

Part I: Analytical Framework

Chapter 1:

Small States and Examination Systems — Concepts and Issues

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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, inter-personal 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	yes	no	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	yes	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.