

APPENDIX A

EDUCATION IN THE ISLAND DEVELOPING AND OTHER SPECIALLY DISADVANTAGED STATES

A Commonwealth Secretariat Survey 1980

Guidance Notes

1. This enquiry consists of three parts:
 - A. A questionnaire to establish the major issues and characteristics of the current educational scene.
 - B. A short series of questions which seek to establish policy directions in the 1980s.
 - C. A specific proposal for Commonwealth action on which your critical comment is sought.
2. From information available to the Commonwealth Secretariat including reports from liaison visits made this year by members of the Education Division, it appears that the educational systems of Island Developing and Other Specially Disadvantaged States are confronted with a number of major concerns, six of the more important of which form the framework for Sections A and B:
 - (a) Institutions; the level of institutional provision which is desirable and possible.
 - (b) Finance; high unit costs.
 - (c) Employment; the balance between employment opportunity and the expectations aroused by formal education.
 - (d) Curriculum; the development of curricula appropriate to national needs and objectives.
 - (e) Expertise; the shortage of trained staff.
 - (f) Technology; the level and cost of imports for buildings, equipment and services.
3. Each of these concerns is not necessarily applicable to each of the smaller states of the Commonwealth neither are these issues peculiar to the island nations of the world. It is perhaps the degree to which these factors are significant relative to the wealth and aspirations of a country that may distinguish the Island Developing and Other Specially Disadvantaged States from their larger neighbours.
4. The Commonwealth Secretariat would appreciate any additional comments if it is thought that central issues have been neglected.

STRUCTURE OF THE EDUCATION SYSTEM

Because of the difficulties in developing a comparative terminology for the levels and stages of an educational system for the purposes of this enquiry you are requested to complete the diagram on the next page. This will indicate the levels and institutions which in total compose the education system of your country. The diagram on this page provides a hypothetical example, and does not necessarily include all types of educational institutions e.g. nursing colleges, agricultural colleges, etc.

AGE	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
POPULATION ESTIMATE 197																		
LEVEL	← Level 1 × Level 2 × Level 3 →																	
TYPES OF INSTITUTION	← Primary → ← Junior High → ← Senior High → ← Technical College → ← All Age Village Schools → ← Teacher Training College →																	

1. Insert the latest population estimate for each year.
2. Divide the level bar into Levels 1, 2 and 3.
3. Add arrows and bars to show the relative position in the age structure for each type of institution.

Ages: It is appreciated that in many instances this can only provide an approximate guide.

Levels: Countries have different conceptions of primary, secondary and tertiary levels of education and of the stages which they include. However, it is generally accepted that the primary level refers to the provision of basic educational needs as defined by the country in question, that the secondary level provides general or specialized instruction after at least four

years first level education and that tertiary level education, which offers a range of specialized courses, requires as a minimum condition of admission, completion of second level courses or their equivalent.

Institutions: Within each country there are a variety of educational institutions. Entry, exit and transfer from these institutions mark specific stages of education.

AGE	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
POPULATION ESTIMATE 197																		
LEVEL																		
TYPES OF INSTITUTION																		

PART A

THE CURRENT SITUATION

The questions in this section seek information under six heads. Wherever possible please indicate the year for which the statistics apply.

1. Institutions

(a) Please complete the table below for each of the types of institutions which have been indicated on the diagram on page 3.

Type of Institution	Year	*Students in their terminal year		Number of Institutions		Year	Foreign students in their terminal year
		Male	Female	Govt.	Private		
1.	19					19	
2.	19					19	
3.	19					19	
4.	19					19	
5.	19					19	
6.	19					19	
7.	19					19	
8.	19					19	
9.	19					19	
10.	19					19	
11.	19					19	
12.	19					19	

* In institutions offering courses of different lengths such as teacher training colleges, please indicate the number of students in their terminal year on all certificated courses.

(b) How many students are following second level courses overseas?

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197

(c) How many third level students are overseas?

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197

(d) In rank order, which three countries or regional institutions are most important in offering third level opportunities to your country?

	No. of students	Year
1.		
2.		
3.		

(e) Briefly outline government policy on the award of overseas scholarships. How are awards related to manpower needs and is there a bonding requirement on the part of students to return to employment after their studies?

(f) Non-formal education

Briefly outline the educational services provided by your ministry outside the formal education system.

2. Finance

- (a) Provide the latest figure for annual educational expenditure
- (b) What percentage of the country's total annual budget is set aside for education?
- (c) Provide a breakdown of recurrent educational expenditure including, if possible, the five items which are listed.
- | | | |
|--|----------------------|----------------------------------|
| i. | <input type="text"/> | <input type="text" value="197"/> |
| ii. | <input type="text"/> | |
| iii. | <input type="text"/> | |
| iv. | <input type="text"/> | |
| v. | <input type="text"/> | |
| vi. Subsidy for private educational institutions. | <input type="text"/> | |
| vii. Support for nationals studying overseas. | <input type="text"/> | |
| viii. Salaries of expatriate staff serving in your country. | <input type="text"/> | |
| ix. Housing and other allowances for expatriate staff. | <input type="text"/> | |
| x. The cost of imported educational materials and equipment. | <input type="text"/> | |
-

- (d) What sum is available for capital expenditure? Please indicate whether this is for a one year period or for a development plan period.
- (e) What percentage of capital funds comes from overseas sources?

3. Employment

- (a) What percentage of the country's population is classed as earning a regular wage or salary?
-

- (b) Quantify or comment upon the proportion of second level leavers going into regular, paid employment.

-
- (c) Quantify or comment upon the migration of first and second level school leavers to seek employment within the country. If there is migration of this type, what are the major benefits and problems?

-
- (d) What is the most recent figure for emigration from your country?

-
- (e) Quantify or comment upon the levels of schooling and training of those seeking to emigrate.

-
- (f) Quantify or comment upon the importance to the economy of financial remittances from overseas.
-

4. Curriculum

-
- (a) List the public examinations undertaken within the first and second levels of the school system. Against each examination indicate whether the examination is based upon a LOCAL syllabus, a REGIONAL syllabus or a syllabus developed by a METROPOLITAN BOARD.

Examining Authority

i.

ii.

iii.

iv.

-
- (b) Describe briefly the machinery which exists within the country for curriculum innovation and revision at the first and second stage of schooling. Indicate, if appropriate, links with curriculum bodies outside the country.

-
- (c) How are courses determined and examinations set in teacher training colleges?

-
- (d) Briefly outline language policy at the first and second levels of schooling.
-

5. Expertise

(a) National

- i. What percentage of first level school teachers have followed a recognised training course?

- ii. What percentage of second level school teachers have followed a recognised training course?

(b) Expatriate

- i. What percentage of the total second level teaching force is expatriate?

- ii. What percentage of the total third level teaching force is expatriate?

-
- iii. List the non-teaching, educational professional posts occupied by expatriates, indicating with a cross where these posts have a national counterpart.

6. Technology

- (a) Who is responsible for the design, construction and maintenance of educational buildings? Distinguish provision at different levels if appropriate.
-

- (b) Describe the ability of the national system to produce and publish teaching materials. Comment on the level of dependence upon overseas sources.

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- (c) Describe the ability of the national system to service and maintain educational equipment and hardware. If there are bodies with specific responsibilities in this area please list them.
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PART B

POLICY IN THE 1980s

For many countries of the Commonwealth, the end of the 1970s has been a time of review. The ability of the formal education system to match development aspirations is under scrutiny in some quarters. This section, under the same broad heads as section A, seeks comment on educational policy for the 1980s.

1. Institutions

Is an increase in the number of educational institutions anticipated and if so, at which level or stage will the expansion be concentrated?

2. Finance

(a) What expansion of the educational budget is planned over and above a requirement to match inflation?

(b) In what main areas is future capital expenditure to be concentrated?

(c) Indicate firm aid commitments for educational projects.

i.

ii.

iii.

iv.

v.

vi.

vii.

3. Employment

Briefly outline plans which exist for the formal education system to match more readily the employment needs of the nation.

4. Curriculum

(a) Briefly indicate the main curriculum development priorities for the 1980s.

(b) What changes are anticipated for language policy in schools?

5. Expertise

(a) What plans exist for the localisation of educational employment?

i. the teaching force

ii. educational administrators

(b) Indicate the main training requirements in the 1980s. Rank the areas in order of importance.

Pre-service primary teacher training	Educational Planners
Pre-service secondary teacher training	Inspectors
Technical teacher training	Principals
In-Service teacher training	District Education Staff
Training of teacher trainers	Ministry Officers
Training for technical teachers' trainers	Others

6. Technology

Describe plans to develop the local production of educational equipment, materials and plant.

PART C

CENTRES FOR TECHNICAL INNOVATION - AN IMPORTANT ROLE FOR TECHNICAL EDUCATION INSTITUTIONS

During the last twenty years a number of Commonwealth countries have established technical education systems to provide skilled manpower at craft and technical levels. These systems are usually based on technical colleges, training centres and secondary school technical departments, offering technical and vocational courses leading to local, regional or international examinations.

The prime function of such institutions is to educate and train students to meet the skilled manpower needs of the country. However, there is a possible secondary role - to provide a development service to the community by making full use of an institution's technical, scientific and commercial resources. Such resources usually include engineering and construction workshops, drawing offices, science laboratories and commercial office machinery.

Human resources include the specialist teaching staff - a body of qualified and experienced technologists - and a student manpower force to service projects under the close supervision of staff, thus gaining valuable experience to complement technical studies. In total, these resources add up to a considerable development potential - a capability to carry out simple research and design, to manufacture and repair equipment and to offer expert advice and assistance to the community on matters of a technical, scientific and commercial nature.

A wide range of development work could be undertaken by a technical college, operating as a source of innovation. Some examples are:

- (a) The design, manufacture and repair of school equipment, furniture and visual aids.
- (b) The design and manufacture of tools for industry.
- (c) Technical and commercial consultancy services for small companies and individual entrepreneurs.
- (d) Consultancy and assistance to the building trade, to introduce safe and efficient work practices.
- (e) Assistance to government departments, e.g. public works, on special problems arising from the servicing of plant and equipment.
- (f) Field training sections in rural industry for the maintenance of agricultural equipment.
- (g) Assistance to local fishermen on boat and engine repair work.
- (h) Co-operative development ventures with local chambers of commerce, employer and employee organisations.

Co-operation between technical colleges and the outside community is not a one-way process - staff and students have much to gain from an experience of problems affecting industry and commerce. Such experience adds a new dimension to the

technical education and vocational work programmes and helps students in the transition from college to employment.

Although a centre of technical innovation will be primarily concerned with local needs, there is considerable scope for regional co-operation with sister institutions in neighbouring countries. A natural development in regional co-operation might be the creation of a pipeline system between centres - to exchange information and prototype material of common interest and need. For example, master stencils for simple publications could be made in one centre and distributed to several other centres for production runs.

A number of small state technical colleges already offer some development assistance to their communities and in these situations there are good foundations for extending the technical innovation service provided by the institution. It may be possible, after a feasibility study, to mount a pilot scheme at a college to provide a full scale, operational test structure to develop ideas, methods and programmes for a centre of technical innovation. A pilot scheme would need the active support of a government, full co-operation and participation by the college and its community and additional human and material resources from developmental agencies.

Your critical reaction is sought to the questions which follow:

In what ways is technical education in your country undertaking some or all of the functions outlined in the proposal?

Comment upon the practicality of developing centres of innovation in technical institutions or departments within your country.

Please specify any other proposals which you believe the Commonwealth Secretariat could beneficially pursue in the interests of educational development in the island developing and other specially disadvantaged countries of the Commonwealth.

APPENDIX B

COUNTRY PROFILES

1. Botswana
2. Guyana
3. Fiji
4. Cyprus
5. Malta
6. Barbados
7. Western Samoa
8. Belize
9. Grenada
10. Seychelles
11. Kiribati
12. Tuvalu

Notes:

The profiles have been compiled by the writer mainly from information provided by two sources:

- (a) Responses to the Commonwealth Secretariat questionnaire of 1980 (Appendix A)
- (b) 8CEC Country Papers (with the exception of Belize)

Each profile is sub-divided into the six sub-headings, which were used in the Commonwealth Secretariat questionnaire, namely:

Institutions
Finance
Employment
Curriculum
Expertise
Technology

The countries are listed in descending order of population size.

1. BOTSWANA

A vast country in Southern Africa (600,372 sq km) Botswana nonetheless qualifies for inclusion in terms of its landlocked version of insularity - even more acute before the Independence of Zimbabwe - its relatively small population (800,000) which is clustered on the eastern periphery of the country, and its very modest economic level, US\$910 per head GNP.

Institutions

Since gaining Independence in 1966, Botswana has maintained a consistent policy of expanding educational provision at all levels. Clear priority has been given to primary education. The proportion of the primary age range in school has risen from under 50 per cent to the present figure of about 80 per

cent. In terms of schools at this level, there were approximately 250 in 1966 and 420 in 1980.

There has been a related expansion of secondary provision, but not at the same rate, with a major thrust aimed at the junior secondary sector, now able to take about half the output of the primary schools. About 30 per cent of the output from the 40 or so junior secondary schools (government and private) proceed to senior secondary schools, of which there are 15 government and one private school. The academic nature of this final phase of schooling, and its small scale in relation to the size of the population of the country can be gauged from the fact that about one-third of its leavers enter university, an increasing proportion attending the University of Botswana and Swaziland.

In addition to the extraordinary expansion of schooling, especially in the primary sector, possibly even greater effort has been applied to the development of various forms of non-formal, further and adult education. A number of organisations are involved: the Botswana Extension College (1973) developing out of the correspondence wing of the Francistown Teacher Training College (1968-73) provides widespread radio and correspondence facilities for formal and non-formal courses at all levels; the famous Botswana Brigades - community based private organisations assisting the primary school leaver - have greatly enhanced access to vocational and technical skills, and are now adapting and applying their expertise to rural and agricultural issues; the Department of Non-Formal Education, established in 1978 has made its priority the National Literacy Initiative, but is also active in community oriented programmes involving environmental and commercial training and bringing secondary school leavers into the ambience of community development.

These, and other vigorous non-formal schemes are particularly keen to bridge the gap between traditional academic learning and the pressing need for skilled community manpower. This involves a considerable and on the whole successful liaison with other government ministries in inter-ministerial district extension schemes. Such efforts to involve primary and early secondary school leavers may well be an important attitudinal and motivational initiative. Parity of esteem for all forms of educational development is a basic aim in Botswana.

Tertiary education is proving much more problematical. Recruitment to teaching and teachers colleges is now a problem and there is a dearth of science staff in particular. The development of technician level training is another major concern. Key manpower skills still require training outside the country despite the vigorous development of the Polytechnic. The University College of Botswana is in the process of adjusting to the succession of Lesotho from the University of Botswana, Lesotho and Swaziland, taking with it the major campus. It is likely that the University Colleges of Botswana and Swaziland will become separate national universities in due course. This will add to the financial burden of education. It will also focus more sharply the need to ensure that the output of the University relates closely to national high-level manpower requirements.

Finance

Not surprisingly in view of the wide-ranging nature and vigour of Botswana's educational expansion, education takes about 30 per cent of the recurrent budget and 15 per cent of the development (capital) budget. This may appear extreme, but it must be placed in the context of Botswana's very rapid rate of national economic growth which has been greatly assisted by the discovery and exploitation of minerals, of good rains, and favourable customs connections.

A problem is building up, however, in that the rate of economic growth will certainly decline at a time when the massive educational efforts will have greatly enhanced both the supply of skilled manpower and general aspirations in respect of employment. Indeed the National Commission on Education in Botswana which reported in 1977 strongly advocated a reduction of public subsidy to education. It also recommended a narrowing of the income differentials of people with different levels of formal educational attainment. The National Commission report was accepted by the Government, and its recommendations form the guidelines for official policy into the 1980s.

Employment

Despite the high level of economic growth it must be remembered that the base level of the economy is still very low, especially in terms of individual employment and income for the majority of the population. Only about 10 per cent are classified as wage or salary earners. Forty-five per cent of the rural population is estimated to be in poverty. Another important element of Botswana's employment pattern is the very high level of migration among males to work in the mines of the Republic of South Africa. About 20 per cent of the citizen labour force works abroad, their remittances being vital to the survival of the poorest sections of Botswana's rural population.

Migration within the country from rural to urban areas has produced an even greater rural-urban dichotomy than many other developing countries. This is related of course to the extreme nature of settlement clustering in one small part of an otherwise very low density, in places even empty, territory.

Curriculum

Primary education expansion has been accompanied by curriculum renewal, well integrated with developments in initial and in-service teacher education. The secondary school curriculum is largely constrained by the requirements of external examinations. Given the high level of activity in the various formal and non-formal components of educational provision in Botswana, the problem is much more to do with logistics and co-operation than with motivation. The localised activities of, for example, individual Brigades and individual District Adult Education Officers need to link effectively not only with each other, but also the content and level of other parties involved in the total educational effort of the country.

There is a Department of Curriculum and Evaluation in the Ministry of Education, but in the context of Botswana curriculum planning would seem to need a stronger inter-ministry and inter-departmental system of co-ordination.

Expertise

As a result of some of the influences already mentioned there is a dearth of expertise at almost every level, so that a relatively high level of expatriate employment is still necessary. There is a problem of containing the results of well-meaning educational initiatives such as the up-grading of the National College of Vocational Training to Polytechnic status - an immediate result of which has been to deplete craft level training. There are also deficiencies of expertise and training in the railway sector (very significant in Botswana's case), and in customs administration. The great education expansion does not yet seem to have accommodated sufficient specific initial training and staff development in a few key areas of employment. At the highest level of need such as medicine and electrical engineering, it would appear that only regional co-operation in Southern Africa or continued reliance on developed country training will suffice, the choice between the two containing difficult political considerations.

Within the education service the great primary thrust was accompanied by a further development of teacher training so that about 70 per cent of the teachers are trained. Secondary school staffing is one of those areas very heavily reliant on expatriates, especially in the sciences, as are senior levels of school and Ministry administration. Clearly, there is a need for staff development in educational administration.

Technology

A number of state and private agencies are involved in the maintenance of building and equipment within the educational system of Botswana. In the area of non-formal education especially in the rural areas, self-help schemes are significant. At the level of technology for teaching and learning there is a major problem of equipment and expertise, though a Teaching Aids Production Unit has been set up. It is obvious that inability to control and develop this aspect of educational support leads to continued, even deeper dependency on outside sources. This obviously relates to policies and programmes at technician level.

2. GUYANA

Guyana, a republic on the north-east littoral of South America is the second largest of our sample in terms of population (c. 793,000), second in land area (214,969 km²), and ninth in G.N.P. per capita (c. U.S.\$ 690).

Institutions

The Government of Guyana, in accordance with its general philosophy provides free education from nursery to university, though the post-compulsory stages are not of course of open access.

There is a very keen commitment to early childhood education, and a total of about 400 nursery schools is a high figure for a developing country of any scale. Primary education has been compulsory since 1976, and the attendance rate at the 430 or so schools is about 80 per cent, a remarkable achievement, especially in comparison with most other countries of South America.

About 75,000 children are enrolled at secondary level, divided 4:3 as between the Community High School and the Multilateral School, the latter being a more traditional variant. Although there are only about 30 Community High Schools as such the Community High School Programme operates in a further 325 primary schools, offering pre-vocational and vocational training. Practical forms of education continue their availability beyond the school sector in the form of five technical and vocational colleges. The development of this type of opportunity may well be the main reason for a relatively low take up of teacher training, normally an attractive avenue of advancement in developing countries. However the three colleges are active, and operate joint programmes with the Canadian Organisation for Co-operation in Overseas Development (OCOD). The University of Guyana, established in 1963, now has about 2,000 students in its five Faculties (Arts, Education, Natural Sciences, Social Sciences and Technology). Two indications here of social commitment are the relatively high proportion of students on certificate and diploma courses in areas related to current economic need, and the interconnection between the expertise of the University and the staff development objectives of the Government. The short courses are especially useful in relation to meeting specific development needs, especially in low density rural areas. Despite the presence in the region of the earlier established University of the West Indies, the University of Guyana, through its more flexible approach is playing an increasingly significant regional role. One example of this is the validation of sub-degree level courses comprising the Caribbean work of the Pan-American Health Organisation.

In addition to the large provision of formal education, Guyana also boasts an impressive range of non-formal schemes, including a country-wide agricultural extension programme run by the Ministry of Agriculture and an active contribution from the Department of Culture in a number of creative fields.

Finance

Considering the impressive range of opportunity offered in a relatively poor country the figure of about 12.5 per cent (1979) of the national budget spent on education seems a modest one. There is still a considerable input of overseas funds into capital projects (42.38 per cent of capital funds in 1979), and very little spent on the employment of expatriates (0.8 per cent of the total), possibly a function of scale as well as of policy. Investment in teacher training seems to be a relatively low priority, although this may be due to investment in the education faculty of the University instead.

Employment

The economy of Guyana is still predominantly primary with the emerging manufacturing sector having slipped somewhat in its proportion of the total employed. Agriculture, however, now employs less than 20 per cent of the working population. This may be due to improved efficiency in this sector in some regions, and a flight from the land in others. Not surprisingly the major growth area in employment over the last two decades has been in public administration, always a keen customer for the type of product emerging from a major investment in formal education.

Curriculum

Curriculum initiatives have not been lacking in Guyana, there being two centres for curriculum development - one in the University of Guyana, the other in the Ministry of Education. The country participates in the work of the Caribbean Examinations Council (CXC) which is a regional body replacing the 'Cambridge Overseas'. CXC is regarded as being a useful body in engendering re-thinking among teachers, though the outcome is not noticeably radical.

Outside the formal secondary sector there are a number of interesting initiatives, such as the Hinterland Development Programme - an alternative to the traditional sixth form - which concentrates on human ecology, agriculture and technology in respect of such activities as forest clearance, water supply and lighting systems. There is a real attempt to integrate the academic and the practical here, while at the other end of the ability range the Low Achievers Programme combines extra vacation work for slow learners with the In-Service Education (INSET) programmes of the University and Teachers' Colleges.

Expertise

Recent initiatives in the education system reflect a range of indigenous expertise. However the availability of expertise at different levels and its geographical spread indicates many disparities. Although there is little need of qualified expatriates, the teaching force is about 50 per cent unqualified. Official policies for staff development in education concentrate heavily on improving planning, inspection and teacher training.

Technology

Despite a keen thrust to localise school materials, especially in mathematics and English, there is a lack of technical, especially printing, capacity to cope with this. Technical institutions play a modest maintenance role, and there is a Low Cost Equipment Production Unit. Nonetheless this is probably the weakest part of the system, a situation which probably reflects the limited capacity of the economy to provide appropriate support services.

3. FIJI

Third in the rank order of the sample by population (630,000), Fiji provides another geographical variant, the multi-island small state. By comparison with other South Pacific island nations, however, Fiji is large. Its land area alone (18,272 sq km) makes it the fourth largest of the twelve, and if intervening areas of ocean are included, for purposes of comparing intra-national distances, then Fiji may be visualised on a spatial par with Botswana and Guyana. Economically though Fiji is more than twice as strong as either, having a GNP per capita of approximately US \$1,850, although this is significantly below the corresponding figure for Cyprus.

Institutions

Post-Independence (1970) educational provision in Fiji has been considerably expanded from an already strong local base. The vast majority of primary and secondary schools are private (627 to 19 and 118 to 10 respectively), and are run by churches or committees. As a result educational administration at school level exhibits a pattern of institutional individuality. This in turn enhances the possibility of disparity and in particular a dichotomy between urban and rural areas.

The expansion of primary and secondary provision has been in accordance with two development plans aiming at ten years of schooling for all children. Enrolment throughout this age range is virtually 100 per cent, but due to a decline in the birth rate since the mid-seventies some spare capacity is available. Secondary schooling comprises junior and senior high schools, but there is a differential provision of these as between urban and rural areas, also between smaller and larger islands in the Fiji group.

The tertiary sector is active and varied. Technical education at this level is served by two colleges, the Fiji Institute of Technology (FIT) and the Western Division Technical Centre - a third, the Northern Division Technical Centre, is planned. Multi-Craft Centres are attached to about a quarter of the secondary schools and their staff are trained at FIT. The Fiji Institute of Technology is a major facility not only nationally but regionally, having nine constituent schools providing for about 2,000 full-time and 1,500 part-time students, the vast majority of whom have no problem in finding employment after graduation. There are normally about 100 students from other Pacific islands.

Nasinu Teachers College established in 1947 is moving towards an in-service training function. This change reflects the decline in the school age birth rate, but there is still a problem of untrained teachers especially in rural areas and outer islands. Although the University of the South Pacific is a regional institution the location of its main campus in Fiji with the majority of its students from that country does have the effect of completing the educational system.

Finance

The Government of Fiji retains financial responsibility for schooling, which in effect means the provision of teachers salaries, and a substantial budget for the committee-run schools. Over all, the government expenditure on education takes about one-fifth to one-quarter of the national budget. A capital development programme includes the funding of more technical, vocational and Multi-Craft facilities and a consolidation programme for the junior secondary sector. It is intended that more money should be used to decrease the marked geographical disparities in provision at all levels, co-ordinating government expenditure and private sources of finance.

Employment

About 50 per cent of the population is reckoned to be in employment, of which about a half are in agriculture and other areas of primary employment. The manufacturing sector is growing as is transportation, and both are absorbers of the products of technical education, as is government employment. An effort is being made to effect a closer match between education and training and the nature of employment growth areas. The phenomenon of unemployment among qualified people is beginning to be an important issue, and is related to aspects of rural to urban migration. There is also a regular emigration of mainly skilled workers. The location of the main campus of the University of the South Pacific near Suva has had a multiplier effect in respect of various non-academic employment opportunities, though this was more marked in the period of the development of the campus.

Curriculum

Curriculum is probably the crucial area of educational change in contemporary Fiji. Central to this is a strong move to promote technical and vocational education; indeed this is now part of the curriculum of all secondary schools, constituting one-eighth of class time. The Ministry of Education Curriculum Development Unit has taken over responsibility from the former Technical Vocational Unit. The rapidly developing programme of Multi-Craft Centres aims at 50 such units by 1985. It has been evaluated recently by ILO.

However the curriculum of basic primary and secondary schooling remains a traditional one, related as it is to the demands of local certification and the entrance requirements of higher education not only in Fiji, but also in New Zealand. There is a Curriculum Development Unit of the Ministry of Education, and a related Resource Centre based at Nasinu Teachers College, but these again operate in a largely conventional, though active, manner. The most acute need is in relation to educational disparities, the curricula needs of rural societies and particular ethnic groups - in other words very local issues which may be connected with economic and employment initiatives in these communities such as the cottage industry movement.

Expertise

Most teachers are trained at primary level, also about three-quarters of those in secondary schools. There tends however to be a greater concentration of untrained teachers in rural areas and on the outer islands of the group. Expatriates are only really significant at the tertiary level, and even then are a small minority.

The main thrust of staff development is in technical and vocational education with technical teacher training under the auspices of the University of the South Pacific which operates a diploma course as well as conversion courses. It is expected that full staffing requirements in this growing sector will be met by 1986/87.

With a growing, disparate and widely dispersed national system such as operates in Fiji, and given its being the regional focus of education in the South Pacific, various forms of senior administrative staff development are a priority consideration.

Technology

There is probably a larger capability for educational technology in Fiji than in Guyana, Botswana and Cyprus, especially in the local production of teaching materials. The level of technical training is sufficient to cope with the majority of maintenance problems, but this is progressively less so in the outer islands. Some technical education schemes include the production of hardware materials for schools.

4. CYPRUS

Fourth in the sample by population size (620,000), Cyprus, is fifth by land area (9,251 sq km), and first by GNP per capita (US\$3,560). Located in the Eastern Mediterranean, Cyprus has always had a strategic significance, and as such has been subject to a succession of colonial occupations, most recently by Britain. Two earlier colonial relationships with Greece and Turkey have, however, contributed much more deeply to the culture, even to the extent that Cyprus is now a divided island. The following paragraphs refer only to the Greek portion of the island.

Institutions

The age of entry to primary school has been lowered from five years to three years, there being a keen interest in nursery schooling. Primary education has been compulsory since 1962. It is free and co-educational and lasts for six years.

Secondary schooling is not compulsory, but is keenly sought, comprising a lower cycle and an upper cycle, each of three years' duration. It is free to the age of 15 and means-tested thereafter. Foreign languages and economics appear to be favoured subject areas at least as far as the clients are concerned. By 1978 about one-fifth of the secondary school population were in technical schools, with electrical engineering the most popular area. Arising from an ILO project, a Higher Technical Institute has been established, and there are also hotel, forestry and nursing courses. The Forestry College has an international reputation and always includes other Commonwealth students. The College of Higher Education is a private institution, and there is also an 'American style' Institute of Management. In 1978 the Council of Ministers agreed on the establishment of a university, following UNESCO advice, the reasons being to save foreign exchange, to complete the educational system, to give access to higher education for a wider socio-economic sector, and to "render Cyprus an educational centre of the surrounding geographical region." Teacher training is well established and active.

Finance

Approximately 13 per cent of the national budget is allocated to education, but there is also a substantial private sector. Most of the public money goes to the primary sector. With a predominantly rural economy and a well established rural society it is possible to levy local taxes for rural primary schools. Government subsidies assist the poorer areas. Assistance from overseas comes in the form of a very large number of remittances and a good share of scholarships, especially from Greece, USA and Britain.

Employment

The economy of Cyprus is well developed by contrast with most other states in the sample group, though the Turkish part of the island is comparatively depressed. There is a small and growing secondary sector, stable and diversified agriculture, and a popular tourist component. This variety of employment opportunity links well with the output of the technical sector, but there is a disproportionately high rate of unemployment among the other secondary school leavers. Many of the academically able leavers proceed to universities overseas and eventually become emigrants, hence the call for a university. Some of the nascent industries such as electronics, building trades and furniture manufacture have forged mutually beneficial links with technical institutions. Industrialisation and tourism have encouraged rural to urban migration.

Curriculum

The formal system, public and private, works very closely to the demands of external examinations from Greece and Britain. Curriculum content is firmly controlled from the Ministry of Education, or from the Ministries of Labour and Agriculture in respect of technical and forestry institutions.

Expertise

The majority of primary and secondary school teachers are qualified and trained, but there is still a considerable need for expatriates in specialist secondary fields. This is somewhat strange in view of the emigration of Cypriot graduates unless of course the subject areas do not match up with school staffing needs. A strong centralised interest in in-service training regularly reinforces the expertise of most teachers.

Technology

As with Guyana and Botswana, educational technology is the weakest area of provision. Technical support is almost always limited to construction and maintenance of premises. This may well be related to the conservatism of methodology and curriculum in association with overseas examinations and related imported texts.

5. MALTA

In terms of population size there is a more distinct gap between Malta and Fiji than between the first four in the succession of the sample. Malta has a population of about 343,000. In terms of surface area Malta is one of the smallest of the twelve (316 km²), but in economic level by G.N.P. per capita, it is second on the list with about US\$ 3,470 p.a. Malta is also distinctive in being the only member of the sample comprising two islands.

Institutions

Primary schooling has been mixed since 1976 and the kindergarten system continues its steady development, following its formalisation in 1975, so that by 1980 there were about 4,000 kindergarten pupils in the public sector and a similar number in private institutions. At the same time about 9,000 of the 33,000 primary pupils were in private schools. Through this dual system, universal primary education is already well established, and there is now also a compulsory secondary sector up to the age of 16. This comprises 'traditional' secondary schools with a five year course and trade schools with a three to four year course. The 'traditional' secondary schools are both private (c 700 pupils) and public (c 14,000 pupils), while trade schools (c 3,700 pupils) are public only.

The upper secondary or sixth form level is not classified as secondary education, being considered alongside technical institutes and secretarial schools. This is part of a 1979 reform of the upper secondary cycle involving a pupil-workers sponsorship scheme, and an upgrading of technical education. By 1980 there were about 1200 pupil workers and an enrolment of 5000 at technical institutes - 4300 craft, 600 technician and 100 secretarial.

The higher education sector has also undergone considerable reform since 1978 when a new university was created from the former polytechnic. The following areas of study were assigned to this institution: accountancy; administration; business administration; engineering; medicine/surgery; domestic science; pharmacy; education. Many students study on a part-time basis. The old university retains arts, law and science, numbering 350 students as against its modern counterpart's 750. About 50 students are studying overseas.

The post-compulsory sector also contains institutions for technical, nautical, commercial, electronic, nursing and hotel studies, while other ministries and government departments provide relevant training institutions, for example in agriculture and catering. A very significant number of students (5000) enrol for evening classes.

Finance

Education is currently assigned about 8 per cent of the national budget, with about half of this directed towards second level provision and a very low proportion towards the administration of the system as a whole, probably due to the compact nature of the islands. The involvement of the commercial sector in the pupil worker scheme and in technical education, and of other ministries are also factors helping to make the budget a relatively modest one for the range of facilities provided. The considerable private investment in schooling is also very significant in this respect.

Employment

Much effort has been made to effect closer links between education and employment, as the structural reforms illustrate. Given modest natural resources, the idea is to concentrate on the development of human resources in a number of key areas. The kindergarten thrust is partly to do with a policy of creating more employment opportunities for working women, and there is also a desire to create more openings for the handicapped groups.

Neither unemployment nor internal migration are real problems, and there are still significant opportunities for Maltese to work overseas and send back remittances.

Curriculum

Malta has not as yet established a curriculum development unit. Many of the courses in secondary and technical education are externally examined and this constrains such reforms. However there has been a clear support for physics and Arabic, both of which are now needed to proceed into the sixth form. There has also been increasing localisation of school texts in several subjects. The worker-pupil schemes, and also the sandwich course developments are in effect also curriculum development initiatives.

Expertise

All primary and secondary school teachers are qualified and the already modest proportion of expatriate expertise is being steadily reduced. Effort is now being concentrated on in-service education, and the institution of the BA Education Programme at the new University of Malta is seen as a major contribution to the level of teacher expertise.

Technology

Virtually all construction and maintenance of buildings and basic equipment is handled locally. Increasingly teaching materials are home grown, though foreign textbooks still dominate. The expertise for self-sufficiency in this area, except for the manufacture of sophisticated aids is clearly going to become available soon.

6. BARBADOS

Barbados is in some respects comparable with Malta, having a population of about 250,000, a surface area of 430 sq km, and a GNP per capita of about US\$3040. It has too a long established educational tradition.

Institutions

There is a complete education system available from the age of two-three onwards, with about 30 per cent of the population in full-time education at one level or another. Universal primary education has long been established and secondary provision is available through a range of institutions. There are grammar schools, comprehensive schools, and technical and vocational institutions. The school leaving age was raised to 16 in 1976.

In the post-compulsory sector there is a national community college (1977), catering for a wide range of technical, commercial and social studies, a polytechnic, a teacher training college, and one of the three campuses of the University of the West Indies. Not surprisingly, the majority of Barbadian undergraduates are at this campus (Cave Hill), where they form by far the largest national contingent within the student body.

Finance

Approximately 20 per cent of the national budget goes to education, nearly half of which is spent on the compulsory sector. There is a relatively modest level of expenditure on the administration of the system which, though not as proportionally low as Malta, probably has some relation to the compactness of the human ecology. There is a strong Government subsidy to private education, mainly to the more established and prestigious secondary schools. Two other characteristics of the financing here are a fairly high expenditure on imported materials and a constraining burden of recurrent expenditure, though significant assistance has been received from aid sources for primary school renewal.

Employment

Barbados has a more diversified economy than most Caribbean islands, despite having been essentially a sugar producer for hundreds of years. Sugar is still important, but apart from tourism, a major and well established component, the country has developed into the entrepreneurial and service centre for the Eastern Commonwealth Caribbean. Light industrial processing and the distributive trades are fairly strong here. The large tertiary sector fits well with the relatively formal and substantial output of the education system. Some of the less attractive manual occupations are filled by migrant labour from poorer islands in the region, but there is a relatively high level of unemployment among the 15-19 age group in Barbados.

Curriculum

Although schooling remains "traditional" in Barbados, there is a keen interest in improving the content and quality in general through the National Curriculum Development Council. Being one of the two headquarters of the Caribbean Examinations Council has enabled local teachers in many subjects to participate in the workshops and other activities associated with the substitution of the metropolitan external examinations. The raising of the school leaving age and the rapid diversification of the secondary sector have also provided a curricula challenge. The location of one of the branches of the School of Education of the University of the West Indies on the Cave Hill Campus has meant that a number of regional curriculum projects have been based in Barbados, and this has been nationally advantageous.

Expertise

The majority of teachers have some training and about two-thirds of primary and secondary teachers are fully trained. Expatriate employment is relatively low, as high levels of local expertise cater for administrative development as well as in most of the key subject areas.

The University, Erdiston Teachers College, and the Caribbean Examinations Council provide many opportunities for in-service education and training, and there are a number of other regional institutions based here such as the Pan-American Health Organisation and the Caribbean Conservation Association to which enterprising teachers can turn for ideas and information.

Technology

Given that primary education has been very long established there is some strain on the departments dealing with renovation and maintenance of basic facilities. A major effort has been made to provide the technical back-up for the popular tertiary sector, especially at the Community College and this may have led to a relative neglect of lower age groups for a period. There is now, however, a thrust to support school science, including the primary level.

7. WESTERN SAMOA

Western Samoa (population 156,000) is the first representative in this section of the very small island nations which comprise the second half of the sample. However, the surface area is comparatively large at 2,840 sq km. Western Samoa's GNP at US\$560 per capita is the lowest in the sample.

Institutions

Most of the primary age range attend the 130 or so government schools or the 22 private schools. The nine year course is to be reduced eight, with admittance normally at the age of six. Senior secondary education is carried out mainly in mission schools which have about 80 per cent of the pupils, but between this level and the primary sector are the very rapidly developing Junior High Schools of which there are now about 27. These schools are highly selective, but operate a locally based curriculum as compared with the New Zealand syllabuses in the Senior High Schools. Nineteen Junior High Schools are government funded, and their establishment has affected an overall balance in secondary enrolment in favour of the public sector (60:40). They are locally constructed using village funds. There are plans to develop this sector further so as to be a universal facility serving community needs. It will mean a postponement of selection procedures.

Beyond schooling there exist several small further education institutions: the primary and secondary teachers colleges, the technical college, the School of Nursing and four theological colleges. At Alafua, there is the second campus of the University of the South Pacific, based on an existing agricultural college and dealing initially with that area of training, but a branch of the School of Education has also been developed there. Consequently Western Samoa has, albeit in a limited sense, a complete education system. Nevertheless most senior secondary school graduates moving on to university tend still to go to Australia and New Zealand.

Finance

About 12 per cent of the national budget goes to education, with very little being spent on imported materials or expertise. It is planned that there will be a strong concentration of educational investment in the areas of teacher training, technical and vocational education, and adult and community education.

Employment

Employment of the products of the education system is a severe problem in Western Samoa, hence the very keen desire to effect a change of attitude towards working in the rural context. Only about one-quarter of the population is employed in terms of wage earning, and the majority of unemployed school leavers drift into the capital, Apia. There is limited opportunity for emigration to paid employment, and the remittances arising therefrom contribute about 10 per cent of national income.

Curriculum

Clearly there is a need to modify educational provision in relation to the problems of economy and employment, and an attempt has been made at primary and secondary level to develop new curricula and methods, in co-operation with both Tonga and Macquarie University in Australia. There is a strongly expressed desire to generate curriculum renewal locally, and Samoan is now the medium for the first seven years of schooling.

Expertise

All primary teachers are qualified, but there is an acute shortage of trained secondary school teachers. Although localisation of educational expertise is a strong and consistent policy in Western Samoa, much of the task of up-grading local expertise devolves upon Macquarie University in Sydney. There may be some contradiction of objectives here, but the need for staff development especially in teacher training and educational administration is very pressing. This policy is preferred to a temporary dependence on expatriate expertise in Samoa itself.

Technology

There is local commitment to the building and maintaining of schools, the production of books and other materials, though the technical capacity to sustain and develop this support needs to be enhanced.

8. BELIZE

Belize is a littoral country comparable in geographical terms with Guyana although on a smaller scale. This newly independent country, a Commonwealth enclave in Central America, is in terms of surface area out of all proportion to the other states at this end of the sample. In a land area of 22,946 sq km the population of 145,000 provides a density statistic only marginally greater than that of Botswana, though the economic level expressed in GNP per capita is, at US\$1080 per annum, significantly higher.

Institutions

Belize exhibits a well established though somewhat disparate pattern of primary provision strongly affected in its location and character by the vagaries of denominational proliferation and competition. Nonetheless this sector provides 11 years of schooling in many parts of the country, overlapping in its upper years with both junior and senior high schools in the few areas where these occur, as well as with the technical college. The last-named institution is by far the most developed in Belize with 600 full-time and 400 part-time students in its four departments - building, business studies, engineering, and general studies.

There is also a teachers college, but the leading academic institution of the country is probably the sixth form college from which students proceed to tertiary courses at the University of the West Indies (mainly in Jamaica), Britain and Canada. The new (1979) Belize College of Arts, Science and Technology (BELCAST) has links with several government ministries and in effect 'tops up' and applies the educational experience of the sixth form college and the technical college. The college includes provision for the training of secondary school teachers.

Finance

About 15 per cent of the national budget of Belize is directed towards education. Almost the entire capital expenditure on education derives from overseas aid.

Grant-aided primary schools account for about half the recurrent expenditure, and grant-aided secondary schools for a further tenth - a measure of the high level of denominational involvement. After that the main thrust is in technical education.

Employment

Employment for products of the education system is very limited, and emigration for work has long been a fact of Belizean life. The resultant remittances are very important to the national economy. In such a context any effort to link the content and operation of education with economic development must look carefully at the economic potential of Belize.

Agriculture has the greatest potential as the lands of the vast interior are as yet relatively untapped, and a steady drift of people to Belize City continues.

Curriculum

Despite the very apparent problems of developing the country's economic potential, Belize has been active in promoting its own local curricula initiatives as well as also playing a full part in regional schemes. Given the political geography of Central America, Belize looks strongly towards the rest of the Commonwealth Caribbean, as well as continuing to retain strong links with British validating bodies. Indeed a considerable amount of testing and certification is a feature of the system.

There has been strong participation in a number of University of the West Indies (UWI) based curriculum projects, and Belize is now involved in the UWI/USAID Caribbean Regional Development Project (1980). This project relates to the Caribbean Examinations Council (CXC) which has had a more difficult implantation in Belize than in most other participating countries, especially in the science area. Both the teachers college and the Curriculum Development Unit are involved in the improvement of the primary curriculum, and the former is also associated with a USA aided programme, the Rural Education and Agricultural Project involving eight pilot schools.

Belize is a multicultural country with Mestizo and Amerindian components in much greater proportions than elsewhere in the Commonwealth Caribbean. A complicated linguistic and cultural heritage, including some areas of Mayan civilisation, has yet to be revealed and exploited in the curriculum. Spanish is becoming an increasingly important subject.

Expertise

Compared with most countries in the sample, Belize has a low proportion of qualified teachers - barely one-third at both primary and secondary level. There is, predictably, a heavy reliance on expatriate staff at secondary level. The teachers college has a small capacity, but BELCAST now provides secondary training for school teachers.

Technology

Capacity for coping with support systems through educational technology is very limited. The Curriculum Development Unit is constrained by its own small scale and problems of equipment maintenance. Nonetheless some very useful developments in local teaching materials have been achieved. Distances and poor interior communications combine to restrict the quality of dissemination of schemes and materials, and Belize is certainly of a scale potentially appropriate for distance learning techniques as yet undeveloped.

9. GRENADA

Grenada, mainly consisting of the southernmost islands of the mountainous Windward group in the Eastern Caribbean, also includes the nearby Grenadine islands of Cameacon and Petite Martinique. Roughly comparable to Malta in area (344 sq km), its GNP per capita stands at about US\$690 with a population of 110,000.

Institutions

Since the socialist revolution of 1979 new institutions have been introduced to the education system, mostly additional to, but in some cases modifying existing institutions. The basic structure of schooling comprises: a newly enlarged pre-primary sector of about 3,000 pupils; a primary and extended primary sector (5-16) of about 23,000; and a junior secondary and senior secondary sector (12-19+) of about 6,000. There is also the Technical Centre (post-primary) and the General Technical and Vocational Institute (post-secondary). Important post-revolutionary structures are: The National

In-Service Teacher Education Programme; the Community School Day Programme; the Curriculum Development Unit; the Institute of Further Education; and the Centre for Popular Education (CPE). These are co-ordinated thrusts towards the creation of a more accessible and locally relevant and popular educational provision, and have already brought many more Grenadians into contact with learning possibilities than ever existed before.

Finance

About 15 per cent of the national budget goes to education of which about two thirds is spent on the salaries of teachers and administrators - a rather lower figure than for some small countries. Much of the capital expenditure derives from overseas sources - international, regional and bilateral.

Employment

Grenada's economy is based mainly on agricultural exports, especially cocoa, bananas and nutmegs, nearly half of which go to Britain. The employment pattern reflects this, but there is also a growing tourist industry which should be further enhanced by the imminent completion of an international airport, and an emerging manufacturing sector. More than one-fifth of Grenada's imports come from the neighbouring nation, Trinidad and Tobago, to which there has long been a pattern of emigration. From here and elsewhere come remittances which constitute a very significant 17 per cent of the GNP. Although there is certainly a discernable growth in secondary and tertiary employment, the majority of work opportunities remain in the rural sector.

Curriculum

Not surprisingly the revolution has brought about considerable activity in the area of curriculum. Only in the formal secondary sector has the existing pattern been retained - in this case the programme of studies leading to certification by the Caribbean Examinations Council. Elsewhere the loosely co-ordinated activities of the new organisations are bringing about considerable curricula change. The main thrust of the Curriculum Development Unit has been in the primary sector and especially in the area of language. Both an increased respect for Creole, and carefully organised renewal of the English language component of the primary curriculum have received the committed attention of the most talented educational expertise available to the Ministry of Education and much dedicated work has been done to back the planning with frequent workshops throughout the country and with new locally produced materials. Primary curricula development is part of a community orientated drive involving both the National In-Service Teacher Education Programme, and the Community School Day Programme. Both involve much greater use of the local environment, physical and human, linked with a sort of 'sandwich' element of formal learning. The Junior Secondary Schools fall between the existing local curriculum and evaluations originally designed for them and the desire in some cases to offer CXC courses.

At the upper secondary level, the Institute for Further Education combines 'A' level work for overseas external examinations with the opportunity for

secondary teacher training, and new community orientated programmes. Work Study Camps have been introduced, involving weekend programmes in rural areas and seem to have been well received by secondary school students and local people alike. The Centre for Popular Education (CPE) has been operating in two phases: (a) a mass literacy programme, (b) an adult education programme, though in practice these objectives overlap. This initiative has been the vehicle for publicising other educational reforms so as to explain their objectives, and gather public undertaking and support. This was much boosted by a workshop run by Paulo Freire in 1980 under the title of work Study Approach for Community Education, which served to illustrate the essential integration of all the new initiatives as well as most of the old.

Expertise

Expertise is clearly at a premium, especially when so many reforms are being attempted, and it was deemed necessary to completely restructure the teacher education process in Grenada. The National In-Service Teacher Education Programme (NISTEP) works under the slogan "A new kind of teacher for the new society", and operates a three-year programme of one day per week in college and four in the school and community. This has replaced the two year full-time college based course plus periods of teaching practice. It is expected that the new programme will not only bring about a fully qualified teaching force more quickly than the old, by being able to cater for larger numbers, but also a new knowledge of and attitude to the rural environment. The Curriculum Development Unit is now housed in the College where one year full-time programmes for unqualified teachers over the age of 40 top up the expertise of that sector of the workforce. Some priority has been given to maintaining the traditional academic standards of the main secondary schools so as to provide a pool of higher level expertise for various sectors of the economy. Meantime much effort has been made to persuade Grenadian professionals overseas to return and lend their skills to the post-revolutionary programme.

Technology

There is also a premium on educational and other technology. The basic school fabric outside the secondary sector is very modest, but technical back-up for curriculum innovation at all levels from primary to adult is a priority in terms of stimulating attitudinal change and the acquisition of basic skills. The Curriculum Development Unit has produced much effective material on basic reprographic equipment, but for the wider thrusts such as the CPE, the printing and production of Grenadian materials in Cuba has been a major support. Within Grenada itself a considerable improvement of local expertise and an injection of new hardware is urgently needed, though the newly established local television service is of good technical quality and could become a valuable resource, given more reliable capacity for the generation of electricity.

10. SEYCHELLES

Seychelles is a multi-island republic scattered over the Indian Ocean but with a land area itself of only 280 sq km. Most of the population of 60,000 is on the main island of Mahe, the remaining few on neighbouring islands such as

Praslin, La Digue and Silhouette. Most of the archipelago is uninhabited. Despite being the second smallest of the sample in area and third smallest by population, Seychelles is about half way on the ranking of GNP per capita (US\$1770 GNP per capita).

Institutions

A pre-school sector is developing for the four to five year olds, followed by the existing basic provision of nine years of schooling from 6-15. This is free but not yet fully compulsory because of the lack of facilities on some of the very small islands, and comprises 24 Government and one private school. Education from 15 plus is provided in a number of institutions, including the basic secondary school, teachers college, technical school and the National Youth Service. The last named is a controversial move designed to engender greater community and ideological commitment to the creation of a socialist society, whereby children of 15 plus are set apart in a special residential establishment. The curriculum of this exercise is very traditional and the facilities so far inadequate. Also in formation is a Polytechnic complex in which current secondary, technical, teacher education, maritime and nursing schools will be combined. There are also four craft training centres with the dual objective of responding to the tourist market and supporting the survival and revival of local culture.

Finance

Expenditure on education forms about 13 per cent of the national budget, more than half of which goes to the basic educational institutions. About 90 per cent of capital funds come from overseas aid sources.

Employment

Seychelles relies mainly on agriculture and tourism for its income, though there are small but developing manufacturing and service sectors. Altogether wage-earning employment is available for about 40 per cent of the population. The development of the Polytechnic and the National Youth Service should improve employment opportunities, at least in the short-term, and there have been some interesting initiatives such as the Dominic Savio Pilot Work Experience Scheme with a view to combating unemployment. There is little opportunity for emigration to work, though some Seychellois do go to India, East Africa and Australia. However, remittances are a very minor feature of the economy. Education has, therefore, to adjust swiftly to total employment possibilities.

Curriculum

The Ministry of Education is responsible for the primary curriculum and the certification of basic schooling. The country is trilingual (English, French and Creole), and so some subjects are taught in English (general science, mathematics and English itself), others in French (history, geography and French). Creole is increasingly accepted in the early years of schooling. There is a Research and Programmes Unit, and considerable interest in curriculum renewal, but local initiatives have been somewhat curtailed by

central editing and supervision. Attempts have been made to up-grade science syllabuses and methods, but island teachers are little involved thus illustrating the isolation of smaller components of a multi-island state. Otherwise In Service Education of Teachers (INSET) seems to have been neglected, despite the under-utilisation of the teachers college for initial training. While the curriculum of the work experience scheme already mentioned is enriched by the sandwich structure of the course, that of the National Youth Service appears to be very traditional and restrictive. Most secondary level programmes work to external examinations based in the Britain.

Expertise

Most primary and secondary teachers are trained, but there are some gaps in key subjects at the secondary and further education levels necessitating the use of expatriate expertise. The Ministry of Education sees further training for heads of schools and teacher trainers as a priority, linked with an INSET thrust. Liaison is replacing inspection. The overall aim is to develop sufficient local expertise to create and maintain comprehensive bilingual education. Overseas scholarships are now taken up in a wide range of donor countries, thus enriching the national stock of expertise. Teachers are a relatively small group - entire force being about 700 - so that staff development should be capable of speedy realisation.

Technology

Considerable effort has been made to improve technological back-up for schooling, as well as to develop technical and vocational education per se. Localisation of teaching material has begun at primary level. There is a Resource Centre, a Schools Broadcasting Unit in operation and a TV Unit developing, and a system of school libraries. Clearly this is an area of priority, but there are major problems in the maintenance and expert operation of electronic equipment, given the rapid obsolescence of such hardware.

11. KIRIBATI

Similar in population total (c 59,000) to Seychelles, Kiribati is also an archipelago state, though with a land area (886 sq km) three times the size of Seychelles . Its economic level is very modest at about US\$770 per capita per annum.

Institutions

Primary education is now available from the age of 6 to 11, but the figures are distorted by repeaters. All but five of the 100 or so primary schools are now government owned and run. More than 50 of these are single teacher schools with an average of over 45 pupils each - a result of extreme island scatter and isolation. About 85 per cent of the 12-14 age group continue in primary school, the others having been selected for one of the secondary schools.

Selection for secondary school takes place at 11 plus, there being five such schools, with a combined enrolment of about 950 pupils. By far the largest

and most prestigious is the King George V/Elaine Bernacchi School with a roll of nearly 400. It is the only secondary school with a sixth year.

In 1977 the Community High School Project began with the aim of providing post-primary practical education for those not selected for secondary schools. On the few islands involved in the project - Makin, Maiana, Tabiteuea N. and Tamana - the initiative was rejected. The islands saw these schools as being inadequate, both in relation to the academic secondary schools and in respect of local community needs. The schools now offer a mixture of post-primary courses some traditionally academic, some more practically oriented.

Post-school provision comprises Tarawa Teachers College, a boarding college with very limited capacity (about 100 students and ten staff); Tarawa Technical Institute (Betio), with about 500 students mostly on short courses; and the Marine Training School (Betio), which provides short courses for three intakes per annum of about 70 each. Higher education has to be sought overseas, mainly in Fiji. It is estimated that by 1988 Kiribati needs to have produced 325 people with higher education qualifications for its higher level manpower requirements.

Finance

Overseas aid comprises a high percentage of the education budget, but it is sometimes considered that this is disproportionately spent on the prestigious secondary sector. With the development of universal primary education, a trained teaching force, and a high birth rate, teachers' salaries are becoming an increasing burden.

Employment

Kiribati has little soil, an unreliable rainfall, and limited scope for entrepreneurial activity. Most of its income is derived from fish, coconuts, tourism and the remittances of seamen, of whom there are 1,200 working mainly in the Pacific. Remittances are much favoured by the mass of the population because they come direct from the wage earner to the family without Government intervention. Hence the strong support evident in the community for the Marine Training School. A German consortium of shipping lines serving the area takes nearly all the output of the school. The only possible potential for further economic development are the marine resources - there being very few modern sector jobs and virtually no scope for manufacturing or agriculture. Tarawa Technical Institute is placing particular emphasis on island community needs. A Rural Training Centre is being developed by the Institute to respond to these needs.

Curriculum

There is a curriculum development unit in Tarawa Teacher Training College, advised by the college staff, whose main thrust is towards providing materials for the upper primary level. The unit has a useful capacity for the size of the country, but little or no contact with similar units elsewhere in the South Pacific. The few one week courses offered for teachers in the outer islands present a major logistical problem in getting new ideas and materials across, physically and pedagogically. The elders of local communities in Kiribati are

very influential and may constrain educational officials and initiatives, including new components of curricula. In this way the locally orientated curricula suggested for the Community High School was rejected in favour of the distant but prestigious academicism of the main secondary school.

Expertise

The teachers college is very small, with a target of 25 students for each year of its new three year course. This was extended from two years to slow the rate of production and improve the quality. There is also a one year up-grading course for unqualified teachers, and a one year conversion course from primary to high school teaching. Only about 45 per cent of primary teachers are fully trained and a further 30 per cent partially so. In addition to the problems facing the single teacher school in terms of range of expertise required, the secondary schools also require most of their staff to operate in several subject areas.

In-service training is very difficult to operate, though the newly developed Rural Training and Development Centre at the Tarawa Technical Institute has been established to help train out-island community leaders and may be seen as an in-service exercise in non-formal education.

Technology

Quite apart from the usual problems of maintaining facilities and equipment, there arises in the case of Kiribati extreme problems of supply. There is a very long delay in receiving vital spare parts, and even books. However, the Tarawa Technical Institute has a language learning facility, and distance teaching is being considered within the island group and the region.

12. TUVALU

Tuvalu, like Kiribati a multi-island nation in the South Pacific, is the final country in the sample. Smallest by far in population total (9,000) it represents a demographic scale tiny even by contrast with Kiribati and Seychelles, but which has other representatives in the non-Independent Commonwealth such as the Cayman islands, Montserrat and the Turks and Caicos Islands. In terms of economic level, Tuvalu is also near the bottom of the sample at about US\$570 GNP per annum. It has a surface area of only 28 sq km. Nonetheless this nation of nine island communities has a keen and active involvement in education.

Institutions

Each community in Tuvalu has a primary school to which is or will be attached a Community Training Centre (CTC). Most primary pupils do not proceed to the secondary school, but stay for CTC courses. These new courses have required curriculum innovation. Each CTC is constructed on a standard pattern: multi-purpose workshop (boys), housecraft room (girls), and a storeroom. The first opened on Vaitapu in 1981 and by the end of 1983 they should all be in operation.

The secondary sector, to which about 20 per cent of primary pupils proceed, aims to meet government manpower needs especially at middle management level. There is also a Marine Training School preparing boys for a career with shipping lines. The small number of graduates who emerge from the secondary sector enter the University of the South Pacific or universities in Australia and New Zealand.

Finance

Not surprisingly most of the education budget goes to primary education, and the major item overall is teachers' salaries. The Community Training Centres are being funded by New Zealand, following an ILO feasibility survey. Indeed all capital expenditure throughout the system derives from aid sources, likewise scholarships for higher education overseas.

Employment

Employment in Tuvalu is very restricted in its range. The environment provides a low resource endowment and this engenders a keen interest in education as a potential resolver of the problem, either by assisting the realisation of a locally based subsistence economy at as high a level as possible, or by assisting the possibilities for emigration. Both aspects are clearly reflected in educational policy, the former in respect of the Community Training Centres, the latter as stated in the Country Paper presented by Tuvalu to the Eighth Commonwealth Education Conference in 1980 in respect of educated manpower:

"Efforts are being made to seek overseas employment for them, thus making our educated manpower force a potential commodity for export".

In fact only about 12 per cent of the population is wage-earning, the most important area being seamanship, with nearly one-quarter of the national income derived from remittances, mostly of sailors. The capital, Funafuti, contains comparatively large numbers of young unemployed persons, hence the very keen efforts to develop and concentrate on rural skills in the CTCs.

Curriculum

Concentration on rural life and culture is to be enhanced by the decision to use the vernacular for primary classes 1 - 5. However this then conflicts with external forces when the class 6 entrance examination to secondary school has to be taken in English, thus favouring students in Funafuti. The secondary curriculum content is almost totally dependent, using the Kiribati Programme for classes 1 and 2 and the Fiji School Certificate thereafter. In the CTCs there is a strong emphasis on skills training relevant to the particular local environment, though some local resistance to this idea is evident.

It would appear that a series of short-term initiatives works best both at school level curriculum change and also in the non-formal sphere; successful workshops have been held for example on welfare, garbage and sanitation.

The Ministry of Education has set up a curriculum unit which has tended to concentrate on school subjects rather than the wider issue of the relationship between curriculum and economy. The lack of a teachers college also works against curriculum change in association with INSET.

Expertise

There are only about 40 teachers, all qualified and nearly a third of whom are expatriates operating in the one secondary school. It is intended to localise the secondary teaching force. Expertise for INSET comes from periodic involvement with the University of the South Pacific, though INSET has been provided for the staff of the eight CTCs in advance of their opening. Given the objectives of development, the local expertise of small remote communities and families will, hopefully, be utilised to maximum effect.

Technology

Not surprisingly the level of technological back-up for education is extremely limited, and a high level of dependency exists for both books and equipment. The curriculum unit is unable to produce its own materials. Most materials are imported and take an inordinately long time to reach Tuvalu. There is a small library on each island.

APPENDIX C

SELECT BIBLIOGRAPHY

A. Publications on education

B. Commonwealth Secretariat publications

C. Other publications

D. Selected journals

A. Publications on education

- | | |
|---------------------------|--|
| Arkleton Trust | Can Education Change Rural Fortunes?
Arkleton Trust, 1981. |
| Bennell, P and Oxenham, J | Skills and Qualifications for Small Island States, in Report of the Commonwealth Foundation Seminar, Barbados 1982. The Development of Appropriate Skills and Qualifications Required to Serve the Community in Small Island States. Commonwealth Foundation, 1982, pp.83-104. |
| Botswana, Republic of | Education for Koginaro. Report of the National Commission on Education. Gaborone, April 1977 (Vol.I Reports, Vol.II Annexes).

National Policy on Education. Government Paper No 1 of 1977, Gaborone, August 1977. |
| Brock, C | Education and Multiculturalism in the Caribbean Region, in Corner, T (ed.), Education in Multicultural Societies. Thirteenth Annual Conference of the Comparative Education Society in Europe (British Section). University of Edinburgh, 1978, pp.87-119.

Problems of Education and Human Ecology in Small Tropical Island Nations, in Brock, C and Ryba, R (eds), A Volume of Essays for Elizabeth Halsall: Aspects of Education No. 22. University of Hull Institute of Education, 1980, pp.71-83. |

- Problems of Scale and Co-operation in the Provision of a Higher Education Facility for Small Nations. Paper presented to the Fifth International Conference on Higher Education. University of Lancaster, 1981, mimeo, pp.20.
- Structural and Curricular Development at the Junior Secondary Level on the Caribbean Island of St Lucia. Paper presented to the 1979 Conference of the Comparative Education Society in Europe, University of Valencia, mimeo, pp.13.
- The Legacy of Colonialism in West Indian Education in Watson, J K P (ed.), Education in the Third World. Croom Helm, 1982.
- Brock, C and Augustine, P Aspects of Social Change in the Caribbean Island of St Lucia, in Evans, M (ed.), Social Studies in Practice. Macmillan, 1975 pp.104-139.
- Camacho, A Education and Educational Opportunity, in Cross, M (ed.), West Indian Social Problems. Columbus, 1970.
- Cammish, N Bilinibus et Calibris: a French Curriculum Development Project in Seychelles, in Brock, C and Ryba, R op. cit. pp.55-70.
- Carrington, L Education and Development in the English Speaking Caribbean: a Contemporary Survey. UNDP/Unesco/ECLA, 1978.
- Carter, J E M Looking at Families (New Hebrides), in Evans, M (ed.), Social Studies in Practice. Macmillan, 1975, pp.140-161.
- Commonwealth Foundation The Development of Appropriate Skills and Qualifications Required to Serve the Community in Small Island States Report of the Commonwealth Foundation Seminar, Barbados, 1982. Commonwealth Foundation, 1982.
- Conroy, J D Some Economic Aspects of Education in Very Small States. Paper presented to the 1979 Development Studies Seminar on the Island States of the Pacific and Indian Oceans: Anatomy of Development at The Australian National University.

- | | |
|--------------------------------|---|
| Cross, M | Urbanisation and Urban Growth in the Caribbean. Chapter 6, Race, Class and Education. Cambridge University Press, 1979, pp.102-128. |
| Dove, L A | The Deployment and Training of Teachers for Remote Rural Schools in Less Developed Countries, in Education in Developing Countries - Occasional Papers No. 1. University of London Institute of Education, 1981, pp.28-49. |
| Durston, S | Education in the New Hebrides : A Pawn in the Political Game, in Broadfoot, P, Brock, C, and Tulasiewicz, W (eds.), Politics and Educational Change. Croom Helm, 1981, pp. 199-208. |
| Fayon, M | From School to Work: The Seychelles Experience. International Journal of Educational Development, Vol. 1, No. 2, 1981, pp.64-66. |
| Figueroa, J J | Society, Schools and Progress in the West Indies. Pergamon, 1971. |
| Figueroa, P M E and Persaud, G | Sociology of Education: A Caribbean Reader. Oxford University Press, 1976. |
| Francis, R | Paradise Lost and Regained: Educational Policy in Melanesia. Comparative Education, Vol. 14, No. 1, 1978, pp.49-64. |
| Franklin, M R | Innovation in Technical and Vocational Education and Training in the South Pacific. Paper prepared for the Commonwealth Regional Meeting on Innovation in Technical and Vocational Education and Training in Island Developing and Other Specially Disadvantaged States. Commonwealth Secretariat. The Bahamas, 26-30 April 1982, mimeo, pp.18. |
| Goody, J | Schools, Education and the Social System: Some Utopian Suggestions. Interchange, Vol. 6, No. 4, 1975, pp.1-5. |
| Harewood, J | Population and Education in the Caribbean. Education Projections Unit, Division of Statistics and Education, Unesco, 1979. |

Hope, N	Training for the South Pacific: Problems of Smallness, in Shand R T (ed.), The Island States of the Pacific and Indian Oceans: Anatomy of Development. The Australian National University. Development Studies Centre, Monograph No. 23, 1980, pp.369-379.
Irvine, D H	Case Study: Education in the Commonwealth Caribbean, in Report of the Commonwealth Foundation Seminar, Barbados 1982. The Development of Appropriate Skills and Qualifications Required to Serve the Community in Small Island States. Commonwealth Foundation, 1982, pp.53-61.
Kay, R	Pacific Teaching Satellite Links: Lecturers and Students. Pacific Islands Monthly, Vol. 51, No.11, 1980.
Kennedy, T	Are there Regional Answers to the Educational Problems of Small States?, in Shand, R T (ed.), The Island States of the Pacific and Indian Oceans: Anatomy of Development. The Australian National University. Development Studies Centre. Monograph No. 23, 1980, pp.347-368.
Michael I	Universities: Servicing Community Needs or Concentrating on their Academic Functions? in Longlo, J (ed.), Universities, National Development and Education. University of London Institute of Education, 1981.
Milburn D, De Cora, P J Austin, G J	Perspectives on the South Pacific: an Island View of Curriculum Development. Canadian and International Education, Vol. 5, 1976, pp.109-115.
Morris. J G	Small is Beautiful in Education Too. Arkelton Trust, 1980.
Parker, R	INSET in Small Island States, in Thompson, A R (ed.), in In-Service Education of Teachers in the Commonwealth. Commonwealth Secretariat 1982, pp.144-187.
	INSET in Small Island Countries in Report of a Conference on In-Service Education in Developing Countries. Centre for Overseas Studies, University of Bristol, 1982, unpaginated.

- South Pacific Commission **The Preparation of Youth for Real Life: Are Community Schools the Answer?** Papers presented to the Eighteenth South Pacific Conference, 1978.
- Meeting the Needs of Island Children.** Paper presented to the Nineteenth South Pacific Conference, 1979.
- Springer, Sir H W **Educational Aspects of Development and Human Ecology**, in Bowen-Jones, H (ed.) **Human Ecology in the Commonwealth.** Knight and Co., 1972, pp.33-41.
- Stewart, I B **Education in the South Pacific: the Issues.** The South Pacific Journal of Teacher Education, Vol. 3, No.3, 1975.
- Taufe'Ulungaki, A M **Curriculum Development in Tonga: Then and Now.** Directions, No.3, 1979, pp.25-35.
- Unesco **Project Findings and Recommendations: Secondary School Curriculum Development Project.** USP/UNDP, 1976.
- Statistical Analysis of Demographic and Education Data for Projecting School Enrolment in Countries in the Pacific Region.** Division of Statistics and Education, 1980.
- University of the South Pacific **Tenth Anniversary Review, 1979.**
- Watson, J E **Educational Publishing Policies in the South Pacific.** The South Pacific Journal of Teacher Education, Vol. 6, No.1, 1978.

B. Commonwealth Secretariat Publications

- Pluralism and Development in Island Communities.** Report of a Commonwealth Seminar, Mauritius, 1975.
- Education and the Community: Partnership for Development.** Report of a Commonwealth Regional Seminar/Workshop, Cook Islands, 1977.
- Meeting on Problems of External Finance for Small Islands.** Report of a Commonwealth Meeting, Western Samoa, 1979.
- Mobilising Human Resources.** Report of the Commonwealth Specialist Conference on Non-Formal Education for Development, New Delhi, 1979.
- The Commonwealth: Its Special Responsibilities to Small States.** Memorandum by the Commonwealth Secretariat, 1979.

- Goodenough, S Race, Status and Urban Ecology in Port of Spain, Trinidad, in Clarke, C E (ed.), Caribbean Social Relations. University of Liverpool Centre for Latin America Studies, Monograph Series No. 18, 1979.
- Lowenthal, D The Population of Barbados. Social and Economic Studies. Vol 6, 1977.
- Manak, A and Ahmed, A Race, Class and Rebellion in the South Pacific. George Allen and Unwin, 1979.
- Mass, R (ed.) The Stability of the Caribbean. Institute for the Study of Conflict, 1973.
- Oxaal I, Barnett, T and Booth, D (eds.) Beyond the Sociology of Development. Routledge Kegan and Paul, 1975.
- Payne, A Change in the Commonwealth Caribbean. Royal Institute of International Affairs. Chatham House Papers No. 12, 1981.
- Selwyn, P (ed.) Development Policy in Small Countries. Croom Helm, 1975.
- Shand, R T Island Smallness: Some Definitions and Implications, in Shand, R T (ed.), The Island States of the Pacific and Indian Oceans: Anatomy of Development. The Australian National University. Development Studies Centre, Monograph No. 23, 1980, pp.3-20.

D. Selected journals

- Caribbean Educational Bulletin. Association of Commonwealth Universities.
- Caribbean Journal of Education. School of Education, University of the West Indies.
- Directions. Institute of Education, University of the South Pacific.
- Pacific Islands Monthly. Pacific Publications, Sydney, Australia.
- Regional Advisory Seminar Workshop Reports. Annual Report issued by the Institute of Education, University of the South Pacific.
- Social and Economic Studies. University of the West Indies.
- South Pacific Journal of Teacher Education (see Vol. 3, No. 1, 1975: Teacher Education around the Pacific and Vol. 4, No. 2, 1976: Symposium on Environmental Studies).