise, in the 'A' level examinations, only six candidates took Agricultural Science and nine took Biology. At the 'A' level, only the General Paper had more than 200 candidates.

These statistics underline one of the benefits of belonging to a regional body, for The Gambia would certainly not have been able to operate independent examinations for such small numbers. It should be added that

Table 14.5: Numbers of Candidates Taking Papers in GCE 'O' Level Examinations, The Gambia, 1994

Paper	May/ June	Nov./ Dec.	Paper	May/ June	Nov./ Dec.
Additional Mathematics	49	1	Geography	338	33
Agricultural Science	355	38	Government	356	47
Applied Electricity	28	-	Health Science	544	40
Arabic	5	-	History	17	-
Art	128	-	Home Management	604	-
Auto-mechanics	15	-	Intro. to Bus. Management	561	31
Bible Knowledge	89	2	Islamic Religious Studies	447	9
Biology	334	27	Literature in English	447	9
Business Methods	-	36	Mathematics	1,161	58
Chemistry	207	14	Metalwork	124	-
Clothing & Textiles	11	-	Physics	176	5
Commerce	690	53	Principles of Accounts	473	27
Economics	843	67	Statistics	589	40
English Language	1,561	168	Technical Drawing	276	1
Food & Nutrition	105	-	Woodwork	139	-
French	204	6			

Source: West African Examinations Council (1995), pp.117-21, 145-8.

Table 14.6: Numbers of Candidates Taking Papers in GCE 'A' Level Examinations, The Gambia, May/June 1994

Paper	Candidates	Paper	Candidates
Accounts	86	General Paper	233
Agricultural Science	6	Geography	13
Art	88	Government	48
Biology	9	History	92
Business Management	106	Islamic Religious Studies	21
Chemistry	14	Mathematics	36
Economics	191	Physics	34
English Literature	33	Statistics	62
French	18		

Source: West African Examinations Council (1995), pp.159-60.

during the period that Nigeria and Ghana were using their national secondary school certificate examinations, only The Gambia and Sierra Leone were using the regional examination for school candidates. The entries from Sierra Leone were not much more numerous than those from The Gambia. During this period, both countries were to some extent benefitting from the fact that WAEC was large enough still to be able to operate the 'O' and 'A' level examinations when candidature had fallen to a low level.

Staffing the Examination System

Each WAEC office is staffed by nationals of the country in which it is situated, with the exception of Headquarters where appointments are based on merit with no country quotas. Because of the scarcity of qualified applicants from the smaller countries, most Headquarters posts are filled by Nigerians and Ghanaians.

At the same time, the Council maintains a policy through which senior staff may be posted by the Registrar to any member country in which their expertise is urgently required. This policy particularly helps the smaller countries. The Gambia has benefitted through deployment of a Nigerian expert who has assisted in developing the computer installation in Banjul. Also, a Ghanaian Test Development specialist spent five years in Banjul, during which time he set up a Test Development Unit and trained local staff.

The advantage of this policy is that expertise can be shared much more cheaply than would be possible if hiring outside specialists or consultants. Also, working relationships between expert and local staff tend to be more congenial since they both belong to the same organisation. Further, since job performance in the countries of posting is assessed as if the experts were in their own countries, external postings do not adversely affect individuals' career advancement at home.

Despite its small size, the Banjul office conducts the same basic functions as other national offices. It employs 64 staff, who are grouped as shown in Table 14.7. However, because of the small size of the team, staff have more multiple roles compared with their counterparts in larger offices. The latter commonly work in specialist departments with labels such as Test Development, Test Administration, and Aptitude Testing. Such specialisation is not possible in The Gambia.

The Council has a system for staff development and training. Much of this is in-house, but study leave may be granted with or without salary to permit individuals to undertake relevant courses. In many cases, the Council has sponsored staff to pursue Masters and Doctoral degrees in measurement and evaluation.

Table 14.7: Specialisms of Staff in the Gambian National Office of WAEC, 1996

Department/Unit	No. of Staff
Examinations	18
Computer	6
Printing	4
Accounts	12
Secretarial	4
Administration	10
Security	10
TOTAL	*64*

Note should also be taken of the roles of school and university teachers. The main aspects in which such people are involved are:

- syllabus development and review,
- item writing and moderation,
- coordination for marking,
- marking of scripts,
- subject awards, and
- continuous school-based assessment.

The last of these has become particularly important in recent years. During the early 1990s, however, policies to increase school-based continuous assessment did not take off in The Gambia as had been envisaged. In 1992, manuals were prepared for primary and junior secondary teachers with help from UCLES, and a core team of teachers was trained. The Ministry of Education did not follow up on these accomplishments, and soon after the manuals were printed and delivered, the Ministry announced that continuous assessment at the primary level would be suspended indefinitely. Only at the junior secondary level was a renewed thrust made.

At the higher levels, regional pooling of examiners limits the role for Gambian teachers. Table 14.8 shows the numbers of examiners employed for the written and external components of regional examinations in 1994/95. For the 'O' level only 19 persons were employed in The Gambia, and for the 'A' level the figure was just four persons. On the one hand it might seem as if the main benefits from being employed are accruing to nationals outside The Gambia. However, it also shows that The Gambia is gaining access to the expertise of other countries for grading scripts.

Table 14.8: Numbers of Examiners Employed for Regional Examinations, WAEC, 1994/95

	Ordinary Level		Advanced Level	
	May/June	Nov./Dec.	May/June	Nov./Dec.
Gambia	19	0	4	0
Ghana	3,575	2,483	762	927
Sierra Leone	355	40	33	0

Source: West African Examinations Council (1995), p.30.

Costs

Article 12 of the WAEC Convention states that "each member country shall make an annual contribution to the funds of the Council at a rate to be determined by the Council". The principal sources of funds for the Council are subventions from member governments and examination fees paid by candidates. In The Gambia, the subvention comprises the government's contribution to the Headquarters and an allocation for the cost of running the local office.

Annual contributions to the Headquarters are based on agreed ratios which are reviewed periodically. In 1996, The Gambia's share was 2.25 per cent, while Liberia's share was 1.75 per cent, Sierra Leone's was 6 per cent, Ghana's was 27 per cent and Nigeria's was 63 per cent. These ratios were based on:

- the cost of the statutory international meetings, which is shared according to level of representation of each country;
- the cost of preparation of examination papers, which is apportioned equally among members; and
- all other costs, divided according to ratios determined by the total number of subject entries for regional and national examinations in each country.

The subvention also includes personal emoluments for local staff and for operational charges. In addition, the government pays a subsidy to cover the shortfall in fees paid by candidates. The Council is not permitted to charge economic fees because most candidates would be unable to afford such fees.

The examination fees in The Gambia are higher than in Nigeria and Ghana, partly because of the lack of economies of scale. In addition, the low level of infrastructural development in The Gambia compared with those countries affects the general cost of the examination. Whereas the other

offices can take care of all aspects in the examination process, the Banjul office still has to seek outside assistance at one stage or another. This requires individuals and packages to cross borders, which raises costs.

The costs of printing question papers for national examinations in Nigeria and Ghana are also significantly lower than in The Gambia because those countries have local security printing houses. Because The Gambia lacks such facilities, all examination papers must be printed outside the country and paid for in hard currency.

At the same time, the Gambian government has found difficulty in paying all bills. In 1995/96, the government should have paid 8,793,600 Dalasis (US$933,500) to the Council, but actually paid only 7,962,800 Dalasis. This type of shortfall has been a pattern for many years, and The Gambia and has run up a huge deficit with the WAEC Headquarters. This state of affairs is not a result of the Ministry of Education's unwillingness to meet its full obligations to the Council. Rather, it is one of the outcomes of overall national budgetary constraints. Even at the reduced level, in 1995/96 the subvention to WAEC represented 6.5 per cent of the government's total (recurrent plus capital) budget for education. This level of contribution prompted a 1995 World Bank/International Development Association visiting mission to question the benefits of the expenditure compared with the alternative uses to which the funds could be put. The mission recommended that the examination policy be reviewed with a view to reducing the number of examinations required and lowering their cost to both government and parents.

Conclusions

WAEC is the oldest of the regional examination bodies on which this book focuses. It had a major celebration for its 40th anniversary in 1992, and plans an even bigger celebration for its 50th anniversary in 2002. Originally founded to serve four countries, WAEC expanded in 1974 to embrace a fifth. The organisation has done much in its history to support and develop the education systems of its member states.

WAEC's history has not been entirely smooth, and its senior officers have always been conscious of the fragility of the organisation. At the time of the 40th anniversary, Emmanuel Evans-Anfom (1992, p.114) then Chairman of the Council, pointed out that WAEC was one of six regional bodies founded in West Africa during the period immediately after the second world war, and the only one still to survive. The bodies which had collapsed were the West African Court of Appeal, the West African Currency Board, the West African Airways Corporation, the West African Cocoa Research Institute, and the West Africa Institute of Oil Palm

Research. Viewed positively, this comparison emphasises the success of WAEC. But it also serves as a warning.

Among the achievements of WAEC has been the way in which it used the services of UCLES and ULSEMC to establish credibility and to develop its own expertise. WAEC grew from an organisation with just 35,000 candidates sitting its first examination in 1954 to a body with over two million candidates in the early 1980s. Since that time, however, the number of candidates sitting WAEC examinations has declined. The principal reason has been the desire by governments to control their own examinations. WAEC has put a brave face on this, and has endeavoured to assist governments in the processes. Nevertheless, the decline in examination candidates during the late 1980s and early 1990s was of considerable significance. Also of great significance was that the bulk of WAEC's work was in national rather than regional examinations. The balance will again shift markedly towards regional examinations when the WASSCE gets into full swing; but national examinations will remain a significant part of the Council's work.

From the Gambian perspective, membership of WAEC has brought some costs and some benefits. On the cost side, membership of WAEC demands considerable financial input. It also creates tensions from coordination with regional partners each of which has undergone political crises, and most of which, because of their greater size, have different perspectives on matters. However, The Gambia has benefitted from cross-fertilisation and technical expertise within the organisation, and from the international recognition of qualifications. The constitutional framework of WAEC has given The Gambia a fairly large voice within the organisation. This is most obvious in the arrangement to rotate the Chairpersonship among member countries on an equal basis according to a fixed pattern. In proportion to its population size, The Gambia also has a much more significant voice on various committees than is the case for the larger countries.

The final balance between these costs and benefits is a matter for professional judgement rather than mathematical calculation. One certainty, however, is that The Gambia has cause for pride at having been an original partner in WAEC in the early 1950s; and generations of beneficiaries can gain satisfaction from the many fruits that that partnership has brought.

Part IV: Metropolitan Examinations Boards

Chapter 15:

University of Cambridge Local Examinations Syndicate

John Sadler

The University of Cambridge Local Examinations Syndicate (UCLES) was established in 1858. It was then called the Cambridge Local Examinations and Lectures Syndicate. The Syndicate had been formed at the request of a group of applicants in newly-prosperous industrial cities, including Bristol, Birmingham and Liverpool, who wished to have a yardstick by which to measure the performance of scholars in their ancient but previously neglected grammar schools. A similar approach was made to the University of Oxford, which responded by creating the University of Oxford Delegacy of Local Examinations (UODLE). As explained by Smith (1995, p.90):

> The term 'Local' in the title of both UCLES and UODLE was intended to explain that the examinations were to be taken 'locally' in the schools and not 'centrally' in Cambridge or Oxford — an explanation which Syndicate officers have long tired of repeating ... in attempts to distinguish between this sense of the word and the use of 'local' to mean parochial.

The United Kingdom (UK) work of UCLES has continued to develop, but over 60 per cent of the Syndicate's work today is overseas. As such, the scope of UCLES activities is certainly anything but local in the sense of parochial.

The work of the syndicate is now divided into three approximately equal parts: school examinations in the UK, school examinations internationally (often in partnership with the governments of the countries concerned), and examinations in English as a Foreign Language for adults and younger students. This chapter mainly focuses on the second of these two categories. As a not-for-profit charitable body, the Syndicate ploughs back any financial

surplus into education and research, wherever possible in the less affluent of its client countries.

Expansion

The beginnings of UCLES were small: the first examinations in 1858 had only 370 candidates (Bradbury 1983, p.33). The marking was carried out only by the Syndics, that is the committee of 13 members of the university appointed to carry out examinations for schools. These people met and decided which candidates were to receive grades. In the early days, the examination was run from two small rooms in Cambridge. Examiners were paid in part according to the weight of scripts, rather than by number.

The first overseas examination was taken in what happens now to be part of a small state, namely the island of Trinidad. The arrangement for this examination was made very soon after the establishment of the Syndicate. The record of a meeting held on 11 December 1862 (quoted by Stockwell 1990, p.206) states that "the Vice-Chancellor read a letter begging for some extension of University action to schools in the Colonies: the Syndicate seemed to consider that the difficulties in the way of such extension were insurmountable". However, in 1863 10 candidates in Trinidad did sit the examination. This was largely because permission was obtained for the examinations to be sent in sealed parcels to the Governor through the Colonial Office.

At first, reflecting the spirit of the times, only boys were permitted to become candidates for the examination. In 1865, however, girls were allowed to take the examinations on the condition that the names of the girls who were successful were not published (Bradbury 1983, p.34). By 1877, 6,435 candidates sat the examinations in 80 boys' centres and 70 girls' centres. By 1959 the number of candidates had risen to 120,000, and today it is over 1,200,000.

After 1869, a steady trickle of applications from overseas locations was approved year after year. These included Natal (South Africa) in 1870, Mauritius in 1873, Wellington (New Zealand) in 1874, Georgetown (present-day Guyana) in 1874, Jamaica in 1882, and the Straits Settlements (present-day Singapore) in 1891. A particular surge of overseas interest came during the 1890s. In 1898, 1,220 candidates at 36 overseas centres wrote Cambridge examinations. In addition to the various parts of the British empire, there were requests from other countries. Examination centres were first requested for China and Argentina in 1917, and for Turkey in 1923.

As well as its own examinations, UCLES serviced other examinations such as the Barbados Scholarship, the Jamaica Scholarship, and the Queen's Scholarships of Malaya. All these scholarships were tenable at British

Universities. In more recent times, UCLES has been involved in many parts of Eastern Europe and the former Soviet Union, as well as with such countries as Brazil, Spain and Vietnam.

UCLES uses over 16,000 people to mark its examinations, over 75 per cent of them being practising school teachers. UCLES relies on a complex computer system to total marks and to present information for senior examiners to use in making decisions about the grades awarded to over a million candidates.

Crises

During the period 1875 to 1930, the overseas operations suffered crisis after crisis. Some crises arose because the countries taking the examinations were very distant, and others because of turbulent weather conditions. In 1875 the New Zealand scripts were delayed by several months, with the result that the examiners were not paid until late 1876. In 1897 it was reported that candidates had taken the examination in the Gold Coast (present-day Ghana), but by March 1898 these scripts had not reached Cambridge. The reason given was that two of the people put in charge of the examination had died within a few months of each other, and the key to the box that held the scripts had been lost! The key was not found until 18 months later, whereupon the scripts were marked and the results issued to the Gold Coast (Stockwell 1990, p.207).

In 1915 the examination papers from Jamaica were lost when the steamer (by chance aptly named 'Candidate') was torpedoed. Scripts from West Africa were also lost in the same year, when the ship carrying the papers was captured by the Germans. UCLES decided to be generous and resolved to repay candidates their fees if the scripts did not reach Cambridge. Amongst other calamities was a delay in examinations in Jamaica in 1926 because of an earthquake, and a hurricane in Nassau in 1928.

Continuity and Innovation

One feature of the examination system has been the continuation of examinations overseas that are no longer available in the UK. Three examples illustrate this observation. In 1920 the Preliminary examination was discontinued in the UK, but it survived in the colonies until 1939. The Junior, which ended in England in 1939, lasted overseas until 1953. And the School Certificate, which ended in the UK in 1953, is still being offered overseas.

UCLES has become increasingly aware of the special needs of overseas candidates, and has reacted positively to most requests for modification.

This matter was first raised in 1902, when a body in Malaya observed that many people "favoured dropping the Cambridge connection because it had led to the cramming of number of useless subjects by boys who should rather have been preparing themselves for a Malayan career" (Stockwell 1990, p.211). On this occasion, the commission concluded that these examinations had led to improvements in English-language education in Malaya, and that internal certification would not carry the same weight as a Cambridge qualification. Nevertheless, the Syndicate did include Malay as a language of examination in 1920. The precedent for local languages had been set in 1906, when papers were prepared in Tamil and Sinhalese for Ceylon (present-day Sri Lanka). Four years later the Syndicate agreed to add Arabic and Sanskrit in response to requests from Shanghai centres in China; and in 1919, Hindi and Urdu were made available for candidates in India.

In addition to academic examinations, in 1916 UCLES accepted a proposal from Ceylon for a special needlework examination. Also, in 1933 it approved an art syllabus for West Africa. By the end of the 1930s UCLES had introduced agricultural sciences and four African languages for the Gold Coast. Candidates also wrote special botany papers mentioning only local plants. UCLES prided itself on the fact that "the adaptation of the Syndicate's examinations to local needs now tends to be as much due to stimulus given on the initiative of the Syndicate as to pressure that might be brought to bear upon the Syndicate by local authorities" (archival correspondence 1935, quoted in Stockwell 1990, p.212). At the same time, the Colonial Secretary's Advisory Committee on Education professed itself "well satisfied with the special efforts made by the Cambridge Local Examinations Syndicate to adapt their requirements and syllabuses to local overseas needs and conditions".

A more recent innovation, which is of particular use to small states, is a computer programme developed by UCLES and called the Small Examinations Processing System. It provides a complete examination administration system for use on personal computers. It became operational in 1995, and has so far been installed in The Bahamas, Botswana, Lesotho and Swaziland.

UCLES also provides training in the techniques of educational assessment and innovation. Such training may be either in the countries concerned or at Cambridge. In 1993, for example, participation in Cambridge-based training included personnel from Brunei Darussalam, Bulgaria, Estonia, The Gambia, India, Latvia, Lesotho, Malaysia, Maldives, Namibia, Romania, Seychelles, Singapore, Slovenia, Sri Lanka and Thailand.

UCLES claims to treat all states in the same way, so that, for example,

Ascension Island is treated the same as Zimbabwe. UCLES also tries to give as fair a service as possible to all the candidates who take our examinations. It is able to trace the work of any candidate up to six months after the candidate has taken the examination. It also looks at the results of individual countries, in addition to making an overall appraisal, and gives regular reports to ministries of education. UCLES boasts of its professional manner and ability to meet the highest standards of validity, reliability and integrity.

Since UCLES is a part of the University and bears its name, it effectively exports the name of Cambridge. UCLES is the first contact many people overseas have with the University, and it is vital that UCLES maintains high standards in all its activities. As a result of its international experience and success with examining world wide, in 1992 UCLES was awarded the Queen's Award. It is the most prestigious award that a British enterprise can win, and UCLES is the only UK examining board to have received this honour.

Localisation

The first hint of localisation, that is of countries running their own examinations instead of the examinations being run by UCLES, is recorded in 1919. The practical problems of administering an UCLES examination at some 6,000 miles distance were felt to warrant a reconsideration of UCLES' role in India. However, it was not until the early 1970s that India finally ran its own examination systems in place of UCLES. The transfer of responsibility for examining to an overseas country usually involves the training of administrators from these countries in Cambridge, the seconding of UCLES staff for duties overseas, and the training of examiners both in the overseas country and at Cambridge.

The Indian initiative was followed by similar steps in other parts of the world. From the 1940s onwards, many British colonies gained independence. Many of the politicians and administrators in the new countries had been educated in the Cambridge curriculum. The new states naturally provided secondary education for a wider range of their citizens, and thus extended the Cambridge system. Later these countries started to found their own examination systems, in many cases basing their models on the UCLES system and engaging the help of UCLES in the process.

Examples of this pattern of events are numerous. The West African Examinations Council (WAEC) was inaugurated in Accra in 1953 and it held its first examinations in cooperation with UCLES in 1955. In 1957 the Federation of Malaya's Certificate of Education was launched, again with the help of UCLES. To assist with the administration of such ventures at

headquarters, four area committees were set up in 1955 to cover the affairs of India & Pakistan, the Caribbean, Malaya, and East & Central Africa. Other localisations that took place after the creation of WAEC include the East African Examinations Council, the Indian Examinations Council, the Caribbean Examinations Council, the Zambian Council, and the Malaysian Examinations Council. Zimbabwe localised its examinations in 1995, and Chapters 2 and 8 in the present book document processes of localisation in Botswana and The Bahamas. However, Zimbabwe and The Bahamas take advantage of the accreditation system offered by UCLES. The Syndicate offers various forms of accreditation including monitoring syllabuses, moderating question papers, and helping examiners to grade their examinations.

Even after countries have localised, UCLES commonly works very closely with those countries to ensure that the examination process works smoothly. In some cases, countries that have localised have had neither the resources nor the expertise to produce certain question papers. In these cases, UCLES has maintained some assistance.

Moreover, in parts of the world localisation has still left an overt parallel role for UCLES. In the Caribbean, for example, students in some islands still take UCLES examinations rather than, or together with, those of the Caribbean Examinations Council.

GCSE, IGCSE and AICE

As a result of the introduction of the General Certificate of Secondary Education (GCSE) into the UK in 1986, UCLES decided to introduce an international version called the International General Certificate of Secondary Education (IGCSE). The examination was aimed at 16 year old students in international schools throughout the world. The examination soon became very popular, and is accepted by universities as being equivalent to the GCSE. It is taken in schools in over 100 countries and territories, including Ascension Island, Bahrain, Bermuda, Cayman Islands, Cuba, Cyprus, Eire, Falkland Islands, Fiji, Indonesia, Japan, Malta, Mauritius, Netherlands Antilles, New Zealand, Papua New Guinea, Philippines, Seychelles, Singapore, St. Helena, Tristan & Cunha, and Vanuatu.

More recently UCLES helped The Bahamas to introduce a new examination based on the IGCSE. The Bahamian General Certificate of Secondary Education was introduced in 1993 to replace the University of London Schools Examination Board examinations.

As indicated in Chapter 4 of this book, Namibia decided to use the IGCSE as its national scheme. The history of this decision is interesting. The South West Africa People's Organisation (SWAPO), which was the

political group fighting for freedom in Namibia, had a school in the Congo in a village called Loudima. The school was set up by Nahas Angula, the Minister for Education in Exile. Members of UCLES staff visited Loudima and introduced the IGCSE to the staff. After a pilot scheme through which it was confirmed that the youngsters could cope with this examination, SWAPO decided to run the examination nationally once the party took over the government.

Still more recently, UCLES has introduced the Advanced International Certificate of Education (AICE) designed for 18 year olds in international schools. Much interest has been shown in this examination world wide, and already it is gaining a reputation as being an excellent preparation for either university or the world of work. At the outset in 1996, candidates for the AICE were based in nine countries including one small state, namely Cyprus.

Costs and Financing

The costs of running an examination board are considerable. They include the costs of setting and printing papers, marking scripts, moderating grades, and administration of the whole process. In the UCLES budget, approximate proportions of expenditure of income from fees are as follows:

- 30 per cent for payment of examiners and moderators,
- 8 per cent for expenses for examiners and moderators,
- 16 per cent for stationery (including printing) and despatch, and
- 56 per cent for overheads including staff salaries, heating, lighting, building maintenance, investment in new equipment, and research and development.

Many countries which are worried about security decide to have their question papers printed in the UK rather than in their own localities. Some countries also prefer their candidates' answers to be marked overseas, to ensure that there is no favouritism or bias towards race, culture or gender.

The break-even point for an examination (i.e. outgoings minus income) seems to be in the region of 4,000 candidates with five subjects per candidate. Obviously, the more subjects an examination board offers, the greater the cost. The advantage of a large, international examination board is that it can offer a diverse array of examinations and assessment techniques at reasonable cost.

The cost of printing certificates can also be high, because such printing must be done securely. Any certificates bearing the name of UCLES are printed by the Syndicate itself. UCLES does not permit certificates for

examinations that it has helped to prepare to be printed outside the UK. This raises costs, but that factor is minor when compared with the security risks. For the accreditation service, the cost of this printing is about 3 per cent of the total cost. However, countries are encouraged to print non-secure materials locally. This includes handbooks for centres, instructions to candidates, and synopses of syllabuses.

Liaison with clients also creates considerable costs. Senior staff from UCLES make many overseas visits, and meet a full spectrum of people from Ministers to classroom students. They listen carefully, and try to ensure that local wishes are implemented. We make biennial visits to the Caribbean, Singapore and Brunei Darussalam, and annual visits to Malaysia, Lesotho, Swaziland, Namibia and Botswana. During these visits, and by regular contact with ministries, they sort out problems such as the specimens that are suitable for biology practicals, the availability of chemicals and apparatus, and whether the experiments will work under the conditions of each particular country. To ensure a backup system, UCLES prepares alternative papers in case practicals are impossible to conduct.

Conclusions

UCLES has a long history, and has helped meet the needs of small states from its earliest days. The operation is of course concerned with large states as well as small ones; and to some extent the small states benefit from that since they are able to reap economies of scale and international recognition.

UCLES has evolved substantially during its history. One feature of the present era has been willingness to tailor products to meet the demands of clients. This results in great flexibility in the nature of the awards and in the design of syllabuses. The fact that UCLES has supported efforts to localise examinations has not in fact led to a collapse of the UCLES market. Indeed, rather to the contrary, UCLES' willingness to meet the needs of the countries concerned has enhanced its reputation and ensured an ongoing role in training and in back-up support. In the initial period after World War II, it seemed that with the various localisation initiatives, the days of the overseas operations of UCLES were numbered. However, as noted by Smith (1995, p.92):

> Nothing could have been further from the truth. As one door closed, another opened. With the loss of work from West Africa, entries from East Africa increased. As the East African Examinations Council became independent, new work came in from Malaysia. When Malaysia changed to a Malay-medium education system, entries from South Africa increased. A new lower level examination was developed for Singapore.

An international version of the GCSE was taken up by International Schools throughout the world. Also, with the independence of Commonwealth countries came an increase in availability of secondary education. When Zimbabwe became independent in 1980, there were 15,000 O-level candidates. Now there are 250,000.

While much of Smith's account focused on large states, UCLES has continued to play a strong, albeit evolving, role in small states. Of particular importance is the fact that UCLES can offer widely-recognised qualifications at a reasonable cost. Through the international operation, UCLES is able to achieve economies of scale which would not be achieved by the small states themselves. And since UCLES has a huge pool of technical expertise, the small states are able to gain specialised advice which permits tailoring to their particular circumstances. UCLES is proud of its record, and looks forward to continued cooperation with a wide range of states, both large and small, and both within and outside the Commonwealth.

Chapter 16:

New Zealand Examining Bodies in the South Pacific

Mike Murtagh & Michael Steer

This chapter focuses on the roles of New Zealand examining bodies in the smaller states of the South Pacific. To permit understanding of the changing nature of relationships between these bodies and the South Pacific countries, the chapter includes some discussion of developments within New Zealand itself. The chapter may usefully be read in conjunction with Chapter 7, which discusses Samoa, and with Chapter 13, which deals with the South Pacific Board for Educational Assessment (SPBEA). Parts of the present chapter overlap with those chapters; but patterns and relationships are addressed from a different angle.

Much of the chapter takes a historical approach to indicate changes over time. It shows the ways in which New Zealand bodies first provided their examinations in unadapted form, then provided specially-tailored assessments, then largely withdrew that specially-tailored provision, and finally developed a system for supporting clients within South Pacific countries where desired.

Background

Presentation of background should start with examinations in New Zealand itself. During the late 1960s, a University Bursaries examination and a Sixth Form Certificate qualification were introduced in New Zealand. Many other examinations already existed, and pressures upon the students were considerable. Looking back, most observers feel that New Zealand's senior secondary school students faced too many national assessments, and that the school curriculum was excessively influenced by examination demands.

Table 16.1 shows New Zealand school qualifications in 1970, together with the authorities responsible for them. School Certificate, University Entrance and University Bursaries were public examinations operated by specifically-designated examination boards. The Sixth Form and Higher School Certificate assessments were operated by the government's Department of Education. The fact that no single authority had responsibility for national qualifications caused problems in articulating syllabus changes

within national curriculum subjects. It also created obstacles to establishment of standard approaches to national assessment.

Table 16.1: Principal External Secondary School Examinations, New Zealand, 1970

	Qualification	Authority
Year 11/Form 5	School Certificate	School Cert. Examination Board
Year 12/Form 6	University Entrance	Universities Entrance Board
	Sixth Form Certificate	Department of Education
Year 13/Form 7	University Bursaries	Universities Entrance Board
	Higher School Certificate	Department of Education

During the early 1970s, New Zealand's secondary teachers' union argued for modification of the system, particularly to introduce an element of internal assessment. After a series of Educational Development Conferences across New Zealand, a report from an advisory council on educational planning gave public support to many of the union's views (Educational Development Conference 1974). Internal assessment was recommended provided that adequate between-school comparability measures were developed, and that teachers were given resources to match the increased workload associated with new procedures.

The recommendations of the 1974 report were not immediately implemented in full, but did lead to some changes. By 1980, assessment in several School Certificate subjects was partly based on marks gained during course work; and in one subject, Art, assessment was entirely through course work. Changes had also begun to occur in the University Entrance and University Bursary examinations. In Geography, for example, practical fieldwork had become part of the overall assessment. Further changes during the 1980s led to extension of internal assessment across all three national examinations. Inter-school comparability was achieved through statistical moderation.

The Sixth Form Certificate had been introduced by the Department of Education as a possible alternative to the University Entrance examination in 1969. The award was loosely moderated across schools from 1974, but it was not as valued by students as the well-established and prestigious University Entrance examination. In the framework for the Sixth Form Certificate, schools awarded grades on 1 to 9 scale, where Grade 1 was high quality work from a course based on the University Entrance examination prescription. However, the links between the two qualifications, and the

extent and nature of comparability, were not widely understood by parents and employers.

Even less understood was the Higher School Certificate. This award's credibility was maintained artificially by making it a requirement for the basic tertiary study grant. The qualification was issued by the Department of Education to Form 7 students on the basis of attendance and course completion, following recommendations by schools.

South Pacific Participation in New Zealand Examinations

The South Pacific countries and territories which have been most closely linked to New Zealand's system of qualifications are Samoa, Tonga, Fiji, Cook Islands, Niue and Tokelau. Patterns in each of these places are here considered in turn.

Samoa was a New Zealand dependency which gained sovereignty in 1962. Paradoxically, in the initial years of independence Samoa became more rather than less involved in New Zealand national examinations. This was chiefly because independence coincided with the expansion of secondary education. Since the country already had strong links with New Zealand and its education system, it seemed natural for Samoan schools which developed Form 5 programmes to ensure that students were prepared for the New Zealand School Certificate examination. This was not surprising, as many of the courses were drafted by expatriate New Zealand teachers and government advisers, who were guided by their own backgrounds and experience.

When the numbers of students moving into Form 6 increased, the Samoan authorities requested the New Zealand Universities Entrance Board to allow schools in Samoa which satisfied prescription requirements to participate in the New Zealand University Entrance examination. This request was granted; and with it came the right of successful candidates to enter New Zealand universities.

In contrast to Samoa, Tonga was in the United Kingdom rather than the New Zealand sphere of influence. Tonga always retained its sovereignty, but between 1900 and 1970 the United Kingdom had control over many of its external affairs. Despite the British influence, many Tongans went to New Zealand for education because New Zealand was closer. When local provision of secondary schools expanded, Tonga also turned to New Zealand for examinations. As in Samoa, Tongan students, first in Form 5 and then in Form 6, were prepared for the New Zealand School Certificate and University Entrance examinations.

Fiji was a British colony between 1874 and 1970, and thus even more strongly within the United Kingdom sphere of influence. Because of this,

initially the schools were tied to the University of Cambridge Local Examinations Syndicate. However, from the 1960s Fijian schools switched progressively to the New Zealand School Certificate and University Entrance examinations, because they were cheaper and because their timetable fitted the Fijian school year more conveniently. During the 1970s, Fiji provided the bulk of the entries from South Pacific countries in the two New Zealand secondary examinations.

Cook Islands, Niue and Tokelau all have histories as dependencies of New Zealand. Cook Islands and Niue attained self-government in free association with New Zealand in 1965 and 1974 respectively, while Tokelau remains a New Zealand dependency. These constitutional arrangements have given students from all three territories full access to education in New Zealand. As secondary education in Cook Islands developed, schools introduced New Zealand examination programmes. Niue has only one high school, which also prepared students for the New Zealand School Certificate; and both Niue and Cook Islands were permitted to assess students for the Sixth Form Certificate. Tokelau did not have its own senior secondary school. Tokelaun students went either to New Zealand or to Samoa where, as previously described, the New Zealand examination system prevailed.

Towards National and Regional Qualifications in the South Pacific

Form 5 education in these South Pacific countries became less elitist as numbers participating grew. With this growth, which coincided with local curriculum development initiatives, came increased interest in the possibilities of national syllabuses and of national and regional qualifications. Policy makers felt that emerging political independence should be reflected not only in education administration, but also in what students were taught and how and where they were examined.

This view was identified by the South Pacific Commission (SPC) through regional educational seminars; and as early as 1964 a request was made through the SPC that alternative papers for Pacific candidates be provided in metropolitan examinations. The New Zealand authorities were initially unwilling to oblige, because such developments could have led to increased dependency at a time when national aspirations were becoming paramount. However, the 1970s brought action both in New Zealand and in the smaller states. Special options for South Pacific candidates were introduced progressively in the New Zealand School Certificate, and in 1978 an alternative English paper was developed for the University Entrance examination. English was a compulsory paper for entrance to universities, and the New Zealand universities, through the Universities Entrance Board, accepted that the alternative English prescription which was only available

in the South Pacific countries could count towards the entrance qualification.

Progress on the development of a regional body was slow; but the New Zealand government funded a working party in 1977 which reported to the SPC in the following year. Its key recommendation was that the South Pacific Board for Educational Assessment be set up to assist the countries of the region to develop assessment strategies for the support of national education certificates. Agreement was reached with member countries in 1979, and the SPBEA met for the first time in Fiji in 1980.

Part of the New Zealand desire to encourage the SPBEA arose from the view that changes to assessment and examination practices in New Zealand itself were impeded by the need to consider the effects of proposed changes on the school systems of the smaller countries. During the early 1980s, the secondary teachers' union, in a move which was supported by the government's Department of Education, proposed abolition of the University Entrance examination. However, in 1981 the newly-elected Minister of Education from the National Party cited difficulties for neighbouring countries as one reason why such a step could not immediately be taken.

Given the context of overall reform and of problems arising from international linkages, it is not surprising that the optional papers based on alternative prescriptions for candidates in the smaller countries had a limited life. In 1982, the Department of Education indicated that its South Pacific Options, as they had come to be known, would be withdrawn in 1985, and urgent negotiations took place to sort out suitable replacements. Discussions were held with SPBEA officials, and the member countries also negotiated independently as they sought appropriate solutions for their own concerns.

The deadline for the withdrawal of the New Zealand School Certificate from the South Pacific was postponed twice: first until 1987 and then until 1988. This allowed some leeway for national governments to devise their own procedures. The Tongan authorities decided that they required a Tongan School Certificate. To assist them, the New Zealand Department of Education provided resources and advice. Form 5 examinations were administered in Tonga in 1987 for the first time, and the SPBEA has provided ongoing technical support. Samoa, Kiribati and Tuvalu launched their own School Certificates in 1989, also with professional and technical assistance from the SPBEA.

The establishment of these national certificates was facilitated by inter-country cooperation of various kinds. Some papers were obtained by Kiribati and Tuvalu from Samoa, and others were shared between Kiribati and Samoa. Until 1996, New Zealand provided papers in subjects with limited candidature; and the SPBEA has always been able to gain further

support in these endeavours from professionals in New Zealand.

Shortly after the announcement about phasing out South Pacific Options in the New Zealand School Certificate came a further announcement about phasing out the University Entrance examination. This announcement was made by the New Zealand Minister who had been elected in 1984 as part of a Labour government. The new Minister announced that after 1985 the University Entrance examination would cease to exist. The Minister also announced that the Sixth Form Certificate would be the only New Zealand national secondary qualification at Form 6 from that time. As a way to solve the problems of international dependency, the Minister indicated that the Universities Entrance Board would assist the smaller countries with interim examination arrangements until alternative procedures were put in place.

The Universities Entrance Board representative notified the SPBEA of the New Zealand government's decisions at the SPBEA's 1985 annual meeting. By that time, it had become evident that a regional Form 6 examination involving all Pacific countries that had participated in the University Entrance examination would no longer be possible. The Fijian Ministry of Education had been turned down in 1982 when it had asked the Universities Entrance Board to enter candidates in the Form 7 University Bursaries examination. The Ministry's response had been to strengthen an emerging Fiji Form 7 examination, which by 1985 was operating in many schools and providing a suitable end-of-school qualification. The Fijian government felt that this qualification both served the interests of its Form 7 students and satisfied political objectives; and education officials and senior teachers were considered to have sufficient expertise in the setting and marking of examination papers to manage a similar exercise at Form 6. The government therefore decided that the Fiji School Leaving Certificate, a new examination for Fijian students only, would commence when the New Zealand Form 6 examination ceased to be available. At the same time, the Cook Islands government, whose people had access to New Zealand as of right, sought and was granted permission to continue to assess for the New Zealand Sixth Form Certificate. The Cook Islands government therefore informed the SPBEA that it did not need a further school qualification at Form 6.

Recognising that regional arrangements for other countries could not be introduced instantly, the New Zealand Universities Entrance Board agreed to run an interim Pacific Form 6 examination for three years to 1988. By that time the SPBEA was ready to administer its Pacific Senior Secondary Certificate (PSSC) examination in 10 subjects. The examination included substantial internal assessment; and in English, for example, this allowed for

national interpretations in the way the course work was prescribed and marked. Of the University Entrance countries, only Samoa and Tonga participated at that time. However, they were joined in 1989 by Solomon Islands and Kiribati.

The New Zealand Qualifications Authority in the South Pacific

In 1987, a Labour government was returned to office in New Zealand for a second term. The government focused on the way state social services were delivered, with the operations of its Department of Education as a primary target for attention. In 1988, a task force which had reviewed the administration of education reported to the government (New Zealand 1988). The task force argued that the time had come for radical change to the structure of the New Zealand education system. Its report promoted simple and uncomplicated systems, with discrete services that operated effectively through clear lines of accountability. There was to be no overlapping of responsibilities between state education agencies, and care had to be taken to ensure that organisations with similar functions acted in concert. By 1990, after the issue of further reports which spelled out the detail (e.g. New Zealand 1989), there was no School Certificate Examination Board, no Universities Entrance Board and, indeed, no Department of Education with assessment responsibilities.

In place, instead, was a New Zealand Qualifications Authority (NZQA), set up to provide a unified approach to the validation and administration of school qualifications and thus by implication expected to simplify the existing uncoordinated and confusing system. The Authority was required to develop a framework for national qualifications in secondary schools in which all qualifications were to have a clear purpose and a relationship with each other. The system for gaining qualifications was to be flexible, with recognition given to competencies already attained.

This new system permitted traditional relationships with other countries to be maintained, because the Authority was charged with assisting overseas governments and international agencies in the development and operation of examinations and related awards. The Authority was also required, after consultation with the universities, to establish and maintain a common educational standard as a pre-requisite for university entrance. This was achieved in 1990 through a mechanism based on defined performance in the Form 7 University Bursaries examination.

In 1991, as the NZQA pursued its primary objective to develop a framework of qualifications, it knew that the school examination structure it had inherited would be in place for some time. The NZQA was not threatened by this. It had established a focused examination unit which was

committed to developing common and transparent processes. The officials in the examination unit continued to work with education ministries in South Pacific countries, and the NZQA was invited to SPBEA annual meetings as an observer. A number of NZQA staff had been closely involved with assessment in the smaller states during the 1980s, and were well placed both to maintain established arrangements and to consider ways in which systems could usefully be changed.

In particular, these staff could respond to requests which were soon to be made concerning Form 7 education by some South Pacific countries. As noted, during the early 1980s Fiji had turned to New Zealand when Form 7 education had expanded in Fiji. When thwarted by the Universities Entrance Board, ostensibly because of that Board's view that it was already promoting inappropriate courses at Form 6 with its University Entrance examination, Fiji went ahead with its own Form 7 qualification. Samoa also developed its own Form 7 qualification in conjunction with the National University of Samoa. Tonga, however, required a more school- centred basis for its Form 7 students. In 1990, the Tongan government considered a number of alternatives and then approached both the NZQA and the New South Wales Secondary Board of Studies, in Australia, to solicit responses on the possibility of partnership. The fact that the PSSC prescriptions had their origins in New Zealand's University Entrance examination contributed to a decision to work with the NZQA rather than the New South Wales board. Arrangements were made for a new Tonga National Form 7 School to prepare candidates for the University Bursaries examination. It was significant for Tonga that the qualifications for entrance to New Zealand universities again became available.

The NZQA's attitude to the Tongan request was very different from the position taken by the Universities Entrance Board with Fiji a decade earlier. Regulations were framed in such a way that portability of qualifications, outside as well as within New Zealand, was seen to be encouraged. For example, the NZQA's contacts with Australian state tertiary admission centres enabled candidates from any country to have their aggregate mark in University Bursaries considered for entry to tertiary institutions in Australia. The NZQA Assessment, Examination and Certification Regulations were approved in 1993 when candidates from Tonga had already gained University Bursaries certificates. The entry eligibility requirement in the regulations was defined to reflect a wider view, whereby for the first time candidates attending teaching institutions overseas could be accepted for entry if the institutions' courses of study had been approved by the NZQA.

The entrance regulation was also apposite. Candidates were academically

qualified for entrance to a New Zealand university if they gained grades of A, B or C in three subjects of the University Bursaries examination, provided that the candidates had also gained the New Zealand Higher School Certificate qualification. This course-completion certificate was seen to give greater breadth of study than grades in three subjects alone, but was only available to students who had completed their Form 7 year in a New Zealand school. Hence, a further explicit sub-section was added to the NZQA's regulations for entrance to university. Candidates were academically qualified if they gained three grades of A, B or C and had completed course requirements deemed by the NZQA to be equivalent to the New Zealand Higher School Certificate. A full Form 7 year at the Tonga National Form 7 School was accepted as equivalent.

Tereora College in the Cook Islands applied to teach and assess to the University Bursaries examination one year after the Tonga National Form 7 School's debut. The NZQA, unlike its predecessor, was able to receive and consider the request in terms of published regulations promulgated by its Board under the New Zealand's Education Amendment Act 1990. An NZQA official visited Tereora College to consider suitability under defined criteria, and checked carefully that the school could manage internal assessment as prescribed in the range of University Bursaries subjects to be offered.

In 1994, Vanuatu, through its education ministry, applied for its Malapoa and Matevulu Colleges to offer the University Bursaries qualification. These two schools were also visited by the NZQA, and first presented University Bursaries candidates in 1995. This represented an expansion into a part of the South Pacific in which New Zealand examinations had not previously been prominent.

The National Qualification Framework devised by the NZQA uses a standards approach by defining specific levels of performance across a wide range of activities (NZQA 1996). Learning outcomes, described as 'unit standards', provide assessment targets and include criteria which enable learner performance to be measured. Qualifications on the Framework consist of suitable groupings of unit standards at appropriate levels of difficulty. To gain a credit for a unit standard, a learner must meet all the listed criteria; and to complete a qualification, a learner must gain all the unit standards contained within it. A key objective is for credits to be carried from school to tertiary provider to employment. This aims to prevent unnecessary duplication of time and effort for both learner and provider.

All registered providers can apply to offer and assess to any registered unit standard, and providers outside New Zealand can apply to the NZQA

for registration and Framework accreditation. The government of Cook Islands has indicated that this will be its preferred option for Form 6 if the Sixth Form Certificate is phased out in New Zealand. Other initiatives will allow for Framework connections to be made. For example, the SPBEA, in approving a new prescription for computer studies in the PSSC, has linked its prescription objectives to unit standards in computing. Moreover, opportunities exist for compatible development in PSSC internal assessment and Framework moderation systems.

Among the challenges for the NZQA is to support South Pacific countries in standards-based developments as they move progressively to internal assessment in their senior secondary schools by balanced promotion, but not rigid enforcement, of the New Zealand Framework view. This, as has been seen, is the way examination links evolved to the advantage of Pacific countries in the past, and should remain the pattern for the future.

Conclusion

This chapter has outlined the evolution of examinations and qualifications in the smaller states of the South Pacific. Most observers feel that the introduction of national and regional certificates in the South Pacific generated immediate gains. The smaller countries were able to define and manage some of their own examinations activities; and the SPBEA, through its regional PSSC qualification, received greater international recognition and increased credibility. Authorities took immediate interest in prescribing appropriate internal assessment activities and in replacing the New Zealand examination content with material more suited to Pacific students. The SPBEA prepared support material for teachers in management and assessment techniques.

The account of events between the 1960s and the 1990s is an instructive example of changing relationships between a metropolitan country and smaller states. In the first phase, curricula in the smaller states became closely allied with the various New Zealand qualifications. This was the case not only in countries and territories with which New Zealand had, or formerly had, constitutional ties, namely Samoa, Cook Islands, Niue and Tokelau, but also in countries with which New Zealand had no formal ties, including Tonga and Fiji. During the 1970s, the New Zealand authorities responded to requests to create special South Pacific Options in the New Zealand School Certificate examination, and an alternative paper in English in the University Entrance examination. In due course, however, these papers were phased out. The push for abolition did not come so much from the smaller states as from New Zealand itself, when the system of examinations was under review and new approaches to qualifications were being

considered. During the 1990s, relationships changed again. With the establishment of the NZQA to replace the previous examination authorities came a new approach to partnership, through the development of new qualifications and different approaches to assessment.

In most of the small Pacific states, the journey which has been embarked upon will continue with further development of national and regional qualifications. For some countries, however, links with New Zealand will continue. The NZQA is able to provide certain services which the small states would be unable to secure by themselves; and the NZQA is pleased to continue to operate in partnership with countries with which New Zealand has longstanding ties and common interests.

Note: The views expressed in this paper are those of the authors, and do not necessarily represent the views of the New Zealand Government, the NZQA, or the SPBEA or its members.

Part V: Conclusions

Chapter 17:

Lessons for Conceptual Understanding

Mark Bray

The introduction and first chapter of this book presented a conceptual framework for the topics addressed. This chapter builds on those remarks, and identifies some of the conceptual implications of patterns described. Focusing on examination systems in small states, this book contributes on the one hand to the broader literature on examinations and on the other hand to the broader literature on small states. Each of these is dealt with here, but is situated within the context of a broader multidisciplinary framework.

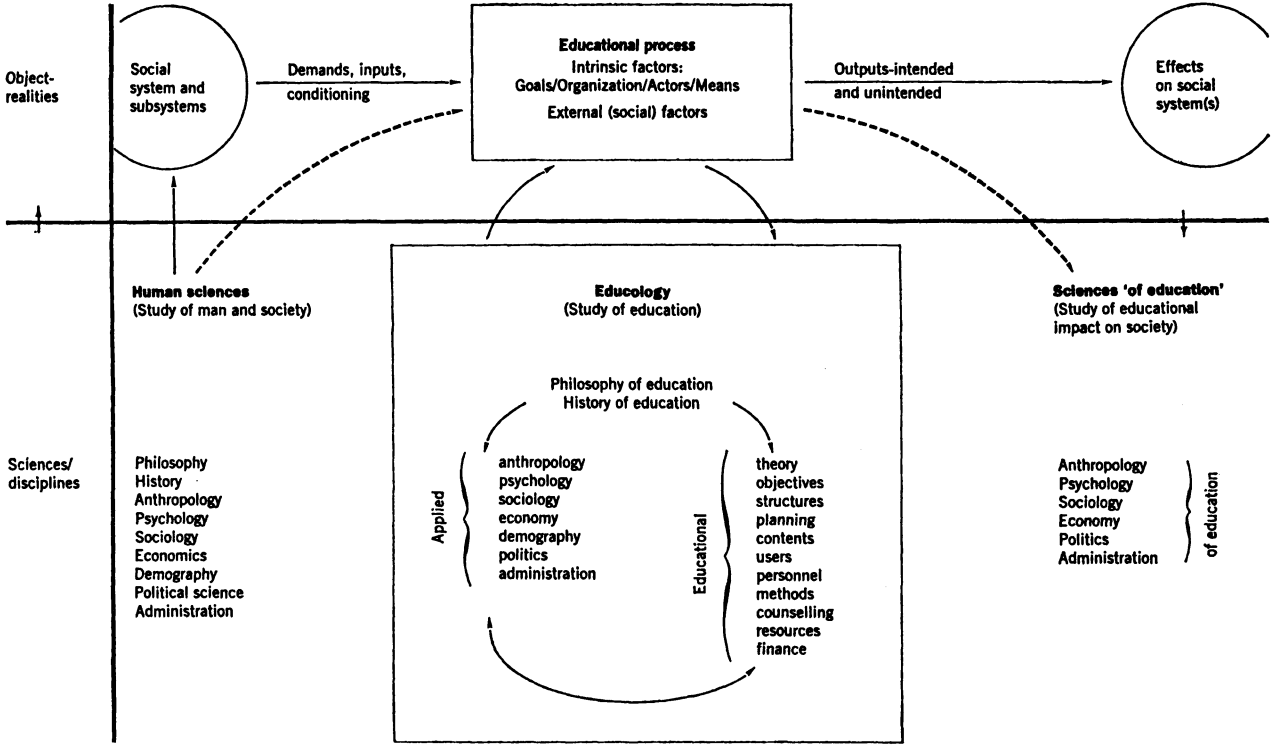
Models for Analysis

Like many comparative studies of its kind, this book may be located within the branch of studies which places education systems at the centre of analysis but which draws on the contributions of other domains of scholarship. Olivera (1988) used the term 'educology', and presented the diagram reproduced as Figure 17.1 to show relationships between the field of education and other disciplines of enquiry.

The sub-field of study of education in small states also draws on many other domains of enquiry. Bray & Packer (1993, pp.232-7) highlighted the contributions of political science, economics, sociology and public administration, using the diagram reproduced as Figure 17.2 to illustrate this.

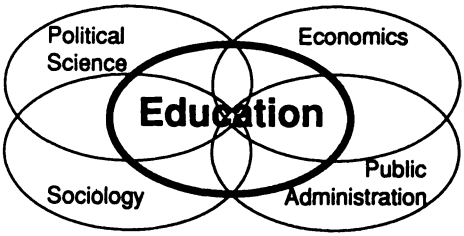
The present book also makes reference to political systems, economic forces, sociological features and aspects of public administration, and thus fits within the same framework. In the realm of politics, for example, among themes highlighted both by Chapter 1 and by some subsequent chapters have been tensions between national self-determination and international forces. In the domain of economics, themes have included the relative costs of national, regional and metropolitan examinations; sociological perspectives have included the ways that examinations officers preserve their neutrality in small-state societies; and in the field of public

Figure 17.1: A Systems-Based Classification of Education-Related Disciplines



Source: Olivera (1988), p.178.

Figure 17.2: Overlapping Fields in the Study of Education in Small States

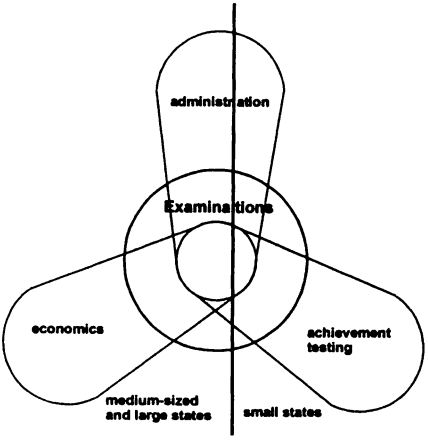


Source: Bray & Packer (1993), p.237.

administration, discussion has included focus on ways to organise examination units and secure qualified personnel.

In so far as this discussion focuses specifically on examinations, the diagram in Figure 17.2, which concerns education as a whole, can be made more specific by making examinations the central focus. This is done in Figure 17.3 which, along the same lines as Figure 17.2, shows some overlapping domains of study. The three domains portrayed are economics, administration, and achievement testing. Other dimensions could have been shown, but these three suffice to make the point while retaining simplicity. The diagram is divided vertically to show the way that examinations can be viewed according to the size of the state. Recognising that the volume of studies of examinations in small states is more restricted than that of examinations in larger states, the vertical line is towards the right hand side rather than in the centre of the diagram.

Figure 17.3: Overlapping Domains in the Study of Examinations



Questions that these Models can Help Answer

It is not by chance that the two chapters in this last part of the book are sequenced with conceptual understanding first, and policy and practice second. The sequencing reflects a view that action will only have a strong possibility of meeting its objectives if it is based on clear understanding of the forces at work. This is where the models are useful. They do not aim at practicalities so much as enhanced understanding, which can then be followed by appropriate action.

Within this conceptual domain, the sorts of questions that the models can help answer are:

- Why have small states in general been the last group to embark on localisation of metropolitan examinations?
- Why do some small states still adhere to metropolitan examinations rather than operating their own national examinations?
- Why are regional examinations councils more likely to be created to serve smaller states than larger ones?
- Why might administrators in small states feel even more vulnerable to security lapses than administrators in larger states?
- Why would one expect unit costs of operating national examinations to be higher in small states than in larger ones?

All these questions begin with 'why'. Some could perhaps have been rephrased to begin with 'what' or some other word; but fundamentally the questions, and the answers that flow from them, are about relationships between factors. Once again, this is a matter of conceptual understanding which should precede the 'how' questions, i.e. those concerning policies and strategies for implementation.

Some Answers to the Questions

Rather than answering in sequence the questions posed above, responses will be clustered under a number of headings. This avoids some duplication, and permits greater coherence in analysis. Commencing with the political domain, discussion focuses first on localisation, self-determination and international links. It then turns to lessons from experiences with the operation of regional examinations councils. These remarks are followed by commentary on sociological and economic factors.

Localisation, Self-Determination and International Links

In countries of all sizes, policy-makers are constantly pressed to ensure that education systems, of which examinations are a part, are relevant to the

societies that they serve. Such pressures have brought periodic waves of reform in almost all countries of the world. This has been particularly evident during periods of political transition during which colonies have moved to sovereign independence. Small colonies in general achieved sovereignty later than larger ones (Derbyshire & Derbyshire 1989), with the result that pressures to make education systems more relevant to national needs in general arrived later in small states than in larger ones.

However, pressures to ensure national relevance have not affected all parts of school curricula to the same extent. Pressures have commonly been stronger at lower levels than at higher ones, beginning with primary schools and only later followed by junior and then senior secondary schools. Universities, almost by definition, commonly see themselves as international institutions in which concerns about national relevance are mixed with concerns for international recognition.

Moreover, even though examinations are among the most important determinants of classroom realities, policy-makers anxious to promote localisation of curricula have often been reluctant to push with equal vigour for localisation of examinations. Sultana's chapter in this book points out that although Malta achieved independence from the United Kingdom in 1964, following which major changes were brought to the orientation of the school system, British examinations remained dominant for the next 25 years, and the Matriculation & Secondary Education Certificate examination board was only established in 1989. A comparable time-lag was evident in Botswana, which achieved independence from the United Kingdom in 1966. A decade after independence, a Commission appointed to review the education system stressed the desirability of localising examinations as well as curricula. The report (Husén 1977) pointed out that the Junior Certificate was controlled by a regional body, the University of Botswana, Lesotho & Swaziland Schools Examinations Council, and that the Senior Certificate was controlled by a metropolitan body, the University of Cambridge Local Examinations Syndicate (UCLES). In addition, the two exami-nations were not coordinated. The report suggested (pp.114-5) that:

> The curricular objectives ... can only be achieved if examinations and assessments are the servants of the curriculum, and this is difficult to achieve if a country does not control the assessment of its own educational system. What may then happen is that an examination system run by an external agency may not assess performance in terms of curricular objectives set by an internal body. When secondary examinations are set by two different agencies, as is the case in Botswana, true control of the curriculum is indeed difficult.

The Botswana government did take over control of the Junior Certificate examination during the next few years. However, it was another two decades before the government felt able to localise the UCLES examination.

Further parallels may be found elsewhere in Africa, in the Caribbean, and in the South Pacific. Zimbabwe gained sovereignty in 1980, but was tied to UCLES examinations until 1994; and Lesotho and Swaziland achieved sovereignty in 1966 and 1968 respectively, but only localised the UCLES examinations in 1997. Likewise the Bahamas gained sovereignty in 1973, but retained the linkage with UCLES; and when the government eventually launched its Bahamas General Certificate in Secondary Education in 1993, it was a joint venture with UCLES. Similarly, as noted in Chapter 13 of this book, although the majority of states in the South Pacific gained sovereignty in the 1970s, in most cases their examinations were only localised during the 1980s.

Moreover, some states have neither localised UCLES examinations nor shown any signs of doing so. Singapore for example achieved self-government in 1959, decolonisation as part of Malaysia in 1963, and sovereignty as an independent state in 1965, but still retains its link with UCLES. Other countries which remain tied to UCLES include Mauritius, which gained independence in 1968, and Brunei Darussalam which gained independence in 1984. The University of London Examinations & Assessment Council (ULEAC) has also continued to play a major role in some post-colonial states. In this book, the ULEAC role has particularly been highlighted in Mauritius and the Maldives.

Among questions then arising are why many states were slow to localise their examinations, and why some have maintained their links with metropolitan bodies. Part of the answer to the first question concerns technical expertise. Newly-independent states, and small ones in particular, were generally short of qualified personnel and would have encountered difficulties had they rushed to localisation. Another part of the answer lies in the perceived respectability and international portability of metropolitan credentials. International recognition was particularly important to small states because many had high emigration rates. Especially in the initial post-colonial period, few small states had universities of their own, and even the ones which did have local universities had only small institutions which could not provide the full range of specialisms needed. Recognised credentials were therefore needed in order to secure admission to universities abroad. Such matters made the education authorities reluctant to tamper with arrangements for examinations, despite the pressure to localise school curricula.

The Singaporean case sheds further important light on this topic because

by the 1980s and 1990s the country certainly had enough domestic expertise to operate a national examination system had the government wanted to. Singapore also had two universities plus an impressive system of polytechnic education. The Singaporean authorities therefore adhered to UCLES examinations because they felt it desirable to do so, rather than because they had no choice. They felt that UCLES examinations offered respectability and neutrality which might not be so easy to achieve had the examination been operated locally; and they were satisfied that UCLES tailored the examination sufficiently to local needs for the purposes of local relevance and national development.

The issue of local tailoring deserves elaboration because it helps to show that metropolitan examinations are not necessarily less relevant than locally-designed ones. When governments of small states insist on establishing local examination units, they encounter dangers from placing the process in the hands of a small group of people who are recruited from a limited pool and who do not necessarily have as much expertise as would be needed. Metropolitan agencies can draw from larger pools of expertise, and in recent years have shown much greater willingness to become client-centred than used to be the case. The chapter on Namibia in this book provides a noteworthy example. Namibia was never a UK colony, and the UCLES link is thus not a simple colonial legacy. In any case, UCLES was contracted to operate its examinations in the post-colonial era rather than before independence, partly because UCLES demonstrated strong willingness to meet Namibian requirements as expressed by the authorities in that country. One indication is that the Higher International General Certificate of Secondary Education (HIGCSE) was created solely to serve Namibian needs; and a second indication is that the International General Certificate of Secondary Education (IGCSE) examination includes papers in no less than seven local languages (Oshikwanyama, Oshindonga, Otjiherero, Rukwangali, Setswana, Silozi and Afrikaans).

An additional point, made clearly by the chapter on Mauritius, is that small states which enter contracts with metropolitan examinations may gain access to a much wider selection of subjects than could be the case had those states endeavoured to operate their own examinations. School Certificate subjects which are offered in Mauritius but usually have low entries in that country include Arabic, electronics, German, law, Marathi. Chinese, Spanish, Tamil, Telugu and Urdu. The range of languages is particularly impressive, and helps support the cultural pluralism of this particular country. The metropolitan agency is able to offer the examinations with low numbers of Mauritian candidates because it gains economies of scale by offering the subjects in other countries too. At the

same time, UCLES has been willing to undertake some tailoring for Mauritian needs. Finding that the French papers for UK and most international students were too easy for the Mauritian context, UCLES has devised special syllabuses to fit Mauritian needs. It has also arranged for special papers in history and geography, to suit the Mauritian society.

These points add up to a complex picture in the realm of localisation, self-determination and international links. Because small states commonly have open economies, and because they typically continue to rely on external training for many specialisms at the tertiary level, the demand for international linkages is generally stronger in small states than in larger ones. In this context, the governments of small states may decide that examinations set by metropolitan agencies have a market value which meets national needs more appropriately than would examinations set by national bodies. However, not all governments hold this view. By the late 1990s, a substantial number of states which had gained sovereignty in the 1960s and 1970s had moved to operation of their own national examinations.

The Roles and Functioning of Regional Examinations Councils

The previous discussion mainly contrasted national examinations with metropolitan ones. It is now necessary to consider the intermediate layer of regional examination councils. Do they provide the best of both worlds? Or are they complex, costly and cumbersome creations which in fact provide the worst of both worlds?

Among the three regional bodies considered in Part III of this book, the West African Examinations Council (WAEC) is the oldest, having been established in 1952. It was followed by the Caribbean Examinations Council (CXC) which was created in 1972, and by the South Pacific Board for Educational Assessment which was created in 1980. These three bodies may usefully be considered alongside two other regional bodies which have ceased to exist. The East African Examinations Council (EAEC) was established in 1967 but collapsed in 1979; and the University of Botswana, Lesotho & Swaziland Schools Examinations Council (UBLS/SEC) was established in 1963 but collapsed in 1979 (Bray 1997).

Each of these bodies has had a different history and structure, but they have also shared common features. Four of the five had small-state members, but one of these also had (and still has) large-state members. The body without small-state members was the East African Examinations Council, the members of which were Kenya, Tanzania and Uganda. All these countries had populations above nine million, even at the time that the council was formed. The other body with large-state members is the West African Examinations Council. On the one hand this body includes The

Gambia, with a population of one million; but on the other hand it includes Nigeria, which has a population exceeding 105 million.

The formation of the regional bodies may best be understood within the context of forces of decolonisation and geopolitical change. The roots of all five councils lay in the colonial era, but the bodies were formed in order to permit localisation from metropolitan bodies. For WAEC, the CXC and the EAEC, this chiefly meant reduction of dependence on UK examining boards. For the SPBEA this meant reduction of dependence on New Zealand agencies; and for the UBLS/SEC it meant reduction of dependence on South Africa. Regional bodies were considered desirable because they offered benefits of scale in both an economic and a professional sense. This was especially attractive to the smallest states which otherwise would have been unable either to afford such an enterprise or to provide the personnel.

However, the attractions of regional cooperation must be set alongside tensions and practical difficulties. Some of these are highlighted in the three chapters of Part III. Each of these chapters focuses on an organisation which has so far survived the tensions and difficulties; but the fact that two other bodies have not survived is of considerable significance.

One of the difficulties lies in the types of products that regional bodies can deliver. Taufe'ulungaki (1993, p.133), writing generally about regional cooperation for education in the South Pacific, observed that:

> There are eleven countries in the region, each one unique and distinct from the other. Not one represents a 'regional' country, and the projects, in endeavouring to cater to the needs of a mythical and abstract entity, ended up with educational programmes that did not match the concrete requirements of any member country.

Allied to this, and perhaps even more important, have been tensions between the forces of regionalism and the forces of nationalism. The EAEC fell apart chiefly because the governments of Tanzania, Kenya and Uganda evolved different political ideologies and required the examination and education systems to support those ideologies. The UBLS/SEC also foundered over disputes about control and ownership. The other three regional bodies have only survived by making various compromises. The history of the CXC includes the resignation (though also the subsequent rejoining) of Cayman Islands; and the history of the SPBEA includes the resignation of Cook Islands, albeit with an otherwise expanding membership which in the 1990s included Vanuatu, Nauru and Marshall Islands. The Indian Ocean Commission did one propose a regional examination board for Mauritius, Seychelles, Comoros and possibly Maldives. However, that idea

never got off the ground because policy-makers in the individual countries were aware of the political and practical difficulties they would face in working together.

Some political difficulties are allied to economic forces. Regional bodies require careful attention to geographic representation in core committees, and require extensive travel for coordination and consultation. They also encounter difficulties from fluctuations in the exchange rates of members' currencies, some of which may not be freely convertible. WAEC, the CXC and the SPBEA have also been plagued by problems of member governments failing to pay their dues according to agreed schedules.

On a more practical level, tension arises from the different academic standards required by different countries. This was among factors which contributed to the demise of the EAEC, the officers of which found particular difficulty in determining grade boundaries and pass rates (Somerset 1997). Boundaries which would have been considered appropriate in Ugandan society would have flooded the Kenyan labour market with too many EAEC passes; and conversely, boundaries which would have been appropriate for Kenya would have led to politically-unacceptable failure rates in Uganda. Differences also arise in the Caribbean. Table 17.1 shows the proportions of candidates gaining Grades I and II in CXC General Proficiency examinations in different countries in 1989. The statistics are the totals for all subjects, and show a range from 55 per cent in St. Kitts & Nevis to just 18 per cent in Guyana. In some individual subjects, the range was even greater. Such factors require the administrators to have considerable negotiating and diplomatic skills as well as professional ability to operate examinations.

Given that these tensions exist, it is also of little surprise that none of the still-surviving regional bodies confines itself to operation of regional examinations. The SPBEA was in fact set up to assist national governments with national examinations, and only launched a regional examination nine years later. WAEC commenced with a regional examination as its principal agenda, but gradually increased its proportion of national examinations to the point at which in 1992/93 91.2 per cent of all WAEC candidates were taking national examinations. The CXC has not had so prominent a role in operation of national examinations, but it does operate the primary school-leaving examinations for St. Lucia and Trinidad & Tobago. Also notable about the Caribbean is that in some countries, and particularly Jamaica, metropolitan, regional and national examinations all operate alongside each other. In other words, the regional body is certainly not given the exclusive right or mandate to control all the examinations in that country.

Table 17.1: Percentage of Entrants Achieving Grades I and II in the CXC General Proficiency Examination, 1989

Country	Per cent
Antigua & Barbuda	37
Barbados	52
Belize	48
Dominica	46
Grenada	35
Guyana	18
Jamaica	36
St. Kitts & Nevis	55
St. Lucia	53
St. Vincent	49
Trinidad & Tobago	43

Source: World Bank (1993c, p.90).

Moreover, some Caribbean countries have never joined the CXC. St. Maarten and Saba have become External Territories, but the other parts of the Netherlands Antilles (i.e. Aruba, Curaçao, Bonaire and St. Eustatius) have not followed. Likewise the Bahamas always stayed out of the CXC, retaining links with UCLES and eventually working in partnership with UCLES to operate its own school certificate examination. Suriname also kept out of the CXC, chiefly because the CXC examinations are not perceived to have wide currency in Europe where most Surinamese students who wish to study abroad prefer to go (Chapman & Levens 1996, p.19).

Sociological Dimensions in the Operation of Examination Systems

Farrugia & Attard (1991, p.237) have pointed out that officials in small states may "envy the impersonality and formality that exist in larger systems where it is easier for officialdom to be faceless". During the 1996 Barbados workshop which was part of the project leading to the present book, Sangay Dorjee, who is among the staff responsible for examinations in Bhutan, commented that the peak seasons in the examination cycle seriously affect his social life. Since he knows that during those seasons he is likely to be accosted for inside information wherever he goes, he often finds it better to stay at home. Chapter 1 of this book referred to Lowenthal's (1987) term, 'managed intimacy'. This seems to be an example of the way in which at least one individual finds a mode of operation.

Extending this commentary, the close-knit interpersonal relationships of small states can have different effects on the administration of examinations, depending on the ways that dynamics operate in particular settings. Theoretical considerations (e.g. Benedict 1967; Lowenthal 1987) would lead to predictions that transparency would lead either to widespread abuse or to very 'clean' systems in which transgressions rarely occur because the perpetrators could so easily be recognised and subjected to social and other sanctions. Several chapters in this book give examples of the former. Mauritius, for example, has been plagued by leakages which have led the authorities to revert to external printing and to ties with metropolitan examination boards. Leakage of examination questions is of course not only a small-country phenomenon, and can also be found in large countries (Greaney & Kellaghan 1996); but it seems that in Mauritius, and also in some other small states, interpersonal relationships are a factor in leakage to an extent which would be much less pronounced in larger states. In contrast, St. Kitts & Nevis has been said to exemplify the other end of the spectrum, in which transparency helps to keep the system free from abuse because all participants are aware of the social implications of transgressions (Manners 1996). Similarly in Malta, according to Sultana, "teachers who accept to set and write papers in contravention of rules — specifying that they must not be related to candidates, and must not have had them as students in the subject over the 12 months preceding the examination — are very quickly caught".

Rodhouse (1991) has contributed further insights into the ways that the small size of societies may affect administrative operations, drawing on his experiences in Jersey. On the positive side, he observes (p.222):

> Intimacy can contribute to excellent teamwork in which the strengths and weaknesses of individuals are well known, and in which 'playing to strengths' produces good results. Close relationships may also speed decision-making, and can generate trust and confidence.

However, this environment may also be problematic (p.223):

> First, innovation can be more difficult if it is 'known' that a particular person will be opposed to new ideas. Second, differences of personality may produce conflicts which are not easy to resolve in a small organisation. Conflicts can consume energy and time which would otherwise be directed at the Department's objectives, and the loss is proportionately greater in a small Department.

Presumably these factors apply to examinations units as much as to other parts of administrative machineries.

Just as variations may be found in the ways that these factors play out in practice, variations may also be found in the tolerance of irrelevance, or in demands for relevance, in examination systems. In some small states, societies tolerate metropolitan examinations which seem to have syllabuses that are barely linked to daily life in the client countries. Johnstone (1987, p.97) presented what was perhaps an extreme example of a type which is now much less likely to be found but which nevertheless makes the point well:

> The Tongan science curriculum contains a practical exercise involving the dissection of a frog, when there are no frogs in Tonga. Many inappropriate examples are used in English language development curricula, such as the following one from Kiribati: 'In my garden I have many petunias, antirrhinums, sweetpeas and roses.' In social science, a number of topics have limited relevance to basic education, such as those concerning England, France, kiwis, glaciers, mountains, kangaroos, Kalahari bushmen and Eskimos. ... In home economics, topics on the growing of wool and cotton have been included, often with no support material.

The question then is why such syllabuses would have been tolerated. The answer to some extent lies in the forces of tradition in a quasi-colonial education system. It also lies in the domain of economics, in so far as Tonga, at the time that Johnstone was writing, had not felt able to embark on localisation of examinations given the manpower constraints and high costs of doing so; and a third factor was the fact that Tonga had high emigration rates, which meant that the public demanded an education system linked to that of destination societies as well as their own.

A further factor which may explain tolerance of metropolitan examinations even when they seem of limited relevance is the fact that such examinations may seem to be more reliable and trustworthy. In many cases this is a myth rather than reality; but myths can be powerful. With reference to Malta, Sultana's chapter in this book points out that:

> the setting and marking of papers in distant England gave GCE [General Certificate of Education] examinations a legitimacy which local examinations could not have. This was partly because of a prevalent colonial mentality, but also because distance assuaged fears regarding the leakage of papers prior to examination sessions, and preferential marking in a

context where everybody seemed to know everybody else.

In contrast to these situations in which the public not only tolerate but may actually favour metropolitan examinations are situations in which the public are highly critical. These situations are typically characterised by strong demand for local relevance. As noted in Chapter 1 of this book, the peoples of small states tend to be acutely conscious of national identities, and in some settings demand a much stronger degree of recognition in school curricula than would be demanded by numerically equivalent groups inhabiting provinces of larger countries or suburbs of large industrial cities (Bray 1992, pp.72-80). Once again sociological analysis, which overlaps with the domain of political science, helps to provide the explanation for this.

The Costs and Financing of Examinations for Small States

Several chapters in this book have highlighted the costs of operating examination systems. The basic question derived from the realm of economics is whether examinations systems operated independently by small states have higher unit costs than those operated by regional or metropolitan bodies. At first sight, one might expect the answer to be affirmative because regional and metropolitan bodies can secure economies of scale which small states would be unable to secure when operating independently. However, the actual picture as portrayed by the chapters in this book, is more complex.

Beginning with the demands of national examination units, some of the case study chapters in this book do comment on the high costs of localisation. Sanerivi, for example, remarks that in financial terms the operation of the Samoa School Certificate and the Pacific Senior School Certificate "is unquestionably more costly" than the old system of New Zealand School Certificate and New Zealand University Entrance. Similarly, Dorjee remarks that it is "uncertain that future localisation of examinations [in Bhutan] will be less expensive than the present system", which is a partnership with Indian bodies. However, Erasmus highlights the costs of using UCLES examinations, and remarks that "Namibia pays a financial penalty for not conducting its secondary school examinations entirely on its own". Among the factors are salary scales, which would be lower in Namibia than in the UK, and the costs of transportation of question papers and scripts.

The chapter by Bissoondoyal on Mauritius adds further complexities. In that country the services of UCLES have been retained for most secondary school examinations, but the Mauritius Examinations Syndicate

has been made responsible for the Certificate of Primary Education (CPE). Immediately following the establishment of the MES in 1984, this was an entirely local operation. However, in 1993 the authorities decided for security reasons to employ a UK printer. The costs of printing and of air freight raised expenses to three times the level that they would have been if everything had been handled locally. Since 1994, further costs have been incurred for the moderation by the University of London Examinations & Assessment Council. The example indicates that efforts at localisation and cost-saving are not always successful.

The chapters on regional bodies, by contrast, indicate that larger bodies can secure economies of scale but that the bodies encounter additional costs from coordination. Moreover, small-state members must to some extent go along with the decisions of their larger counterparts. In the West African case, although in 1996 The Gambia paid only 2.25 per cent of the budget of the West African Examinations Council (WAEC), that figure amounted to 6.5 per cent of The Gambia's 1995/96 total budget for education. It is uncertain that membership of WAEC was cheaper, or represented better value for money, than operation of a national examination system or use of metropolitan bodies would have been.

As for the metropolitan bodies, certainly the scale of the UCLES operation is one factor which permits the organisation to keep its unit costs down. Sadler remarks that the break-even point for an examination (i.e. outgoings minus income) seems to be in the region of 4,000 candidates with five subjects per candidate. It is because of its international operation that UCLES is able to offer examinations which in Mauritius, for example, are taken by fewer than 100 people. However, UCLES' work in Mauritius has also highlighted a potential threat within the system: the 1984 leak of examinations in Mauritius required the cancellation of papers all over the world, and was estimated to have cost UCLES £250,000. The Syndicate now insures against such events; but the administrators are always aware of their vulnerability in such respects.

Discussion of costs should also note that in some countries the difficulty is not only in absolute costs but also in availability of foreign exchange. Several chapters in this book comment on the misgivings of governments which see large outflows of foreign exchange to regional and/or metropolitan examination boards. In several settings, this has been among the major forces for localisation. However, the book has also noted that regional bodies, in particular, sometimes make efforts to accommodate governments in difficulty. For example, when Jamaica and Guyana were in crisis, the Caribbean Examinations Council negotiated arrangements of a type which could probably not have been negotiated with metropolitan bodies. Con-

siderable adjustments are also made within the framework of WAEC.

Forces for Change

Underlying much of the commentary above is the need for analysis which takes account of dynamic forces rather than just a static picture. This is particularly evident in the political sphere. One major force for creation of all the regional examination boards has been the process of colonial transition. The seeds of WAEC, the CXC, the SPBEA and the UBLS/SEC all lay in the late colonial period, and the bodies were seen as a way to reduce dependence on metropolitan examination boards. In those regions and at that time, the regional initiative was given more weight than national ones, though subsequent development brought stronger national demands, even within the regional framework.

In some cases, however, national governments did not act on their own initiative so much as respond to changes in the metropolitan systems. Sultana makes this observation with reference to Malta, which, until the late 1980s was heavily dependent on examining boards in England & Wales. When the metropolitan examining boards merged the General Certificate of Education (GCE) with the Certificate of Secondary Education (CSE) to create a General Certificate of Secondary Education (GCSE), Malta found itself being offered a product which it did not want. The CSE had been developed in England & Wales to cater for students with low academic ability, but had never been adopted in Malta; and the GCSE was predicated on a set of criteria which did not match Maltese educational policies and practices. Because of these changes in the metropole, Malta found itself forced to overcome its inertia and to develop its own system.

The situation in the South Pacific was a little different but had some parallels. In 1973 the New Zealand government set up special alternative papers in the New Zealand School Certificate (NZSC) examination to serve candidates from the smaller South Pacific countries. Even at that time, however, the New Zealand authorities recognised the dangers of fostering dependency. As noted by Renwick & Eyers (1991, pp.9-10):

> the New Zealand government was aware that, by making alternative papers available, it was, at least in the short-term, increasing the dependency of Pacific Islands education systems on examinations administered by New Zealand. It therefore emphasised that the alternative papers were to be seen as an interim arrangement. New Zealand would want to cease providing them when the countries of the region, separately or collectively, were in a position to handle their own examinations at fifth and sixth form level.

In 1982, partly because the New Zealand authorities wished to reform their own examination system, they announced that the South Pacific Option papers in the NZSC examination would be withdrawn in 1985. This caused considerable consternation in some parts of the region, and the deadline was subsequently postponed to 1987 and then again to 1988. The New Zealand government did recognise the difficulties that could be caused by the change, and assisted the governments of the smaller states with training and other support. Ultimately the goal of localising the examinations was achieved; but it was more a case of the small-state governments being pushed to operate their own assessments than of the small-state governments themselves demanding autonomy from New Zealand.

Further factors include the major quantitative and qualitative advances that have been evident in most small states (and also many larger ones) at all levels of education. Even relatively poor states now have much higher enrolment rates at primary, secondary and tertiary education than was the case during the 1970s and before. In countries which have reached universal primary education and substantial enrolment at post-primary levels, much of the policy emphasis has moved to qualitative issues. Also, in many parts of the world, populations have grown significantly during the last few decades. Among the implications of these forces for small states are that, at least in terms of population, they are not as small as they used to be; and when population growth is combined with increasing enrolment rates, the growth in absolute size of examination candidates may be substantial. This may give small states economies of scale and other benefits that were previously out of reach.

Moreover, a corollary of expanded and improved-quality education is a strengthening in the base of human capital and therefore the expertise needed to operate organisations of all types including examinations. The improved human capital may in turn be complemented by technological advances in the form of computers, faxes etc. which have radically altered the nature of data processing.

These observations show the ways in which changes in examination systems may have multiple roots. In many cases the chief forces for change are political, but they can also be economic, social, technological and pedagogical. In some instances the changes are driven by factors within the small states themselves, but in other cases they are driven by external factors. Whatever the situation, the fact remains that models for analysis must take account of dynamic as well as static factors.

Conclusion

The commentary in this chapter shows ways in which the analysis of exami-

nation systems in small states may be informed by perspectives from a wide range of fields of enquiry. Particular attention has been given here to insights from the fields of political science, sociology and economics. The analysis helps shape understanding of the forces which shape education and examination systems. In turn, this understanding can and should form the background to formulation of appropriate policies.

Chapter 1 of this book pointed out that in many respects it is more useful to look at a continuum of scale than at rigid categories of small, medium-sized and large. It also highlighted the fact that states which have small populations do not necessarily have small areas or small gross national products; and considerable variation exists in the geographic and cultural features of states which have small populations. All these facts need to be built into analysis, to recognise diversity and avoid over-simplified explanations of patterns and forces behind them. This book has advanced understanding by addressing one particular domain that has previously received very little attention; but considerably more research and analysis remains to be conducted. To be comprehensive, such analysis must also be interdisciplinary.

Chapter 18:

Lessons for Policy and Practice

Mark Bray

The previous chapter identified some lessons for conceptual understanding of the forces which shape examination systems in small states. The chapter argued that such understanding was among necessary preconditions for a strong chance of success in devising both appropriate policies and workable strategies for implementation of those policies.

In the light of the conceptual remarks, and drawing on the accounts in previous chapters, the present chapter turns to lessons for policy and practice. In a book of this nature, such lessons must of course remain rather general. Moreover, policy makers and practitioners in each country must devise their own strategies according to their specific circumstances. In other words, it is impossible to identify a single set of strategies which could be applicable to all the small states in the world. Nevertheless, the descriptions of different systems have exposed experiences from which some themes can be identified.

Among the many possible ways to organise presentation of such lessons, perhaps the best is via a set of questions. As in Chapter 17, therefore, these questions are set out first. From the questions flow information on the actions taken by practitioners in various small states, together with commentary on the virtues or otherwise of those actions.

This book has noted three basic models for operation of examinations in small states: through national bodies, through regional councils, and through metropolitan agencies. The observation leads to the generic question: How can small states deploy their limited resources to gain the best outcomes in the choice between national, regional and metropolitan bodies? In turn, this question may be rephrased and subdivided:

- If governments of small states decide to operate their own national examination units, what strategies should be used to ensure that those units operate in an optimal manner?
- If governments of small states decide to collaborate with regional partners, what strategies should they employ to minimise costs and

maximise benefits?
- If governments of small states decide to utilise the services of metropolitan agencies, what steps can they take to secure packages which most appropriately serve national goals?

These questions provide the framework for the rest of this chapter. The three strategies are of course not mutually exclusive; but it is useful to consider them one at a time.

A final introductory remark is that among the initial decisions facing policy makers is the form of assessment which they wish to promote. The education systems of the majority of countries covered in this book, particularly at the senior secondary level, remain dominated by formal examinations. This may be a more prominent feature in Commonwealth countries than in other parts of the world. One widespread international trend is away from traditional two- or three-hour, unseen and summative examinations, and in the direction of continuous and school-based assessment. Such movement has implications for arrangements the administration of assessments. However, since formal examinations are likely to remain a major component in most of the education systems covered in this book, this is the emphasis of the chapter.

The Design and Operation of National Examination Units

Discussion on the design and operation of national examination units will here be grouped under four headings. First to be considered will be the location of such units within administrative frameworks. This will be followed by comments on the size and staffing of examination units. The two remaining sections discuss management issues and questions of international recognition.

The Location of Examination Units

Among the first organisational questions for policy makers is where examination units should be located within administrative structures. The majority of national examination units presented in this book operate in ministries of education. However, the examinations board in Malta is operated by a university; and the syndicate in Mauritius is an independent statutory body.

The role of universities in examination of school-level performance has been considered problematic in various countries, both large and small. While long traditions exist for university involvement in the United Kingdom and some other countries, many observers have reservations about the extent to which universities should be permitted to impose their own definitions of quality on schools. However, it must be recognised that the

amount of direct university involvement in examination boards that bear university names is not always very large. Thus the University of Cambridge Local Examinations Syndicate (UCLES) and the University of London Examinations & Assessment Council (ULEAC) largely operate independently of the main administrative structures of their respective institutions.

For some small states, the possibility of asking a domestic university to operate an examination unit does not arise, simply because those states do not have domestic universities. This is the case in Seychelles and Maldives, for example. However, others do have national and/or regional universities. In Southern Africa, the University of Botswana, Lesotho & Swaziland (UBLS) used to play a role in school-level examinations, but the UBLS Schools Examinations Council was disbanded after Botswana withdrew in 1979 and Lesotho and Swaziland also went their separate ways.

Among the countries covered by the present book, only in Malta are school-level examinations controlled by a domestic university body. The University of Malta operated its Matriculation Examination for secondary school leavers until the 1950s. The examination was then replaced by assessments set by United Kingdom examining boards, which in turn were replaced in the late 1980s by those of the University of Malta's Matriculation and Secondary Education Certificate (MATSEC) examinations board. Sultana's chapter in this book indicates that not everyone in Malta was convinced that the university should again be given a dominant role in school-level assessment.

The two main alternative models are units within ministries of education or autonomous statutory bodies. Bissoondoyal's chapter indicates that in Mauritius, examinations prior to the 1980s were primarily conducted by the Ministry of Education. The Mauritius Examinations Syndicate (MES) was created as an independent body in 1984, partly because of examination leakages from the ministry and the view of the authorities that a separate body would be better able to operate a secure system. Such events could of course occur in large states as well as small ones; but among the small-state features which could make leakages more likely to occur is the highly personalised nature of small societies, which have many overlapping relationships and roles. Independent statutory bodies with clearly-defined responsibilities and mechanisms for accountability may be able to handle such circumstances more easily.

However, states with small populations must also be mindful of the need to maximise use of scarce personnel and expertise. This factor favours administration of examinations by existing bodies rather than creation of new ones. Examination units located within universities or ministries

commonly draw on personnel in a part-time capacity while those people devote the rest of their time to other work within the organisations. Such individuals can also of course be called upon to contribute to independent bodies, but arrangements are not always so easy.

In summary, arguments can be found to support arrangements of all three main types. The models decided upon in any particular setting commonly reflect traditions in the country concerned, and may be guided by attitudes towards institutional independence or integration which can be found in large states as well as small ones. However, the need in small states to make use of scarce expertise may contribute to decisions to locate examination units in existing bodies rather than in separate specific-purpose ones. Most examination units are located in ministries of education since those bodies are already seen as the legitimate centres of control and expertise on school matters. Examination units in ministries can also draw on other sections of the ministries for financial management, data processing and printing.

The Size and Staffing of National Examination Units

The country studies in this book have shown wide variation in the number of employees in national examination units. At one end of the spectrum is the Bhutan Board of Examinations (BBE), which in 1996 had just nine staff; and at the other end of the spectrum is the Mauritius Examinations Syndicate, which in 1996 had 220 staff.

The disparity in the size of these two bodies may partly be explained by differences in the scale of operations, for Mauritius has twice the population of Bhutan, and also has much higher school enrolment rates. However, the disparity also reflects the fact that the MES is an independent statutory body with its own team of accountants and clerical officers. The MES also undertakes functions not undertaken by the BBE. Most notable is the research section, which in 1996 had eight specialised professionals supported by 12 research assistants and data processors. It seems arguable that the MES is staffed in a very luxurious mode, especially for a small state. By contrast, a case would seem to exist for expansion of the Bhutanese team, especially in the light of plans to take over senior secondary examinations from the Council for the Indian School Certificate Examination (CISCE).

Review of the Mauritian structure also helps expose the tendency for bureaucracies in small states to be designed as copies of those in larger states, even though this is often inappropriate. Some analysts have argued that small states need bureaucracies which are significantly different in their characteristics (e.g. Bray 1991; Murray 1985; Warrington 1994). Such analysts have particularly highlighted the scarcity of personnel in small

states, and the fact that government bureaucracies in small states tend to form much greater proportions of total employment than they do in larger states. According to Bissoondoyal, the Mauritius Examinations Syndicate has benefitted from the buoyant economy, which has meant that the organisation has not faced the financial stringency of counterpart bodies elsewhere. Micro-political factors may also have favoured the MES. Whatever the background, it does not seem to be a model which should or could be emulated by many other small states.

Small states which do face shortages of financial and/or human resources might find it useful to look at the examination unit in Samoa. In 1996, that unit had only six staff, including one typist. Rather than recruiting specialists in every subject, the unit drew on the staff of the Curriculum Unit in the Ministry of Education and on the staff of the teachers' college, the national university and the secondary schools. In addition, the unit made use of the South Pacific Board for Educational Assessment (SPBEA), and supplemented its internal pool of moderators with residents of Fiji and New Zealand. The unit also kept itself modest in its ambitions for research. While research is obviously desirable in settings of all types, sometimes research cannot easily be justified as a mainstream activity. An alternative is to invite researchers from local and foreign universities to undertake the studies which are priorities.

The Department of National Examinations & Assessment in Namibia also deserves comment. This seems to be another case of a small state following a large-state organisational model. In 1996, the Department had as many as 52 posts, to which were added 20 occasional employees for about 10 months of the year. Following a common large-state model, the Department was divided into Administrative and Professional wings. As pointed out elsewhere (Bray et al. 1991, p.52), such divisions are particularly problematic in small states because they fragment small pools of expertise and obstruct deployment across bureaucratic lines. Also, the Namibian model aimed to have specialists for each subject rather than seeking to use staff who were already employed in other posts. The chapter on Bhutan points out that engagement of teachers in the examination process not only helps reduce costs and make use of scarce skills, but also has a valuable in-service function which promotes school-level understanding of the examination processes.

Other ways in which governments of small states can minimise staffing demands include mechanisation, for example with optical scanners. The costs of such equipment might put it beyond the reach of states which are poor as well as small, and attention would have to be given to training in the use of such machines as well as in maintenance. Moreover, optical

scanners are only appropriate for certain types of test. Nevertheless, they are certainly useful in some settings.

Finally, some examination units improve both efficiency and effectiveness by contracting out parts of the examination process rather than trying to do everything themselves. Several chapters in this book mention contracting out of printing, and comparable arrangements can be made for data processing and other functions. Some examination units go even further by purchasing whole papers from other agencies. Thus the governments of Kiribati and Tuvalu have at times purchased papers from Samoa; and several countries in the South Pacific have purchased papers from New Zealand. These are examples of cooperation between small states as well as between small and larger states.

The Management of National Examination Units

Allied to the above comments is the notion that staff in small states must be much more multi-functional than is likely to be the case for their counterparts in the examination units of larger countries. Sanerivi's chapter indicates that staff in Samoa operate very much as a team, so that members can cover for each other at times that individuals are absent. Coverage for absence can be a major problem in small organisations, and requires attention in examination units as much as in other specialist bodies.

Another challenge in small units within small ministries of education is to balance the need for specialisation and development of expertise with the need for career mobility. The chapter by Khan & Persico on Guyana noted that the Examinations Division and the Test Development Unit are handicapped in recruitment by a perception that promotional routes are limited because the teams are so small. Experience elsewhere has indicated that individuals in such circumstances who do wish to be promoted often have to abandon their specialist skills. Such abandonment is especially problematic in small countries, where the expertise of every individual counts significantly within national frameworks. This observation stresses the need for flexibility in promotion structures and in assignment and use of personnel, and underlines the value of being able to call on individuals who may no longer be primarily assigned to examination units.

A further challenge for small examination units arises from the tendency for insularity and staleness. In all organisations, personnel need refreshment from time to time. Small examination units can suffer from 'examiner burnout', in which individuals run out of innovative ideas and, in the worst cases, simply recycle the same types of examination questions from year to year. Large units are more easily able to rotate staff between units, thereby providing variety in tasks and rejuvenation in perspectives.

Several strategies are available to small states to tackle this problem. Collaboration with teachers and lecturers not only reduces the load on a small group of personnel, but also provides avenues for new insights. Small states may also find great value in regional and international connections. Chapter 1 noted the value of links through international bodies including the Commonwealth and the United Nations bodies. Specifically in the field of examinations, and rather different in character, is the International Association for Educational Assessment (IAEA). This organisation was conceived in 1974 with the goal of improving assessment techniques through sharing of expertise and by undertaking specific projects (IAEA 1996a, p.1). Primary membership is institutional, and includes over 80 measurement agencies in different parts of the world. Small states are highly visible in IAEA affairs. In 1996, the President was from Lesotho, and the other seven members of the executive committee included one from Mauritius and another from the Caribbean Examinations Council based in Barbados (IAEA 1996b, p.1). The IAEA is thus a body which groups personnel from large, medium-sized and small states, and in which some of the major concerns of small states are addressed. Also, the 1996 Barbados workshop, the proceedings of which form part of the basis for the present book, recommended the establishment of a Commonwealth Association of Examination & Accreditation Boards.

Some governments have gone further than merely encouraging staff to attend international meetings, and have organised medium- and long-term attachments. For example, in 1996 three officers of the Botswana Examinations Research & Testing Division visited the Caribbean Examinations Council to look at technical and administrative procedures. Such initiatives are particularly noteworthy since they take participants beyond the more common pathways of Europe and North America.

Issues of International Recognition

Governments of small states which operate national examinations may still be concerned with international recognition. This is unlikely to be a problem at primary and junior secondary levels, where assessments are almost entirely for the local context. However, international recognition is commonly important at senior secondary levels. Even the small states which have national universities are unable to provide the full range of specialisms, and therefore need to send students abroad. Moreover, as noted in Chapter 1, the economies of some small states are highly dependent on remittances from migrants, and some governments actively encourage emigration for purposes of employment.

In some cases, international recognition is achieved through partnership

with metropolitan bodies. For example, Class X students in Bhutan take the Bhutan Board-Indian Certificate of Secondary Education (BB-ICSE) examination, which is a joint operation between the Bhutan Board of Examinations and the Council for the Indian School Certificate Examination. Likewise, the Bahamas General Certificate of Secondary Education is a joint operation of the Bahamas government and UCLES. Similar forms of partnership have been set up between UCLES and the governments of Swaziland, Lesotho and Botswana, which have also moved towards localisation of their school certificate examinations.

In other cases, national bodies have achieved broader recognition through partnership with regional bodies. This is most obvious in the South Pacific, where the SPBEA helps ensure the quality of national qualifications, and also disseminates information on the nature of those qualifications. Some states, particularly Tonga and Cook Islands, have gained broader recognition through accreditation by the New Zealand Qualifications Authority (NZQA); and Nauru's education system has close ties with the State of Victoria in Australia. In each of these cases, as would seem logical, a main goal of partnerships is not globally-international recognition so much as targeted recognition in the larger countries with which the small states have important ties.

Beyond such strategies, however, small states may have to be content with compromises. Greaney & Kellaghan (1990, p.36) discussed concerns about the loss of international recognition of examinations following localisation. They argued that in order to maintain recognition, "it will be necessary for governments to invest more in evaluation and research activities relating to examinations". This is a demanding suggestion, especially for small states. Indeed it is arguably a recommendation which would distort administrative structures and costs more than would be warranted by the outcome. The alternatives are either for small states to accept the possible loss of international recognition, or for them to engage in targetted partnerships of the types mentioned above, or for them to use the examinations of regional and/or metropolitan bodies.

Small-State Participation in Regional Examinations Councils

The chapters in this book have shown that regional bodies can certainly bring benefits to small states, but that they also bring challenges of various kinds. The nature of participation in regional bodies and the extent of the benefits depend on many factors, including the ways that the member states themselves view the bodies. In addition to educational variables, political and economic issues are of considerable importance.

Making Use of Constitutional Provisions

The three regional bodies examined in detail in this book have rather different histories and characteristics. The West African Examinations Council (WAEC) and the Caribbean Examinations Council (CXC) were primarily established to operate regional examinations, whereas the South Pacific Board for Educational Assessment (SPBEA) was primarily established to assist members to operate national examinations. WAEC is mainly composed of medium-sized and large states, though does also include The Gambia, whereas the CXC and the SPBEA are mainly composed of small states.

In all three regional bodies, careful provisions have been made to secure the voices of all member states, though the nature of those provisions varies. The WAEC Convention sets out a fixed number of seats on the Council for each member state, allocating The Gambia two seats out of 16. The Convention also stipulates that the Chairpersonship of the Council should rotate between the five member states in a fixed sequence. Careful arrangements are also made for representation of member states on most administrative committees. The constitutions of various CXC and SPBEA structures similarly allow for equal representation of member states on some committees, and for some quasi-proportional representation according to their population sizes on others.

These constitutional provisions provide the framework, but the ways in which the member states make use of the provisions is another matter. Two questions which immediately arise again concern expertise and availability to attend meetings. As already remarked, states with small populations are necessarily limited in their pools of personnel with professional expertise, and such persons who also have good negotiating skills are even more scarce. Because of this, small states may find themselves disadvantaged in comparison with larger states in the recruitment of appropriate people to join regional committees. Also, returning to a point made above, when a person travels to attend a regional meeting, the gap left in the home office is proportionately greater in small states than in larger ones. This may mean that individuals are not easily available to attend meetings, even when they have the necessary expertise.

A third question concerns costs. Regional meetings require expenditure on airfares and accommodation, and the expenses may be a proportionately heavier burden on small states than they would be on larger ones. Sometimes the regional meetings are held in the small states themselves, in which case airfares and accommodation are not needed. However, on those occasions a different financial burden arises because the host country must provide facilities and hospitality for the visitors.

Despite these issues, small states in general receive favourable treatment in regional organisations. Ndure's chapter in this book points out that in the WAEC framework, The Gambia has a much louder voice than, for example, parts of Nigeria with equivalent population sizes. The same remark would to some extent apply within the CXC and the SPBEA, though of course the disparity in country sizes in those organisations is much less than in WAEC.

Making Use of Regional Resources and Expertise

Even when small states have a voice, the question remains what they would say, and how they can use the resources offered by regional organisations. Most obvious, of course, is the access to the regional examination. In general, small states are able to enter small numbers of candidates for these examinations because the addition of candidates from other states creates a sufficient clientele to permit the operation to be economically viable. In the WAEC case, the withdrawal of Nigeria and Ghana from the West African School Certificate examination meant that for most of the 1990s that examination probably was not economically viable. In this case, however, Sierra Leone and The Gambia benefitted from the overall resources of WAEC, which was enabled by other activities to continue to operate the regional examination. WAEC maintained a long-term view on regional examinations, and for this reason designed a West African Secondary Senior School Certificate Examination for launching in 1998.

Member states may also access technical expertise for domestic operations. Ndure's chapter notes that The Gambia was able through WAEC to gain the services of a Ghanaian test development specialist and a Nigerian computer expert. Because these individuals were employed by the regional organisation, they were very familiar with its structures and processes. Moreover, they were more willing to work in The Gambia than other expatriates might have been because the service was for the umbrella organisation and therefore contributed to, rather than detracted from, their prospects for promotion.

Also evident in all three regions is that small states ask regional bodies to assist with *national* examinations as well as regional ones. This is especially evident in the South Pacific, where the SPBEA provides technical expertise for the majority of national School Certificate examinations and also for several primary school examinations. In the Caribbean, the CXC assists with primary school examinations in St. Lucia and Trinidad & Tobago; and WAEC operates national examinations for all its member states. Regional bodies should therefore be seen as a resource to meet national needs as well as regional ones.

Dealing with Wider Political and Economic Factors

As noted in the previous chapter, the two regional examination boards which collapsed during the 1970s, i.e. the East African Examinations Council (EAEC) and the University of Botswana, Lesotho & Swaziland Schools Examinations Council (UBLS/SEC), chiefly died because of macro-political factors rather than narrower educational ones. Also, as noted by Ndure, WAEC was one of six regional bodies founded in West Africa during the period immediately after the second world war, and is the only one still to survive. The bodies which had collapsed were the West African Court of Appeal, the West African Currency Board, the West African Airways Corporation, the West African Cocoa Research Institute, and the West Africa Institute of Oil Palm Research. The reasons for their collapse were again primarily political, as the governments of the member states pulled in different directions. These patterns send a signal to the still-existing regional bodies about their vulnerability to wider political forces.

Political factors have also played a major role in the basic membership of regional bodies. Bahamas never joined either the West Indian Federation or the CXC, chiefly because its leaders preferred to operate separately from the other Caribbean governments; and in 1977 Cayman Islands left the CXC, chiefly because of concern about Jamaican dominance, which was at that time strongly flavoured by communist and black-power ideologies. Moreover, the ability of WAEC, the CXC and the SPBEA to cross language boundaries has been very limited. All have moved slightly beyond the Commonwealth, as evidenced by Liberia's membership of WAEC, St. Maarten and Saba's affiliation to the CXC, and the Marshall Islands' membership of the SPBEA. However, none have recruited the non-Commonwealth francophone territories in their respective regions. Likewise, the CXC has not attracted the Spanish-speaking or other Dutch-speaking territories; and WAEC has not attracted the Portuguese-speaking states. WAEC also lost the membership of West Cameroon when it was split off from Nigeria in 1961 and was joined with the Republic of Cameroon. West Cameroon retained an anglophone education system, but for the next 16 years tied its secondary school system to the examinations of the University of London before establishing its own examinations board. Again the move was chiefly political, since the decision-makers in Cameroon wished to distance themselves from Nigeria and saw WAEC as being dominated by that country.

Economic factors may also play a part, because such factors determine the context within which education and examination systems operate. The issues concern not only syllabus design but also numbers of candidates for examinations and pass rates. As noted in Chapter 17, major tensions can

arise between countries concerning grade boundaries and cut-off points. Economic factors also, of course, determine the ability of member governments to pay their dues. All three regional examinations boards covered in this book have difficulty in persuading at least some member governments to meet their financial obligations.

These macro-political and economic factors are largely beyond the influence of educational policy-makers. However, at least some scope for negotiation may exist. Thus, all three of the regional bodies covered here have continued to provide services to governments in financial crisis, even on occasions when those governments have been unable to pay their basic dues. Also, in the Caribbean, for example, arrangements have been made for governments to pay the CXC in local currencies, even when those currencies have not been freely convertible. This has enabled at least some governments to be able to retain assistance from the regional body even when they were unable to make comparable arrangements with metropolitan boards.

Small States as Clients of Metropolitan Examinations Agencies

In general, metropolitan examinations boards have become more flexible and responsive to the needs of their clients than used to be the case. This is partly the result of changing relationships in a post-colonial world, and partly a simple matter of good business practices. Small states would be well advised to capitalise on this fact. With reference to Malta, Sultana quotes Zammit Mangion (1992, p.354), who points out that the Maltese "never fully exploited the facilities which the English examining boards would have been ready to provide to tailor their examinations ... to Maltese needs".

The extent to which metropolitan boards may be willing to embark on special tailoring has been exemplified in this book by patterns in Namibia and Mauritius. In Namibia, UCLES has created a Higher International General Certificate of Secondary Education (HIGCSE) examination solely to serve Namibian needs, particularly for access to universities in South Africa. Also, at the level of the International General Certificate of Secondary Education (IGCSE), UCLES facilitates and approves papers in no less than seven local languages: Oshikwanyama, Oshindonga, Otjiherero, Rukwangali, Setswana, Silozi and Afrikaans. In Mauritius, UCLES has prepared special syllabuses and examinations in French, to match the higher standards generally expected in Mauritius than in the majority of other countries that use the UCLES French papers; and UCLES has also tailored papers in economics, geography and history more closely to the Mauritian context. Elsewhere, UCLES has developed a Normal ('N') Level examina-

tion to suit the needs first of Singapore and later of Brunei Darussalam. This fits the streaming policies of those countries, the governments of which want greater flexibility than can be achieved through just the Ordinary ('O') and Advanced ('A') Levels.

Some tailoring to the needs of clients is also evident in the South Pacific and the Indian Ocean. During the 1970s, South Pacific Options were introduced in the New Zealand School Certificate examination, and an alternative English paper was developed for the University Entrance examination. The 1980s and 1990s brought evolution of this picture with the establishment and development of the SPBEA, and with the formation of the NZQA. The chapter by Murtagh & Steer notes that the NZQA has even operated at the school level in Vanuatu. In the rather different context of Maldives, the chapter by Waheed points out that the ULEAC has made special arrangements for fisheries science to be a Mode 2 subject specially tailored to Maldivian needs.

In many cases, small states may be able to secure assistance from metropolitan bodies as part of bilateral aid packages. During the 1970s, what was then called the Overseas Development Administration of the UK government paid for staff of the UK Southern Region Examinations Board to work with educators in Anguilla and St. Kitts & Nevis; and more recently, UCLES has worked with Ministry of Education officials in The Gambia.

In addition, improved technology, particularly in international communications, has greatly reduced the distance that used to separate metropolitan bodies from their clients. Such technology includes electronic mail and fax; and international telephone calls and air travel have become much cheaper. As a result, small states are much less isolated than many of them used to be.

A further example of technological development is that special computer packages have now been prepared to serve the needs of small states. Chapter 1 of this book cited computer programming as one area in which small states cannot easily achieve economies of scale, for a single programme developed for a national system would serve only a small number of pupils. Recognising this fact, UCLES has developed a Small Examinations Processing System. It is said to be capable of administering complex examinations with up to 10,000 candidates (UCLES 1994, p.14), and is currently used in the Lesotho, Bahamas, Botswana and Swaziland.

Small states have also gained benefits from metropolitan bodies in the links between those bodies and regional organisations. In the South Pacific, the New Zealand examining boards played a major role in the establishment and early operation of the SPBEA. Similarly, at the inception of WAEC the

Universities of Cambridge and of London were formal partners in the organisation. They each held seats in the WAEC Council, and provided practical advice on strategies and procedures. The architects of the CXC decided against a formal link with any of the metropolitan bodies, but they did solicit technical advice from both UCLES and the Educational Testing Service in Princeton, USA. They also arranged for UCLES Chief Examiners to review CXC processes in individual subjects, and to make public pronouncements (usually positive) on the extent to which the CXC standards matched those of UCLES.

However, small states also need to bear cost considerations in mind. This book has stressed that metropolitan examinations are not necessarily more costly than regional or national ones; but they do demand foreign exchange, and they may have hidden costs in the form of imported textbooks which accompany the metropolitan syllabuses. These factors stress the need for policy makers to undertake careful accounting.

Despite the international recognition that metropolitan examinations bring, policy makers should be aware that international certificates cannot always be considered part of a 'gold standard'. Kahn (1990) investigated patterns in the UCLES school certificate, paying particular attention to the percentages of students gaining different grades in various science subjects. His data focused on the results of candidates in Singapore, Zimbabwe, Botswana, Brunei Darussalam, Mauritius and Swaziland, and showed how the introduction or removal of candidates from other countries affected the overall pool and caused fluctuations in the grades of students in individual countries. Kahn concluded from his analysis that planners should interpret changes in the performance of students from individual countries with caution, because the changes might reflect fluctuations in the overall pool rather than real changes in the performance of specific groups of students. Kahn suggested that such factors underlined the desirability of national governments operating their own examination systems and moving away from metropolitan boards. The chapters in the present book indicate that the issue is not necessarily so simple, though Kahn's analysis is certainly instructive and important.

Conclusions

This chapter has considered in turn the advantages and disadvantages of, and some of the strategies involved in, operation of national examinations boards, participation in regional councils, and use of metropolitan agencies. The chapter has stressed that each arrangement may have merits and problems, and that policy makers in small states should carefully assess what is desirable and feasible in their own settings.

At the same time, the three models should not be considered mutually exclusive. Thus the chapter by Stanley-Marcano & Alexander indicates that in Trinidad & Tobago all three types of examination operate side by side. They serve different, though overlapping, groups of clients; and they meet different, though overlapping, needs. Similar patterns can be found in other countries. They illustrate the forms of pragmatism which may be found in many countries as their governments and peoples seek the ways to get the best of all worlds. The Introduction to this book pointed out that the style of educational development is too frequently modelled on what is appropriate and fashionable in large states, and that small countries have an ecology of their own which demands strategies which may differ from those in larger states. The ways in which small states organise their examination systems are a good example of this.

Eckstein (1996) is among people who have highlighted the value of comparative studies of examinations. He pointed out (p.239) that:

> We still have much to learn on the subject, and it is far too important to be neglected. Comparative study of examinations has made us increasingly aware of the complex and multiple effects and causes of particular assessment practices.

Eckstein went on to highlight the practical, as well as conceptual value of comparative studies. This particular book has addressed a topic which has to date received very little attention in the literature. In the process, it has exposed many complexities and some fascinating relationships. However, much more research remains to be done. It is hoped that this book will stimulate further enquiry by analysts in states of all sizes.

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Index

Maps and tables are shown in bold.

This publication deals with the provision of examinations in small states. It presents a conceptual framework and discusses models for the administration and provision of examinations at the end of the secondary cycle. It is a response by the Human Resource Development Division of the Commonwealth Secretariat to facilitate the development and improvement of education in countries faced with challenges of scale. It is intended for use by ministries of education, institutions, researchers and international organisations.

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