Education for Economic Development in the South Pacific

K.G. Gannicott editor
Preface

In recent years rates of economic growth have been low in the island nations of the South Pacific. Shortages of educated labour are an important contributor to poor economic performance. This volume brings together a series of studies on educational development in the region. An overview surveying major issues of curriculum and financing is followed by an examination of ethnic differences in educational attainment in Fiji. The next study contrasts the curriculum policies being followed in Western Samoa and Tonga. This is followed by studies which survey recent policy developments in Vanuatu and evaluate the role of fees for education in the Solomon Islands. The volume concludes with an evaluation of the past and future role of Australian aid. The major emphasis of the volume is on the need to redirect educational resources to primary and secondary schooling.

The work presented in the study on the Solomon Islands is based on a larger study of educational finance and management carried out for the Ministry of Education and Training in Solomon Islands (Gannicott and McGavin 1987). The present version has been written and edited by K. Gannicott, with helpful contributions from P.A. McGavin. The authors wish to record their thanks to the Interim Director and Staff of the Secondary Education Project of the Ministry of Education and Training. Particular gratitude is due to the Principal Education Officer (Planning), Ms Stephanie Knox, for her kind cooperation during fieldwork in Solomon Islands. Neither Ms Knox nor any other member of the Ministry of Education and Training is responsible for the views presented in this study. The views expressed are those of the authors alone, and should not be interpreted as representing official educational policy in Solomon Islands.

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Key to symbols used in tables

n.a.  Not applicable
..  Not available
-  Zero
Overview

K. Gannicott

It is a cliché of research in this region that one must first set aside the very idea of the South Pacific, since vast distance and diversity make the 'South Pacific' little more than a geographical expression. Such discarding of the regional emphasis does not come easily. Captain Cook, Captain Bligh and the Bounty, Paul Gauguin, Somerset Maugham, Robert Louis Stevenson, Margaret Mead, and James Mitchener have all in their separate ways contributed to deeply-held Western images of the South Seas. The recent demolition of Margaret Mead's work on Samoa (Freeman 1984) is a powerful reminder of the need to look behind the legends.

In education, as in other areas, there is great diversity in the region, with a wide spectrum of policy issues. Polynesian countries such as Tonga and Western Samoa, which long ago attained virtually 100 per cent literacy, are in a different category from the Solomon Islands and Vanuatu, which are still some way from the attainment of universal primary education. Fiji raises yet another set of educational issues, with its differential ethnic educational attainment and the special problems following the coups.

The studies in the present volume reflect this mix of similarity and diversity. Previous work on education in the South Pacific (see, for example, Throsby 1987) has highlighted the many policy issues which the countries have in common. Among these issues are:

- the generally high costs of education in countries where population is scattered, schools are small, and boarding is common;
- the perceived low quality of schooling in the region;
- the provision of post-secondary education and training in countries too small to sustain viable tertiary institutions;
- the balance between formal and non-formal education;
- the role of schooling in preparing people for migration; and
- the perennial question of academic or general schooling versus a vocational curriculum.
The present work was originally conceived as a set of country studies which would start with these broad regional issues and assess their detailed impact and application in each country. Detailed sector studies of this sort can contribute not only to the policy debate within each country but to the formulation of appropriate strategies for the provision of bilateral and multilateral aid to education. As the work progressed it soon emerged that, despite differences of emphasis between countries, the same theme was dominating the analysis of each country and was indeed subsuming many of the other policy issues. That theme was the failure of the region’s education systems to provide the appropriate quantity and type of workforce skills for economic development.

In recent years rates of economic growth have been low throughout the island nations, and while the reasons for that slow growth are complex, governments in the region are acutely aware that shortages of labour skills are an important constraint on better economic performance. This theme is brought out strongly in the studies discussing education in Vanuatu and the Solomon Islands. Gannicott and McGavin point out that Solomon Islands embarked on independence in 1978 with a very low level of labour skills. Despite considerable recent achievements in raising the primary enrolment ratio, skill levels remain low, with critical shortages of people with technical, administrative and managerial skills. The shortage of such skills is a major limitation on economic performance. The point was made in a recent World Bank appraisal of education in the Solomon Islands that as a consequence of the critical skill shortage, ‘a large number of tasks affecting the country’s development are not being accomplished’ (World Bank 1986:1).

McMaster tells a similar story in his evaluation of recent developments in Vanuatu. At independence Vanuatu inherited not only the familiar developing country problem of very limited school enrolments, but was also confronted with the colonial legacy of two separate school systems. For nearly a century the New Hebrides (as it was called) was ruled by a joint British and French condominium, and each colonial power established its own schools. It is not difficult to appreciate the cost of running separate English- and French-speaking school systems in a country of little more than 100,000 people scattered in classic South Pacific fashion across 270,000 square kilometres of ocean. That cost has constrained what Vanuatu has been able to achieve since independence. Some progress has been made in integrating the systems, and primary enrolments continue to make steady progress, but the country remains chronically short of skills for its economic development. The demand for upper secondary graduates exceeds the limited capacity of the school system; the demand for high level professional and technical skills has greatly exceeded the supply of Vanuatu citizens returning from overseas tertiary study; and little progress is being made with the localization of senior positions. The
number of expatriate employees in senior positions was greater in 1985 than in 1981.

It is not surprising that skill shortages should dominate the discussion of education in Vanuatu or the Solomon Islands, both of which became independent with low levels of educational attainment. What is of particular interest is that the same theme emerges in Western Samoa and Tonga, countries which had already achieved near-universal literacy by the turn of this century. In his study comparing the evolution of education in Samoa and Tonga, Gannicott notes that both countries have well-developed educational systems and an overall level of human resources which is high by the standards of other developing countries. Despite this background both countries are chronically short of technical and managerial skills. These shortages are not simply transient features of normal labour market adjustments, but constitute a long-standing structural problem. National development plans in both countries have repeatedly argued that skill deficiencies were limiting economic growth. Gannicott brings out in this study the fact that although they have chosen quite different solutions to the problem, both Western Samoa and Tonga are currently putting in place educational reforms with the central aim of increasing the supply of skills for economic development.

The question of an adequate supply of skills comes up in an interesting form in Fiji. Here too development planners point to persistent shortages of appropriate skills, and argue that the main fault lies with a school curriculum which is not sufficiently oriented to the production of vocational skills. What is particularly interesting in Fiji is that education planners link this question of appropriate skills to the differential educational attainment of the ethnic groups. As Gannicott demonstrates in his chapter on Fiji, ethnic Fijians, like the people of Tonga and Western Samoa, had already attained high levels of literacy by the beginning of this century, whereas the Indians who were imported to work on the sugar plantations were mostly illiterate. Now it is the Fijian Indians who have (on average) the superior educational attainment, and Fiji’s planners ascribe a large part of this turnaround to the argument that the existing school system is not well suited to the production of the vocational skills in which ethnic Fijians would perform well. The supply of technical skills would be increased and the educational performance of ethnic Fijians would be much better, so this argument runs, if the school curriculum became more oriented to the production of technical and vocational skills.

The unifying theme of the book, therefore, is the investment that needs to be made in the education systems of the region if those systems are to remedy persistent skill shortages. This overall theme has in turned raised two further issues which recur throughout the volume. The first of these is already implicit in the comments on Fiji: concern with the type of skills being produced means that in almost every country there is a strong focus on the nature of the school
Which is appropriate — academic or vocational curriculum?
— How can an expanded school system be financed?

Curriculum reform attempts to improve technical/vocational skill training

Reasons for skill shortages sought in academic curriculum

Fijian and Western Samoan planners attribute many education problems to unrealistic aspirations

Fiji is far from unique in ascribing a large part of the explanation for skill shortage to the lack of a sufficiently vocational school curriculum. Many developing countries have attempted to diversify their (usually secondary) curriculum to include a greater proportion of technical/vocational skill training (World Bank 1988). As Gannicott shows in the study on Fiji and also in the study on Western Samoa and Tonga, the question of an appropriate curriculum for increasing the supply of vocational skills has figured prominently in all three countries. Tonga is now adopting policies to strengthen the general, or academic, curriculum in primary and secondary school, but Fiji and Western Samoa attach major importance to the need for a curriculum reform which will 'de-academicize' the type of schooling offered.

Fiji and Western Samoa argue that the main culprit for skill shortage is the academic system of schooling, which remains geared to the requirements of education in a colonial society. In that society, European colonial rulers acted as the reference point for the occupational aspirations of local people. Both before independence and even more strongly in its immediate aftermath, when senior administrative and managerial jobs were there to be localized, the glittering prizes went to those with the highest — and preferably overseas — academic qualifications. As the formal education system emerged from its beginnings in the pastoral elementary schools, it naturally became oriented to the kind of education that would provide the key to obtaining European-style occupations. In the South Pacific the best and brightest sat New Zealand-based school-leaving and university entrance examinations. The outcome was an elitist system which ‘selected and moulded a small group of academically superior pupils in a system of increasingly stringent examinations, with a majority of pupils falling by the wayside on the way to the top’ (Fiji’s Central Planning Office 1975:174).

Education planners in Fiji and Western Samoa, as in many developing countries, believe that it is the persistence of such white-collar aspirations by parents and pupils — aspirations now rendered hopelessly unrealistic by the vastly increased numbers of students and the long-completed localization of most jobs — which accounts for many of the problems in education.
Whereas in the old system only a few pupils were able to reach the secondary level and there were enough continuing opportunities for successful ones in the Civil Service, with the present increased emphasis on the mass of children, ... the manpower needs of the economy cannot cope with the large numbers of academic school leavers (Fiji's Central Planning Office 1975:176).

In short, the core argument is that the school system is too academic in its structure and curriculum. This basic tenet is called upon to explain many features of the systems in parts of the South Pacific. According to this line of argument, the predilection of parents and pupils for a more ‘academic’ type of schooling helps explain why the economy remains short of technical and vocational skills. In the mirror image of this argument, technically trained personnel are in short supply yet unemployment of school-leavers is emerging as a serious problem. Again, the explanation is that the school system is insufficiently oriented to the teaching of agro-technical skills.

Countries in the South Pacific are far from unique in the curriculum and structural reforms which have been attempted. Indeed, the educational policies we have described have been thoroughly in accord with the fashion in education planning during recent years. Many countries have attempted to diversify the secondary curriculum by integrating vocational or pre-vocational studies more closely with traditional academic subjects. Belief in the merits of curriculum reform has guided much World Bank educational lending: between 1963 and 1982, 117 World Bank education projects contained a diversified curriculum component, and 20 per cent of all education sector lending can be attributed to such components, at a cost of about US$800 million at 1983 prices (Psacharopoulos and Woodhall 1985:230).

There has been steadily accumulating evidence that ‘vocationalizing’ the curriculum is a costly and inefficient way of increasing the economic value of schooling. The World Bank concluded in 1980 that although curriculum development has been accorded high priority in many countries, ‘its effect on education output ... has failed to meet expectations’ (World Bank 1985:33). Psacharopoulos and Woodhall ‘found little evidence to suggest that the new type of schools improved the quality of education, changed students’ attitudes towards the labour market, or had the intended effect on employment prospects’ (Psacharopoulos and Woodhall 1985:230). The World Bank recently surveyed the record of curriculum reform in Africa, and in a remarkable piece of honesty concluded that if further research corroborated their findings, the conclusion had to be that ‘diversified secondary schools are not worth their higher costs ... this is a sad lesson for the many African countries that invested in such programs and a sobering experience for the technical experts (often from international funding agencies) who advised them, but it is a lesson nonetheless’ (World Bank 1988:64).
The reasons for this are not hard to find. First, schools have only a limited ability to shape pupils' attitudes to the jobs they want to do. In a classic article over twenty years ago, Foster (1966:150) described the idea that children's vocational aspirations can be altered by massive changes in curriculum as 'no more than a piece of folklore with little empirical justification'. As Foster noted, 'vocational aspirations of children and the occupations which they enter are almost exclusively determined by factors ... outside the schools, [and] no amount of formal technical, vocational or agricultural instruction alone is going ... to have any effect on the rate of economic development' (Foster 1966:157). What really matters is the structure of incentives within the wider economic system: aspirations are determined by the individual's perception of opportunities.

Second, the paradox of adopting a vocational curriculum in order to attract and retain students allegedly deterred by an academic curriculum is that it can lead to a system in which fewer students are given access to schooling. Costs per student are higher for technical/vocational instruction than for general academic subjects (Metcalf 1985; Psacharopoulos and Loxley 1984), so where educational budgets are constrained (and where are they not?) the result must be a more restricted school system which may exclude the very students it was hoping to attract.

Third, it has come to be realized that the formal school system is an inhospitable venue for occupational training (World Bank 1988). School-based vocational training is not as effective as that carried out on the job or in specialized training centres. Schools often have difficulty recruiting competent vocational instructors, a difficulty that will be all the greater if vocational skills are genuinely in high demand in the market place: teachers' salary scales are rarely flexible enough to encompass subject differentials. Equipment in vocational schools can easily become obsolete: education budgets are dominated by the inflexible salary component, and tight budgets are more easily met by failing to maintain or to keep up to date with equipment. Since vocational schools are separate from the industries for which they train, they find it difficult to provide realistic work experience. Schools are slow to adjust to changing market conditions, and to alter the mix of skills they are training; even when linkages with industry are good enough to gain useful labour market information, curriculum changes are slow and difficult to effect in a formal school system. Finally, these characteristics of school-based training can be exacerbated by what we said earlier about student incentives to gain extra education. Students who do follow the vocational stream will often do so not because of any genuine interest in technical qualifications, but because they see it as a second chance to get a higher qualification. Pressure will then emerge to upgrade the technical training institutions into more 'academic' establishments — taking such institutions even further from any linkages with the labour market.
One riposte to this line of argument is that in many developing countries, including especially the small island economies of the South Pacific, the industrial base is not large enough for industry to take on a training role: the school system must do the job or it won't be done at all. But if the industrial base is really as small as alleged, or has small-sized firms, then some scepticism is in order about the genuine need for vocational skills. Most of the entry-level jobs in such an economy will require relatively little in the way of specific skills, and these can be provided by training on the job. Second, if there are genuine difficulties in industry-based training, specialized industrial training centres, possibly operated by government but funded through levies on the beneficiaries, are likely to be better than schools, both because of the increased chance of forging industrial linkages and because of the scale economies they will enjoy in equipment purchase and installation.

The conclusion is that specialized technical skills will be taught more cheaply and effectively within firms, where the equipment and expertise are already on hand, and where the identification of needed skills is driven by production requirements (World Bank 1988). Schools are institutions for imparting general skills: reading, writing, mathematics, and scientific understanding; for teaching widely applicable skills such as bookkeeping and typing; and for inculcating general occupational skills such as attitudes to work, punctuality, and discipline. These are the skills which provide the basis on which occupation-specific training can build. As the World Bank has noted, governments that are interested in laying the groundwork for a more technically oriented economy ... should place heavy emphasis on general mathematics and science in the school curriculum ... these subjects are relatively inexpensive to teach, and are likely to promote economic growth more efficiently than can in-school vocational education, [and] at the same time, policymakers should be exploring all the macroeconomic policy instruments that may help to raise the volume of training provided throughout the economy (World Bank 1988:64-5).

We have described at some length the current state of play on vocational training in schools because, as noted earlier, debate about the appropriate curriculum for the provision of workforce skills has dominated recent educational policies in several countries of the region. The study that follows describes the impact of the curriculum debate in Fiji, and argues that curriculum reform is not achieving either the labour force or equity objectives set for it: it is not providing Fiji with more technically trained personnel, nor is it having any perceptible effect on the worsening relative position of ethnic Fijians in the school system. The third study compares and contrasts policies for skill development in Tonga and Western Samoa, arguing that the reform program in Western Samoa not only neglects the role of labour market incentives in student choice of general schooling, but mistakenly puts post-secondary vocational training under the aegis of a
National University of Samoa: this institution would be remote from labour market requirements, and likely to promote, not curtail, expansion of academic higher education through student pressure to upgrade technical training into an overtly 'academic' qualification. In Tonga, by contrast, current policies call for a strengthening of the traditional general curriculum in primary and secondary school, followed by a post-secondary college that is designed to be community-based and responsive to labour market requirements.

**Financing an increase in skills: the role of fees**

*Fees can have a role in financing programs to increase skills*

The second strand of argument in remedying skill deficiencies is how a desirable increase in educational output is to be financed. It is already known that education in the region is generally costly, and that spending on education is high by international standards. For example, developing countries spend an average of 4 per cent of Gross National Product on education, but in Fiji the figure is 6.5 per cent, and in Tonga it approaches 8 per cent (Unesco 1986: Tables 2.12, 4.1). Major recession with the collapse of commodity prices in the early 1980s has meant that public budgets for education have been (and are likely to remain) tightly constrained. While we lack detailed evidence on rates of return to education in the South Pacific, the persistent skill shortages which we have already cited are consistent with world-wide evidence that social returns to education remain high, particularly at primary and secondary level (Psacharopoulos 1981, 1985).

*Increasing scrutiny of education policy for efficiency and equity*

While force of circumstance is dictating a search for additional sources of finance, the underlying rationale for public finance of education is also coming under tighter scrutiny. There is now increasing understanding that public finance of education in many developing countries has been neither efficient nor equitable. It has been inefficient because the highest degree of public subsidy has typically gone to tertiary education, so high private returns to that level have boosted student demand for tertiary expansion, despite the fact that the highest social returns come from expanding the lower levels of schooling (World Bank 1986). Moreover, from an equity point of view, the relatively few who are fortunate enough to get access to tertiary education benefit not only from the fact that the level of subsidy is greatest at that level, but from the cumulative public expenditure on primary and secondary education. Since those who go to tertiary education tend to come from wealthier family backgrounds, the result in many developing countries is that the children of white-collar workers accumulate five or six times as much public educational expenditure as the children of rural workers (Jimenez 1987; World Bank 1986).

These issues are taken up by several writers in the present volume. One of the features of educational finance in the South Pacific is that fees are often charged at the lower levels, whereas those who are
successful at university entrance will be awarded a scholarship that
covers all tuition and boarding costs at an overseas university. Gann- 
icott demonstrates that in Western Samoa, students’ fees for primary 
and secondary school cover around 25 per cent of tuition costs, 
whereas tertiary students are fully subsidized. The government in 
Western Samoa wants to cut back demand for tertiary education, but 
its own policy on fees drives the whole system forward. McMaster 
suggests that the reimposition of fees would help ease constraints on 
expanding education in Vanuatu, and Gannicott and McGavin explore 
in detail the scope for increasing secondary fees in the Solomon Islands.

In recent years there has been a rapid growth of conceptual and 
practical work on educational fees in developing countries (Mingat 
and Tan 1985; Jimenez 1987). This work has examined the scope for 
raising fees to finance an increase in enrolments, without jeopardizing 
the equity position of those already enrolled at lower fees. Although 
there is no direct evidence for the South Pacific, the balance of interna-
tional evidence is that enrolments are relatively inelastic with respect 
to fees (Jimenez 1987). This means that few students will drop out if 
fees are raised. Even if scholarships or fee remissions are given to 
poorer students to encourage them not to drop out once fees are raised, 
net revenue from the fee increase will still permit an expansion of 
enrolment capacity.

Gannicott and McGavin echo other writers in this field in arguing 
that a fees-financed enrolment expansion, suitably combined with 
scholarships or fee-remissions for needy students, can be more equi-
table than reliance on public finance. When fees are low and a limited 
public budget causes excess demand for education, some people will 
be denied access and/or the quality will worsen. As Thobani (1983) 
argues, ‘unfortunately, both these phenomena typically tend to hurt 
the poor more than the rich’. In similar vein, Armitage and Sabot (1982) 
argue that ‘a small school system will tend to be monopolized by 
children from relatively privileged backgrounds [and] rapid expansion 
of that system will benefit disproportionately children from less 
privileged backgrounds’.

An additional feature of the work on the Solomon Islands is that the 
authors bring out the connection between the level of fees and unit 
costs in education. We have already noted that costs are generally high 
in the South Pacific, and any given fee increase will make possible the 
provision of more places in a low cost than in a high cost system. Or, to 
put this the other way round, the higher the unit cost of education, the 
more fees have to be raised in order to achieve a given increase in 
capacity. One of the most useful consequences of a policy for raising 
fees is that such a policy should be coupled with managerial and 
administrative changes that try to reduce unit costs and improve ef-
ficiency.
Similarly, McMaster notes that in Vanuatu there has been a gradual decline in community support for primary schools. In the past, the churches had mobilized the community to build and maintain schools, provide food for boarders, and generally contribute to the welfare of the local school. The government has now taken over almost all schools, and in 1986 abolished primary fees. McMaster notes that the traditional self-help approach has almost disappeared, to the extent that some communities are now demanding that the government pays them rent for the land occupied by the school.

Public budget constraints and the role of fees in financing an expansion of education for economic development raise the question of the contribution that might be made by international aid. It needs to be recognised that the problem in the South Pacific is not primarily one of aid shortage. As Throsby and Maglen point out in the final study in this volume, the South Pacific countries are the world’s biggest recipients of aid, whether measured per capita or as a proportion of Gross National Product. These countries receive aid per capita that is between three and twenty times the average for developing countries.

This does not mean, however, that the region could not benefit from a reallocation of existing aid patterns, or even an increase in aid for particular areas. Throsby and Maglen’s evaluation of Australian aid for education is particularly valuable in this respect, because the authors demonstrate clearly that Australian aid for education has not served the region as well as it might. The main feature of Australian aid is that the tertiary sector in the region has consistently been the dominant educational recipient of aid. This is true even when allowance is made for Australia’s support for the University of the South Pacific and even when the implicit overseas student subsidy is ignored. (Since 1984-85, countries sending students to Australian institutions at less than full cost have had the implicit subsidy counted as part of their aid allocation.)

Throsby and Maglen note that concentrating on aid to tertiary education has served both parties to the transaction. Australia, in common with other aid donors, has no doubt felt that supporting high level training was the most immediate and practical way of assisting economic growth in the region. 1 This form of aid has also matched and reinforced the private demands of the region’s students, for whom a tertiary qualification opens the way to wage jobs in their home country. We noted earlier that the pattern of public subsidy tended to increase student demand for tertiary education, even though international evidence on rates of return suggested that the highest social returns could be expected from investing in primary and secondary schooling. It now emerges that the pattern of Australian aid has effectively reinforced the potential for such misallocation of investment.

1 It is worth noting also that many of the benefits of this form of aid remain in Australia, accruing to Australian institutions. Even when spent offshore, a significant proportion is spent on Australian staff, suppliers, and consultants. Throsby and Maglen take up these issues in detail in their chapter in this book.
Throsby and Maglen canvass the benefits to the region that could be expected from reallocating Australian aid so that it focuses on other education sectors, endorsing the theme that recurs throughout the country studies of this volume.

Finally, a word about what is omitted from this series of studies. Papua New Guinea is not included, partly because in regional terms it is a large country that warrants separate treatment, and partly because some of the major issues of investment in this country's education have already been explored in a companion volume (Throsby 1987). Virtually every study in this volume makes reference to the University of the South Pacific, although the University itself receives no systematic attention. It is axiomatic that as the region's own major tertiary institution, the University of the South Pacific needs to be considered in the overall context of the policy issues discussed here. However, the very fact of its regional focus demands a different analysis from the country-specific perspective of the present work. This perspective has already been provided elsewhere (Johnstone et al. 1987). Also excluded from this volume is any systematic analysis of the quality of education in the South Pacific. The increase in the number of Pacific islanders undertaking tertiary studies in Australia has focussed attention on the quality of their primary and secondary preparation, and every study in this series raises the issue of the quality of basic schooling in the South Pacific. The omission of any extensive treatment of quality issues is not because of any oversight. The quality of primary and secondary schooling in the South Pacific is so important that it is receiving separate and detailed analysis (Throsby and Gannicott 1989).

Finally, it was noted earlier that studies of this sort can contribute to the formulation of appropriate strategies for the provision of aid. Virtually all the chapters in this volume make suggestions for the way in which Australian aid can contribute to improved resource allocation in education in the South Pacific. It needs to be recognized however, that this study is designed not to draw up a shopping list of specific aid projects, but to indicate the parameters within which the countries and the aid agencies can together identify such projects.
Education in Fiji
The efficiency-equity quandary once again

K. Gannicott

As in most of the island economies of the South Pacific, the foundations of a formal school system in Fiji were laid by European missionaries, and the early pastoral schools provided the basis for an extensive system of primary education. A written form of the Fijian language was compiled by the first Methodist missionaries in 1835, and the Methodists quickly established a system of village schools in which children were taught to read and write in their own language. Catholic missions also established village schools after their arrival in 1844, and by 1874 elementary education had become so widespread that there were proposals for a secondary boarding school to teach up to the Matriculation Examination of the Australian Colonies. In 1877 the Governor of Fiji reported 'I have visited a great number of schools and have been impressed by their efficiency. A very large proportion of the natives can read and write and the amount of native correspondence would greatly surprise those who are inclined to sneer at native progress' (quoted in Fiji Ministry of Education, Youth and Sport 1977:1). Continued steady progress in the extension of schooling meant that by the time of the 1976 census (the first to be held after the country's independence), the adult literacy rate had reached 79 per cent, and 94 per cent of the 6-11 age group were enrolled in school. Fiji became independent in 1970 in much better shape, educationally speaking, than many other newly-independent countries in Africa or Asia.

The theme of this chapter is that Fiji has failed to build upon that foundation. Fiji has benefited from a declining rate of population growth, but the record since independence has been one of stagnation and even regression in the task of educating its children: in 1986 Fiji was enrolling a lower proportion of the relevant age groups in primary and secondary education than in 1976. Even before the special difficulties created by the coups of 1987, the economy was simultaneously
**Box 1**

Fiji's educational structure requires careful explanation, partly because of terminology and partly because of the maintenance of two systems of grade progression. Fiji reserves the term 'classes' for its primary grades, and refers to secondary grades as 'forms'. Traditionally Fiji has had a system of 8-year primary/4-year secondary, but in the early 1980s the government sought to introduce a 6-year primary/6-year secondary cycle. Some schools have switched to the new structure, but many parents and schools have preferred to retain the old system, which enabled students to sit the Secondary School Entrance Exam at the end of 8-year primary. The result of this dual system is that great care has to be taken in statistical comparisons. New-style primary schools offer Classes 1-6, and secondary schools offer Forms 1-6, with some schools recently introducing Form 7. Primary schools operating under the old system offer Classes 1-8, with Classes 7 and 8 of these schools overlapping Forms 1 and 2 of secondary school.

Expanding shortages of skilled labour, unemployment of school leavers, and high rates of wastage from primary and secondary school.

Difficulties of this sort are not, of course, unique to Fiji. Many of Fiji's problems are symptomatic of those confronting other newly-independent countries as they struggle with the consequences of a school system built in the image of an ex-colonial power. Education planners in Fiji explain many of their problems by the retention of an inappropriately 'academic' curriculum inherited from colonial days, an explanation which has become thoroughly familiar in developing countries since Foster's classic article on vocational schooling in Africa over twenty years ago (Foster 1966).

It would be wrong, however, to believe that the story of education in Fiji since independence can be captured purely by an explanation lifted 'off-the-shelf' from international experience. In Fiji the familiar problems of post-colonial efficiency in educational resource allocation are overlaid with the crucial local issue of equity. Questions about rates of expansion, educational structure, and curriculum are intimately bound up in Fiji with differences in educational attainment between ethnic Fijians and Indian Fijians. It hardly needs to be said that the coups of 1987, and the emigration of highly-skilled Indian Fijians, have brought to centre stage the thorny issue of ethnic skill differences.

The study begins by describing the quantitative development of ethnic Fijian education in the last decade, followed by an examination of differences in educational attainment between ethnic groups. Recent educational policies in Fiji are then discussed, and it is argued that Fiji's policy of 'vocationalizing' the curriculum is unlikely to achieve either its efficiency or its equity objectives. The study goes on to argue that an important part of the explanation for differences in educational attainment lies in the quality of schooling available to each ethnic group.
Education in Fiji: quantitative developments

Fiji embarked on independence in 1970 with justifiable confidence in the future of its educational system. The literacy rate at the time of the 1966 Census was already 72 per cent. The Sixth Development Plan, which covered the first years of independence, looked forward to the long-term achievement of ten years of education for every child, with a further two years available for those with sufficient ability (Sixth Development Plan). By the mid-1970s, these targets were no longer on the distant horizon: the Seventh Plan was able to speak optimistically about their imminent achievement. As the Seventh Plan noted,

substantial progress was made in the last Plan in raising enrolments at the primary and lower secondary levels in the effort to provide ten years of education for every child. ... Whereas in 1964 large numbers of children left primary and lower secondary schools at nearly all levels, in 1974 ... more than 96 per cent of all children remained in primary school, 84 per cent remained in Forms 1 and 2, and 58 per cent remained in Forms 3 and 4 (Seventh Development Plan).

The Plan went on to note that progress had been so good that 'the high percentage of primary school age children in school can be expected to go even higher, ... and if enrolments at the Form 1-4 levels were to continue to grow at the last Plan's rate of expansion, virtually every child would be able to find a place at this level by the end of the Plan period (Seventh Development Plan).

These are stirring words, and there is no reason to dismiss them as the usual hyperbole endemic to national plan documents. By the mid-1970s, educational planners in Fiji were confronted with the inestimable gift of a declining rate of population growth. Between 1956 and 1966 Fiji's population had grown by 3.3 per cent per year, but from the mid-1960s until 1975 the family planning program brought about a substantial reduction in fertility. The target crude birth rate of thirty per thousand was reached in 1969. Together with high rates of net migration in the early years of independence, this lower fertility sharply reduced the rate of population increase to 2.1 per cent in the decade after 1966. The crude birth rate started to rise again after 1976, but the Seventh Plan rightly pointed to a window of opportunity in which the school age population would be either static or increasing only slowly, and in which the educational dollar would stretch further (Seventh Development Plan:175-6). Table 1 shows the pattern of enrolments since 1976.

It is clear from Table 1 that the confident expectations of the post-independence years have not been borne out. The number of people with post-secondary education has almost doubled in the last ten years, but virtually no progress has been made in extending primary and secondary schooling. Enrolments of the 6-11 age group peaked early in the decade, and have since been essentially static. The proportion of the 12-15 age group attending school is today smaller than in 1976. This stagnation in enrolments has come about despite the bonus
<table>
<thead>
<tr>
<th>Age Group</th>
<th>1976</th>
<th>1981</th>
<th>1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 6-11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolment</td>
<td>93.9</td>
<td>91.0</td>
<td>99.8</td>
</tr>
<tr>
<td>Age 6-11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolment</td>
<td>93.9</td>
<td>91.0</td>
<td>99.8</td>
</tr>
<tr>
<td>Population</td>
<td>95.0</td>
<td>95.6</td>
<td>105.9</td>
</tr>
<tr>
<td>% enrolled</td>
<td>98.8</td>
<td>95.3</td>
<td>94.3</td>
</tr>
<tr>
<td>Age 12-13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolment</td>
<td>29.3</td>
<td>29.0</td>
<td>27.7</td>
</tr>
<tr>
<td>Population</td>
<td>33.7</td>
<td>31.1</td>
<td>31.4</td>
</tr>
<tr>
<td>% enrolled</td>
<td>87.0</td>
<td>93.2</td>
<td>84.4</td>
</tr>
<tr>
<td>Age 14-15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolment</td>
<td>22.5</td>
<td>27.9</td>
<td>19.8</td>
</tr>
<tr>
<td>Population</td>
<td>31.7</td>
<td>48.6</td>
<td>29.6</td>
</tr>
<tr>
<td>% enrolled</td>
<td>71.0</td>
<td>57.5</td>
<td>66.9</td>
</tr>
<tr>
<td>Age 15-17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolment</td>
<td>141.7</td>
<td>147.9</td>
<td>147.3</td>
</tr>
<tr>
<td>Population</td>
<td>160.4</td>
<td>175.2</td>
<td>166.8</td>
</tr>
<tr>
<td>% enrolled</td>
<td>88.3</td>
<td>84.4</td>
<td>88.3</td>
</tr>
<tr>
<td>Age 16-17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolment</td>
<td>13.1</td>
<td>..</td>
<td>12.2</td>
</tr>
<tr>
<td>Population</td>
<td>30.4</td>
<td>..</td>
<td>30.5</td>
</tr>
<tr>
<td>% enrolled</td>
<td>43.0</td>
<td>..</td>
<td>40.0</td>
</tr>
<tr>
<td>Post-Secondary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9.7</td>
<td>..</td>
<td>17.3</td>
</tr>
<tr>
<td>% population</td>
<td>2.3</td>
<td>..</td>
<td>3.0</td>
</tr>
</tbody>
</table>

* Age group 14-16.
* Age group 6-16.
* The Fiji Population Census questions on post-secondary education are known to be unreliable (Parliament of Fiji 1977:18), and the data do not separate those currently enrolled in a post-secondary program from the total population with post-secondary qualifications. The totals shown refer to the total number with post-secondary education.
* % population refers to the percentage of total population aged 5 and over with post-secondary education.

of the reduced birth rate during the late 1960s and early 1970s. Table 1 clearly shows the slow rate of increase of the population in the 6-11 age group (a mere 1 per cent per year since 1976) and the 12-15 age group has actually declined over the decade. This is an educational planner’s dream, and a useful perspective on the potential advantage it gave to Fiji can be found in the fact that the school-age population of sub-Saharan Africa is expected to grow at 3.3 per cent per year between 1980 and the end of the century (World Bank 1988:2).

It might be objected that there is really little cause for concern in the stagnation of enrolments in Fiji. As Table 1 demonstrates, Fiji’s education system is well developed, and stagnation is occurring not at the low levels of participation seen in Vanuatu or the Solomon Islands but at levels of enrolment which are high by the standards of developing countries. The problem is that Table 1, which uses the same presentation as Fiji’s Development Plans, overstates the educational picture, particularly in the proportion of pupils attending secondary school. The age-based enrolment ratios of Table 1 measure the percentages of the various age groups enrolled in school: they do not indicate the level of school attended by each age group. In a system which is internally efficient this will not matter much: the age group (say) 12-15, which nominally covers the age of lower secondary attendance, will correspond quite closely to the numbers actually receiving secondary education. However, in a system characterized by high rates of late entry, drop-out, or grade repetition, large numbers of the 12-15 age group may well be attending school, but they will either be clustered in the lower grades of secondary school or still receiving primary schooling. The enrolment ratio for the 12-15 age group will, as a consequence, give a misleading impression of the numbers in that age group actually receiving secondary schooling.

The standard way to correct this is to estimate net enrolment ratios, as shown in Table 2. These ratios are calculated by subtracting under- and over-age students from the total number enrolled at a given educational level, and then dividing by the population of the age group for that level.

Just as Table 1 can exaggerate numbers enrolled at any given educational level, strict exclusion of under-age children from the net enrolment ratios can lead to an unduly pessimistic view of educational progress in Fiji. Approximately one-third of pupils in Fiji start at age 5, rather than the official age 6, but they are by definition excluded from net enrolment ratios. There is no entirely satisfactory solution to this problem, and Tables 1 and 2 need to be taken together to provide an indicative range rather than a definitive estimate.

Even with this proviso the net rates shed a quite different light on Fijian educational progress from that portrayed in Table 1. The corrections make it clear that although over 85 per cent of the 6-15 age group attends school in Fiji, this high percentage is heavily biased by the substantial proportion of older students attending the lower grades of schooling. Much lower percentages of the 12-15 year age groups are
Table 2 Net enrolment ratios, 1986

<table>
<thead>
<tr>
<th>Class/Grade</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes 1-6</td>
<td>95.9</td>
</tr>
<tr>
<td>(Ages 6-11)</td>
<td></td>
</tr>
<tr>
<td>Classes 7 and 8/Forms 1 and 2 (Ages 12-13)</td>
<td>67.4</td>
</tr>
<tr>
<td>Forms 3 and 4 (Ages 14-15)</td>
<td>45.9</td>
</tr>
<tr>
<td>Class 1-Form 4 (Ages 6-15)</td>
<td>86.0</td>
</tr>
<tr>
<td>Forms 5 and 6 (Ages 16-17)</td>
<td>28.9</td>
</tr>
</tbody>
</table>


actually receiving secondary education than Table 1 implies. While 90 per cent of the 12-13 age group attends school, only 67 per cent of that age group is enrolled in the first two grades of secondary school. Similarly, less than half of those aged 14-15 are receiving the level of secondary education nominally specified for that age. The balance of children in the 12-15 age groups are either not attending school at all, or are still making their way through lower grades.

The implications of these calculations can be quickly summarized. Fiji became independent in 1970 with a well-established school system and a sound basis of adult literacy. Despite the immense advantage conferred by a static, and in some groups declining, population of school age, very little progress has been made in enrolling increased percentages of children in school: the enrolment rates are little changed from those in 1970. The post-independence target of ten years of education for everyone has still not been achieved, and the Ninth Development Plan target of ‘twelve years of education for every child who so desires’ (Ninth Development Plan:137) is nowhere near achievement. The evidence from net enrolment rates suggests that the percentages of children attending secondary school are much more modest than the numbers implied by the Development Plans.

Education and equity in Fiji

So far this chapter has addressed only the slow quantitative progress of the education sector, but intimately connected with this purely quantitative question is the issue that is never very far below the surface in Fiji — differences between ethnic Fijians and Indian Fijians in school attendance and educational attainment.
Despite changes since the coups of 1987, even the casual visitor to Fiji cannot fail to notice the predominance of Indian Fijians in both commercial life and in senior managerial positions. The obvious, and correct, inference from this observation is that Indian Fijians have a higher educational attainment than ethnic Fijian. However, it is not always appreciated that the educational superiority of Indian Fijians is a very recent occurrence. At the time of independence in 1970, adult ethnic Fijians were better educated than adult Indian Fijians. Table 3 shows the percentage of each group which had achieved functional literacy.

Table 3 brings out clearly the superior literacy rate of the ethnic Fijian population in both 1966 and 1976. We noted at the beginning of this chapter the extensive missionary influence in Fiji, and the activity of those early years established a tradition of elementary schooling among the ethnic population. The Indian Fijians, who started life in Fiji as indentured labourers on the sugar plantations, did not share in the Christian teaching that underpinned the spread of literacy among the ethnic Fijian population; they lacked the settled village structure that facilitated the spread of Fijian schools; and officials did not consider the provision of education to be a high priority for a group initially viewed as being only transient. The result was that literacy was lower among Indian Fijians as a whole than among ethnic Fijians, and, in addition, Indian Fijian social customs meant that literacy was much lower among women than among men. These historical influences are brought out more clearly in Table 4.

<table>
<thead>
<tr>
<th>Table 3 Functional literacy in Fiji, 1966 and 1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966 (per cent)</td>
</tr>
<tr>
<td>Total population</td>
</tr>
<tr>
<td>Ethnic Fijians</td>
</tr>
<tr>
<td>Indian Fijians</td>
</tr>
<tr>
<td>Males</td>
</tr>
<tr>
<td>Ethnic Fijians</td>
</tr>
<tr>
<td>Indian Fijians</td>
</tr>
<tr>
<td>Females</td>
</tr>
<tr>
<td>Ethnic Fijians</td>
</tr>
<tr>
<td>Indian Fijians</td>
</tr>
</tbody>
</table>

Many Indian Fijians were becoming economically mobile in years just before and after independence.

Among the older age groups the superior educational attainment of ethnic Fijians is very marked, and only among the very young groups in 1976 had the gap started to close. Only in the older groups is there any substantial difference in literacy between ethnic Fijian men and women, whereas the disparity between Indian Fijian men and women is apparent among all but very young adults in 1976.

While the broad historical trends are clear, it is nonetheless a simplification to characterize the ethnic experience as one in which the Indian Fijian population persistently lagged behind ethnic Fijians in education attainment. The distribution of education attainment was in fact bimodal. In the immediate pre- and post-independence years many Indian Fijians remained as unskilled labourers on the sugar plantations, but many were becoming economically mobile. As we saw in Table 4, in 1976 Indian Fijians were more likely than ethnic
Table 6 Net enrolment rates in Fiji by ethnic group, 1986

<table>
<thead>
<tr>
<th>Age group</th>
<th>Ethnic Fijian</th>
<th>Indian Fijian</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-11</td>
<td>96.5</td>
<td>95.8</td>
</tr>
<tr>
<td>6-12</td>
<td>96.5</td>
<td>95.8</td>
</tr>
<tr>
<td>6-13</td>
<td>63.4</td>
<td>70.6</td>
</tr>
<tr>
<td>6-14</td>
<td>43.4</td>
<td>47.4</td>
</tr>
<tr>
<td>6-15</td>
<td>85.2</td>
<td>86.8</td>
</tr>
<tr>
<td>6-16</td>
<td>25.8</td>
<td>30.7</td>
</tr>
</tbody>
</table>


By 1976 educational disparity between ethnic Fijian and Indian Fijian males had almost disappeared.

Fijians to have had no schooling — but they were also more likely to have had education beyond primary. Table 5 shows the details.

The picture that emerges from Tables 3 - 5 is therefore one in which literacy was much more quickly and extensively established among ethnic Fijians than among Indian Fijians, with Indian Fijians being particularly slow to achieve literacy among females. By the time of the 1976 census, the data on literacy among young adults suggest that the ethnic Fijian/Indian Fijian disparity had virtually disappeared, at least among men. Moreover, by 1976 there were the first signs that Indian Fijians were starting to move ahead of ethnic Fijians in average educational attainment. Table 6 brings these trends up to date with data on current educational enrolments by ethnic group.

Table 6 brings out clearly that the inverse relationship between level of schooling and participation rate is much more marked for ethnic Fijians than for Indian Fijians. Enrolments in Table 6 do not include those enrolled in Multicraft programs because data on Multicraft are not available by age and grade. Multicraft is a 2-year full-time program based on the secondary schools, and aims to give those who drop-out of the mainstream academic program a training in practical skills. Their exclusion from Table 6 means that the percentages for ethnic Fijian enrolments are biased downwards, because more than twice as many ethnic Fijians as Indian Fijians attend Multicraft (Ministry of Education 1986:90). However, total Multicraft numbers are extremely small (563 ethnic Fijian and 214 Indian Fijian in 1986), and demonstrably would not account for more than a small fraction of the enrolment differences between ethnic Fijians and Indian Fijians in Table 6. Moreover, it needs to be remembered that the net rates of Table 6, like those of Table 2, understate the relative Indian Fijian superiority by
omitting the substantial numbers of Indian Fijian children who start school before age six.

A further perspective on the higher participation rates of Indian Fijians can be obtained by looking at cohort survival and transition rates (Tables 7 and 8). By focusing on grade of enrolment, without regard to age, these neatly sidestep the problem of under- and over-age enrolments and bring into clearer focus the differences in participation between the ethnic groups.

Tables 7 and 8 together form a picture of strong ethnic differences in current educational enrolments. Among ethnic Fijian students, only 81 per cent of those who enrol in first grade survive to Year 6 (Table 7), and only 91 per cent of the survivors go on to Year 7 (Table 8). Among Indian Fijian students, however, 96 per cent of Grade 1 enrolments

| Table 7 | Cohort survival rates in education by ethnic group, Fiji, 1986 |
|---|---|---|
| (a) Primary cohort survival rates | | |
| | Class 1 | Class 6 |
| | enrolment 1981 | enrolment 1986 |
| Ethnic Fijian | Ethnic Indian | Fijian |
| 9,085 | 8,399 | 7,354 |
| 80.9 | 95.6 |
| (b) Secondary cohort survival rates | | |
| | Class 7/Form 1 | Form 4 |
| | enrolment | enrolment |
| | 1983 | 1986 |
| Ethnic Fijian | Ethnic Indian | Fijian |
| 6,215 | 7,341 | 3,855 |
| 62.0 | 67.4 |


| Table 8 | Transition rates in education by ethnic group, Fiji, 1985-86 |
|---|---|---|
| | Class 6 to Class 7/Form 1 | Class 8/Form 2 to Form 3 |
| | (Year 6 to Year 7) | (Year 8 to Year 9) |
| 1985-86 | Ethnic Fijian | Indian Fijian | Ethnic Fijian | Indian Fijian |
| 90.5 | 99.4 | 85.7 | 83.6 |
| | Form 4 to Form 5 | Form 5 to Form 6 |
| | (Year 10 to Year 11) | (Year 11 to Year 12) |
| 1985-86 | Ethnic Fijian | Indian Fijian | Ethnic Fijian | Indian Fijian |
| 87.0 | 83.2 | 49.0 | 66.8 |

survive to Year 6, and virtually all of these (99 per cent) move on to Year 7. While the Year 8/9 and Year 10/11 transition rates for ethnic Fijians are marginally higher than for Indian Fijians students, this is because larger absolute numbers of ethnic Fijians have already been ‘deselected’ through drop-out: just as at primary level, the cohort survival rates at secondary school are higher for Indian Fijian students. The culmination of these differences in participation is seen in dramatic fashion in the Year 11/Year 12 transition rates in Table 8, with a difference of seventeen percentage points between the ethnic groups.
Finally, even when we compare ethnic Fijian and Indian Fijian students within the same level we find that the Indian Fijian pupils perform better. Table 9 shows examination results for 1986.

There is in Table 9 clear evidence not only that more Indian Fijian’s than ethnic Fijians sit for the various secondary exams (something which could be readily inferred from what we already know of their higher retention and progression rates), but that they are successful out of proportion to their numbers. With the exception only of the Junior Certificate Exam, the Indian Fijian success rate is greater than that for ethnic Fijian children right across the board. Indeed, despite the fact that the ethnic Fijians are a more highly selected group by reason of their greater drop-out in earlier years, the relative Indian Fijian advantage in exam success increases as they move through secondary school.

The Tables presented in this section bring out vividly the ethnic differences in educational attainment in Fiji. Indian Fijians have moved from a situation where, little more than ten years ago, their educational attainment was inferior to that of ethnic Fijians, to a situation today where their children dominate the exam-oriented secondary system. Indian Fijian children are less likely to repeat or drop out within levels, have higher rates of survival within each school level, have a better exam success rate, and have higher rates of progression from one level of education to another. A single comparison that summarizes the many statistics in this section is that for every 100 Indian Fijian children who enrolled in Grade 1 in 1975, 31 completed the full 12 years of school in 1986. For every 100 ethnic Fijian children in the same entering group, only 19 finished year 12 in 1986.

Current educational policies in Fiji

Fiji’s educational planners betray a certain schizophrenia when describing the performance of education in recent years. As noted earlier, the Development Plans have been persistently optimistic about progress in enrolments. Net enrolment ratios and cohort survival rates (Tables 2-9) make it clear that Fiji is still some way from achieving ten years of education for every child, yet the Ninth (and latest) Development Plan echoes the tone of earlier Plans in proclaiming that ‘twelve years of education for every child who so desires will be attempted during DP9’ (Ninth Development Plan:137). Nonetheless, it is clear that Fiji’s planners have been uneasily aware that the simple age-based enrolment ratios were concealing problems in retention and participation. Each of the three Development Plans since 1975 has spoken of the need for improved retention within the system. The Ninth Plan conceded that ‘the drop-out rate remains significant’ (Ninth Development Plan:136), and the Ministry of Education was even more blunt in acknowledging that the crude wastage rate for primary and lower secondary was increasing (Ministry of Education 1986:12). In 1985 the
crude wastage rate for the first eight years of school was 26.1 per cent. That is to say, for every hundred pupils who enrolled in first grade in 1978, twenty-six had dropped out by eighth grade in 1985. This wastage rate was actually somewhat worse than five years earlier.

The explanation that is offered by Fiji's planners for the failure of the system to expand enrolments, and to retain those who do enrol, goes to the heart of the policies that have been followed since independence. This explanation is couched in the terms described in detail in the Overview: the culprit is the academic system of schooling, which, it is argued, remains geared to the requirements of education in a colonial society. As the formal education system emerged from its beginnings in the pastoral elementary schools, it naturally became oriented to the kind of education that would provide the key to obtaining European-style occupations.

Education planners in Fiji have reacted to a perceived academic preference of parents and pupils which accounts for many of the problems in education. Whereas in the old system only a few pupils were able to reach the secondary level and there were enough continuing opportunities for successful ones in the Civil Service, with the present increased emphasis on the mass of children in Fiji, the manpower needs of the economy cannot cope with the large numbers of academic school leavers' (Seventh Development Plan:176). In short, the core argument of Fijian educational policy is that the school system is too academic in its structure and curriculum, explaining why the Fijian economy has been simultaneously short of technical and vocational skills and yet has also experienced unemployment of school-leavers (Eighth Development Plan:257; Ninth Development Plan:136).

Above all, the low retention rate of those aged 12-16 is believed to be caused not least because the academic schooling they are offered does not meet their interests or aptitudes, and because the academically-oriented examinations held after Class 6 and Class 8 and after Forms 4, 5, and 6, provide a formidable barrier to the retention of non-academically inclined children (Seventh Development Plan:175, 178). While educational policies that impinge upon ethnic differences are always couched in very circumspect language, Fiji's planners have understood that it was ethnic Fijians who were not succeeding in the existing academic system, and hoped that a more vocational curriculum would help redress the balance of educational attainment (Eighth Development Plan:256; Ninth Development Plan:136).

Given this interpretation of the problem, the main thrust of educational policy in Fiji has been to move away from an 'academic' system and to introduce a substantial element of technical/vocational training into the curriculum. From the Seventh Development Plan onwards, the elements of this policy have been as follows:

(i) to change over from the traditional 8-year primary/4-year secondary system to a 6-year/6-year cycle. The 8-year primary system was
perceived by planners to be especially worthy of change, since even at
this elementary level students were already being inculcated with the
ethos of a system driven by the curriculum requirements of academic
exams. The Intermediate Exam was taken after sixth grade, and, much
more importantly, the Secondary Schools Entrance Exam at the end of
eighth grade acted as a screening device for pupils wishing to enter
secondary school. With a shift to a 6-year primary cycle, it was hoped
that the primary curriculum would become less oriented to the
demands of the Secondary Entrance Exam. This process would be
assisted by curriculum reform at the primary level (Seventh Develop-
ment Plan; Eighth Development Plan).

(ii) the secondary curriculum would be completely revamped to
introduce a more practical vocational education. Fiji adopted what has
become known as the diversified secondary school approach, whereby
the core academic curriculum is expanded to incorporate technical,
agricultural and commercial courses.

Secondary school will become increasingly orientated towards prac-
tical studies ... to align technical and vocational education with the
manpower requirements of the economy ... since increasing the
amount of education without at the same time giving serious con-
sideration to the appropriateness of different types of education may
simply lead to unemployment at higher levels with increasing
frustration for parents and pupils alike (Seventh Development

(iii) post-secondary education would also become increasingly
orientated towards the supply of technical and vocational rather than
'academic' qualifications. The major shift here has been the change of
policy towards the University of the South Pacific. Fiji acknowledges
that the University played a major role in the country's educational
development, particularly in the areas of teacher training and the
supply of public service administrators in the post-independence
years. However, with the filling of those requirements, Fiji has made it
clear that it will no longer support 'white-collar' training at the
University of the South Pacific (University of the South Pacific
1983: 49). It will not support its own students in studying for teaching
qualifications there, and those wishing to study humanities or social
science at government expense are allowed to do so only after 'specific
directions concerning their course of study' (University of the South
Pacific 1983: 50). Instead of supporting the continued expansion of the
University, there has been a decisive thrust to use technically-oriented
tertiary institutions, such as the Fiji Institute of Technology, the Fiji
College of Agriculture, and Ba Technical Centre.

It is therefore no exaggeration to summarize the thrust of recent
educational policy in Fiji as that of trying to move towards a techni-
cal/vocational system of schooling at all levels of education.
Education would be 'de-academicized', the schools would inculcate
much better attitudes to vocational subjects, and the nexus between
academic curricula and student demands for increased schooling in
the vain pursuit of a white-collar job would be broken. Only if the system were changed would education play its proper role in ‘rural development, distribution of income, slowing the migration to urban areas, and in leading the youth of Fiji toward employability and employment opportunities’ (Seventh Development Plan:174).

The reform of the structure and curriculum of schooling in Fiji is thus addressed to both efficiency and equity objectives. On the one hand, the reform was expected to help rein in the demand for academic qualifications at tertiary level and in so doing improve the supply of technically qualified personnel. On the other, the provision of a practically oriented curriculum was also expected to help improve the enrolment and performance of those students — overwhelmingly ethnic Fijian — who had not performed well in the academic, exam-oriented environment of the present system.

Insufficient time has elapsed to offer a thorough evaluation of these policies, but it is already apparent that there is no strong evidence that the reform proposals have had their intended impact. First, the reform program has been thwarted by persistent demands from parents and pupils to retain the ‘academic’ style of schooling. Indeed, parental choice in favour of retaining the old system has been so strong that important elements of the planned reform, such as the shift from 8-year to 6-year primary, with a reduced role for the Secondary Entrance Exam, have had to be virtually abandoned (Ninth Development Plan:135). Second, practical vocational training at secondary school has received little support from parents. The official answer to the lack of parental support for vocational studies at secondary school was to mount a publicity campaign to correct their mistaken attitudes (Ninth Development Plan:136). But it is not obvious that the parents’ attitudes are mistaken: parents and their children accurately perceive that the best chance of getting the best jobs is to get as much education as possible, and no amount of vocational education in the schools will change this.

Third, what has happened in Fiji is consistent with the evidence from other countries that when occupational training does take place within formal education the tendency is for the institutions concerned to become steadily ‘academicized’. For many years the purpose of the Derrick Technical Institute was ‘to concentrate on the consolidation and expansion of trades and technician-level courses’ (Seventh Development Plan:182). This technical institute was subsequently transformed into the Fiji Institute of Technology, with all the tertiary trappings of external assessment, search for international standing, cross-crediting with the University of the South Pacific, and demands for a rise in the formal academic qualifications of staff (Fiji Institute of Technology 1985). It comes without surprise to learn ‘that there is an urgent need to commission a feasibility study ... to assess the present standards and facilities for developing into a fully-fledged Polytechnic’ (Fiji Institute of Technology 1986).
Fourth, instead of curriculum reform changing attitudes and expectations about undertaking further academic schooling, a feature of secondary schools in recent years has been the re-emergence of a tendency to retain pupils in the system, in order to undertake a further year of schooling beyond the nominal final year of Form 6. This has come about because, not surprisingly in the light of Fiji’s reduced support for the University of the South Pacific, not all those who passed the New Zealand University Entrance Exam after Form 6 were able to find a place at this institution. The secondary schools have accommodated themselves to this by instituting an additional year, Form 7, with yet another exam at the end as a further screening device in the paper chase. This development has been bolstered by the official policy (following the abolition in 1988 of the New Zealand School Certificate Examination) of allowing all Form 5 leavers to proceed to Form 6 without selection. It hardly needs to be said that these developments, taken largely under pressure of student demand, run entirely counter to the planned reforms, which were intended to reduce demand for upper secondary and post-secondary education. The Ministry of Education might argue that a relaxed attitude to expansion at upper secondary level is still consistent with the broad thrust of policy, because it was proposed to alter the upper secondary curriculum ‘in order to place greater emphasis on vocationally-oriented subjects ... so that students are better prepared for living and employment’ (Fiji, Ministry of Education 1987). But under the fixed public educational budget facing Fiji, expansion of upper secondary education diverts funds from lower levels of schooling, and trying to channel upper secondary expansion into expensive vocational subjects exacerbates that shift. The opportunity cost of expanding Forms 6 and 7, when substantial numbers of children still do not complete a basic ten years of education, needs no emphasis.

Above all, the program has had no perceptible effect in encouraging ethnic Fijians to stay within the formal school system. Curriculum reform was justified, in part, as a way of providing the type of education that would overcome the alleged lack of incentive and motivation of ethnic Fijians to participate successfully in a school system whose curriculum was oriented to the achievement of examination success in traditional academic subjects. There is no evidence that curriculum and structural reform is having any such effect; as we noted earlier, the latest evidence for 1986 points to a worsening drop-out rate.

These critical remarks should not be interpreted as being dismissive of all attempts to reform curricula or systems. There is clearly much in Fiji’s educational policies which can be accepted without question. There can be no quarrel with the general concept of providing education that is genuinely suited to the realities of life and jobs which most students will follow. Secondary school pupils do need to have an exposure to a wide range of subject options, especially if this will help the ‘motivational factors’ that are believed to explain the poorer performance
of ethnic Fijian students in the existing academic system (Eighth Development Plan: 256). And, with the University of the South Pacific being virtually the same age as an independent Fiji (the University was established in 1968, Fiji became independent in 1970), Fiji's policies towards that institution demonstrably need to be reviewed now the initial thrust of localization has been completed.

An alternative hypothesis: variations in school resources

The problem is that whatever the genuine merits of curriculum reform, it is manifestly not achieving the objectives that were set for it: it is not providing Fiji with a more technically-oriented labour force, nor is it making any perceptible impact on the worsening relative position of ethnic Fijians in the school system. The crucial explanatory fact is that Fiji's economy has not performed well in the last decade. Healthy real growth of 4.7 per cent per annum during the first decade of independence came to an end in the early 1980s, with the decline in export receipts as world sugar and other commodity prices collapsed. Reduced sugar receipts were only partially offset by increased revenue from tourism. The government budget deficit widened to 5.5 per cent of Gross Domestic Product in 1985, and government debt service obligations increased as the rising deficit forced the government to borrow more. Even before the drastic decline in economic activity after the coups, the growth rate averaged only 2.0 per cent per annum during the 1980s. Since population growth has averaged 2.1 per cent per year, real Gross Domestic Product per head was stagnant between 1980 and 1986. Unemployment, which remained low during the 1970s, rose to more than 10 per cent in 1985. This unemployment has been heavily concentrated among school-leavers: in an unhappy accident of timing, the worsening economic situation coincided with large inflows of young job seekers into the labour market, the result of the high level of population growth in the mid-1960s (Ninth Development Plan: 29).

In these circumstances curriculum reform simply cannot carry the weight of social and economic change that educators envisage. Incentives and motivation to attend school, to progress to higher levels of schooling, and to choose a particular type of education, are set not by curriculum within the schools but within the wider economic system: curriculum reform will not, of itself, change those incentives. In the particular circumstances facing young people in Fiji during the last decade, competition for entry-level jobs has been fierce. School-leavers as a whole have found themselves up against formidable odds in obtaining employment. The way to improve one's chances of getting a job was to stay longer in school, pass the increasingly selective exams, and get the highest qualification possible. In short, the pressure by students and their families to get as much education as possible of an allegedly 'academic' nature has its basis in the clear economic incentives to follow exactly this course of action — and to expect that
Indian Fijians have been more successful than ethnic Fijians in gaining better paid jobs

'vocationalizing' the curriculum will change those economic incentives is simply to overlook what we have learned since Foster's pioneering work (Foster 1966). It is the 'academic' education which is vocational in Fiji's circumstances.

Competition to get the highest academic qualifications sheds a useful light on the ethnic differences in educational attainment which were described earlier. As we saw in Tables 3-8, the Indian Fijian community became educationally emancipated in the years following independence, and Indian Fijians have steadily improved their relative position in the school system. While school-leavers as a whole have faced great difficulty, Indian Fijian students have (on average) thrived in the academic school system and have 'won' the competition for the best jobs. Ethnic Fijians have, on average, been the losers in the race. This difference in educational attainment is, to say the least, a very complex issue, with part of the explanation lying in social and cultural factors outside the education system, and in the different incentives and motivations facing each ethnic group. What is clear is that whereas official policy has placed great weight on curriculum reform as a solution to the problem, there has never been any convincing evidence that ethnic Fijians were faring poorly in school because they were somehow less suited to academic pursuits.

The more plausible hypothesis is that an important source of disparity in educational outcomes lies in the fact that ethnic Fijians receive on average a lower standard of schooling than Indian Fijian children. This comes about because there are effectively two separate school systems in Fiji, each catering to its own ethnic group. There is certainly no formal segregation of schools, and (particularly in urban secondary schools) there are schools with substantial enrolments from both ethnic groups. In general, however, there is not much enrolment overlap between the two groups. This is partly a consequence of the population distribution: the ethnic Fijian population is predominantly rural, the Indian Fijian population mainly urban, and this alone generates schools with enrolments predominantly from a single ethnic group. The second reason is that most schools in Fiji (98 per cent of primary and 92 per cent of secondary) are technically private, subject to Ministry of Education approval and with teachers mostly paid from public funds, but nevertheless set up by private initiative and managed by local committees. Again it needs to be stressed that some of these schools and their management committees represent both ethnic groups, but a major consequence of this pattern of private initiative is that most schools (particularly at primary level) are established to cater for the language and culture of each community. At primary level initial instruction is given in the vernacular language — Fijian, Urdu, or Hindi — with English taught as a foreign language, and shifting to English as the medium of instruction in the upper years of primary and in secondary school.
There is now convincing evidence that this system of private initiative has combined with the socio-economic differences resulting from the rural-urban population distribution to produce two essentially separate school systems, with the ethnic Fijian schools offering a lower standard of schooling than the Indian Fijian schools. It was noted in the overview that quality issues in South Pacific education are being treated in depth elsewhere, but the issue of quality in Fiji is an integral part of the explanation of quantitative differences in educational attainment between the ethnic groups. A number of reasons for these differences can be identified.

First, because the ethnic Fijian population is predominantly rural, their schools are in more isolated rural areas, are much smaller, and require more multiple-class teaching for which staff are not usually trained. There are some hundred primary schools, almost exclusively ethnic Fijian, which are so small that teachers have to teach two to three grades in the same class. The teachers in these classes (like the pupils, virtually all of whom are ethnic Fijian) have received no specific training in the special skills required for such teaching.

Second, ethnic Fijian teachers have a lower standard of educational attainment than Indian Fijian teachers. The strong majority of all teachers, whether Indian Fijian or ethnic Fijian, have received teacher training, but there are clear differences in their levels of basic education. At primary level, nearly 40 per cent of ethnic Fijian teachers have had no more than Form 4 education, whereas only one quarter of Indian Fijian teachers finished school at this level. At secondary level the discrepancy is even more striking: in 1986 over 40 per cent of Indian Fijian secondary teachers had a university degree, compared to only 26 per cent of ethnic Fijian teachers. At the other extreme, 26 per cent of ethnic Fijian secondary teachers had no more than Form 5 basic education — little more than many of their pupils — whereas only 7 per cent of Indian Fijian teachers finished school at this level (Fiji Ministry of Education 1988:79-86). While this observation can only be offered as anecdotal evidence, widespread discussions with educators and policymakers in Fiji produced a uniformity of view about the low standard of much teaching in ethnic Fijian schools. When large numbers of ethnic Fijian teachers have had little more basic education than their own pupils, teaching is likely to be pedestrian and limited, using a narrow range of curriculum material and staying close to painfully mastered but out-of-date textbooks or reading techniques, and emphasising rote instruction rather than the creative and analytical thinking required for success in the more senior levels of schooling.

In addition, rural ethnic Fijian schools are much worse equipped with textbooks, libraries, and science laboratories and equipment than the mainly urban Indian Fijian schools. There are about 360 ethnic Fijian schools with 50,000 students, and most of these schools have very few books other than basic textbooks. The Ministry of Education in Fiji has described the lack of books and teaching resources 'in Fijian
schools today, especially at the early developmental stage in the primary schools, as a major contributing factor to the high rate of failure amongst ethnic Fijian children at the upper secondary and the tertiary level — failure which is attributed to an apparent inability to think analytically’ (private communication 1988).

Moreover, because of their more remote location, many ethnic Fijian schools experience only very infrequent support and inspection from the Ministry of Education. As the Ministry itself has acknowledged, ‘the majority of rural and isolated schools are run and attended by ethnic Fijians. Most of these are visited once a year by the District Education Staff. Each of these visits, however, is usually of about two hours duration at the most’ (private communication 1988).

Ethnic Fijians living in rural areas often need to board if they are to attend secondary school (nearly one-third of ethnic Fijians in Form 4 are boarders, whereas there are no Indian Fijian boarders at this level). Not only does boarding provide a major cost disincentive to continue with study, but it means that many ethnic Fijian students spend the school year entirely in an environment deficient in books. Day-school Indian Fijian pupils benefit not only from schools with more reading material, but from the fact that they have access to more books in English at home (Stewart 1984).

Not all these problems can be attributed to differences in school quality. Even without the differences in school standards, Indian Fijian children would enjoy the advantage of coming from predominantly urban areas, where they have a much greater exposure to English, both in the home and in their everyday environment, whereas English is spoken in comparatively few rural ethnic Fijian homes (Fiji, Education Commission 1969). It is likely too that conditions are less conducive to study in poorer village homes (Bennett 1974). What emerges, however, is that these ‘natural’ advantages and disadvantages are being reinforced through the school system: the higher occupational standing and higher incomes of the urban Indian Fijian population mean that their local management committees can channel greater resources back into their community schools. The overall result has been the development of two separate and unequal educational systems, with the Fijian schools deficient in the very resources which are known to have an important and direct impact on educational achievement — the basic educational standard of teachers, the provision of textbooks and other reading material, the provision of equipment for basic scientific instruction, and a supportive management and inspectorate. (There is now a large literature on the factors which lead to a high quality of schooling. For a summary, see Fuller (1985). For a survey of factors affecting educational quality in the South Pacific, see Gannicott and Throsby (1989).)
It is untrue to suggest that the government has failed to take action to deal directly with the question of ethnic disparities. As long ago as 1969, the Report of the Fiji Education Commission identified the emerging educational discrepancy between the ethnic groups, and following the recommendations of this Commission 50 per cent of tertiary scholarships have been reserved for ethnic Fijians. But as Baba has noted, this positive discrimination has not achieved its objectives: at tertiary level fifty per cent of university scholarships have been reserved for ethnic Fijians, but

little consideration was given to the fact that the average proportion of Fijians passing the New Zealand Entrance Examination during the 1970s was about 18 per cent. The Fijian quota for university was drawn from this group, and the other fifty per cent of scholarships was drawn from the remaining 82 per cent of the non-Fijians who passed the same examination (thus explaining) why many Fijians were not adequately prepared to undertake University studies, and why there was a high failure rate of Fijians (Baba 1985:28-9).

Specific assistance to Fijian schools also takes place through the Fiji Education Board, which was established within the Ministry of Home Affairs in 1983. In its first five years the Board dispensed an annual average of F$2 million in fellowships, capital works, books, and equipment for ethnic Fijian schools. This amounted to only 2.5 per cent of total 1986 expenditure by the Ministry of Education.

The problem is that the policy of tertiary quotas, like the policy of curriculum reform, is tackling symptoms once they have emerged well into secondary school, but the fundamental cause of those symptoms is the low standard of schooling offered to Fijian children in primary and lower secondary school. It seems likely that Fiji’s early attainment of virtually universal primary schooling has diverted attention away from the quality of that schooling, and the post-independence desire to train a cadre of technical manpower has understandably produced a policy emphasis on the quantitative expansion of upper secondary and tertiary levels. Given this perspective, it is not surprising that remedies for unequal ethnic attainment have been sought at the higher levels of the school system, whereas what really needs to be done is to strengthen basic education for ethnic Fijians at primary and lower secondary levels. It is at this basic level that they are failing to receive the same standard of education that is offered to Indian Fijian children. With inadequate preparation in the fundamental areas of language, mathematics, and science, it is scarcely surprising that ethnic Fijians have lagged behind in educational attainment as reflected in examinations and employment opportunities.
Conclusion and policy recommendations

This chapter has provided a critical review of various aspects of the current educational scene in Fiji. The assumption underlying educational policy has been that curriculum reform was the way to reorient the system towards the production of technical and vocational labour and also to provide the type of education best suited to those (predominantly ethnic Fijians) who were demonstrably failing to flourish in the academic environment of the present highly selective system. We argued that there was no evidence that curriculum reform was achieving what was expected of it. Whatever the genuine merits of such reform, it is not a sufficient condition for changing student attitudes to enrolling in school and pursuing particular types of study. The crucial explanation in Fiji is not curriculum but the fact that the educational system acts as a means of selecting and rationing entrants to a very limited number of school-leaver jobs. The ethnic Fijian community has been much less successful in the rigorously selective academic system not because of some inherent unsuitability for academic pursuits but because ethnic Fijians receive on average a lower standard of education than Indian Fijian children.

This chapter has attempted to take a wide perspective of education in Fiji, without becoming involved in short-run issues of crisis management consequent upon the coups. Nonetheless, it would be naive to pretend that the events of 1987 will not have an impact on the issues discussed. The crucial problem that has already emerged in Fiji is that of selective skill shortages as substantial numbers of Indian Fijians in high and medium level jobs emigrate. The remedy here is not to rely on the formal school system. As we saw in the Overview, schools are both too slow and too unwieldy to provide job-specific training. An urgent priority in Fiji is to explore ways of increasing the amount of specific, job-based training in technical, administrative, and managerial skills. Such training could take place through industrial training centres, through local enterprises (via wage/tax incentives), by making training provisions an integral part of aid projects, and by the selective provision of training programs in Australia. Some of these suggestions are already being put in place with assistance from Australian aid funds.

A key feature of this emphasis on skill provision outside the formal school system is not only that it is economically efficient, but that it also takes account of the equity issues raised in this paper. Enhanced and expanded schemes of job training would, inevitably, be oriented towards ethnic Fijians, and such schemes have the potential of reaching all workers — including those who may not have completed formal schooling.

Apart from the exigencies of remediing specific skill shortages in the wake of the coups, the main policy proposals of this chapter centre on the need for a shift of emphasis towards investment in primary and
lower secondary school, especially for those schools with mainly ethnic Fijian pupils. The key requirement is for a redirection of investment priorities, with restrained demand at upper secondary level, and a reallocation of public resources to the lower levels. Priority should be given to the maintenance of a strong general, academic education at primary and secondary level, based on the notion that subjects which have broad relevance (mathematics, language, science) will provide a much better foundation for subsequent training in the labour market than specific vocational instruction.

Fiji’s system of state-aided Fijian private education has played a major role in allowing the Indian Fijian population to move out of the ghetto of indentured work on the sugar plantations, and in giving Fiji a high level of educational development compared to its Melanesian neighbours. The flexibility and responsiveness of that system should be preserved. But the current system of state aid needs to be better targeted, to take account of the fact that the urban/rural split between the ethnic groups itself generates different access to resources. Without a major increase in the resources invested in the mainly rural schools available for Fijian children, the ethnic disparity in educational achievement will continue to widen, as the Indian Fijian community reinforces its educational superiority through greater investment in the education of its own children.

Within the last two years, no doubt under the exigencies of the skill shortages and attitudes engendered by the coups, the Fijian Government has started to move in this direction, and has initiated a series of policies aimed specifically at increasing the flow of resources into rural primary and lower secondary schools. These policies are intended to go well beyond those followed by the Fiji Education Board since 1983. They include increased funds for the supply of library books to Fijian primary schools; the establishment of educational media Centres; expansion and improvement of both pre-service and in-service teacher training; the establishment of properly equipped pre-school centres for ethnic Fijian children; the appointment of district education advisers to help improve and supervise teaching effectiveness; and increased funds for equipment and materials to improve the teaching of basic science in those secondary schools catering mainly to ethnic Fijian students.

All these policies have precisely the right emphasis: they are designed to increase the flow of resources to the lower levels of the school system, and they are targeted at the position of ethnic Fijian students within that system. Despite the value of these policies, there must be a high probability that current constraints on public expenditure will mean that only inadequate funding will be available. The valuable role that can be played by Australia and international agencies in supporting the adequate funding of this program needs no emphasis.
Western Samoa and Tonga — close similarities in educational development — but contrasting policies for educational change

Western Samoa is introducing vocationally oriented curriculum, Tonga is strengthening traditional academic skills

The theme of this study is that Western Samoa and Tonga share many close similarities of educational development, but have chosen to implement policies for educational change which could hardly show sharper contrast. The similarities are strong. The missionary background; the early attainment of universal literacy; the steady and apparently rather painless expansion of education in a stable society; the current shortage of technical, vocational and administrative skills; and, above all, the fact that, two decades and more after independence, their school systems still seemed to reflect the legacy of colonial times, are all aspects which the two countries have in common. The contrast lies in the solutions proposed. Where Western Samoa is introducing a vocationally oriented curriculum, Tonga prefers to strengthen traditional academic skills; and where Tonga is trying to develop a community college closely linked to employment requirements, Western Samoa is funding a national university.

The study aims to bring out this pattern of similarities and contrasts. The analysis starts by tracing the pattern of educational development in both countries, showing in particular that a major shared issue of education is that at independence both Tonga and Western Samoa inherited systems overwhelmingly oriented to the requirements of New Zealand schooling. We then describe the central economic issue of Western Samoan and Tongan schooling, which is that both countries are chronically short of technical, vocational, and managerial skills. The chapter concludes by reviewing current educational policies in each country, drawing out the contrasts between them.
Similar history: the growth of education

In Tonga and Western Samoa, as in most countries of the region, formal education dates from the arrival of European missionaries. The London Missionary Society arrived in Western Samoa in 1830, having already proselytized in Tonga for some years. Catholic and Wesleyan missionaries followed not long after. Mission activity quickly led to the establishment of pastoral schools in the villages, with the main purpose of teaching students to read, write and reckon in their own language, so that they would learn the scriptures and become Christians. In addition to the three ‘r’s’ the curriculum also included other useful skills such as horticulture, sewing, elementary commerce and English. In both countries the early pastoral schools provided the foundation for an extensive system of primary education. Basic literacy and numeracy diffused rapidly among the population, and by the end of the nineteenth century both countries had achieved very high rates of literacy in their own language. Tonga and Western Samoa take pride in these early achievements in basic education. Tongan policy documents typically point out that primary education became compulsory at the remarkably early date of 1876 (see, for example, Fourth Five-Year Development Plan and Tonga Central Planning Department 1986) and the Department of Education in Western Samoa has shared the anecdote about ‘a group of dignitaries from London [who] recorded in 1900 their amazement at finding a population who were almost one hundred per cent literate in their own language’ (Western Samoa, Department of Education 1980:1).

In Western Samoa the brief period of German administration (1900-1914) brought few changes to education, but the displacement of German rule by New Zealand administration (1914-1962) set the pattern of educational structure that would continue until current times. New Zealand administration introduced the concept that education was primarily a state responsibility, and from 1920 onwards started to establish secular government schools in the villages. Mission schools continued to operate a system which placed more emphasis on religious instruction, but government schools quickly accounted for the majority of pupils in the primary system. Secondary education did not begin until the early 1940s, and this too started as mainly a mission activity. In a development reminiscent of so many other colonial countries as they moved towards independence, the next phase in Western Samoan education, from 1945 onwards, was to prepare a small élite of ‘scholarship boys’ who would be trained in the metropolitan country as future leaders of an independent nation. Initially these early scholarship students were selected at the end of primary school, but by the 1950s the development of secondary education (and in particular the opening of Samoa College in 1953) meant that students were able to undertake secondary education in a government school within Western Samoa. Avele College and Vaipouli
College opened soon after, and the government secondary system has gradually developed to the point where it provides around 60 per cent of available places at secondary level.

Tonga was never formally administered by New Zealand, having become a British protectorate in 1870, but simple geography meant that in matters of education New Zealand acted as proxy colonial power for the distant United Kingdom. The result was that Tonga’s pattern of educational development closely resembled that of Western Samoa. Government gradually took over from the churches the major responsibility for primary schooling; the churches played a leading role in establishing secondary education; while the role of church secondary schools remains quantitatively very important (accounting for 77 per cent of secondary places in Tonga), prestige secondary schooling is provided through highly selective government schools, with Tonga College and Tonga High School providing the equivalent of Samoa College; and New Zealand provided the major source of curriculum, teachers, inspectorate, and external certification through the New Zealand School Certificate and University Entrance examinations.

The result in both countries is that basic literacy and numeracy are of long standing, and primary and secondary schooling are widely diffused in the population. When Western Samoa became independent in 1962, nearly 80 per cent of primary age children were attending school; at the time of Tonga’s independence in 1970, virtually 100 per cent of the 6-11 year age group were enrolled in primary school, and over half the 12-17 age group attended secondary school. By the standards of most other developing countries — including their regional neighbours Vanuatu, Solomon Islands, and Papua New Guinea — Tonga and Western Samoa embarked on independence with a high standard of human resource development. Since independence, participation rates have continued to increase. At the most recent census in Tonga (1984) 99 per cent of the 12-14 age group and 75 per cent of the 15-17 age group were attending school, and Western Samoa’s census in 1986 shows that 98 per cent of the 10-14 age group and 66 percent of the 15-19 age group were enrolled in school.

It is not only the extent of human resource development which differentiates Tonga and Western Samoa from other developing countries: the results of that expansion have also been atypical. In many developing countries governments have been caught in the dilemma of wanting to upgrade the country’s human capital, while at the same time trying to ration strong private demand for schooling because there would be no wage jobs for some categories of school-leavers. Vanuatu, Solomon Islands and Papua New Guinea all face the problem of requiring substantial educational investment to upgrade very low average skill levels, without at the same time adding to the unemployment already experienced by leavers from junior secondary school. The consequence is the social trauma of urban unemployed
Poor economic performance and low growth of wage jobs in recent years

Both Tonga and Western Samoa have had poor economic performance in recent years, with very low growth of wage jobs. In Tonga the current development plan estimated that during 1986-90, six thousand new jobs would be needed to absorb all school leavers, whereas less than half that number would actually find wage jobs (Fourth Five-Year Development Plan:84). In Western Samoa the Fifth Development Plan forecast that ‘the increase in demand for money earning jobs is estimated at 2.0 per cent annually, or approximately four hundred jobs per year. This might seem a modest rate, but if income levels are not to erode further, it will require a continued strong performance of the economy’ (Western Samoa’s Fifth Five-Year Development Plan:26). That ‘strong performance has not been forthcoming in the recent past: Gross Domestic Product per capita fell by 10.3 percent during the period of the previous Development Plan 1980-84’ (Western Samoa’s Fifth Five Year Development Plan:5).

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Despite this indifferent economic performance, there is little evidence that educational expansion in Tonga and Western Samoa has led to a serious problem of unemployed school leavers or to a frantic rush for ever-higher educational qualifications after the pattern of so many other developing countries. During the 1980s Western Samoa has had its fastest rates of educational expansion among the 15-19 age group (Western Samoa, Department of Statistics1983,1988). Johnstone has noted the phenomenon of ‘youth cadres being established on the fringes of urban areas’ in Tonga (Johnstone 1987:92), and the same phenomenon can be seen in Western Samoa’s capital Apia. It is important, too, to note that pressure for further education is partly disguised. Private demand for upper secondary and post-secondary education is rationed in both countries by highly selective examinations, so pressure for places is less apparent than in more open systems. Even with these caveats the problem in Western Samoa and Tonga is of small dimensions compared to other developing countries. Long-established primary education and a high level of literacy have been followed since independence by an expansion of secondary enrolments that appears to have taken place at a steady and non-problematical pace.

High levels of emigration relieve pressure for education expansion

A major explanation for this lies in the phenomenon of Polynesian emigration. From the early 1970s onwards, both Tonga and Western Samoa have had high levels of emigration to New Zealand, Australia, and the United States, averaging around 1.7 per cent of annual population. This overall figure conceals the fact that emigrants are drawn disproportionately from the younger and better educated age groups (Ahlburg 1986). In Tonga between 1976 and 1984 the annual rate for the 15-19 age group was nearly 2 per cent, was 2.4 per cent for the 20-24 age group, and reached 6 per cent for the 25-29 age group (Five-Year...
Development Plan:77). In years of particularly high emigration from Western Samoa the net rate for the 20-24 age group has reached 21 per cent (Western Samoa, Department of Economic Development 1980:93). The role of migration in relieving pressure that would otherwise build up from educational expansion in a slow-growing economy is sufficiently important in Tonga and Western Samoa that it has been suggested that policy makers in these countries implicitly acknowledge ‘education for export’ as a strong reason for the provision of high school education (Johnstone 1987:93). The role of a post-secondary college in training Tongans with skills which would facilitate their migration and subsequent employment in other countries’ was raised explicitly in a recent project evaluation of the Tonga Community Development and Training Centre (Johnstone et al. 1987:6).

The second reason for the relative ease of educational development is that those who cannot find wage jobs, and who choose not to emigrate, have been absorbed back into village life. Again the distinction with other developing countries is instructive. The cliché of educational expansion is that children are prepared for urban wage jobs which do not materialize for most school-leavers: those who are unsuccessful return only grudgingly to the village, to a rural life of concealed unemployment, population pressures, and land shortage scarcely better than the open unemployment of urban living. It is not necessary to get carried away by romantic notions of ‘subsistence affluence’ in the South Seas to acknowledge that Tonga and Western Samoa do not conform to the usual developing country pattern. The economies of both countries have been more or less stagnant in terms of conventional growth in Gross National Product, but they have nonetheless permitted the maintenance of traditional lifestyles and a comfortable living for all in an environment where climate and soils are benign. In these circumstances it is hardly surprising that the option of return to village life is viewed quite positively; Robson (1985) provides survey evidence that very high percentages (50-80 per cent) of students in Western Samoan rural high schools wish to continue in their own village after the completion of school.

It is true that the lifestyle enjoyed by those who remain in the villages is subsidized by the highest per capita aid in the world (see final study, this volume) and by the remittances of those who go to work overseas; and, as we noted earlier, there is in Polynesia as elsewhere a drift away from the islands and villages to the urban centres. Planners in both countries are acutely aware that comfortable lifestyles are being maintained only by the remittances of migrants and by levels of international aid so high they beg the question of aid-dependency.

Despite the important caveats, it remains true that in Western Samoa and Tonga the traditions of village life have been strongly maintained, and both countries are fiercely proud of Polynesian culture, exemplified in Western Samoa as the fa’a Samoa (‘Samoan way’). Both countries have tightly-structured social systems, with the matali or
chief system in Western Samoa, and the three tier structure of hereditary king, chiefs, and commoners in Tonga. In both cases these structures are held together by an elaborate system of extended family ties and relationships. An integral part of this system is the strong role of religion in both countries. The heritage of the missionaries goes well beyond the foundation of a formal school system: in both Tonga and Western Samoa religious belief and observance continue to play a role in daily life that is prominent even by the standards of a region where religious belief retains great strength. In short, Tonga and Western Samoa are closely-knit, small, and homogeneous societies, in which the economics of village life have combined with the social structure to produce great social and political stability, and in which the maintenance of the traditional way of life is highly valued. Daily economic life has been comfortable, the traditional social system has limited the scope for upward mobility except through emigration, and the education system has slotted easily into this economic and social structure.

Scarce labour skills and low quality of education

Chronic shortages of skilled labour — likely decline in remittances in longer term

The other side of this story is that both Western Samoa and Tonga continue to experience chronic shortages of skilled labour. Local attitudes to aid and remittances are two-edged. On the one hand there is concern about the impact of a likely decline in remittances in the longer term, as those working in New Zealand and elsewhere become genuine settlers rather than South Pacific gastarbeiter, with family relationships overseas rather than in Tonga or Western Samoa. The relaxation and then sudden reimposition of New Zealand visa requirements for Pacific Islanders in late 1986 emphasised the potential volatility of remittances.

On the other hand, there is understanding that continued reliance on aid and remittances is itself destructive of traditional culture and reduces the prospects for long run self-reliance, through a deleterious effect on incentives and attitudes. The way out of this conundrum is a faster rate of economic growth, so that more jobs are generated at home, young people have a reduced economic incentive to emigrate, and the economy becomes less reliant on aid and remittances.

Sustained economic growth in the small island economies is a complex and problematical issue, but both Western Samoa and Tonga ascribe a major part of the explanation for their slow economic growth to deficiencies in labour skills. As noted above, both economies have grown only slowly, with low rates of growth of wage jobs. Notwithstanding the generally high levels of educational attainment, both countries are extremely short of middle and senior technical and managerial skills. The evidence for these skill shortages is no less convincing for being mostly anecdotal and impressionistic. Labour market data are poor, and the ‘evidence’ from the sorts of manpower
forecasts popular in the 1960s and 1970s can generally be disregarded. Nonetheless, impressions from fieldwork support long-standing allegations of very low levels of work force skills in both Western Samoa and Tonga. The educational system produces few people with technical and vocational skills, and emigration of those who do have such skills reduces the local stock even further.

In Tonga there is much fragmentary evidence of low skills levels. The Potter Report, commissioned for the Third Development Plan 1975-1980, recommended post-secondary training in priority areas of vocational and technical skills, agricultural training, marine, and teacher training (Potter 1975). The Fourth Development Plan 1980-85 noted that 'only 5.1 per cent of the total employed in 1976 had obtained a university degree or a vocational/technical certificate or diploma', and concluded that 'the low educational level of the employed population continued to be a serious bottle-neck in development' (Fourth Five-Year Development Plan:111). An International Labour Office (ILO) survey indicated that there were at least one thousand workers in different trade occupations who lacked any formal training (ILO 1984). The major source of labour force data in Tonga is a special survey carried out in 1984. The report was nothing if not thorough, seeking to estimate training requirements for ninety-nine different occupational codes. Employers' opinions on future labour requirements are known to be unreliable, especially at this level of detail, and many of the specific findings of the survey can be disregarded. Nevertheless, the broad conclusions of the survey are entirely consistent with the other fragments of evidence, and what emerges is a clear picture of the need for skill upgrading. The major areas of skill shortage were in clerical, management, and commerce occupations, and in building, electrical, and mechanical trades. Large numbers of foreign workers were working in professional, administrative and managerial roles because of the shortage of Tongan skills in these occupations (Tonga, Ministry of Education 1985).

A similar story can be told in Western Samoa. The First Five Year Development Plan (1966-70) highlighted a general lack of labour and entrepreneurial skills. By the time of the Second Plan (1971-75), a wide variety of technically trained personnel at both professional and tradesman level had been identified as being in short supply. Engineers, health personnel, mechanics, repairmen, fitters, machinists, sheetmetal workers, electricians, and carpenters were only some of the shortages listed (Second Five Year Development Plan:12). The Third Plan (1975-79) repeated these requirements for skilled labour, and went on to note 'the very real deficiency in Western Samoa in persons with middle and higher-level administrative and managerial skills' (Western Samoa Third Five Year Development Plan:35). The Fourth Plan (1980-84) made it clear that the labour force situation was not improving: 'manpower bottle-necks are among the major problems hampering Western Samoa’s development, [and] in a review of
Development Plan Three progress...lack of qualified staff and supervisors was cited as the single most important reason for delays in the implementation of projects' (Western Samoa Fourth Five Year Development Plan:16). Some of its comments, paraphrased from a lengthy exposition, will convey the flavour of its concern:

- the major areas where shortages ... occur are senior and middle-level management, technical skills at all levels, accountants;
- the shortage of well-trained management staff is the most crucial;
- there are very few Western Samoan engineers at present;
- at the subprofessional level there are key shortages too. Key areas here are agriculture, food technology, and surveying;
- perhaps even more important is the shortage of sufficiently skilled tradesmen: mechanics, electricians, carpenters, plumbers;
- the shortage of qualified accountants is an important obstacle;
- there is also a need for a higher level of skills for secretarial and clerical staff;
- foreigners working for the government number somewhat over 200.

The Fifth Plan (1985-87) had little to add to the comprehensive listing of the Fourth, except to repeat what has become the routine complaint of each Plan: 'major problems confronting Western Samoa include...shortage of a wide range of skills' (Western Samoa Fifth Five Year Development Plan:2).

Even if it is accepted that the evidence for skill shortages in Tonga and Western Samoa is more impressionistic than quantitative, it adds up to a pattern that cannot be gainsaid: both countries have a very low level of labour skill in their workforce. There is a shortage at the professional level of managers and accountants, but of even greater concern is the shortage of middle-level tradesmen and craftsmen in technical/vocational areas.

Evidence of deficiencies in quality of education at primary and secondary level in both countries

Although the shortage of technical skills has tended to dominate the policy debate, a second and more recent concern has emerged. Increasing evidence from both countries points to considerable deficiencies in the quality of education at primary and secondary level. As we have seen, both Tonga and Western Samoa take great pride in their early achievement of universal literacy. It has therefore come as a shock in Tonga to find that a recent survey of primary schools has discovered major problems in learning by pupils. In 1986-87 a survey was carried out of forty-two government primary schools to establish the numbers of children who were not able to keep up with the syllabus. Using a variation of standardized tests which have been found to be good predictors of cognitive development (Platt 1988), the survey reported that eleven schools had 15-25 per cent of pupils with learning difficulties, seventeen schools had 25-30 per cent of pupils with learning difficulties, and fourteen schools had more than 30 per cent of pupils with such difficulties. Overall 'we see the majority of schools having
20-40 per cent of children being unable to cope with the content and speed of the present curriculum' (Platt 1988:27).

The survey describes pupils in this category as having learning difficulties, but these high percentages cannot be explained by the incidence of children with acute learning difficulties such as physical or mental handicap (Platt 1988:30). This suggests that the learning difficulties do not originate with the children, but with the schools: it is schools which are failing to teach 20-40 per cent of pupils to the required standard of quality.

There are similar grounds for concern about the quality of Western Samoan education. An indicative piece of evidence is the poor performance of Western Samoan tertiary students in New Zealand. Kinloch (quoted in National University of Samoa 1984) compared the performance of Western Samoan and New Zealand university students. She found that although the Western Samoan students were highly selected for competitively awarded scholarships, and were full-time students on generous allowances, whereas the New Zealand sample included part-timers who are known to have poorer completion rates, the performance of the Western Samoan students was no better than that of their New Zealand counterparts.

Kinloch’s findings raise obvious questions about the quality of primary and secondary preparation of the students concerned. What is particularly interesting is that the findings also have clear implications for the quality of the Western Samoan school system in general. Western Samoan students studying in New Zealand are the cream of a highly selective educational system. If the products of that elite system are not receiving a basic education up to international standards, there cannot fail to be concerns about the quality of schooling received by the vast majority of pupils who do not go through the senior secondary/tertiary stream.

There is no direct evidence on this question. What is known is that buildings, equipment and supplies are so poor in many junior high schools that they are inadequate for a satisfactory standard of instruction. The following paraphrase of extensive remarks by Luker, Bailey and Bishop (1983) will give an indication of conditions in many junior high schools:

The junior high schools are almost totally devoid of materials of all kinds, for the teaching of agriculture. Junior secondary high schools lack trained agriculture teachers, and the necessary range of facilities, equipment and materials. Classrooms contain no piped water supply ... no storage provision, no preparation area, no work surfaces beside the writing benches, and no display areas. The same story applies to the teaching of home economics. The facilities and equipment for cooking were extremely few ... no running water or drainage ... ovens poorly maintained, surfaces are not sealed or covered to ensure that food is prepared hygienically. In industrial arts, the concrete bases of the rooms are often formed of inappropriately mixed concrete proportions which result in rapid, serious and dangerous deterioration of the floor. Electricity is not
connected to the workshops and the workshops' benches and tools are insufficient for the sizes of class. Science has no laboratory or sufficient equipment for teacher demonstrations of the most elementary kind. The other junior high school subjects are similarly served in regard to the availability of anything other than a basic classroom with a chalkboard. Storage spaces are in very short supply, reprographic equipment, audio-visual materials and equipment are not available, nor are up-to-date texts and reference books.

In short, the quality of primary and secondary schooling in Tonga and Western Samoa is in all probability much lower than had previously been thought. It needs to be stressed that the 'quality problem' in these countries is of a different order of magnitude to that in the Solomon Islands or Vanuatu (see country studies this volume). Nonetheless, the Platt survey from Tonga, and the evidence of Kinloch and Luker, Bailey and Bishop concerning Western Samoa, provide strongly indicative evidence that there is much room for improvement in the quality of schooling.

Education and labour skills: the New Zealand connection

Given the combination of high enrolment ratios and the strongly traditional orientation of both societies, it is not surprising that in the immediate post-independence years there seemed little reason to be concerned about the performance of the education system. Only during the 1980s has there been an increasing realization that both countries had school systems which had long been quantitatively well developed, but which were apparently not meeting the changed employment needs of the economy. We noted earlier the important role of New Zealand in the history of education in the islands, and a major feature of this association, which even twenty to thirty years later continues to dominate educational policy, is the orientation of Tongan and Western Samoan education to New Zealand examination and curriculum requirements.

This orientation was derived not from any precise cloning of actual structures (for example, Western Samoa has had separate junior and senior secondary high schools, whereas Tonga has offered an integrated secondary system) but from the fact that both countries were heavily reliant on New Zealand staffing, curriculum, and examinations. In their early years, secondary schools in both countries were staffed almost entirely by New Zealanders. The school inspectorate came from New Zealand. The curriculum was essentially a New Zealand curriculum. Most importantly, students sat the New Zealand School Certificate and the New Zealand University Entrance examinations. The result was the pattern we have already seen when describing the development of Fijian education. European colonial rulers acted as the reference point for local occupational aspirations; the educational system became oriented to providing the kind of schooling that would open the door to European-style jobs;
academic élite sat the New Zealand-based exams; and it was success in these exams which yielded scholarships for study overseas, and, on return, to rewarding jobs.

The crucial ingredient in this explanation is that the New Zealand connection at the higher levels had ramifications throughout the school system, with the curriculum at virtually every level being oriented towards the academic requirements of the New Zealand examination system. The problem was not simply that the syllabus, examinations, and often teachers came from the metropolitan country, but that the entire experience of colonial administration had shaped the school system in a way that was no longer relevant — and indeed had very high opportunity costs in the persistent shortages of technical and vocational skills.

At the end of primary school in Tonga the Secondary School Entrance Examination is used to select new entrants to secondary school, with government high schools (in particular Tonga College and Tonga High School) taking the cream of candidates. Places in other secondary schools are filled according to the rank order of candidates’ performance in the examination. Thereafter the structure of studies in secondary school was geared to preparation for the New Zealand School Certificate and the New Zealand University Entrance Examination. While the prestige schools achieve excellent results in these examinations, the majority of schools also feel constrained to follow the same pattern of academic studies and examinations, but with greatly inferior results. Some high schools have pass rates in University Entrance of only three or four per cent, worse than Tonga College by a factor of twelve. The consequence is not simply that the upper secondary system becomes geared to New Zealand examinations; rather the more important outcome is that the effects percolate right back into the primary curriculum, through the demands of the Secondary Entrance Examination and its role in selecting students.

Recent reforms of curriculum material and the introduction of locally designed exams have modified the picture in Tonga. In the case of Western Samoa,

educators have made earnest endeavours to fashion the curricula more to fit the Western Samoan setting, [but] the bulk of programmes particularly in the upper primary and secondary levels still closely resemble those of the pre-1962 era, partly because New Zealand examinations continue to be used as criteria for determining the success of a student (Western Samoa Department of Education 1986:7).

In these circumstances, it is not difficult to understand how the entire system of education in Western Samoa ‘came to be dominated by the New Zealand system, and how the curriculum became narrowed to a New Zealand one, and why the average Western Samoan parent has come to accept ... that to be educated one must pass a New Zealand examination’ (Tamati 1981:3).
Samoa College attracts the cream of students who gain most of the tertiary scholarships, and subsequently return from abroad to hold the most prestigious jobs. The problem is that 'Avele and Vaipouli Colleges tend to follow suit in the choice of subjects... and in the external examinations they sit... the mission secondary schools [to get academic recognition] emulate Samoa College... and the Junior High Schools are [also] following academic programmes' (Galumalemana Netina 1984:95-96). Just as in Tonga, the examination success record of most schools other than Samoa College is deplorable. In 1983, Samoa College had 61 successes out of 226 candidates in the New Zealand School Certificate, a success rate of one in four. The remaining 16 schools, both public and mission, managed only 37 successes out of 991 candidates. This is a success rate of only 1 in 27, worse than the record of Samoa College by a factor of seven. University Entrance Exam results for 1983 tell a similar story (Galumalemana Netina 1984:96). Galumalemana Netina characterises these results as a woeful situation which serves to illustrate the wastefulness of the system which produces hundreds of people with inadequate skills to implement national development plans.

Few changes were made in either Tonga or Western Samoa in the immediate post-independence years, but by the early 1980s the view was being increasingly expressed that education was continuing to foster an academic and selective white-collar elite, for which there were few jobs available once the initial post-independence replacement of colonial administrators was complete. By contrast, economic growth was being stymied by a continuing lack of technical/vocational skills. Moreover, even on its own terms the system was failing miserably, with many schools following a traditional academic curriculum, but, as we have seen, achieving extremely poor results in the various external examinations, and with indicative pieces of evidence suggesting low overall quality. Both countries embarked on reform programs (and, to some extent had reform forced upon them by New Zealand's decision to phase out the various external examinations). The interesting feature of these policies for reform is that, starting from a similar background of problems, each country has proposed a different solution to those problems. We turn now to a review of these contrasting policies.

Current policies in Western Samoa

The answer given by educational planners in Western Samoa to the dilemma of a well-developed education system which nonetheless leaves the economy short of technical skills is that Western Samoan education has not been sufficiently vocational in nature. The academic nature of the system, according to this line of argument, means that students aspire to gain the highest academic qualifications. This deprives the economy of middle-level technical skills because the students want
Western Samoan planners argue for greater vocational content to curriculum

Reform program is considerable

The central feature of the reform will be to move from a system dominated by the early selection of a small cadre of academically-gifted children to a comprehensive scheme in which all children can proceed to junior high after primary school, selection to a senior college is delayed until the completion of junior high, and in which the curriculum at all levels will be ‘de-academicized’. The senior colleges will retain a core of academic subjects, but will also offer industrial arts, commercial subjects, and technically vocational instruction. New Zealand examinations will be phased out and replaced by locally-designed Western Samoa Junior Certificate and Western Samoa Senior Certificate Examinations. Junior high will try to meet its comprehensive function by offering a diversified curriculum of both academic and vocational subjects, with a much expanded system of technical and vocational electives. The Department of Education made it clear, that ‘curriculum-wise, it is intended that the Junior High Schools would concentrate on technical/vocational subjects’ (Western Samoa, Department of Education 1983:5). The restructuring of secondary schooling and the abolition of the selective examination after primary school will strengthen the primary curriculum by freeing schools from the constraint of preparing pupils for an academic selection test.

This is a massive reform by any standards, and Tamati has usefully pointed out that both Western Samoa’s problems and the proposed solution conform closely to a model which is typical of many third world countries in recent times:

with a growing number of children finishing primary education, social pressure became greater for wider access to secondary education. The number of secondary school leavers quickly increased ... and in many countries governments were forced to speed up the development of higher education to reduce social tension. School...
Western Samoan planners argue for greater vocational content to curriculum

Western Samoa's reform comparable to other developing countries

But evidence accumulating against effectiveness of vocationalizing curriculum

Western Samoan leavers had little chance of finding employment. Soon ... the problems caused by the overdevelopment of higher education forced the authorities to limit university entrance but at the same time the development of primary education increased the demand for secondary education ... The final secondary school examination [became] much more difficult to pass [and] the number of failures rapidly doubled or trebled. The purpose of this examination thus became solely to screen applicants for university entrance by applying an arbitrary if not openly recognized limit to the number of those admitted. Some means must be found of lessening the two-pronged pressure on secondary education ... and one of the solutions is to include in secondary education technical training suited to the requirements of the economy making it possible for those leaving secondary school to proceed directly to working life. ... Despite [many problems] technical secondary schools can make a valid contribution to satisfying the requirements of vast spheres of activity, cost much less than post-secondary education, and can offer another possibility of further studies to young primary school leavers, thus diminishing or minimizing the pressure in general secondary schools and, ultimately, the demand for higher education (Tamati 1984:44-5).

We have reproduced Tamati's remarks at length because they make clear the fact that Western Samoa's diagnosis of its problem and the corrective policies put in place draw heavily on comparable experience in other developing countries. Indeed, the reform program in Western Samoa is thoroughly in accord with the fashion in education planning over recent years. As noted in the Overview, many countries have attempted to diversify the curriculum by integrating vocational or pre-vocational studies more closely with traditional academic subjects. There is clearly much in the case for curriculum reform which can be accepted without question. Secondary school pupils do need to have an exposure to a wide range of subject options, and the education system in Western Samoa is in urgent need of reform to reduce student pressure for places at upper secondary and tertiary institutions: the abysmal examination record of most Western Samoan secondary schools is consistent with Tamati's observation that the purpose of such school-leaving examinations becomes that of rationing the supply of candidates to tertiary education.

The irony is that Western Samoa has embarked on a program of structural and curriculum reform at just the time when there is increasing evidence that 'vocationalizing' the curriculum is a costly and inefficient way of increasing the economic value of schooling. We need not repeat here the arguments from the Overview. Suffice it to say that the World Bank concluded that 'the effects of curriculum reform have failed to meet expectations' (World Bank 1985a:33), and 'diversified secondary schools are not worth their higher cost' (World Bank 1988a:64).

Whatever the genuine merits of curriculum reform in Western Samoa, such reform will not in itself achieve the objectives set for it. The central theme of the reform program is that Western Samoan
education has suffered from an academic, overseas bias, and that curriculum reform and system restructuring will change students' attitudes to an academic style education. But, if the Overview analysis is accepted, student aspirations are not the consequence of an academic curriculum, and no evidence exists that altering the curriculum or the structure of education so as to impart a specifically Western Samoan rather than New Zealand flavour will, in itself, change parental and student attitudes to the type and quantity of education demanded. Foster's conclusion bears repetition: 'vocational aspirations of children and the occupations which they enter are almost exclusively determined by factors ... outside the schools' (Foster 1966:149). What really matters is the structure of incentives within the wider economic system. This in turn means that the question of incentives for undertaking extra education must be tackled at its source, and not through the indirect and ineffective mechanism of curriculum reform.

These incentives come from two directions. The first is that the structure of earnings in Western Samoa is very closely related to the amount of education acquired. In 1986, approximately 25,000 Western Samoans were in paid employment, and of these some 18,000, or 72 per cent of the total, worked either in the public sector (including teaching) or for government corporations.

Table 10 shows a small but representative sample of starting salaries by educational qualification in the public service for 1986. While it shows the detail for only two categories, the same picture of a hierarchy of qualifications, carefully delineated between different local and overseas institutions, applies right across the range of occupations (Western Samoa, Public Service Commission 1986). It provides striking evidence of the incentive in Western Samoa to get as much education as possible, preferably from overseas, and still more preferably from the better foreign institutions.

Second, the system of rewards to extra education in the labour market is underpinned and reinforced by the system of student finance. This system itself provides an incentive to take as much education as possible, because students pay a decreasing proportion of the costs of their education as they go through the school system. Or, to put this the other way round, the amount of public subsidy to students increases as they acquire more education. Parents pay fees for primary and junior secondary school. These fees are controlled by the village school community committees, not by the Ministry of Education, and they vary widely from village to village. This makes it very difficult to calculate a meaningful cash-equivalent average fee, but if we estimate a notional 20 tala per annum, to allow for the fact that villagers are responsible for providing their own school building and equipment, this would mean that fees cover approximately 25 per cent of the 83 tala unit cost of primary and junior high (Western Samoa Department of Education 1987). At senior secondary, however, the enrolment-
### Table 10  Entry point salaries, 1986 (WS tala)

<table>
<thead>
<tr>
<th>Teaching</th>
<th>Salary on entry</th>
<th>Administration/Commerce</th>
<th>Salary on entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Teachers Certificate (W. Samoa)</td>
<td>3,465</td>
<td>Shorthand/typing</td>
<td>5,170</td>
</tr>
<tr>
<td>Diploma of Education (W. Samoa Secondary Teacher)</td>
<td>4,190</td>
<td>Stage 4</td>
<td>5,930</td>
</tr>
<tr>
<td>New Zealand Primary Teachers Certificate</td>
<td>3,750</td>
<td>Diploma of Management (NZ Inst. of Mgt)</td>
<td>5,930</td>
</tr>
<tr>
<td>B.Ed</td>
<td>7,205</td>
<td>CPA (W. Samoa)</td>
<td>6,130</td>
</tr>
<tr>
<td>B.A.</td>
<td>7,205</td>
<td>B. Tech (PNG)</td>
<td>5,930</td>
</tr>
<tr>
<td>B.Sc</td>
<td>8,180</td>
<td>B.Comm (PNG)</td>
<td>6,135</td>
</tr>
<tr>
<td>B.A. &amp; Ed.</td>
<td>7,440</td>
<td>B.B.A. (US)</td>
<td>8,180</td>
</tr>
<tr>
<td>B.Sc. &amp; Ed.</td>
<td>8,350</td>
<td>B.B.S. (NZ)</td>
<td>8,180</td>
</tr>
<tr>
<td>B.A. &amp; Ed. Maths</td>
<td>8,180</td>
<td>B.Comm (NZ)</td>
<td>8,180</td>
</tr>
<tr>
<td>M.A</td>
<td>8,350</td>
<td>B.A. (Accounting)</td>
<td>8,180</td>
</tr>
<tr>
<td>M.Sc</td>
<td>8,610</td>
<td>B.C.A. (NZ)</td>
<td>8,180</td>
</tr>
<tr>
<td>M.A. &amp; Ed.</td>
<td>8,610</td>
<td>B.A.</td>
<td>7,205</td>
</tr>
<tr>
<td>M.Sc. &amp; Ed.</td>
<td>8,865</td>
<td>B.Economics</td>
<td>8,180</td>
</tr>
<tr>
<td>Ph.D</td>
<td>10,230</td>
<td>M.Economics</td>
<td>8,610</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MPP, M BA (NZ) or (US)</td>
<td>8,610</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MBS (NZ)</td>
<td>8,610</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.Comm (NZ) or B.Comm and A.C.A.</td>
<td>8,610</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.Sc.</td>
<td>8,610</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MBA &amp; CPA or M.Comm &amp; ACA</td>
<td>9,670</td>
</tr>
</tbody>
</table>


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Weighted average tuition fee is 80 tala per year (Western Samoa, Department of Education 1987), which is less than 20 per cent of tuition costs, and at tertiary level those successful in the University Entrance examination will be awarded a scholarship that covers all tuition and boarding costs at an overseas university.

In short, even allowing for the wide margin of error in these calculations, the degree of subsidization of students increases as they move through the system, creating a direct financial incentive to undertake as much education as possible. Data do not exist to carry out a formal calculation of rate-of-return to education in Western Samoa, but it is not difficult to infer that the combination of increased earnings from extra education and the heavily subsidized tuition costs means that the private rate of return is almost certainly very high, and will considerably exceed the social return.

*High private rate of return for education — exceeds social return*
The persistence of strong financial incentives provides a sufficient explanation for the pressure to acquire as much education as possible in Western Samoa, without recourse to arguments about curriculum. The appropriate policy response is one that gets no mention in Western Samoa's current reform program requiring students at the higher levels of education to pay a greater proportion of their tuition costs. There is now increasing understanding that fees for education are not necessarily incompatible with equity in education, and may in some circumstances improve it — an argument that is discussed in detail in the study on Schooling in the Solomon Islands. There is an urgent need in Western Samoa to undertake research into the economic and social consequences of raising tuition fees at upper secondary school and beyond.

One other aspect of raising tuition fees needs to be mentioned. The proposal for increased fees is based on the notion that aspirations to acquire extra education arise not from the nature of the curriculum but from the structure of incentives in the economy as a whole. This is illustrated by the evidence of earnings-by-education in Western Samoa, but the argument about incentives is reinforced if ‘the New Zealand connection’ is reconsidered. With emigration to New Zealand such a feature of Western Samoan life, it is a plausible hypothesis that the perceptions of Western Samoan students will be shaped not only by salary differentials within Western Samoa, but by what they know of salary levels in New Zealand, and their expectations of profitable migration after graduation.

If this is indeed a feature of student attitudes, curriculum reform in Western Samoa will not make the slightest difference: students will want to study whatever will improve their chances in New Zealand — which means getting as much internationally-acceptable education as possible. Indeed, we can predict that students and parents will actively try to undermine any curriculum or structural reform in Western Samoa which is not compatible with that objective, by seeking to retain the examinations and syllabus which they perceive to have a market value. The solution here is not to impose a curriculum reform which is irrelevant to the formation of those attitudes and incentives, but again to tackle the problem at source, by requiring students to shoulder a greater proportion of the tuition costs that result from their own decisions.

National University of Samoa

The second area of concern about the reform program is the potential role of the National University of Samoa. The stated purpose is twofold: the university is intended to provide a focus for study of Western Samoan language and culture and thereby assist in shifting the emphasis away from curriculum material oriented towards New Zealand; and it is intended to provide a Foundation Year for Western Samoan
students who will go on to study in overseas universities. It is not difficult to sympathize with both these objectives. The protection and dissemination of the Western Samoan cultural identity is a matter of acute concern in a society whose young people look to New Zealand for jobs, wages, and, increasingly, a permanent home. Nor can there be any quarrel with the aim of overcoming the increasing failure rates of recent years in overseas universities (Western Samoa, Department of Education 1986:17).

The problem is that the National University is likely to exacerbate student demand for tertiary education in Western Samoa. Although at present the National University operates only the Foundation Year Program, this is purely a matter of current policy. No such constraint is built into its enabling legislation, which permits the University ‘to provide facilities for university education’ (Clause 4 of Principal Act, 1984, quoted in Western Samoa, Department of Education 1986:17). Already development plans are full of the nomenclature of ‘chairs’ and ‘professors’ and ‘mounting undergraduate courses for first degree programs’ (Western Samoa, Department of Education 1986:18, and also Ward and Ward 1986), and there can be little doubt that the Foundation Year is intended as the embryo of a fully-fledged university.

In the light of our earlier analysis about student pressure for upgrading institutions so as to gain the most ‘academic’ qualification possible, it is easy to envisage that the National University of Samoa will come under tremendous pressure to expand into a full university. Enrolments are currently limited to those who are going on to overseas universities, but demand for higher education in Western Samoa is such that the institution could come under intense student demand as a ‘second chance’ (and inevitably lower standard) university, providing degrees to those who have not been accepted overseas, and syphoning public money away from primary and secondary education.

We should not be sanguine about the chances of such pressure being resisted. Indeed, it is all too easy to predict that the demand from students for an ‘open door’ policy at the National University will coincide with the interests of teaching staff and educational policymakers: the latter at least will be well aware of the very high costs of a small tertiary institution, and will find justification for expansion in the fact that unit costs fall very steeply as enrolments increase (Psacharopoulos, 1980). The economic reality is that any feasible size for a national university in Western Samoa will still be below minimum efficient scale, and, much more seriously, rapid expansion of enrolments in the National University will undermine the whole basis of a reform designed to reduce pressure for academic study at tertiary level.
Western Samoa Technical Institute

The third major concern is the future of the Western Samoa Technical Institute (WSTI). The crucial issue is whether the main thrust of policy towards the Institute, as proposed under the overall reform program for Western Samoan education, is consistent with the evidence cited in the Overview about the economics of vocational training. The central feature of the reform, as far as the Technical Institute is concerned, is that in 1990 the Institute will be incorporated into the National University of Samoa (Western Samoa Department of Education 1986). Although the reason for this incorporation is nowhere clearly stated, the concept is presumably that the Institute will be better able to respond to Western Samoa's development needs if it is formally part of a specifically 'Samoaan' tertiary structure.

The Institute provides an almost perfect case study of precisely those problems with school-based technical training which led the World Bank to characterize the formal school system as an inhospitable venue for such training. The Western Samoa Technical Institute has been the subject of a seemingly endless stream of consultants' reports over the years. To name only the most recent, they have included Cross (1981), Ramaprasad Raju (1983), Sangster (1983), Luker, Bailey and Bishop (1983), Dowding (1984), Stam (1984), and Burke et al. (1986). Although the many consultants' reports obviously vary in their detailed recommendations, the theme that pervades them all is that 'since its inception twenty years ago very little progress has been accomplished in the development of the Institute' (Stam 1984:11).

Stam (1984:12) describes the main courses at the Institute as 'an almost complete disappointment', with low rates of completion, poor quality of graduates, and poor employment prospects. Skilled instructors are in very short supply, and the lack of salary flexibility in public service scales has precluded the obvious remedy for that shortage (Western Samoa, Department of Education 1983). Public financial constraints mean that equipment in the Institute is poor. Stam (1984:27) observed that 'some of the equipment is, by sheer neglect, in a bad state'. Burke et al. (1986:79-92) remarked that in general, buildings are in sound structural condition, but poor maintenance and shortages of equipment create an impression of 'a very run down facility'. The only exception to this gloomy story was the obvious enthusiasm and experience of the Samuel Hweywood, the Institute's Principal, who provided the 'glue' which held the Institute together.

Above all, the central theme that emerges from the consultants' reports is the dichotomy between what the Institute has offered and what employers want. The evidence is that employers take little interest in the work of the Institute (Dowding 1984; Stam 1984) and 'the support given by local industry towards training at WSTI and in apprenticeships is seen to have diminished because of disappointment with WSTI graduates' (Burke et al. 1986:13). The main business of the
Institute is apprenticeship training, both in the two-year pre-apprenticeship course and in the day-release scheme for those who have secured a contract as an apprentice. Many outside commentators have stressed that the apprenticeship style of training, with a lengthy training period culminating in a specialized craft, is not what employers want. The real need, given the small scale of many enterprises, is for workers with technical skills to be broadly trained, and to be able to turn their hand to a wide range of occupational tasks. Moreover, an important requirement is for the Institute to offer a wide variety of short courses for entry-level training, ‘with the need to supply the labour market [being] kept constantly in mind [and] with course content ... worked out with people in the industry’ (Dowding 1984:17).

It is unrealistic to pretend that there is a simple remedy for the problems of the Institute. The Institute is caught in the dilemma that if it remains small, unit costs will be very high and the range of skills taught will be limited; if it is large enough to operate at efficient scale, it will turn out too many graduates for a small economy to absorb. Nonetheless, the main direction of desirable reform is clear. The most urgent need is to explore mechanisms for ensuring that vocational education in Western Samoa is more relevant to labour market demands, to enlarge the capacity of industry to provide on-the-job training, and to examine ways in which industry in Western Samoa can contribute to the financing of training opportunities.

None of these has found a place in the current proposals for reform. Instead, the Institute is to be incorporated into the National University of Samoa. Little needs to be said about this, other than to suggest that it is the very opposite of the correct policy. In the light of international evidence on the relationship between formal schooling and occupational training, incorporation into the National University is likely to widen, not narrow, the dichotomy between what the Institute offers and what employers want; the skills taught will become less, not more, relevant to labour market needs; and it will promote, not curtail, expansion of academic higher education through student pressure to upgrade their technical training into an academic qualification.

The result of this analysis is that the reform program in Western Samoa is unlikely to achieve its objectives. Curriculum reform at primary and secondary level will not in itself play a significant role in altering student perceptions of the type and quantity of schooling they demand, and at tertiary level there is a considerable risk that the reforms will create a mechanism — a National University and incorporation within it of the Technical Institute — which will inadvertently add fuel to the expansion of academic studies at tertiary level, the very opposite of what planners are trying to achieve.
Current policies in Tonga

Tongan policy aims to strengthen basic academic skills

The previous section looked in detail at current policies in Western Samoa. We can be much briefer about recent developments in Tonga, since it is not being unduly glib to characterize Tonga’s policies simply as the antithesis of those in Samoa.

First, Tonga is adopting a quite different set of policies with respect to curriculum. The objectives of education do not differ much between the two countries: just as in Western Samoa, Tonga proposes that ‘any curriculum is to aim at providing education which is appropriate to meet the country’s manpower needs, thus supporting and fostering national and communal development’ (Tonga, Central Planning Department 1981:309). In the Tongan view, however, this objective is best achieved by a school syllabus which strengthens basic academic skills: ‘it is educational policy to give the child a high level of general education so as to provide a large degree of flexibility of training and subsequent employment’ (Tonga Fourth Five-Year Development Plan 1980-85:317). Thus, the primary school curriculum is intended to develop basic skills of literacy and numeracy as well as positive attitudes to learning; the first three years of secondary school aim to reinforce these basic skills; the next two years concentrate on equipping the students with a high standard of general education as well as a beginning of the development of the basic skills for their chosen development.

Tonga is in the process of phasing out the New Zealand examinations and replacing them with local equivalents: 1986 was the first year in which the Tonga School Certificate Examination was held instead of the New Zealand School Certificate. Faced with the prospects of designing its own exams (and of course mindful of the shortages of technical personnel), Tonga flirted with the possibilities of introducing a vocational curriculum in secondary school (Taufe’ulungaki 1988, personal communication) but this possibility has been rejected. Given the shift to locally organized examinations, so that Tonga is no longer dependent on following the New Zealand curriculum, the opportunity has been taken to introduce more Tongan content into the syllabus. Johnstone (1987:97) gives the example of how the New Zealand based science curriculum in use in Tonga contained material on dissecting frogs, although there are no frogs in Tonga. Nevertheless the essential pattern and content of the New Zealand curriculum is being retained. This is perceived in Tonga to be the best way of strengthening the traditional academic subjects which are considered to provide a sound basic education.

At the time these issues were being debated in the early 1980s, dissatisfaction with the existing curriculum came from a feeling not that it needed more vocational material but that it was insufficiently general: the Fourth Development Plan, which covered the period 1980-85, argued that the curriculum was too ‘materially oriented in terms of
Box 2

Tonga's 'Atenisi Institute

No description of schooling and traditional society in Tonga would be complete without mention of the 'Atenisi Institute, a school which defies easy classification. 'Atenisi (which is Tongan for Athens) started as an alternative school in 1963. As an institution 'dedicated to the ancient Greek idea of education as pure criticism ... and with its devotion to the democratic ideals of critical thought' (Twyford 1988), 'Atenisi has always been a magnet for young western travellers in the South Pacific, and has been heavily dependent on them as volunteer teachers. Not surprisingly, 'Atenisi has never quite escaped its reputation as Tonga’s own contribution to 1960s flower power.

This image does not do justice to 'Atenisi's genuine academic performance and its high standard of music and cultural achievements. Perhaps the most significant feature of 'Atenisi is the light it sheds on the place of mainstream schooling in traditional Tongan society. 'Atenisi's founder, Futa Helu, is quoted as saying that Tongans are now for the first time seeing their society is not monolithic, that the common people and the ruling aristocrats are on opposite sides of the fence ... and the often heard defence of the current system as 'traditionally Tongan' [is] an excuse to maintain privilege and power in the guise of ethnicity' (quoted in Twyford 1988:56). It is certainly true that there is increased questioning of the traditional Tongan social structure, but it is also worth noting that this structure is not so inflexible that it has refused to tolerate 'Atenisi and its ideas.

General curriculum considered to give students more flexibility and sounder basis for job choices

production and employment and does not sufficiently cater for the needs and aspirations of the individual [that] vocational elements in the curriculum tend to confine students to their existing way of life [and that given the long-term aspects of education] it is difficult to develop a curriculum which will provide a type and level of education appropriate for the next few decades' (Tonga Fourth Five-Year Development Plan:316-17).

There could scarcely be a sharper contrast with Western Samoa. What is particularly interesting is that Tonga chooses to retain a general curriculum not because of any failure to recognize the limited possibilities for wage jobs for school leavers, but because it is the traditional curriculum, emphasising basic skills, which is thought more likely to equip school leavers with the knowledge and attitudes necessary 'to develop, through their own initiative, ways and means of earning a livelihood other than those offered by Government and large enterprises' (Tonga Fourth Five-Year Development Plan: 317). Tonga's description of general education as being more realistic and relevant, because vocational elements tend to entrench existing patterns of life, as well as becoming too quickly obsolescent, is the very opposite of the way curriculum arguments are typically presented, but the Tongan policy is entirely consistent with the weight of international evidence summarized in the Overview.
The second major contrast with Western Samoa lies in Tonga's response at post-secondary level to the problem of shortages of technical skills. Tonga has long had a variety of post-secondary institutions, such as the primary and secondary teachers' college, and training centres run by the Ministry of Works, Ministry of Agriculture, Forestry and Fisheries, Ministry of Police, the Tongan Defence Services, the Nurse Training Centre of the Department of Health, and a Maritime Polytechnic Institute (Johnstone et al. 1985). All these centres were extremely small: in 1985, 1123 students were spread among fourteen post-secondary institutions, some of which had fewer than ten enrolments (Tonga Five-Year Development Plan:389). (These figures exclude enrolments at 'Atenisi.) Equipment and technical facilities do not even approach adequacy. Although there is not the same weight of evidence about Tonga's deficiencies in technical training as there is about the Western Samoa Technical Institute, there is little doubt that equipment and technical facilities are very poor (Cummings 1986, personal communication).

As well as uneconomic size and deficient facilities, these colleges tended to operate independently of each other with consequent duplication of administration, buildings, and teachers, and were demonstrably not meeting Tonga's needs for labour market skills. By the mid-1980s there was general agreement in Tonga that this fragmented activity should be brought together into a unifying post-secondary institution. In Western Samoa this objective is being pursued through the National University of Samoa and the incorporation within it of the Technical Institute. In Tonga it is planned that tertiary education will be provided and coordinated through a Community Development and Training Centre (Tonga Five-Year Development Plan:392).

The Community Centre concept of post-secondary provision is fundamentally different from that of a national university. Where Western Samoa's National University will cater expensively for an academic élite, the community college concept describes an institution designed to serve the entire community. The general community interest is served in two ways. One of these is that the community college is not oriented towards the (usually) single, centralized campus of a formal institution, but towards the 'more rational use of what already exists and ... the economically viable expansion of training according to available resources ... taking training to the community' (Johnstone 1985:Vol2, c[i]). Whereas the main administrative functions and many formal programs would need to be centralized in the capital Nuku'alofa, the rationale of the community college is that it will be multi-centred, offering programs in many parts of the country.

The broader community interest is also served because in addition to the formal training usually associated with technical, agricultural, and teachers colleges, a large part of its work will consist of a variety of non-formal programs. Johnstone et al. correctly note that non-formal
education programs 'can help raise productivity in farming, fishing, handicrafts, ... can reduce cost by developing better practices in housebuilding and repair ... and caring for simple machines such as outboard motors, ... and can improve dietary and cooking practices, child and maternal health, first aid, etc' (1985:5).

Possible problems

Some of the objectives of the Centre are little more than wishful thinking. It may be doubted whether establishing education programs under the Centre can transform the outer islands 'into dynamic growth centres, attracting and retaining their most able members' (Johnstone et al. 1985:30). There is also a risk that a college geared to amorphous community needs may find itself dabbling in a variety of low quality programs, with no coherent policy for what it is trying to achieve. While it is true that 30 per cent of Tonga's population lives outside the main island of Tongatapu the college must not only be seen to be serving these people but must be physically present as well. However, cost and administrative pressures to centralize in the capital may prove irresistible.

Strengths of centre concept

Nonetheless, the emphasis on a post-secondary college operating at a community level, and responding to community needs for formal and informal programs, has immense implications for the style and content of technical training in Tonga. This style of post-secondary institution is unlikely to fuel demand for formal tertiary qualifications; the scale at which it can operate economically is appropriate to its parent society; and the emphasis on community involvement should ensure that the skills provided are in accord with what is needed in the market place.

The project profile for the Centre noted that:

there are many important activities carried out by non-government agencies, by small commercial and industrial concerns and a variety of private employers. The Community Development and Training Centre will aim to encourage these and assist them by providing a framework for coordinated development (Tonga, Ministry of Education 1986:1).

These are brave words, and time will tell whether 'coordinated development' means that the Centre will seek to impose its own view of what training should be offered, or whether it will lead to a genuine complementarity between formal courses of instruction and employer training. As Dowding (1984:17) noted in the Western Samoan context, the real need, given the small scale of many island enterprises, is for broad, entry-level technical training. Workers with technical skills must be able to turn their hands to a variety of occupational tasks, and can be supplied with specific skills by employers where necessary. The co-existence of formal technical courses and market-driven employer training within the benign ambit of the Centre could play an important role in ensuring that the Centre's own programs remain oriented to what employers want, in providing realistic work experience, and in adjusting quickly to changed market conditions.
Conclusion

This chapter has described in detail the evolution of education in Western Samoa and Tonga. Starting from much the same background and sharing many of the same objectives, each country has chosen a different reform path. Western Samoa is introducing a diversified curriculum at secondary level and is expanding its tertiary sector (including the production of technical and vocational skills) through the creation of a National University. We have criticized this reform program as being unlikely to succeed in its objectives. First, there is now a wealth of evidence from around the world that vocational training is not efficiently carried out within the formal school system: schools should teach general skills that provide the foundation for subsequent vocational training, and occupation-specific training should be taught either within firms or within specialized training centres. Second, schools have only a limited ability to mould pupils’ attitudes to the jobs they want to do. The vocational aspirations of schoolchildren are shaped not by an allegedly academic curriculum, but by their perception of opportunities and incentives in the economy as a whole.

We argued that Western Samoan planners had scarcely considered these two key issues. As a consequence, the central thrust of the reform program — to diversify the curriculum — is unlikely to achieve what is expected of it, and indeed some specific policies, such as establishing the National University of Samoa and incorporating the Technical Institute within the University, are likely to make matters worse rather than better. Moreover, no attention at all has been paid to a policy which would directly address the question of student incentives and attitudes — that is, to require them to pay a greater proportion of the tuition costs associated with their own choice of education. At present, by giving the biggest subsidies to students at upper secondary and tertiary level, government in Western Samoa itself encourages expansion of the very level and type of education it wants to reduce.

The key elements of Tonga’s present policies are to strengthen the traditional academic curriculum at primary and secondary level, and to foster the creation of a post-secondary institution which will teach a range of formal and non-formal vocational courses. It is facile to try to force either country’s policy into a neat category, but the major conclusion is unmistakable. Tongan policy is consistent with the country’s requirement to increase the output of technical skills, and is in accord with the international evidence on the most economical way to produce those skills, and the emphasis on maintaining a traditionally academic curriculum in primary and secondary schooling has received recent additional confirmation from the findings of the Platt Report on deficiencies in learning by Tongan pupils.
The central concern in recent educational policy in both Western Samoa and Tonga has been the need to produce more technical and vocational manpower. Australia has already been closely involved in planning the concept of the Tongan Community Development Centre, and there is no need to emphasize the further contribution that can be made to ensure that the Centre is equipped with the facilities and staff necessary to bring the concept to fruition. Western Samoa's policies towards its National University and Technical Institute are, of course, entirely a matter for its own government and people to decide. It needs to be recognized, however, that the type of tertiary expansion envisaged in Western Samoa — specific workforce training as part of a fully-fledged tertiary institution — is unlikely to attract international support when such expansion runs entirely counter to the weight of evidence accumulated from other developing countries.

While the central concern of policy has been the provision of more technical skills, what also emerges from this survey is the important role international support can play in upgrading primary and secondary schooling in both countries. As we saw in the previous chapter's discussion of Fiji, a long history of near-universal primary education has tended to divert the policy interest away from this level of school. The findings of the Platt Report in Tonga, detailing learning difficulties in high percentages of primary pupils, have come as a considerable shock. The roots of these learning difficulties are to be found in the low quality of facilities, equipment, teachers, and books in many Tongan schools. Tongan policy is focused upon strengthening basic primary and secondary skills, and this policy should be strongly supported from bilateral and international sources.

Similarly, we noted early in this chapter the evidence from Luker, Bailey and Bishop that buildings and equipment in many junior schools in Western Samoa are inadequate to provide a satisfactory standard of instruction. Junior secondary schools will play a key role in the extension of secondary schooling to a greater proportion of the age group. Although this chapter has been extremely critical of Western Samoa's overwhelming emphasis on curriculum reform as an allegedly sufficient condition for changing students' occupational aspirations, it goes without saying that there are genuine merits in ensuring that the junior secondary curriculum exposes Western Samoan children to a wide range of useful skills. And, not least, one of the motives for the Foundation Year at the National University of Samoa is to bring Western Samoan students up to the standard of overseas universities. But this is a very expensive remedy which will benefit only the academically gifted. Any quality problem in Western Samoan education should be remedied much lower down the educational pyramid, where much greater numbers of students can benefit — and at considerably lower cost.
These arguments point to a desirable upgrading and expansion of primary and secondary schools in both Western Samoa and Tonga. In the final study of this volume, Throsby and Maglen note that relatively little Australian aid to education in the South Pacific has been provided to help with the upgrading of educational facilities. This is in sharp contrast to aid from agencies such as The World Bank, which very typically is concerned with loans for the provision of better educational facilities. The need for improved facilities at the lower levels of education in both Western Samoa and Tonga is so great that Australian aid can make a major contribution. Throsby and Maglen comment that 'an expanded role for Australian educational aid in this respect seems clear, although progress depends crucially on the use of proper techniques of project identification and appraisal before commitment of funds' (Throsby and Maglen 1988). The carrying out of these detailed appraisals should have high priority.
Education for development in Vanuatu
A review of policy issues

J.M. McMaster

Background

Vanuatu consists of about eighty small islands covering an area of the south-west Pacific Ocean measuring 900 kilometres by 300 kilometres. The population of about 120,000 is 94 per cent indigenous Melanesian, with the balance consisting of other Pacific islanders, and Europeans who settled during the colonial era. Vanuatu society is highly diversified, with well over a hundred Melanesian dialects being spoken and wide regional variations in customs, social structure, culture and religious affiliations.

About 80 per cent of the population live in widely scattered coastal villages and engage in subsistence agriculture supplemented by a small amount of cash income earned from the sale of copra and other commodities such as cocoa, coffee, beef, timber and fish. Vanuatu has only two urban areas — Port Vila, the capital, with a population of about 17,000, and Luganville with a population of about 6,000, located on the island of Santo.

As elsewhere in the South Pacific, the missionaries commenced the establishment of a network of missions and church schools throughout the islands to convert the inhabitants to Christianity and provide basic education. The Presbyterian missionaries were followed by Anglican and Roman Catholic missions.

For nearly a century, from 1887 to 1980, the British and French administered the country as a condominium known as the New Hebrides, an arrangement which resulted in the creation of two separate school systems. The British developed a Protestant mission-school system designed to establish basic literacy and create a Bible-based, religious village society. Their schools were constructed out of local materials and modest fees were introduced to help finance the system. The Roman Catholic French schools aimed to spread French culture and language as well as religion, and the curriculum was modelled on that taught in France.
Schooling left entirely to missions until mid-1950s

British and French administrations subsequently assumed responsibility for their respective education systems

Until the mid-1950s schooling was left entirely to the missions. In 1956 the British established a National Service Education Department and commenced the integration of English language schools into a single system. In 1973 the French assumed full charge of the French medium schools by annexing the Roman Catholic mission schools. During the 1970s, in the approach to independence, there was strong competition between the two school systems. The French invested heavily in new high quality facilities and provided fee-free schooling in order to attract more students and increase their influence. Their schools were generously staffed with expatriate teachers and were generally better provided with books and equipment than the British schools. Also, parents could send their children to French schools at age three rather than waiting to age six for entry to British schools. In contrast to the more lavish French schools, British primary schools were of much simpler construction, being mainly built of bush materials by villagers as self-help projects and maintained by pupils. Similarly, the British secondary school, Malapoa College in Port Vila, was composed of less elaborate buildings well suited to the tropical environment and supplied with an adequate level of supplies and equipment.

With independence, Vanuatu Government faced task of integrating the two education systems

— legacy of problems

After independence in 1980, the new government was faced with a massive task of integrating the two parallel systems of education into a new unified system. They inherited a legacy of problems which made the systems inefficient and inappropriate for the new nation. These included wasteful duplication of facilities, inappropriate or unsuitable curricula, a high unit cost structure, shortage of trained teachers, lack of suitable teaching aids and books, language problems, low levels of educational achievement combined with high drop-out rates and repeater rates, lack of planning, curriculum and teacher training professionals, and an extreme shortage of funds for development of an integrated system. These problems were exacerbated by inter-system rivalry, suspicion and lack of cooperation.

Aims of this study

In recent years these problems have been extensively studied in a series of education sector evaluations carried out co-operatively between the World Bank, UNESCO and the Australian International Development Assistance Bureau. Findings and recommendations from this joint work formed the basis for the educational chapter of the Second National Development Plan from 1987-1991 and to this extent have helped shape current government policy towards education. This study reviews current policy problems facing education in Vanuatu, drawing extensively upon studies of recent years. The study starts by looking at relationships between schooling and employment, and then reviews in turn each of the main subsectors of the education system.
Box 3

Vanuatu's education system

Primary education now consists of six grades with children entering school at age six. Secondary education is divided into two cycles. The lower secondary cycle consists of four years, Grades 7-10 or Forms 1-4. The upper cycle consists of three years, Grades 11-13 or Forms 5-7. A number of vocational training institutions accept students who have completed year ten; these include the Nurse Training School, the Marine School, the Police Training School, the Tagabe Agricultural School and the Vanuatu Technical Institute (INTV).

Education and employment

Increasing difficulty for secondary school graduates in gaining wage employment combined with a severe shortage of skilled labour is a common paradox in South Pacific labour markets. Low levels of educational attainment of the adult workforce and the low literacy rate have often been cited as a major constraint to economic development and a cause of project implementation failure.

Currently in Vanuatu the demand for wage jobs in the formal sector from the five hundred or so secondary school leavers vastly exceeds the small number of salaried job vacancies while, at the same time, many public service posts remain vacant because of lack of suitably qualified applicants. The mismatch between labour market requirements and labour supply is a complex one but, in general, it can be summarized as one where the level of educational attainment of most school leavers is well below the level of skill required by employers.

It has been estimated by Bartsch (1985) that about 77 per cent of the ni-Vanuatu labour force is engaged in the mixed subsistence sector, with the other 23 per cent in the formal wage sector. About one-third of the mixed subsistence sector is comprised of smallholder farmers who mainly engage in copra production, another third engage exclusively in subsistence activities, and the remaining third combine subsistence activities with a limited amount of cash farming.

Over the last decade the plantations have experienced difficulty in recruiting manual labour from the villages at the wage rate they can afford to pay. Ni-Vanuatu have shown a strong preference for self-employment in subsistence farming supplemented by devoting a few hours a day to copra production to meet their cash income requirements.

There are no up-to-date statistics which provide a comprehensive overview of the employment situation as the last population census was undertaken in 1979. However, a number of more limited surveys give an indication of the main trends. In 1983, the total workforce including non-citizens was estimated to be 59,300. Some 12,500 of
Table 11  Estimated ni-Vanuatu employment by industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>1979</th>
<th>1989</th>
<th>1979</th>
<th>1989</th>
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<tbody>
<tr>
<td>Primary</td>
<td>37,800</td>
<td>54,000</td>
<td>81</td>
<td>80</td>
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<td>Manufacturing</td>
<td>800</td>
<td>1,150</td>
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<td>2</td>
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<td>Electricity and power</td>
<td>40</td>
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<td>Construction</td>
<td>840</td>
<td>1,200</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Trade and tourism</td>
<td>1,640</td>
<td>2,350</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>1,160</td>
<td>1,700</td>
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<tr>
<td>Finance</td>
<td>160</td>
<td>230</td>
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<td>Services</td>
<td>4,480</td>
<td>6,400</td>
<td>9</td>
<td>10</td>
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<tr>
<td>Other</td>
<td>240</td>
<td>340</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>**Total economically</td>
<td>47,160</td>
<td>67,430</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active population</td>
<td>100</td>
<td>100</td>
<td></td>
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<tr>
<td>**Non-primary sector</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>employment</td>
<td>9,360</td>
<td>13,430</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>**Total potential labour</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>force</td>
<td>57,400</td>
<td>79,000</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

*Figures for 1979 are actual census totals for that year; figures for 1989 are projected estimates.


Characteristics of wage employment

Growth of private sector employment uncertain

— due to decline in tourism

these were in wage employment, of whom 6,200 were estimated to be in private sector urban employment and 3,200 in established posts in the public service. Another 1,100 were employed by the public sector as daily-rated labour. In addition, another 2,000 workers were estimated to be employed in plantations as daily paid labour. Table 11 shows ni-Vanuatu employment by industry from the 1979 Census of Population, together with estimates for 1989.

The private sector is the major employer of wage employees and its share of wage employment is likely to increase as government funding constraints will restrict severely the growth of the public sector over the next decade. If anything, total employment in the public sector might be forced to contract.

The growth of private sector employment is also uncertain at this time. Private sector firms in Port Vila are experiencing a severe recession, mainly due to the low numbers of tourists: an unfavourable exchange rate, together with perceptions of political instability, have had a negative impact on tourism. Tourism is the largest employer of wage earners in Vila as many private sector businesses, small shops, restaurants, taxi and tour operators depend directly or indirectly on tourism expenditure. In comparative cost terms, Vanuatu is a more expensive destination for tourists than some other competitors such as Bali, Fiji and the Queensland coastal resorts. Also, the situation is exacerbated by the restricted number of flights out of Australia to Vila.
### Table 12 Private sector urban employment in Vanuatu by occupational category

<table>
<thead>
<tr>
<th>Occupation</th>
<th>ni</th>
<th>European</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vanuatu</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High level professional and technical</td>
<td>2</td>
<td>56</td>
<td>8</td>
<td>66</td>
</tr>
<tr>
<td>Middle level professional and technical</td>
<td>36</td>
<td>26</td>
<td>10</td>
<td>72</td>
</tr>
<tr>
<td>Low level professional</td>
<td>14</td>
<td>12</td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td>Professional managers</td>
<td>15</td>
<td>68</td>
<td>19</td>
<td>102</td>
</tr>
<tr>
<td>Middle managers</td>
<td>19</td>
<td>59</td>
<td>14</td>
<td>92</td>
</tr>
<tr>
<td>Proprietors</td>
<td>53</td>
<td>59</td>
<td>35</td>
<td>147</td>
</tr>
<tr>
<td>Supervisors</td>
<td>141</td>
<td>38</td>
<td>35</td>
<td>214</td>
</tr>
<tr>
<td>Agricultural workers</td>
<td>71</td>
<td>1</td>
<td>1</td>
<td>73</td>
</tr>
<tr>
<td>Other skilled and semi-skilled</td>
<td>2,942</td>
<td>257</td>
<td>123</td>
<td>3,322</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,087</td>
<td>699</td>
<td>262</td>
<td>4,948</td>
</tr>
</tbody>
</table>


### Table 13 Work permit issues in Vanuatu

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional/technical</td>
<td>136</td>
<td>152</td>
<td>261</td>
<td>253</td>
</tr>
<tr>
<td>Administrative/managerial</td>
<td>116</td>
<td>104</td>
<td>140</td>
<td>218</td>
</tr>
<tr>
<td>Clerical</td>
<td>97</td>
<td>48</td>
<td>43</td>
<td>36</td>
</tr>
<tr>
<td>Sales</td>
<td>56</td>
<td>23</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Service</td>
<td>54</td>
<td>28</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td>Production related</td>
<td>97</td>
<td>72</td>
<td>42</td>
<td>36</td>
</tr>
<tr>
<td>Agricultural*</td>
<td>10</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Occupation not indicated</td>
<td>-</td>
<td>78</td>
<td>81</td>
<td>72</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>566</td>
<td>566</td>
<td>605</td>
<td>654</td>
</tr>
</tbody>
</table>

*Figures for 1983-85 are incorporated in other occupational categories

<table>
<thead>
<tr>
<th>High level professional and technical</th>
<th>Vanuatu</th>
<th>Expatriate</th>
<th>Vacancies</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle level professional and technical</td>
<td>245</td>
<td>1,479</td>
<td>41</td>
<td>1,760</td>
</tr>
<tr>
<td>Low level professional</td>
<td>122</td>
<td>58</td>
<td>-</td>
<td>180</td>
</tr>
<tr>
<td>Senior management and administration</td>
<td>17</td>
<td>80</td>
<td>130</td>
<td>153</td>
</tr>
<tr>
<td>Supervisory</td>
<td>1</td>
<td>32</td>
<td>-</td>
<td>33</td>
</tr>
<tr>
<td>Other skilled and semi-skilled</td>
<td>27</td>
<td>1,220</td>
<td>153</td>
<td>1,400</td>
</tr>
<tr>
<td>Labourer</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,996</td>
<td>331</td>
<td>345</td>
<td>3,672</td>
</tr>
</tbody>
</table>


and the airport runway limitation which prevents the use of fuel-efficient jumbo aircraft.

In 1983 the National Planning and Statistics Office conducted a survey of private employment in urban and peri-urban areas (National Planning and Statistics Office 1983b). The composition of private sector employment is illustrated in Table 12, which summarizes private sector urban employment by occupational category from this 1983 survey.

The survey excluded self-employed persons, government officers and domestic servants. It illustrates the high proportion of expatriates in the professional and technically skilled occupations in private sector employment. Ni-Vanuatu only account for 3 per cent of the high level professional and technical category and 50 per cent of the middle level professional and technical category, whereas they account for 97 per cent of the agricultural workers and 88 per cent of the semi-skilled workers.

The number of work permits issued to expatriates working in the private sector is another useful indication of the areas of skill shortage. Table 13 shows a classification by occupational categories of work permits issued over the four year period from 1981 to 1985.

Expatriates in the private sector are required to renew their work permits annually, so Table 13 provides a reliable measure of the expatriate workforce. It shows the high proportion of expatriates with professional, technical or managerial skills which, in 1985, accounted for 72 per cent of all work permit holders. The number of work permits issued for middle level and low level semi-skilled jobs has declined, indicating a trend towards localization of these private sector positions. However, the private sector demand for professional, technical
and managerial expatriates has shown an increasing upward trend from a total of 252 in 1981 to 471 in 1985. This indicates that the private sector's demand for additional higher level professional and technical employees has greatly exceeded the supply of ni-Vanuatu graduates returning from overseas study. These trends indicate that the private sector will be able to localize most low and middle level positions over the next five years, but will continue to rely heavily on recruiting expatriates to meet its demand for professional workers and technical experts. The private sector demand for graduates with professional skills should remain high in the foreseeable future.

Table 14 illustrates the occupational structure of the public service in 1985. Table 14 illustrates the difficulty the government has experienced in attaining its localization objective.

There are still 403 high level professional and technical posts to be localized and in fact the number of high level professional and technically qualified expatriates (245) was actually 40 per cent higher in 1985 than three years earlier (ILO 1982). Given the current projection of the number of graduates completing courses, it likely to take more than a decade to localize these posts.

Employment prospects for school leavers were examined in detail by Bartsch (1985) as one of a series of studies commissioned by the World Bank to provide information for the Education Sector Investment Program. Although there has been no comprehensive labour force survey of school leavers' employment experience, the study by Bartsch analysed the secondary school leaver situation by examining the findings of a tracer study of Form 3 (Grade 9) secondary school leavers from four English medium schools for the period 1978 to 1982.

Bartsch also analysed data obtained from the National Planning and Statistics Office which has been keeping computerized records of all school leavers from Malapoa College since 1984. He found that the two-thirds of the students completing the lower secondary cycle in the English medium schools who were unable to gain a place in the upper secondary cycle 'have faced considerable difficulties in finding wage employment; too many applicants are chasing too few jobs for which Form III level education is an acceptable qualification' (Bartsch 1985:26).

Prior to 1986, the lower secondary cycle in English medium was three years but has since been increased to four years. Bartsch has identified a number of other indications of an excess supply of lower secondary graduates seeking wage employment. For example, a large number of Form III school leavers apply for Public Service posts requiring only primary education, and he cites a highly publicized case in Port Vila in 1985 when 124 school leavers applied for five Public Service vacancies which required only primary schooling qualifications. Analysis of the applications by Bartsch revealed that 101 applicants had some level of secondary education and 30 had completed the lower
Most primary school leavers have no prospects of wage employment.

Secondary cycle to Form III. This illustrates the extremely difficult situation primary school graduates have in gaining work for which only primary schooling is required. Over 70 per cent of primary school leavers have no choice but to return to village life as they have no employment prospects in the formal sector.

Small number of upper secondary school graduates have excellent employment and further education prospects.

Secondary education is used by employers as a screening device as lower secondary graduates are willing to accept unskilled work below their status. The data on the employment experience of Form III school leavers from Malapoa College also confirms the difficulty lower secondary leavers experience in gaining paid work. The activities of the thirty-seven ni-Vanuatu students, who terminated their studies at Malapoa College after completing the lower secondary cycle (Form III) in 1983, were surveyed in 1985. This indicated that 41 per cent were unemployed, another 27 per cent had succeeded in finding paid work, and the other 32 per cent were continuing their education at other institutions such as the Vanuatu Institute of Technology (INTV), the Police Training School (VIOE) or the Honiara Technical Institute (now incorporated in the Solomon Islands College of Higher Education). At the time of the survey, Malapoa College had the reputation as the best English school in Vanuatu, so one would expect that lower secondary school leavers from other English medium secondary schools would experience much greater employment difficulties.

In strong contrast to primary and lower secondary leavers, there are excellent employment and further education opportunities for the small number (30-40) of students who graduate each year from upper secondary education. Those who qualify for tertiary studies overseas are provided by the government with fully funded scholarships financed by aid donors. The overseas scholarship figures indicate that almost all upper secondary graduates over the last five years have taken up overseas study. On completion of overseas study, most graduates have excellent employment prospects in both the public and private sectors.

Those entering the public sector have been very rapidly promoted to senior positions within a year or so of returning from their studies. The private rates of return for the small percentage of students that complete the upper secondary school cycle is high, as their expected life-time earnings profiles are very much higher than those terminating formal education after completing lower secondary education.

Following this introduction to the labour force in Vanuatu, we turn now to an assessment of current problems and policies in the education system.
Primary education

Characteristics of primary education

— English school enrolments growing
— French school enrolments static

— very low average pupil/class ratio
— high unit cost

Government aims to increase pupil/teacher ratio

Vanuatu is close to achieving the government objective of a primary enrolment ratio of 90 per cent of the school-age population. The enrolment ratio has been rising steadily from 73 per cent in 1979 to 88 per cent in 1985. In 1986 enrolment figures indicate that 25,077 children attended primary schools — 9,831 in the French medium and 15,246 in the English medium. Since independence in 1980, the English school enrolments have been growing while the French school enrolments have been static. Due to the widely distributed low-density of population (small coastal villages scattered across many islands), the average size of primary schools is small, averaging only ninety-one pupils per school.

Because of their size, the schools also have a small number of pupils per grade and this has resulted in a very low average pupil/class ratio of 19.7. The pupil/teacher ratio and low degree of resource utilization has led to a relatively high unit cost of primary education. Class sizes are well below the levels which in other developing countries are generally considered as pedagogically acceptable and affordable, given the government budget implications. The government's long-term objective is to increase the pupil/teacher ratio to 30:1 to reduce the recurrent cost per pupil. Detailed primary school statistics are shown in Table 15.

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of pupils mid-1985</th>
<th>Population per school</th>
<th>Pupils per class</th>
<th>Pupils per teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks/Torres</td>
<td>6,004</td>
<td>81</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>Santo/Malo</td>
<td>24,376</td>
<td>95</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>Ambae/Maewo</td>
<td>211,211</td>
<td>84</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Pentecote/Pentecost</td>
<td>11,122</td>
<td>100</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>Malakula</td>
<td>17,859</td>
<td>98</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>Aabry</td>
<td>7,566</td>
<td>87</td>
<td>19</td>
<td>24</td>
</tr>
<tr>
<td>Paama</td>
<td>52,375</td>
<td>101</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td>Epi</td>
<td>2,966</td>
<td>92</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>Shepherds</td>
<td>4,975</td>
<td>66</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>Vaté/Éfaté</td>
<td>26,044</td>
<td>115</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>Tafea</td>
<td>21,061</td>
<td>77</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>135,559</td>
<td>91</td>
<td>20</td>
<td>24</td>
</tr>
</tbody>
</table>

A school location planning survey conducted in 1985 found that many classrooms were not fully utilized, so existing school facilities can largely accommodate the relatively small increase in enrolment needed to achieve the government’s target of raising enrolment ratios to 90 per cent (Unesco 1986).

A World Bank study of education in Vanuatu (World Bank 1985) found that the unit cost of primary education in Vanuatu was high compared with most other countries in the region. The annual cost per pupil for primary education was estimated to be US$206 in Vanuatu, compared with US$69 in Western Samoa, US$57 in Solomon Islands, US$190 in Fiji and US$181 in Papua New Guinea. As well as suffering from a high unit cost structure, primary education in Vanuatu is characterized by low quality of learning achievement, a high proportion of untrained teachers (about 35 per cent of the total), a critical shortage of teaching materials, high drop-out and repeater rates, and the problems generated by tuition in separate Francophone and Anglophone schools.

Reducing the cost of primary education

Unesco’s School Location Planning Study canvassed a number of options for reducing the unit cost of primary education, and the following discussion relies heavily on this study.

The small size of schools and classes has been identified as the major factor in the high cost structure. However, consolidating several small schools to achieve economies of scale is not a practical solution because it would require a substantial increase in boarding facilities and costs. The cost savings generated by large class size and better school utilization are greatly outweighed by the increased boarding costs. Boarding costs are currently heavily subsidized by government, so any expansion in boarding students would increase the cost of education to the government. If boarding costs were fully passed on to parents, access to primary schools might be reduced because many low-income families would be unable to pay. Daily attendance at larger schools would not be feasible in many rural areas as villages are widely spaced along often rugged coastlines. In many island locations, the walking distance and time involved would make day attendance impractical. The rugged terrain, frequent heavy rains, and absence of roads add to the difficulties of daily commuting. Currently about 13 per cent of all primary pupils are full boarders. In some regions such as Santo/Malo, Pentecost, Paama and Epi the proportion of boarders is much higher due to the large number of small isolated villages where the number of pupils is too small to justify a school. Thus, taking these locational, population and cost factors into account, there is very little scope for reducing the overall costs to the community through pursuing...
a strategy of school amalgamation. Instead, it will be necessary to implement measures to reduce the recurrent costs of small schools.

The small average class size of 19.7 is a result of the small number of pupils in each of the six grade levels of primary education. It has been suggested that the greater use of multigrade classes could lead to an increase in the average class size through combining two or more grades in the one classroom. Multigrade teaching is, however, more demanding for the teachers and would normally require specialized training in small group teaching techniques. On average, 22 per cent of primary teachers are involved in multigrade teaching, usually with two grades in the classroom and, in a few cases, three grades. In 1985 none of the multigrade teachers had any specialized training in multigrade teaching techniques. Sixty per cent of schools have some multigrade teaching.

A strategy of increasing the use of multigrade classes provides a feasible means of reducing unit costs through increasing average class size. However, in most school situations it would be difficult to form class groups of an average of 30 merely by combining two grades into one class. Grade groups in most schools would have to be split in order to achieve an even distribution of students among the teachers. Such a strategy would involve almost all teachers in multigrade teaching.

This approach has important implications for teacher training and inservice training. Extra resources would need to be devoted to inservice training programs, and pre-service training would need to include a substantial module on multigrade teaching techniques. Also, multigrade teaching methods may require a greater use of printed material, programmed learning, self-instructional student exercises and peer group learning exercises. If, through greater use of multigrade teaching, average class size could be increased to the government’s target level of thirty, teacher salary costs could be reduced by one-third.

The adoption of a general policy of automatically promoting students from one grade of the six year course to the next grade at the end of each school year could result in cost reductions in the long-run through the elimination of grade repetition. Automatic promotion involves pushing all students through and out of the primary system, irrespective of their level of educational achievement.

Currently, a large proportion of the small primary schools have adopted an alternate year entry system whereby they only take in new first year pupils every second year. This practice has been designed to increase the size of the first year class and subsequent classes. As a result, these schools do not have a complete sequence of grade classes operating each year. An alternate year entry system, if operated for a sequence of years, reduces the number of classes in any one year from six to three. Currently only about 34 per cent of all primary schools have the full six grades operating each year. The evidence suggests that this system is an effective method of increasing class size and improving teacher utilization, especially in situations where teachers are not
trained in multigrade teaching and have difficulty applying small group learning systems.

About 83 per cent of the education budget is allocated to teachers' salaries and other personnel expenditure. Personnel expenditure is predicted to increase significantly over the next few years as a result of the application of a new pay scale. Of the 16 per cent allocated to non-personnel expenditure, about one-third is currently allocated to subsidizing primary and secondary boarding costs. There is likely to be an increase in the demand for boarding facilities for primary school children over the next decade as the system moves closer to universal primary education. The 12 per cent of primary school-aged children who are not yet enrolled in primary schools are mainly concentrated in the most isolated areas of the country where day attendance is virtually impossible. Almost all of these children will need to attend school as boarders. The government's decision to abolish primary school fees at the beginning of 1986 may increase the access of some of these children to schooling and thus increase the total cost to government of the boarding school subsidy. On the whole, schools have been under-resourced with teaching materials, and supplies and maintenance expenditure have been minimal. Apart from reducing the level of subsidy to boarding, there appears to be little scope for reducing the costs of non-salary expenditure.

Many developing countries have reduced their capital costs and expanded access to schooling through more intensive use of school buildings and facilities. One system involves conducting two school sessions per day with different groups of children attending a morning or afternoon session. This effectively doubles the utilization of the school buildings. Another option involves increasing class size to the full capacity of the classroom. Classes of fifty to sixty children are common in some countries.

The Vanuatu School Location Planning study revealed that there was some unutilized capacity in most schools, since class size averaged less than twenty pupils. Many of the classrooms have the physical capacity to accommodate thirty pupils. In many regions, the enrolment ratio could be increased from the current level estimated at about 88 per cent to 95 per cent or higher without the need for further classrooms.

A recent review of school enrolments revealed that in many primary schools a large number of 3, 4 and 5 year-olds were attending primary schools (Unesco 1986). This trend apparently had increased in recent years and is mainly concentrated in the French medium schools. These children were mainly taught by untrained teachers. This trend led to inflated pupil numbers which were then used by school principals to justify a claim for more teachers. Late in 1986 a directive was issued stating that under-age children must be excluded from schools. Children must now be six years old before gaining entry to school. The
introduction of this policy enabled the government to dismiss about two-hundred untrained teachers from the system.

Over recent years there has been a gradual decline in community support for primary schools. Increasingly the rural population has seen schooling as purely a government responsibility. In the past, the churches had mobilized community members to provide free labour to build schools from local building materials, to clean, maintain and repair schools, assist with playground maintenance, and provide food for boarding schools. However, now that government has taken over almost all the schools in the system, this traditional self-help approach has almost disappeared. Some communities are now demanding that the government pay them rent for the land that the school occupies. Most of the boarding schools rely heavily on funds from government for supply of food which is mostly imported rice, tinned fish, sugar, and flour. Schools find it difficult to gain access to good fertile land to grow traditional crops for the school boarders. Also, the community expects the government to be fully responsible for all the maintenance costs associated with the school. Lease payments for school land are likely to increase educational costs substantially. This trend urgently needs to be reversed in order to contain the growth of recurrent costs.

The reintroduction of primary school fees may be necessary to change parent attitudes to schooling. Rural parents with boarding children could be required to supply some allocation of local food to school kitchens on a roster basis. The government could negotiate with communities for the allocation of land for food production for boarders. The supply of imported food could be reduced and funds reallocated for school supplies of seed, fertilizer, farming tools and livestock, poultry, fencing wire, and so on. Communities making land and food available to schools could receive a rebate of school fees as an incentive. Students and parents could be given greater responsibility for jobs such as school-cleaning, grass-cutting, or furniture making. Communities could be encouraged to take pride in their local school through regional competitions for the best maintained school, similar to the concept of the 'tidy town' competition.

Raising the quality of primary education

The Education Sector Investment Program jointly funded by the World Bank, UNESCO and Australian International Development Assistance Bureau has identified and formulated strategies and programs directed toward the improvement in the quality of primary education (World Bank 1988). These include:

- upgrading approximately 40 per cent of all current primary teachers who have no teacher training;
- improving teacher supervision and inservice support and strengthening the regional education offices;
development of an integrated curriculum and examination system for primary schools and for related teacher training;

- increased provision of appropriate learning materials;

- testing the benefits of using vernacular languages in the early primary grades;

- increased funds for school maintenance, repair and reconstruction as well as the establishment of a maintenance unit with new equipment, facilities and staff.

Consideration is also being given to progressive retrenchment of untrained teachers who have little formal education. This has already commenced in 1987. This will have its greatest impact on the number of French-speaking teachers, because there is a much higher proportion of untrained teachers in the French schools. The basic thrust of the government strategy is to concentrate its efforts on improving the quality and appropriateness of the curriculum and improving teacher effectiveness.

There have been a number of reports on the primary curriculum over the last few years (Brice and Lawson 1984; Davidson and Humphries 1986). Following these reports, the development of a unified curriculum has become a central part of the Primary Education Project. As part of the quality upgrading program, Australian aid is funding a new curriculum development centre and publications unit, equipment and materials, and specialist training for curriculum writers.

Secondary education

In 1985 there were ten secondary schools offering lower secondary education. Seven of these were English medium and three were French medium. In 1986 the government decided to establish a further eleven lower secondary schools distributed across the eleven regions, bringing the total to twenty-one schools. The first cycle of secondary covers grades 7 to 10 in both mediums. The second cycle of upper secondary education involves three years from grades 11 to 13. Currently, upper secondary education is only available in the capital, at Malapoa College and the Lycée Louis-Antoine de Bougainville.

The demand for secondary education greatly exceeds the supply of places and competition for entry is high. Many rural parents and pupils regard access to secondary education as a passport to future white collar employment in Vila and upward mobility, income and status. The government has been under strong pressure to expand secondary education even though, as we noted earlier, many students completing lower secondary education currently fail to gain wage employment and are forced to return home to a life of subsistence farming.
The government is strongly committed to expanding access to lower secondary education and has set an objective of increasing the transition rate from primary Grade 6 to secondary Grade 7 from about 18 per cent in 1986 to 25 per cent. The government also aims to provide a more equitable physical distribution of secondary schools across the eleven regions.

In 1987 the government embarked on the process of establishing the eleven new single stream schools against the advice of the 1986 World Bank-UNESCO Mission. Single stream secondary schools are far too small for efficient use of specialist teachers and facilities and to gain economies of scale. Curriculum choice must be very limited and the new curriculum would not be taught efficiently. Another major problem caused by this unplanned rapid expansion of single stream schools is the critical shortage of qualified ni-Vanuatu teachers. Almost all secondary teachers are expatriates. As a temporary measure, some experienced primary teachers were used in 1987 as secondary teachers, but of course this is a loss to the primary system. The localization of secondary teachers will be a slow process due to a shortage of upper secondary school graduates available to take up scholarships for secondary teacher training overseas. The government has subsequently accepted that the creation of eleven new streams was incompatible with the various resource constraints, and has agreed to reduce the net increase to six, by absorbing students from five of the streams into existing secondary schools (World Bank 1988:10).

A program of quality improvement of lower secondary education has been developed by the Ministry and is being progressively implemented. A new integrated lower secondary curriculum and related examination system is being developed, as are new learning materials for the integrated curriculum, and specialized facilities for all the established secondary schools.

There is considerable scope for improvement in the quality of learning achievement in the lower secondary grades. Achievement levels in mathematics and science are particularly weak. This problem of poor achievement level in the quantitative subject areas has its roots in the primary education system and affects upper secondary as well as tertiary study. Retention and promotion rates in junior secondary are comparatively poor, currently averaging only 68 per cent, leading to a high wastage level and lowering internal efficiency.

A strong case can be made for the rapid expansion of upper secondary education by redirecting resources to this level in the system. The shortage of upper secondary graduates is a major constraint on the localization of the workforce and to the implementation of many potential development projects. There is strong labour market demand for upper secondary graduates to take up vacancies in both the private and public sector in middle level clerical positions, banking and finance, and technical and teaching areas. Demand is even greater for
university graduates with training in the main professional areas which are currently dominated by expatriates.

The upper secondary schools suffer from high drop-out rates, particularly in the Francophone system where the curriculum is the same as metropolitan France. This curriculum is inappropriate to the learning needs of ni-Vanuatu students and as a result only a few students sit the Baccalaureat at the end of Year 13. Very few succeed at this level and qualify to continue their studies overseas at a tertiary level.

Students entering the Francophone system are greatly disadvantaged in comparison to those entering the Anglophone secondary system. Almost all the overseas tertiary scholarships are for English-based programs such as those offered at the University of the South Pacific, the University of Papua New Guinea and other regional institutions. This has resulted in the professions being dominated by English-speaking graduates. Unfortunately, primary students entering the Francophone system must continue in the same system, and thus have virtually no opportunity of gaining a tertiary education. This may account for the gradual decline in enrolments in the Francophone system. The dual language policy is a matter of great political sensitivity in Vanuatu. On purely educational criteria, a strong argument could be made for phasing out the Francophone system, as it does not relate to the region's tertiary institutions, has failed to develop an appropriate upper secondary curriculum, and does not produce a supply of much needed secondary graduates. The dual system has led to duplication, waste of resources, lack of economies of scale and inequality of educational opportunity.

Tertiary education

At the request of the Government of Vanuatu the University of the South Pacific opened a centre in Port Vila in February 1981 and now provides a range of part-time courses. The majority of the two-hundred or so students who enrol each semester take courses at the preliminary level (Year 12), with the aim of gaining admission to the University for full-time study at the Foundation Level (Year 13 and 14). Also, a small number of students enrol in degree level courses on a part-time basis. The Centre plays a valuable role in providing students who dropped out of upper secondary education with a second chance to gain entry qualifications to full-time tertiary study.

Since independence, aid donors have helped Vanuatu to increase the number of students sent on scholarships to the main campus of the University of the South Pacific in Fiji from 14 in 1980 to 99 in 1984. In 1986 a total of 235 ni-Vanuatu students were undertaking overseas training on aid-funded scholarships sponsored by Australia, Great Britain, New Zealand, Canada and France. Most of the scholarships are for attendance at the regional institutions with the majority at the
Suva Campus of the University of the South Pacific, and at the University of Papua New Guinea, while a small number attend tertiary institutions in Australia, New Zealand and France. No comprehensive data is available on the success rate of students studying abroad, but there is some evidence that students have experienced difficulty with university courses which require proficiency in quantitative/numeracy skills. Some students experiencing difficulty with quantitative degree programs have transferred into less quantitative social science based programs. Very few students have elected to take up degree programs in engineering or agriculture. For example, of the thirty-three students selected for overseas degree programs, three were chosen to study engineering and three to study agriculture. These are both areas where there are high numbers of expatriates employed in professional posts in the public sector.

Of the 676 posts either held by expatriates or remaining vacant in 1985, 453 were in the professional/technical category requiring professional tertiary qualifications and substantial work experience. These positions have proved very difficult to localize because of the small number of ni-Vanuatu successfully completing professional training overseas. (For example, in 1984 only 12 ni-Vanuatu were awarded degrees and 12 awarded diplomas.) In order to meet this workforce shortage there has been a rapid increase in the number of students studying overseas, from 91 in 1981 to about 130 in 1984 to 235 in 1986. Further expansion of tertiary student numbers is now restricted by the limited number of students completing the upper secondary cycle.

Further consideration needs to be given to career path planning of graduates returning from overseas study. Over the past five years some of the new graduates have entered the public service and almost immediately have been promoted to the senior ranks at the director level without sufficient work experience, on-the-job training or maturity. Having reached the top echelon at a young age, they have a very limited career path ahead of them for the rest of their working lives. A policy of more gradual promotion of graduates, combined with on-the-job training and increased job rotation would be a more effective approach to localization of senior public service posts.

In the past decade many countries have established student loan programs under which loans are provided by government, commercial banks or other financial institutions. Usually the government provides some degree of interest subsidy and a guarantee for loan repayment in the case of student default. After entering the workforce, students must repay the loan and any interest. It is argued that such a system is both equitable and efficient. The high private rate of return on human capital investment in higher education provides a strong motivation for able students to take out loans to further their education. This is especially so when there is excess demand for higher education and limited scholarships available. A loans system is more equitable than the current situation where all the costs are paid by
government, as those students who acquire free higher education are likely to enjoy higher life-time earnings than those who enter the workforce with only secondary education.

In Vanuatu’s situation, almost all students who study overseas receive fully funded scholarships with generous living allowances provided by aid donors. On completion of their higher education overseas, they return to take up senior posts in the public service. Most graduates are promoted very rapidly to the senior ranks of the public service. Thus, the private return to their publicly funded education is very high and indicates that there is scope for reducing the degree of public subsidy through a loans scheme. However, there are many practical difficulties to be addressed as the terms and conditions of overseas scholarships are mainly determined by the aid donors who fully fund the scholarships for overseas study.

The aid resources devoted to overseas scholarships do have an opportunity cost, and an efficient loan scheme could contribute to both equity and efficiency goals by helping increase the share of private finance in educational investment. However, there is likely to be solid political resistance to the introduction of a loan system of higher education overseas.

Aid donors could play a leading role in the design and implementation of a tertiary education loan system and the coordination of the scheme among donors. Many of the loan schemes in Latin America and the Caribbean have been helped by guidance and advice and financial assistance from international agencies such as the Inter-America Development Bank (IDB) and the United States Agency for International Development (AID). Agencies which provide student loans in Panama, Jamaica, Trinidad, Barbados, Honduras and Costa Rica have received loans from the IDB, and the AID has helped establish or expand student loan programs in Brazil, Colombia, the Dominican Republic, Honduras, Nicaragua and Peru.

Psacharopoulos and Woodhall (1985:155) note that these loan schemes have generally been successful and have increased the private demand for education. They have achieved their equity objective of enabling many poor students to finance their own education. However, as a cost-recovery mechanism, student loans have proved to be of limited value in the short run because of the long repayment periods, high interest subsidies and the effects of non-indexation of loans for inflation. Also, none of these loan schemes is yet fully self-financing through revolving funds.

**Technical and vocational education**

Technical training for the main trades areas such as plumbing, electrical, carpentry, and mechanics is provided at the Francophone Vanuatu Institute of Technology (INTV) which provides certificate and diploma
courses. The unit costs of INTV are high as most of the instructors are French expatriates. In recent years, due to the depressed state of the private sector, INTV graduates have found it difficult to gain employment. In the past, entry to INTV was effectively restricted to students from the Francophone secondary system. The trade occupations were thus dominated by French speakers. However, INTV has recently started to admit a limited number of Anglophone students. The government has recognized the need for the Institute to become a dual language institution because of the faster expansion of the English oriented modern sector, where employers prefer English speaking tradesmen and technicians. There is evidence that some employers have expressed reservations about the appropriateness of training received at INTV. Entry requirement for INTV will soon be adjusted upwards from Form III level to Form IV.

Given the limited capacity of the labour market to absorb INTV graduates, there is no requirement to expand the output of INTV in the foreseeable future. However, measures need to be implemented to localize the instructor positions and to evaluate the appropriateness of the curriculum for local conditions. It has been found that students receive instruction in the operation of modern machinery which is not used in the private sector and that greater emphasis is needed on the use of hand tools and simpler machinery.

Tagabe Agricultural School is the only institution in Vanuatu which provides formal education in agriculture. It was reopened in 1987 after having been closed for two years because of the over-production of field workers and the difficulties graduates had experienced in gaining jobs. It has usually accepted a new intake of thirty lower secondary, Year 10, graduates every three years. The student group has been evenly divided between English speaking and French speaking. Instruction by the six staff members is bilingual.

Tagabe School has high unit costs

The unit cost of instruction is very high (US$3,000 per student per year in 1985) and the staff/student ratio is low at 1:5. The small class size and the bilingual nature of the program is mainly responsible for the high cost structure. In the past, the general level of student ability in mathematics and science has been low, so about 30 per cent of the first year course has been spent providing remedial instruction in these subject areas. The World Bank review of the school in 1985 identified serious weakness in the curriculum and found the existing laboratories and experimental fields inadequate, resulting in a lower level of practical course content than is necessary to produce competent field agents.

The future role of the school and its relationship to the government’s agriculture sector development plan has not been adequately determined. Also, no assessment has been made of the number and type of skilled agriculture workers who will be required over the next decade. The government has devoted little attention to the training needs and future skilled labour requirements of the fisheries and
Other options for agricultural training

The government needs to make a decision either to upgrade substantially the school's facilities, equipment, and curriculum to produce a higher quality graduate, or to send students overseas to other regional institutions such as the Fiji College of Agriculture. The school could then be converted to an in-service training centre and offer specialized short courses to provide training to support specific new agricultural development projects. The skills and expertise of many current agricultural field workers need upgrading in specific areas. The Tagabe School could also serve as a resource centre for agricultural information, providing farming radio broadcasts and producing and distributing pamphlets to farmers. Short courses could also be provided for subsistence farmers who wish to establish commercial operations.

Eighty per cent of Vanuatu’s people derive their livelihood from rural activities and the majority of school leavers take up subsistence farming after the completion of no more than primary schooling. In terms of both equity and efficiency in educational resource allocation, a strong case can be made for increasing the level of government support for the provision of effective rural vocational training programs directed at increasing the labour productivity of rural dwellers. Agricultural development efforts in the past have been hindered by low levels of numeracy and literacy among farmers. The training of farmers in more effective farming techniques is a fundamental requirement for the achievement of Vanuatu’s natural resource based development strategy, based on increasing agricultural productivity. Improving the efficiency of the agricultural sector is vital for the achievement of economic growth, as it is the most important single sector of the economy, accounting for 80 per cent of all exports and 75 per cent of net foreign exchange earnings.

Low production levels in plantation sector since independence

Prior to independence in 1980, this sector was largely dominated by export-oriented plantations, which were mainly owned by expatriates. The mid-term review of the First National Development Plan (Vanuatu, National Planning and Statistics Office 1984) found that since 1981 the performance of the plantation sector has been poor, with production levels below those achieved in the early 1970s. After independence, plantation land titles were abrogated and land ownership reverted back to the customary land owners, many of whom lacked the skills to manage their new acquisitions. The plantations rapidly deteriorated, with no investment in new equipment and lack of maintenance, and many reverted to bush. The many disputes between individuals and groups contesting customary ownership of parcels of land have now mostly been resolved by the recently established Island Courts.
The rehabilitation of the plantations by the native owners is now vital to the agricultural sector since their output has contributed to a major share of agricultural exports. Many of the customary owners lack basic training in efficient farming techniques and aspects of farm management. In response to this need, the Roman Catholic Church in 1982 opened the Plantation Management Training Centre (Senta Blong Lukaut Plantesen) at Montmartre on Efate.

The Centre conducts annual courses of ten months duration in technical agriculture, labour management and financial management for an intake of sixteen manager trainees. The Centre receives financial assistance from the International Human Assistance Programme. This is one of a number of institutions established and operated by the churches to provide training in vocational skills to support agricultural development.

The government's development strategy for agriculture now places strong emphasis on increasing quality and output levels from small holdings of copra, cocoa, coffee and beef. This involves establishing new plantings, re-planting of coconuts, more efficient agro-processing of higher yield planting materials, and the adoption by farmers of improved farming techniques. Most smallholders also need training in modern farming techniques but lack the resources to attend some of the fee-paying courses currently offered by church institutions. Also, many are very difficult to service through agriculture extension staff visits because of poor communication, lack of transport and the small number of trained extension staff. The use of radio to educate farmers has considerable potential but is limited due to lack of rural electrification and the relatively high cost of battery operation.

Church institutions also play a valuable role in providing training to school leavers at rural centres in a range of areas including building construction techniques, woodwork and carpentry, furniture-making, basic mechanics for the repair of outboard engines and lawn mowers, basic metal work, water supply and sanitation, sewing and homecrafts, typing and bookkeeping, food and nutrition, charcoal stove making and community leadership. Courses range from six months to two years. The centres are small and the enrolment capacity ranges from ten to ninety students who are accommodated in very basic boarding facilities. These centres generally suffer from a shortage of funds, lack of qualified teachers, inadequate teaching facilities and rudimentary equipment. Most of these small centres are poorly resourced and require considerable upgrading of both their facilities and training staff. However, even if this were to occur, their ability to meet the practical training needs of unskilled rural youth is limited by their annual enrolment capacity. This is estimated to be about 475 places, whereas each year the number of students leaving school to return to a life of subsistence farming is about 2,200. According to estimates in Vanuatu's Indicative Manpower Development Plan, between 70 to 73 per cent of ni-Vanuatu entrants into the labour force.
over the 1985-94 decade will not have been educated beyond completion of primary schooling. Almost all of them will commence a life of subsistence farming techniques and other practical rural skills.

The vocational training needs of this group of school leavers is currently under-resourced in terms of the current allocation of government educational funds. A new approach to rural training is needed to target this segment effectively. One approach could be to establish a government-funded Rural Training Resource Centre in each of the eleven regional divisions. The centres could be responsible for planning and coordinating vocational training programs and integrating them with the government's regional development plans and projects. Most new development projects involving rural dwellers need to implement a training program as part of the project. The centres could play a central role in coordination of project-related training. Training teams stationed at the Resource Centres could visit villages and provide practical training related to village improvement schemes and smallholder development projects on topics such as maintenance of rural water supplies, outboard motor maintenance, construction methods, new cash crop and livestock farming methods, primary health care, planning for smallholder farming and village leadership training. The Rural Training Centres could provide a base for a range of extension staff including agricultural extension offices, primary health care staff and fisheries extension staff.

**Conclusion**

Vanuatu continues to face the daunting problem of allocating resources to education. At the time of independence, skill levels of the population were extremely low, and as we have seen in this study they remain low. The country needs both quantitative expansion of skills and qualitative improvement. But Vanuatu has not only faced what might be called the standard post-independence problem of needing to invest heavily in raising skill levels. The particular problem for Vanuatu is that it is still wrestling with the consequences of having had two colonial masters. Britain and France left behind ample physical facilities for primary schooling, but the total managerial and administrative cost of continuing to run what amounts to two separate school systems, one in English, the other in French, in a country whose total population barely exceeds 100,000, needs no emphasis.

The result of this very expensive and fragmented system is that Vanuatu confronts in particularly acute form the trade-off between quantitative expansion and qualitative improvement. There is no doubt that both are necessary, but given the usual public expenditure constraints, a choice has to be made. Political sensitivities in a newly-independent country have made it very difficult to find an acceptable solution to the dual language problem. It was also political considerations which earlier this decade seemed to be driving education policy.
in the direction of greater quantitative expansion. As we have seen, social demand for lower secondary education is very high, and the government was under strong political pressure to make lower secondary schooling more accessible to children from rural areas. However, constructing secondary schools in some areas but not others had a high political cost, and the government’s solution was to build eleven schools, evenly distributed among the provinces.

We noted that there was subsequently more careful appreciation of the economic and financial costs involved in such expansion, and a more modest scheme of quantitative growth has now been adopted. Despite the scaling down of targets for lower secondary, it could be argued that this part of the system will still be expanding too fast relative to upper secondary schooling because of the much stronger demand for Year 13 school leavers. Some expansion of lower secondary education is of course necessary to produce a higher flow on to the upper secondary cycle. However, the demand for upper secondary places well exceeds the limited number of places and competition for places is high. The strong labour market demand for upper secondary graduates indicates a much higher social rate of return to investment in upper secondary compared to the lower secondary cycle.

It should also be noted that the technical and vocational education sector is in urgent need of upgrading to meet the labour market requirement for skilled workers across a broad range of occupations. A strong case could be made for government funds to establish a network of eleven Rural Training Centres to provide vocational training programs for the 70 per cent of school leavers who enter subsistence farming having only attended primary school.

Despite the caveats, the main thrust of Vanuatu policy is now directed towards a policy of steady quantitative expansion combined with a search for measures to improve quality and reduce the costs of the system. This shift in policy has been reinforced in the Second National Development Plan. The Plan acknowledges that difficult choices have to be made between quantitative expansion and qualitative improvement, and comes down very much in favour of the latter (Vanuatu Second National Development Plan). The government’s main priority over the next five years are as follows:

- to continue to unify the French and English medium schools through developing a common integrated curriculum and examination system;
- to improve the internal efficiency of the primary schools through implementing cost reduction measures;
- to upgrade the training of teachers through improved pre-service and in-service training, improved teacher supervision and in-service support;
- to increase the provision of appropriate learning materials;
to increase the transition rate from Grade 6 primary to Grade 7 secondary from 18 per cent in 1985 to 25 per cent;

to improve the quality of teaching throughout the system.

**Role of aid agencies**

This study started by noting the major cooperative role of international and bilateral agencies in providing the analysis and evaluations which have helped shape current educational policy in Vanuatu. With those policies now in place, their implementation will require the continued cooperation and financial support of the agencies concerned.
The key feature of human resources in the Solomon Islands is that skill levels are very low. Half the population over thirty years of age has not attended school; a majority of the labour force (58 per cent) has completed no more than primary education; less than 7 per cent has completed secondary school; and the total stock of employed graduates is less than 550 (Solomon Islands, Statistics Office 1988b).

The structure of the school system is shown in Figure 1. Since independence in 1978 the Solomon Islands has made progress in expanding access to education, but low levels of educational development are being remedied only slowly. Around 75 per cent of children aged 8-13 now attend primary school, a genuine achievement when the Solomon Islands has one of the world’s highest rates of population increase. A major factor in the improved primary enrolment ratio was the World Bank Primary Education Project of 1982,
Lack of suitably qualified candidates for tertiary education

Quality education does not depend on lavish equipment, and good schooling can be achieved with limited (even meagre) resources. In the Solomon Islands, however, many pupils at both primary and secondary
level are deprived of access to essential books and equipment — a deprivation which has a debilitating effect on pupils and teachers alike. While there are exceptions (usually when a dynamic principal has acted as a spur to local initiative), many schools offer extremely poor facilities. In one province visited during fieldwork, primary pupils were issued in 1987 with only two exercise books each, and there is no reason to consider this an isolated instance when equipment outlays for each primary pupil fell in real terms from SI$9 in 1984 to SI$5 in 1987.\footnote{In 1987 one Solomon Islands dollar was worth A$0.85.} Many provincial high school buildings are degenerating from an already low standard; dormitories are commonly overcrowded; teaching materials and textbooks are in extremely short supply; and facilities for any sort of practical instruction are almost non-existent.

These low levels of educational development, in both quantitative and qualitative terms, are a major constraint on economic development. The evidence for this is no less persuasive for being anecdotal, and fieldwork in the Solomon Islands very quickly reveals the shortage of skilled and semi-skilled labour. Capital equipment, whether provided from local or aid funds, becomes useless once repairs or maintenance are required. Refrigeration and air-conditioning units cannot be fixed once they need attention. Outboard motors, a crucial aid to productivity in an archipelago stretching over 1,450 km of ocean, receive amateur rather than trained servicing. At the higher levels, there is a severe deficiency of people trained in managerial skills. Senior administrative and decision-making positions in both private and public sectors either go unfilled or are occupied by expatriates. As the World Bank commented in a recent appraisal, ‘a major consequence ... (of the shortage of qualified nationals) ... is that a large number of tasks affecting the country’s development are not being accomplished’ (World Bank 1986b:1).

The problem in the Solomon Islands is that there is little scope to remedy these skill deficiencies through expanding the public budget for education. In 1978 total government expenditure on education amounted to 3.8 per cent of Gross Domestic Product. This climbed year by year, and peaked at 6.6 per cent in 1983. Since then, the proportion has fallen back to under 5 per cent. Similarly, education expenditure as a proportion of all government expenditure peaked in and has since fallen sharply.

This experience reflects quite closely what has been happening in other developing countries. In a recent study of educational finance the World Bank pointed out that compared with the previous five years, the average rate of growth of real public expenditure on education in developing countries declined between 1970 and 1980. Between 1975 and 1980 ... this rate was lower than national income growth for over a third of a sample of fifty-five developing countries. Meantime, growth of the school-age population is still high (World Bank 1986c:6).
Box 4  
**A provincial high school principal’s comments**

A Provincial High School principal recently wrote:

The toilet and washing buildings are unusable, and the dormitories are in bad condition. We also need more classrooms, an office, library and storage space. We had laboratory tests done last year which proved our water is unhealthy because pigs shit in it. Many of the children developed diarrhoea or dysentery at the end of the first term because of bad drinking water. Toilet facilities are non-existent, so children often relieve themselves in the school area. Our Form III has to take the same tests as children in National Secondary School. But NSS’s have better facilities, more books, and a bigger number of well-qualified teachers. Some of our students here are really good, but they are at a severe disadvantage (Gatu 1988).

Solomon Islands has experienced great economic difficulties in 1980s

In the Solomon Islands the 1980s have been a time of great economic difficulty. The Central Bank of Solomon Islands has emphasized the need to rectify unsustainable deficits in both the balance of payments and the government budget (Central Bank of the Solomon Islands 1987:5). The collapse in international commodity prices in the early 1980s brought a steep decline in export earnings, and the substantial increase in the government budget deficit in 1985-86 made fiscal adjustment an additional key policy issue. Increasing demand for government services from a rapidly growing population (3.5 per cent per annum), rising aspirations, a costly devolution of administration to provincial governments, and a public service whose salaries account for two-thirds of the government’s domestic expenditure constitute a formidable structural problem.

Table 16  
**Public educational spending as a share of government spending, Solomon Islands** (per cent)

<table>
<thead>
<tr>
<th></th>
<th>Education as proportion of current and capital government spending</th>
<th>Education as proportion of current government spending</th>
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</thead>
<tbody>
<tr>
<td>1979</td>
<td>12.2</td>
<td>17.6</td>
</tr>
<tr>
<td>1983</td>
<td>22.0</td>
<td>21.5</td>
</tr>
<tr>
<td>1987</td>
<td>16.8</td>
<td>22.1</td>
</tr>
<tr>
<td>Annual average growth rate of educational share:</td>
<td>15.9</td>
<td>5.1</td>
</tr>
<tr>
<td>1979-83</td>
<td>-7.0</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Improvement in education cannot be financed by government

The Solomon Islands needs both quantitative expansion and qualitative improvement in education, but in current economic circumstances it is simply not realistic to pretend that extra resources for either of these can be found to any extent from the government budget. Ways must be found to finance a desirable increase in educational investment from sources other than government. Work is currently under way to identify ways in which Australian aid might contribute to qualitative improvement; in this section we focus on quantitative expansion. In particular, the chapter examines the ways in which an expansion of secondary schooling could be financed through a greater reliance on fees.

Fees for education: efficiency and equity

Solomon Islands education financed almost entirely from public budget

At present the Solomon Islands finances very little of its educational spending through fees. Scarcely 3 per cent of primary recurrent funding, 11 per cent of provincial secondary schooling, and 17 per cent of national secondary school funding comes from fees. As Table 17 suggests, the Solomon Islands is not out of line by the standards of other countries: education is almost everywhere financed overwhelmingly from the public budget.

Widely held view that fees are economically inappropriate and socially equitable

Adherence to international norms can often be a source of reassurance in domestic policymaking. It is also true that the consistent international pattern of reliance on public money rather than on fee revenue reflects a widely held view that fees are both economically inappropriate and socially inequitable. They are thought to be inappropriate because if there are social benefits (positive externalities) to education, high fees may result in social under-investment in schooling. And they are thought to be inequitable because, it is alleged, only the children of richer families will be able to afford the cost of going to school.

Role of fees now being re-examined by World Bank as means of expanding education without loss of equity

This general line of argument has long been accepted, and no doubt accounts for much of the picture portrayed in Table 17. In more recent years, the persistent failure of governments in many developing countries (and some developed countries) to provide enough places to accommodate all who wish to enrol, combined with de facto limitations on any significant increase in the public educational budget, has awakened interest in the role of fees. The World Bank in particular has carried out much conceptual and practical evaluation of the way in which increased fees can be used to expand education without any loss of equity (World Bank 1986c; Mingat and Tan 1985; Thobani 1983; Tan, Lee and Mingat 1984). In what follows we draw heavily on the methodology established by the Bank.

2 This work is being carried out by C.D. Throsby and K. Gannicott on behalf of the National Centre for Development Studies at the Australian National University, and is supported by the Australian International Development Assistance Bureau.
Table 17 Cost recovery in public education, Solomon Islands, 1986 and East Africa, West Africa and Asia, 1980

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Primary</th>
<th>Secondary</th>
<th>Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solomon Islands</td>
<td>3.3</td>
<td>14.1</td>
<td>n.a.</td>
</tr>
<tr>
<td>East Africa</td>
<td>6.3</td>
<td>16.6</td>
<td>2.6</td>
</tr>
<tr>
<td>West Africa</td>
<td>11.4</td>
<td>9.8</td>
<td>3.1</td>
</tr>
<tr>
<td>Asia</td>
<td>0.9</td>
<td>1.7</td>
<td>6.6</td>
</tr>
</tbody>
</table>


Our starting point is to acknowledge that raising fees is indeed likely to reduce the private incentive to go to school: when obtaining education (just like any other commodity) students and their families will in general prefer not to share in the cost. Two crucial arguments must, however, be kept in mind. The first is that in many developing countries — including the Solomon Islands — proposals to raise fees are not based on an initial equilibrium in supply and demand for education. The typical situation in developing countries is not one of equilibrium but of excess demand for education at the low level of fees currently charged. In these circumstances, higher fees will reduce the private incentive and hence reduce excess demand, but they will have little if any effect on overall enrolment. Indeed, as Mingat and Tan (1985:5-6) point out:

the opposite result is likely when: (i) the government is faced with a budget constraint for the education sector; (ii) there is excess demand for education at the initial level of fees; (iii) the additional revenue generated by ... raising of fees is used to increase the supply of school places; and (iv) there is no excess supply at the new level of fees.

The second qualification to be kept in mind is that although increased fees will reduce the private incentive to purchase schooling, the available evidence suggests that the effect is small. That is to say, the private demand for schooling is inelastic with respect to price. Jimenez has noted that the international evidence on price elasticity leads to the conclusion that ‘an increase in most components of private cost would result in a less than proportionate decrease in the demand for education’. Of the countries for which there is direct evidence (Columbia, El Salvador, Malawi, Malaysia, Mali, Pakistan, Philippines, Taiwan, and Tanzania) only Taiwan showed an elasticity exceeding one, and Jimenez suggests that the method of calculation of the Taiwan study diminishes its reliability (Jimenez 1987:79). This is an important conclusion, because fees comprise only a small proportion of total...
Higher fees effective in funding increased educational expansion — but is there loss of equity?

Access tends to be inequitable when provision of places is limited

Expanded enrolments likely to have equalizing effect on future income distribution

private costs, and demand for education will therefore be relatively inelastic with respect to fees alone.3

This combination of arguments (excess demand for school places, a public budget constraint, low price elasticity, and fee revenue used to increase the supply of school places) means that higher fees are an effective way of funding increased educational investment. But is this expansion obtained at an unacceptable loss of equity? Posing the question in this way reflects the standard belief that there is a trade-off between greater efficiency and greater equity. This may well be true in some circumstances, but it is unlikely to be true when the government's budget constraint means that it cannot finance the level of demand associated with low fees. As Thobani has argued, 'a situation of low user charges and a low level of service may be worse from an equity point of view than one with higher user charges and an expanded supply' (emphasis added) (1983:13). This is because access will tend to be inequitable when the provision of places is limited. When fees are low and a limited public budget causes excess demand for a service such as education, some people will be denied the service and/or the quality of the service will worsen. Thobani correctly notes that 'unfortunately, both these phenomena typically tend to hurt the poor more than the rich'. Armitage and Sabot (1982) provide a clear instance of this in their study of secondary schooling in Tanzania and Kenya, concluding that a small school system will tend to be monopolized by children from relatively privileged backgrounds. Rapid expansion of that system will benefit disproportionately children from less privileged backgrounds, without displacing the more privileged children. Thus, contrary to the way the argument for public funding is often presented, it is generally richer people who use a school system which is subsidized through very low fees. Increasing the supply of places is likely to improve, not reduce, equity in the school system.

These arguments consider the equity question in relation to access to schooling. A further aspect of equity is that expanded enrolments are likely to have an equalizing effect on the future distribution of incomes. There is a wealth of international evidence (Psacharopoulos 1973, 1981, 1985) that private returns to education are generally very high. These high returns spring from two sources. The first is that students everywhere pay only a small fraction of the full costs of their education. In short, fees are low, and those lucky enough to get places are heavily subsidized. Secondly, these high private returns spring from the scarcity value in the labour market of those with educational qualifications — a scarcity value that is the consequence of low enrolments. Increasing enrolments will decrease the relative scarcity and

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3 Even if we leave aside the indirect opportunity costs of earnings foregone, direct costs include boarding, books, travel (a significant item in Solomon Islands schooling), uniforms, and incidentals, as well as tuition fees. Mingat and Tan (1985) estimate that tuition fees in Malawi account for only 15 per cent of all direct student costs. Our own fee calculations include an allowance for boarding, but this still leaves a substantial part of private costs not covered by fees.
lower the private rate of return, leading to an improvement in equity through a more equal distribution of incomes in the population.

While these twin equity arguments for expanding the provision of school places seem clear-cut, this still does not entirely dispose of the worry that funding the extra places through higher fees may cause poorer students among the current enrolment to drop out, and their places to be taken by those who can afford the increased fees. This presents no conceptual difficulty. What is required here is to provide a system of scholarships or fee exemptions to those students who cannot afford to pay the additional fees. Because of differing administrative costs, scholarships or fee exemptions are generally considered the appropriate tool at secondary level, with loan or graduate tax schemes the better instrument for tertiary students.

At first sight offering scholarships may appear to cancel out the financial gains from raising fees, leaving the system no better than before, but this is not true. Since only the students who would otherwise drop out receive scholarships, the result of a combined higher fees/scholarship policy is that more school places are created compared to the initial situation, and they are created with no diminution in the equity position of the poorer students currently enrolled. The practicalities of such a scheme in the Solomon Islands are the subject of the next section.

Increased fees in the Solomon Islands

Our starting point in applying the framework of the previous section to the Solomon Islands is the key fact of excess demand for secondary schooling. In its appraisal report for the Secondary Education Project, the World Bank (1986b:6) found that 'in 1984 out of a total of about 3,620 applicants, only about 1,520 or 42 per cent were admitted into Form I'. We have used these figures as the basis of our calculations, but it must be admitted at the outset that they provide only a broad indicator of the relevant numbers. The figure of 1,520 enrolments is clearly meant to refer to the entire secondary system, but it is more meaningful to make separate calculations for provincial secondary and national secondary schools. Provincial and national secondary schools vary in their fee structures, unit costs, and patterns of government involvement. Moreover, although the Bank identified excess demand throughout the secondary system, they note that the shortage of places is most acute in the provincial schools.

Our initial procedure was to assume that the Bank's estimate of a 42 per cent shortfall in all secondary places in 1984 could be used as a measure of excess demand in the provincial secondary school system alone. This almost certainly underestimates the shortage of places in provincial secondary schools. It was noted above that the pressure for places is more acute in provincial schools. Moreover, the current
expansion of primary places in response to the Primary Education Project will almost double demand for Form I secondary places by 1990 — and provincial schools will have to absorb most of this increase. Thus, our working numbers are only approximate, but they are extremely conservative, and understate the magnitude of excess demand for places in provincial secondary schools.

In Figure 2, point A shows the current number of provincial secondary school enrolments (2,831) at the present fee of SI$50.4

Demand curve DD1 is drawn on the assumption of a constant elasticity of -0.5. This means that demand drops 0.5 per cent for every 1 per cent increase in fees.5

With the demand curve identified, it was then assumed that (i) the existing public budget for provincial secondary schools (SI$1.3m) would be held constant, and (ii) additional resources from fees would be used to expand provincial secondary school places. Together with the unit cost of a provincial secondary school place, this information allows the construction of supply curve SS1. The formula for the calculation is $S = GB/(C-F)$ (where GB is government budget for provincial secondary, C is the unit cost, and F is the fee level). In 1986 the government budget for provincial secondary schools was SI$1.3m, and the unit cost was SI$521 (Gannicott and McGavin 1987:40).

The results can be read at a glance from Figure 2. As fees are raised from the present level of $50, the potential demand for provincial secondary school places diminishes. At the same time, the fee revenue

---

4 The official tuition fee is $60 per year at provincial secondary, but the total fee revenue is consistent with a lower average fee of $50. Part of the discrepancy is due to a remission of fees in needy cases, but administrative failure in fees collection will also explain part of the difference. Fees also vary between day pupils and boarders. We have used $50 as the best estimate of average fees actually charged. Point B shows that potential demand is estimated at 6,740 (i.e. 2,831/0.42) at the current fee. When fees are raised, this demand will diminish. The crucial question is the rate at which this will happen. It was noted earlier that demand for education is relatively inelastic with respect to private costs. No specific evidence of this sort exists for the Solomon Islands. What we have done, therefore, is work with two alternative assumptions.

5 The demand curves in these figures are constructed using continuous percentage changes, so that each measures the relevant elasticity at every point along its length. A demand elasticity of -0.5 with respect to fees alone is much greater than the international evidence noted earlier, since fees are only a portion of total private cost. DD1 therefore represents a very conservative assumption. Demand curve DD2 is drawn with the more realistic assumption of an elasticity of -0.25. We use DD1 as the basis of subsequent calculations, noting that a more realistic elasticity, such as that portrayed in DD2, would reinforce the results we obtain.

6 In a strict general equilibrium framework there is no requirement that revenue from fees should necessarily be reinvested in education: the formal requirement is that such revenues should be invested where they will generate the highest return, which may or may not be in the education sector. In practice governments can, and do, earmark funds for reinvestment in the same sector where the funds were raised. One current example is the proposal for a graduate tax in Australia, and the setting up of a scheme whereby proceeds from the tax will be committed to expansion of tertiary education. The same assumptions are made in the calculations in this chapter.
allows an expansion in the supply of provincial secondary school places. Demand is matched by supply when the provincial secondary school fee reaches SI$167. At this fee, the provincial secondary school system could be expanded from its current 2,831 places to 3,680 enrolments. In short, raising fees to SI$167 will permit an extra 849 places to be created, an increase of 30 per cent on the current total. If demand elasticity were -0.25 (demand curve DD2), the equilibrium fee would be SI$235, and provincial secondary school enrolments could expand up to 4,563.

Is this increase in fees equitable? If fees were raised from SI$50 to SI$167, then (at a constant fee elasticity of -0.5) 1,283 or 45 per cent of the original enrolment could be expected to drop out. The appropriate policy here is to provide scholarships or fee exemptions for poorer children, so that the potential drop-outs are exempted from the increased fee. Since some of the fee revenue is now going to provide scholarships rather than new places, the supply curve shifts to the left—that is, fewer new places are created at each fee level. When fees are raised to SI$167 the amount of funds required for scholarship provision (SP) is given by the formula SP = Number of drop-outs times (167-50). The adjusted supply curve is then calculated as (GB-SP)/(C-F). This adjusted supply curve is shown as SS2 in Figure 3.

The crucial result, however, is that even with a scholarship scheme to protect poorer children, the supply of new places in provincial secondary schools is still greater than the initial situation. With fees of SI$167 and scholarships to relieve potential drop-outs of the increased fee, the supply of new places can rise to 3,263—an increase of 15 per cent on the initial situation, and at no additional cost to public funds.

It hardly needs to be stressed that the arithmetic precision of the calculations should not blind us to the fact that these estimates are based on a series of assumptions. The results from Figures 2 and 3 need to be understood as indicative estimates of what can be achieved, rather than a precise formula for policy. Nonetheless, it is worth emphasizing that we chose our assumptions to be conservative. A lower and more realistic estimate of fee elasticity, a larger and more realistic estimate of excess demand, and a more modest allowance for scholarships (since not all potential drop-outs would need full scholarships in
order to continue schooling) would all reinforce the results obtained here. As Mingat and Tan (1985:18) conclude from their own study of Malawi, 'contrary to what is frequently argued, the results show that a fee policy that includes an appropriate scholarship scheme might increase realized enrolment without sacrificing equity, and even possibly enhancing it'.

We have described in detail the calculation of fees at provincial secondary school level. Not only is the problem of excess demand most acute at that level, but the government provincial secondary school system is more homogeneous than the varied national secondary system, with its mix of government, church, and government-aided church schools.

We start the analysis of national secondary school fees by excluding the two Seventh Day Adventist schools on the grounds that they receive little, if any, public money. This leaves four government-aided church and two government national secondary schools. Enrolments for these six schools totalled 2,122 in 1986 (Gannicott and McGavin 1987:22-3). Total government appropriations for national secondary schools were SI$1.883m in 1986, and the churches contributed around SI$0.253m towards their four schools. We treat both these amounts as fixed and exogenous, and this gives a total fixed expenditure of SI$2.136m. Unit costs vary between the six schools, and the average unit cost, weighted by enrolments in each school, is SI$1,130 (Gannicott and McGavin 1987:40). Fees also vary between schools, and the enrolment-weighted average was SI$123 in 1986.

This gives all the evidence necessary for the calculations, except for the key question of excess demand. We took some trouble when calculating provincial secondary school fees always to err on the side of conservative assumptions. We noted earlier that the World Bank identified a 42 per cent shortfall in the secondary system as a whole. While the academic competition for entry is stronger for national secondary than for provincial secondary schools, the quantitative pressure for places is acknowledged to be less than for provincial secondary school entry. On balance, we judged that we could continue to be cautious in our assumptions if we calculated a reduced pressure of demand as the central estimate, and used 42 per cent as the upper estimate of excess demand in the national secondary schools.

The results of these calculations are shown in Figure 4. Demand curve DD1 provides the central estimate. It is constructed on the assumption of a constant elasticity of -0.5 and a level of excess demand for national secondary school entry which is only half that for provincial secondary school places. Demand curve DD2 sets the upper limit: it too is drawn with a constant elasticity of -0.5, but assumes an excess demand of 42 per cent, the same as for provincial secondary schools. On the central estimate it can be seen that fees should be raised to SI$241, allowing national secondary school places to be expanded from the current number of 2,122 up to 2,403.
Since a rise in fees from the current level of SI$123 up to SI$241 could cause just over 600 students from the original enrolment to drop out, supply curve SS2 in Figure 4 shows the supply of national secondary school places if potential drop-outs are fully exempted from the extra fee. Thus, Figure 4 demonstrates that even with a modest measure of excess demand for national secondary school places and with full regard for the equity issue, an increase in fees up to SI$241 could still generate sufficient net revenue to expand national secondary school enrolments from the current 2,122 to 2,322. In the absence of the rise in fees, those extra places would cost SI$0.226m, the equivalent of a 12 per cent rise in the existing public budget for national secondary schools. As demand curve DD2 indicates, less conservative assumptions about excess demand lead to a higher equilibrium level of fees (up to SI$383) and the revenue to create even more national secondary school places (up to a total of 2,859 places).

One further aspect of national secondary fees is worth attention. The supply curve in Figure 4 is drawn using an enrolment-weighted average of unit costs in the six schools in the sample. Variation in costs between the six schools is in fact quite marked, ranging from an average of SI$980 in the government-aided church schools to SI$1,245 in the government schools (Gannicott and McGavin 1987:74). This 27 per cent difference in unit costs has important implications for a policy of raising fees. Figure 5 illustrates the argument. The conservative assumptions from the earlier national secondary school calculations (-0.5 elasticity and a lower excess demand than in provincial secondary schools) are used again, but they are now combined with two different supply curves: SS1 is based on the relatively low unit costs of SI$980 in the aided church schools, and SS2 is derived from the higher costs of SI$1,245 characteristic of the government schools.
Figure 5 illustrates at a glance the tight linkage between unit costs and fees: any given fee increase will make possible the provision of more places in a low cost than in a high cost system. Or, to put this the other way round, the higher the unit cost of education, the more fees have to be raised in order to achieve an increase in enrolments. This simple arithmetic relationship brings out sharply the fact that increased fees for schooling are not a substitute for other managerial changes that need to be made in Solomon Islands education. Part of the explanation for the cost variations in national secondary schools is that teachers in the government schools are paid on the public service rather than teaching service pay scale, but higher teacher costs do not fully explain the greater overall costs of the government schools: non-teaching costs are 30 per cent higher for government than aided church national secondary schools (Gannicott and McGavin 1987:73). One of the most useful consequences of a policy for raising fees is that such a policy must be coupled with management and administrative changes that try to improve efficiency and reduce unit costs.

We have not performed for primary schooling the sort of detailed estimates undertaken for provincial and national secondary schools. The coverage of primary schooling has been extended in recent years, and a quantitative measure of remaining excess demand would be little more than guesswork. The issue of fees in primary schools is further complicated when in-kind rather than cash transactions take place at local level: government primary schools are currently tuition-free, but parents contribute to the cost of primary schooling in a variety of ways, often through contributions in kind. This is not an argument against the principle of charging fees: the task then becomes one for local educational administrators to devise innovative schemes for villagers to pay for education in whatever ‘coin’ they possess. Such contributions can take the form of labour for school building and maintenance, the provision of local materials, or the supply of foodstuff for pupils. Much activity of this sort happens already, and could readily be extended.
Conclusion

This study has attempted to calculate the amounts of extra revenue, and hence the improvements in educational provision, that could be generated by raising the level of fees. These results are summarized in Table 18.

It can be seen from Table 18 that if these recommendations for fee increases were adopted, the additional revenue generated (SI$0.8m) would be equivalent to a 23 per cent rise in the existing public budget for secondary education. Even with a constant public budget, fees could make possible the creation of an additional 849 provincial secondary school places and of 281 national secondary school places. If poorer students who would otherwise drop out are exempted from the rise in fees, the number of places can still increase: the increase then becomes 432 for provincial secondary schools and 200 for national secondary schools. It needs to be emphasized that even when equity is taken into account, the public budget is held unchanged at the current level. The allowance for equity is deducted from the fee revenue, and thus reduces the potential number of extra places rather than increasing the public budget.

It also needs to be emphasized that these estimates must not be treated as precise results. There is a considerable margin of error, and the results provide guidelines, not firm rules, for educational policy. In particular the limitations of the technique need to be borne in mind. While we follow previous studies in using unit costs as the basis for constructing the supply curve of enrolments, this is clearly only an approximation of what can be achieved through increased fees. A precise estimate of new or expanded schools requires attention to the capital cost of creating new places. Second, the technique can offer only a broad picture in the sense that it cannot feasibly be used to calculate a detailed structure of fees by school, grade, province, day pupil or boarder, the time period over which fees are raised, and the many other issues which go to make up the precise fees charged. These are specific issues which must be resolved by administrators within the Solomon Islands.

While we take care to stress the limitations of the results, the approach of this study does offer some strengths. A feature of the work is that it pays particular attention to the equity issue. Table 18 presents the data in a form which allows decision-makers in the Solomon Islands to weigh for themselves the value they place on equity issues when formulating a detailed fee structure.
Table 18 Fees and enrolments in the Solomon Islands

<table>
<thead>
<tr>
<th>Current situation</th>
<th>When fees are raised</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td>expenditure (SIS)</td>
</tr>
<tr>
<td></td>
<td>Enrolments (SIS)</td>
</tr>
<tr>
<td></td>
<td>Fees (SIS)</td>
</tr>
<tr>
<td></td>
<td>New fees (SIS)</td>
</tr>
<tr>
<td></td>
<td>Increase in revenue (SIS)</td>
</tr>
<tr>
<td></td>
<td>Ignoring equity</td>
</tr>
<tr>
<td></td>
<td>With equity</td>
</tr>
<tr>
<td>Provincial</td>
<td></td>
</tr>
<tr>
<td>secondary schools</td>
<td>1.31 2,831 50</td>
</tr>
<tr>
<td>provinces</td>
<td>167 0.473m 3,680</td>
</tr>
<tr>
<td>provinces</td>
<td>3,263</td>
</tr>
<tr>
<td>National secondary</td>
<td>2.14m 2,122 123b</td>
</tr>
<tr>
<td>schools</td>
<td>241 0.318m 2,403</td>
</tr>
<tr>
<td>schools</td>
<td>2,322</td>
</tr>
</tbody>
</table>

*a Excludes Seventh Day Adventist Schools.
b Enrolment — weighted average on non-Seventh Day Adventist school fees.

Source: Compiled from estimates in the text.

Fee revenues could also be allocated to quality improvement

Two further comments need to be made. The first is that while we couched the discussion of provincial secondary and national secondary school fees in terms of the quantitative expansion that a rise in fees would make possible, the quality problems at secondary level must not be understated. Some or all of the fee revenue could, if it is so decided, be allocated to quality improvement rather than quantity expansion. Thobani (1983:24) has made the useful point that even in the absence of measured excess demand there may still be an implicit excess demand if enrolments have been accommodated by allowing quality to fall. It is hardly necessary to repeat here the widespread perception of low average quality in primary and many secondary schools in the Solomon Islands. The objective in charging fees would then not be to expand places but to improve quality. Again, the calculations allow education managers to weigh for themselves the value they place on these options.

Increasing fees for schooling should be combined with policies to improve efficiency and reduce costs

Finally, increased fees for schooling are not a substitute for other policy changes. A policy for raising educational fees in the Solomon Islands must, for maximum benefit, be coupled with other changes that try to improve efficiency and reduce unit costs. Not least of the advantages of an increased reliance on fees is that the more direct involvement of parents in financing the schooling of their children provides a built-in incentive for the containment of costs and the pursuit of increased efficiency. Educational fees are often assumed to have a high political cost, but administrators should not underestimate what can be achieved through a greater reliance on parental contributions. The following anecdote is worth repetition:

during the October 1984 election campaign in the Solomon Islands, one political party advocated abolishing fees, but many citizens countered that their concern was not free education but rather increased educational opportunity and equality. Apparently, some parents are prepared to bear a greater share of total educational costs if their contribution can be clearly linked to the improvement of education (World Bank 1986c:39).
Economic performance in Pacific island countries over the last few years has been poor. Growth rates of Gross National Product and Gross National Product per head have been very low and in some cases negative. Employment has stagnated, unemployment in the formal sectors has been growing and underemployment in the traditional sectors has been continuing, despite significant emigration in some instances.

To what extent can this poor economic performance be attributed to shortcomings in the education sectors of Pacific island countries? The link between levels of education and rates of economic growth is by no means a clear and direct one. Early hypotheses that increased educational investment was an automatic guarantee of increased growth have long since been discredited. At the same time no country outside the oil-rich group that has achieved high rates of economic growth has done so without having a well-educated workforce, a well-developed education system, and high levels of educational participation. The view is now widely accepted that education, if not a sufficient condition for growth, is at least a necessary one.

Governments in most Pacific island countries have recognized this fact by the prominence they have given to education in the formulation of their policy priorities. Public expenditure on education in several countries in the region is significantly greater than in comparable developing countries in other parts of the world; for instance, total educational expenditure as a proportion of Gross National Product in 1983-84 was 7.8 per cent in Tonga and 6.4 per cent in Fiji, compared with an average of 4.0 per cent for all Less Developed Countries (UNESCO 1986b: Tables 2.12, 4.1). Pupil-teacher ratios in the region are, on average, somewhat more favourable than in the rest of the developing world. Yet performance indicators for the education sectors in Pacific island countries reveal low participation rates in some countries, notably Solomon Islands and Vanuatu. School retention rates are low, especially in rural areas and amongst females. Levels of teacher training throughout the region are clearly inadequate.
If we look beyond the immediately measurable statistics, we find that an even greater problem lies in the poor quality of education being provided in the region, particularly at the school level. The standard of school leavers as assessed in terms of basic literacy and numeracy skills is considered in many instances to be inadequate for effective employment or self-employment in either the formal or the informal sectors. Even for those who complete their full secondary schooling, there can be severe difficulties at the tertiary level because of deficiencies in their preparation in mathematics, science and English.

In this context aid could play a vital role. Aid could fund activities strategically chosen to improve the efficiency or effectiveness of the education systems of recipient countries in areas of critical need. It could take over or assist with the funding of existing activities, thereby releasing the recipient country's own funds for other purposes. Either way, one might expect to see aid having some impact on educational and, in due course, economic performance. Yet, in Pacific island countries, despite the considerable volume of Australian and other aid spread with the best of intentions throughout the region, educational achievement has been, as we have noted, less than satisfactory.

This study is concerned with the reasons for this disappointing outcome. In the following section we outline and discuss the levels of Australian educational aid to Pacific island countries. We then go on to analyse the directions of the aid program, and examine the proposition that increased Australian aid for education in Pacific island countries, or at least a different pattern of aid, could lead to improved results.

The pattern of Australian aid to Pacific island countries

Data on Australia's Official Development Assistance (ODA) expenditures are reported almost exclusively in publications of the Australian International Development Assistance Bureau (AIDAB). It has not always been easy to get a clear picture of Australian aid flows. The definition of what constitutes aid, its classification by sector or function, its characterization as bilateral or multilateral, and the combination of country and regional aid programs have in the past contributed to discrepancies and inconsistencies between and within the various data sources. Program budgeting was introduced in AIDAB in 1987-88, and this is resulting in new data series with better identification of total development assistance. Where possible, this study uses these new series. It should be kept in mind, however, that some detailed statistics, or data for long series of past years, are not yet available on the new basis. (For details of the changes in AIDAB statistics, see AIDAB 1989.)

Australian aid to the South Pacific has grown in both absolute and relative terms over the last decade. As Table 19 shows, Pacific island countries received A$50.6 million in Australian ODA in 1983-84, representing 6 per
Table 19 Total Australian Official Development Assistance (ODA) to Pacific island countries (PICs), 1983-84 to 1987-88

<table>
<thead>
<tr>
<th>Year</th>
<th>Current prices (A$m)</th>
<th>Constant (1987-88) prices (A$m)</th>
<th>PICs' share of total Australian ODA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983-84</td>
<td>50.6</td>
<td>66.6</td>
<td>6.1</td>
</tr>
<tr>
<td>1984-85</td>
<td>64.2</td>
<td>79.7</td>
<td>6.3</td>
</tr>
<tr>
<td>1985-86</td>
<td>79.0</td>
<td>91.6</td>
<td>7.7</td>
</tr>
<tr>
<td>1986-87</td>
<td>87.5</td>
<td>94.3</td>
<td>9.0</td>
</tr>
<tr>
<td>1987-88</td>
<td>86.6</td>
<td>86.6</td>
<td>8.5</td>
</tr>
</tbody>
</table>

*The costs involved in educating students from developing countries in Australian secondary and tertiary institutions were not counted as Official Development Assistance expenditure for 1983/84.


The costs involved in educating students from developing countries in Australian secondary and tertiary institutions were not counted as Official Development Assistance expenditure for 1983/84. By 1987-88 these figures had grown to A$86.6 million and just under 9 per cent respectively.

It may be noted, however, that part of this recent growth is more apparent than real. Not only is the increase in aid more modest when measured in constant prices, but since 1984-85 Australia has begun to include in the recorded aid figures an estimate of the implicit subsidy being provided to overseas students. Thus countries sending students to Australian educational institutions appear to have had a sudden increase in the levels of aid received from Australia. Whilst this mainly affects countries from the East Asian region, it does also provide a not insignificant boost to the recorded aid figures for the South Pacific.

The distribution of Australian ODA amongst the countries of the region is shown for the year 1987-88 in Table 20. In absolute terms, the two largest countries of the region, Fiji and Solomon Islands, were the greatest recipients, but on a per capita basis one of the smaller countries, Tonga, received the major share. It should be noted, however, that because of the relatively small amounts involved, these figures are sensitive year by year to inclusion of individual items.

Even without the increase in apparent aid volumes due to inclusion of the student cost subsidy, Australia is presently the major aid donor to the South Pacific. Data for 1987-88 indicates that in that year Australia provided nearly one-quarter of all ODA received by the six major countries of the region, placing it ahead of the other two traditional donors, the United Kingdom and New Zealand. Figures shown in Table 21 indicate that Australia provided 40 per cent of Fiji’s total ODA from all sources in 1987-88, with nearly one-third of that going to the Solomon Islands, Tonga and Western Samoa.
Table 20 Distribution of total Australian Official Development Assistance (ODA) amongst Pacific island countries (PICs), 1987-88

<table>
<thead>
<tr>
<th>Recipient country</th>
<th>Total Australian ODA</th>
<th>Total (%)</th>
<th>(A$ per capita)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>19.0</td>
<td>22.0</td>
<td>26</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>11.2</td>
<td>13.0</td>
<td>38</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>10.4</td>
<td>12.0</td>
<td>71</td>
</tr>
<tr>
<td>Tonga</td>
<td>9.5</td>
<td>11.0</td>
<td>96</td>
</tr>
<tr>
<td>Western Samoa</td>
<td>9.8</td>
<td>11.3</td>
<td>61</td>
</tr>
<tr>
<td>Kiribati</td>
<td>3.0</td>
<td>3.4</td>
<td>44</td>
</tr>
<tr>
<td>Other PICs*</td>
<td>4.6</td>
<td>5.3</td>
<td>11</td>
</tr>
<tr>
<td>Unallocated/regional</td>
<td>19.1</td>
<td>22.0</td>
<td>n.a.</td>
</tr>
<tr>
<td>Total</td>
<td>86.6</td>
<td>100.0</td>
<td>45</td>
</tr>
</tbody>
</table>


Table 21 Importance of Australian Official Development Assistance (ODA) to Pacific island countries (PICs), 1987-88

<table>
<thead>
<tr>
<th>Level of ODA</th>
<th>Australia (A$m)</th>
<th>Other (A$m)</th>
<th>Total* (A$m)</th>
<th>Aust. ODA as proportion of total (%)</th>
<th>ODA from all sources as percentage of GNP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>19</td>
<td>32</td>
<td>51</td>
<td>40</td>
<td>3</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>11</td>
<td>70</td>
<td>81</td>
<td>14</td>
<td>52</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>10</td>
<td>26</td>
<td>36</td>
<td>28</td>
<td>15</td>
</tr>
<tr>
<td>Tonga</td>
<td>9</td>
<td>22</td>
<td>31</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td>Western Samoa</td>
<td>10</td>
<td>23</td>
<td>33</td>
<td>30</td>
<td>21</td>
</tr>
<tr>
<td>Kiribati</td>
<td>3</td>
<td>23</td>
<td>26</td>
<td>12</td>
<td>60</td>
</tr>
</tbody>
</table>

*Figures for Australian ODA are for 1987-88; figures for ODA from other sources are for 1987.


South Pacific countries are among highest recipients of aid in world (per capita)

The substantial levels of aid flowing from all sources into the countries of the South Pacific have placed them amongst the highest recipients of aid in the world when measured on a per capita basis or in relation to the size of Gross Domestic Product. Levels of aid per capita in the South Pacific (shown in Table 20) are between three and twenty times the average for comparable developing countries, and in the smaller states such as Tuvalu and Niue the difference is even
greater. In relation to Gross Domestic Product the average proportion of aid to Gross Domestic Product in low-income developing countries is about 7 per cent; the figures in Table 21 show that in the South Pacific only Fiji falls below this figure, with most of the countries considerably higher. The significance of aid in the economy of Kiribati is especially noteworthy.

Overall, it can be said that aid saturation rather than the perennial problem of aid deficiency is a characteristic of the South Pacific. This situation is reflected in a drying up of suitable projects for aid assistance in some sectors in at least some Pacific island countries.

Australian ODA to the South Pacific for educational purposes grew strongly in real terms over the decade from 1978-79, reaching a level of over A$25 million in 1987-88, as shown in Table 22. This growth is also reflected in the substantially increased proportion of Australian aid to the Pacific island countries being used for educational purposes. Since the mid-eighties about 30 per cent of Australian aid to the Pacific has been for education, and even excluding the student cost subsidy this figure is still around 25 per cent, compared to about 15 per cent in the late 1970s. Education is now a more important component of Australian aid for the South Pacific than it is for any other region.
Table 23 Distribution of Australian Official Development Assistance (ODA) for education amongst Pacific island countries (PICs), 1987-88

<table>
<thead>
<tr>
<th></th>
<th>ODA for education (A$m)</th>
<th>Education as percentage of total ODA to country (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A$m)</td>
<td>(%)</td>
</tr>
<tr>
<td>Fiji</td>
<td>8.4</td>
<td>31.4</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>4.3</td>
<td>15.9</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>1.9</td>
<td>7.0</td>
</tr>
<tr>
<td>Tonga</td>
<td>2.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Western Samoa</td>
<td>2.1</td>
<td>7.9</td>
</tr>
<tr>
<td>Kiribati</td>
<td>0.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Other PICs</td>
<td>1.6</td>
<td>5.9</td>
</tr>
<tr>
<td>Unallocated/regional</td>
<td>5.9</td>
<td>22.2</td>
</tr>
<tr>
<td>Total</td>
<td>26.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>


By far the largest single recipient of Australian educational aid in the region is Fiji, as shown in Table 23. This is because of Fiji’s preponderant representation in the numbers of tertiary students from the region undergoing aid-assisted training. If, as is sometimes suggested, Fiji enjoys a disproportionate share of the benefits from aid to the University of the South Pacific (see further below), its dominance as a recipient of Australian aid is further enhanced. In per capita terms, however, the largest recipients of Australian educational aid (not counting direct aid to the University of the South Pacific) in 1987-88 was Tonga (A$22 per head), with Solomon Islands, Vanuatu and Western Samoa each receiving about A$13 per head. Kiribati was the lowest recipient in that year (A$6 per head).

Data on growth in educational aid allocations to individual countries shows that Fiji, Tonga and Western Samoa have grown only slowly over the last decade, whereas aid allocations for education to Solomon Islands and Vanuatu have increased rapidly over the period. Kiribati, with a small base and a slower-growing population, has appeared to present fewer aid opportunities in the education area, and its level of educational aid is well below that of most other countries in the region both in absolute and per capita terms.

Tertiary education has consistently been the dominant education sector as a recipient of Australian aid, even when the overseas student cost component is ignored. Vocational and technical education has also received a major share. Aid to school level education in the Pacific island countries has been relatively unimportant, though it has grown in significance since the early 1980s. A relatively small share has been
Table 24  Australian Official Development Assistance (ODA) for education to Pacific island countries (PICs) by educational level, 1977-78 to 1986-87

<table>
<thead>
<tr>
<th></th>
<th>Primary and secondary (%)</th>
<th>Tertiary (%)</th>
<th>Vocational and technical (%)</th>
<th>Teacher training (%)</th>
<th>Other (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977-78</td>
<td>4</td>
<td>54</td>
<td>23</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>1978-79</td>
<td>5</td>
<td>52</td>
<td>22</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>1979-80</td>
<td>7</td>
<td>52</td>
<td>20</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>1980-81</td>
<td>5</td>
<td>48</td>
<td>25</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>1981-82</td>
<td>12</td>
<td>43</td>
<td>26</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>1982-83</td>
<td>26</td>
<td>42</td>
<td>15</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>1983-84</td>
<td>32</td>
<td>30</td>
<td>22</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>1984-85</td>
<td>32</td>
<td>53</td>
<td>8</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1985-86</td>
<td>16</td>
<td>64</td>
<td>14</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>1986-87</td>
<td>4</td>
<td>75</td>
<td>17</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

*These data are calculated from bilateral aid flows, since at this detailed level statistics are not yet available for the total aid flows on which earlier tables are based. While this means that the absolute figures used to calculate Table 24 are not precisely comparable with those in the earlier tables, there is no reason to believe that the inclusion of total aid flows will significantly alter the distribution among sectors of education.

Source: Australia, Australian International Development Assistance Bureau, Functional Classification of Australian Official Development Assistance to Developing Countries: Bilateral Flows by Project and Major Item of Expenditure, Canberra, 1988b.

Solomon Islands and Vanuatu received almost all Australian aid going to school education

All Pacific island countries received significant aid for vocational and technical education

spent on teacher training, and that amount has been diminishing in recent years. These trends can be seen in Table 24.

Amongst countries in the region the sectoral distribution of Australian educational aid varies very widely, as can be seen from Table 25. It must be kept in mind that the figures for any one year are affected by the timing of individual projects. In 1986-87, virtually all the aid to the primary and secondary schooling sectors was directed to two countries, Solomon Islands and Vanuatu, with some countries in the region receiving no aid at all for these sectors.

Significant proportions of aid for vocational and technical education were received by all Pacific island countries, with the relatively larger amounts going to the smaller countries. It must be noted, however, that classification problems and inconsistencies in AIDAB data sources make these figures somewhat uncertain. Only Tonga and Kiribati received any aid for teacher training. But, as noted above, it is aid for tertiary training that is the predominant form of Australian educational aid for the region overall, with this sector absorbing 90 per cent of Fiji’s allocation, two-thirds of Tonga’s, and over half of Western Samoa’s in the year 1986-87.
Table 25 Australian Official Development Assistance (ODA) for education to Pacific island countries (PICs) by educational level and country 1986-87

<table>
<thead>
<tr>
<th></th>
<th>Primary and secondary</th>
<th>Vocational and technical</th>
<th>Teacher training</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Fiji</td>
<td>4</td>
<td>94</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>15</td>
<td>48</td>
<td>36</td>
<td>-</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>27</td>
<td>46</td>
<td>24</td>
<td>-</td>
</tr>
<tr>
<td>Tonga</td>
<td>1</td>
<td>67</td>
<td>24</td>
<td>7</td>
</tr>
<tr>
<td>Western Samoa</td>
<td>-</td>
<td>52</td>
<td>29</td>
<td>18</td>
</tr>
<tr>
<td>Kiribati</td>
<td>-</td>
<td>46</td>
<td>52</td>
<td>2</td>
</tr>
<tr>
<td>Other PICs</td>
<td>8</td>
<td>32</td>
<td>60</td>
<td>-</td>
</tr>
<tr>
<td>Unallocated/regional</td>
<td>-</td>
<td>86</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td>64</td>
<td>14</td>
<td>2</td>
</tr>
</tbody>
</table>

*See note 'a' for Table 24.
Source: See Table 24.

There are five major elements in Australia’s aid for education purposes in the South Pacific:
- in-country capital works such as the building and equipping of schools and colleges, the construction of additional classrooms and libraries;
- curriculum development projects;
- support for the University of the South Pacific;
- training, in Australia, in third countries, and in-country;
- student cost subsidies both secondary and tertiary.

Table 26 indicates the relative importance of each of these items in Australia’s education aid to the region in 1986-87. The figures in this table are indicative of the relatively small number of major capital works projects being undertaken at any one time. They also show the relatively large share of educational aid that goes to support a single institution (the University of the South Pacific). The largest items again are seen in the training and student-related area, with the preponderance of tertiary training as a form of aid once more emphasized.
Table 26  Major components of Australian Official Development Assistance (ODA) for education to Pacific island countries (PICs), 1986-87a

<table>
<thead>
<tr>
<th>Item</th>
<th>(A$)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) In-country capital works</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>0.191</td>
<td></td>
</tr>
<tr>
<td>Vanuatu</td>
<td>0.226</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.417</td>
<td>2.07</td>
</tr>
<tr>
<td>(ii) Curriculum development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tonga</td>
<td>0.018</td>
<td></td>
</tr>
<tr>
<td>Western Samoa</td>
<td>0.223</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.241</td>
<td>1.2</td>
</tr>
<tr>
<td>(iii) Support for University of the South Pacific</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General support</td>
<td>4.428</td>
<td></td>
</tr>
<tr>
<td>Curriculum development advisers</td>
<td>0.327</td>
<td></td>
</tr>
<tr>
<td>Third-country awards</td>
<td>0.055</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.810</td>
<td>23.89</td>
</tr>
<tr>
<td>(iv) Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Australia</td>
<td>3.268</td>
<td></td>
</tr>
<tr>
<td>In third countries</td>
<td>2.026</td>
<td></td>
</tr>
<tr>
<td>In-country</td>
<td>0.666</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5.960</td>
<td>29.6</td>
</tr>
<tr>
<td>(v) Student cost subsidies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>0.432</td>
<td></td>
</tr>
<tr>
<td>Tertiary</td>
<td>7.417</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.849</td>
<td>39.0</td>
</tr>
<tr>
<td>(vi) Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for NGOs</td>
<td>0.108</td>
<td></td>
</tr>
<tr>
<td>Miscellaneousb</td>
<td>0.746</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.854</td>
<td>4.24</td>
</tr>
<tr>
<td>Total ODA for education</td>
<td>20.13</td>
<td>100.00</td>
</tr>
</tbody>
</table>

*aTable 26 is compiled from the published data on bilateral aid flows to individual countries of the South Pacific, together with the amounts allocated to the region as a whole. This results in some slight overcounting for the PICs, since in the published statistics Papua New Guinea is included in the region of 'Oceania'. The discrepancy is likely to be small, since most of the A$5.8m of educational aid allocated to Oceania goes towards support of the University of the South Pacific.

*bIncludes an amount of $0.085m for university and technical training in French Polynesia that could not be disaggregated for inclusion in item (iv) Training.

Source: See Table 24.
Analysis of Australia's aid program for education to the Pacific island countries

The discussion of the pattern of Australian aid for Pacific island countries in the previous section prompts three important questions. First, how is the total volume of aid and its distribution between countries determined? Second, how is the proportion of aid going to education as distinct from other uses determined? Third, how is the distribution of educational aid amongst alternative levels, functions or projects determined? The answers to these questions, especially the latter two, are to some extent interrelated.

Discussion of the determination of the overall level of the Australian aid budget, either in total or in regard to that portion going to Pacific island countries, takes us somewhat beyond the central concern of this chapter. Suffice it to say that strategic, diplomatic and internal budgetary considerations exercise an important influence on the overall aid vote and on its allocation between regions. AIDAB has recently spelt out Australia's aid objectives in the South Pacific very clearly:

Australia's aid relationship with the countries of the South Pacific ... is inseparable from Australia's foreign policy priorities and reflects them. Australia's aid program is designed to promote economic development and growth with equity, primarily for humanitarian reasons, but also to complement Australia's strategic economic and foreign policy interests (AIDAB 1987a:2).

These objectives are consistent with those of the Pacific island governments themselves, all of which are currently seeking to implement national plans stressing economic development compatible with the broader social goals of equity and enhanced opportunity.

Education has long been regarded as a crucial ingredient in the achievement of these national objectives, and hence, as we have seen, the volume of Australian aid to the region for educational purposes has been rising significantly in recent years. Determination of the proportion of aid going to education appears to have been based not so much on a precise formula weighing up the expected benefits from this form of aid against those arising in other avenues, as from simply an implicit acceptance of the broad propositions concerning the links between education and economic and social development. In these circumstances, aid for education in any form is seen to be beneficial to recipient countries, and education establishes a claim on aid resources which is strongly competitive with other forms of aid provision. Furthermore, the appeal of these broad claims for education has not been lost on the direct beneficiaries of educational aid, including educational administrators, students and their families, who have successfully promoted them in their lobbying for a greater share for education in the distribution of aid funds across sectors.
The pattern of aid distribution emerging at the present time is also being influenced by a shift in approach adopted by AIDAB. There is a move, for example, to focus on countries rather than on the region, and then on sectors within countries, in line with recommendations in the Jackson Report (Australian Government 1984). There has been some effort to seek strategies having a direct bearing on growth in Gross Domestic Product, given the poor performance of Pacific island countries in this respect, and, in this context, education is seen as a sector yielding longer-term rather than more immediate benefits.

Let us turn to the question of the direction of educational aid itself. This is the question that takes the overall budget constraint as given, and looks at the distribution of aid amongst levels and functions within the educational sectors of Pacific island countries. As we have seen, Australian educational aid to Pacific island countries has concentrated on support for training, predominantly at the post-secondary level. This process has been essentially unplanned and uncoordinated. It has been rationalized in some quarters by the somewhat uncritical acceptance of the notion that assisting tertiary education, especially in the fields of technology and administration, is the most immediate and practical way of contributing towards economic growth in the region, since at these levels and in these fields Australia has something to offer that Pacific island countries cannot provide for themselves.

In addition, this pattern of aid has doubtless been influenced by the broad guidelines that AIDAB has had to recognize in determining its aid program. For example, requirements that assistance should not generally be available for acquisition of local materials, or (up till now) that aid should not generally be extended to cover recurrent costs of projects, have tended to favour aid provision in the form of training, since this form of aid clearly meets these sorts of requirements.

In fact, however, it has also suited Australia's own interests to provide aid predominantly in the form of training assistance. It is a very visible form of aid, requiring almost no management by AIDAB. It results in a high proportion of the expenditure remaining in this country, that is, in Australian educational institutions and with Australian suppliers of goods and services. Even when this form of aid is spent off-shore, a significant proportion is spent on Australian staff, advisers and suppliers of materials. Furthermore, as we have noted above, this form of aid provision matches and reinforces the private demands of students from the region, who seek an internationally recognized qualification for entry into employment in the modern sector in their own country or abroad. It is not surprising, therefore, that considerable pressure has been exerted on Australia by prospective students through their own governments for maintenance and extension of this form of aid. Australia has thus felt to some extent that it is meeting the needs of Pacific island countries by taking heed of
But underlying problems of educational development have not been addressed

Yet the emphasis on training as the major form of aid has meant that the real problems facing educational development in the south Pacific island countries have not been addressed. Although it is impossible to generalize, since the state of development and the problems ahead differ markedly between countries, it can be said that serious constraints on educational development exist within the region in several areas, including the following:

- in primary and secondary schooling, especially in regard to capital infrastructure, curriculum development, provision of materials, and levels of teacher training;
- in the post-secondary area, especially in regard to the appropriateness and quality of training being provided both in Australia and within the region;
- in the vocational and technical field, especially in the provision of relevant skills for self-employment in the informal and small-business sectors; and
- in the areas of educational administration and management, and student certification.

In the following sections of the study we examine each of these issues in turn.

Primary and Secondary Schooling. It is difficult to overstate the importance of primary and secondary schooling in the education systems of any country. These levels establish the fundamentals of educational development. The strength and relevance of curricula, the quality of teachers, and the adequacy of facilities, especially in the core areas of language, mathematics and science, are crucial to success. Primary and secondary schooling need to be widely accessible if the goal of universal adult literacy is to be achieved, and if all citizens are to be brought into the mainstream of economic and social development.

Aid can contribute to educational development at primary and secondary levels in a number of ways, including the provision of capital works, assistance with curriculum projects and materials, and teacher training.

First, in the direct production and infrastructure sectors of Pacific island countries, provision for capital works is a major form of Australian ODA; however, in the education sectors this type of aid has been minor. As seen in the previous section, some assistance for capital works, mainly in extending, building, renovating and/or equipping primary and secondary schools, has gone to Solomon Islands, Vanuatu, Western Samoa and Kiribati, but very little to Fiji and Tonga. Aid of this type can provide opportunities for Australia to enter into co-financing arrangements. However, the overall provision for capital works in education has been relatively small.
Considerable scope for assistance to capital works in education sector

— more support goes to capital works in other sectors

Yet in most countries in the region, and especially in the smaller ones, there exist deficiencies in school buildings, plant and/or equipment which are imposing real constraints on the delivery of teaching services. Substantial possibilities exist for Australian aid to contribute to the expansion of schooling facilities in countries such as the Solomon Islands and Vanuatu where participation rates are low, and to improvement in the quality of schooling in these and other countries.

One reason for the larger proportion of capital projects in the aid programs in sectors like agriculture, mining, transport and public utilities, is the existence of well-established procedures for the identification, appraisal, implementation and monitoring of projects in those sectors. Any expansion of allocations to capital projects in the education sector would need to be predicated on the development and application of similar procedures in this area, in order that only viable and sustainable projects promising the highest rates of return at the margin are funded. Delivery of this sort of aid can be more expensive than other aid avenues, especially if new administrative structures have to be put in place to generate and monitor projects. Nevertheless the pay-off from any increased cost in aid administration should be visible in terms of improved aid performance. Further research in this area would be desirable in order to identify, in a broad benefit-cost context, the best ways of proceeding along this route.

Second, aid for curriculum development purposes has taken the form of the provision of technical advisers, the running of workshops and the supply of educational materials, but the amounts involved have been small, with Tonga and Western Samoa being the main recipients. AIDAB’s Pacific Regional Team has concentrated some attention on the curriculum area, and has made some useful progress. But there remain many instances of inappropriate and outdated curricula in use in schools in the region, in many cases strongly supported by government and local educational officials. At the secondary level, conflicts between ‘academic’ and ‘vocational’ curricula continue. There is scope for aid-assisted curriculum projects at a regional level which identify the extent to which shared problems could be met on a cooperative basis.

Finally, it can be said that well-trained, well-supported and motivated teachers are crucial to the development of soundly based high-quality primary and secondary education. Yet there is ample evidence that both the quantity and quality of trained teachers in the region, especially in the Solomon Islands and Vanuatu, are well below what is required. Part of the problem no doubt is the low status, relatively low pay, and poor working conditions of school teaching compared with other jobs in the formal sectors of Pacific island workforces. To the extent that the problem is compounded by inadequate training facilities, aid donors are in a position to help. Yet, as noted earlier, Australian aid for teacher training in the region is small, with only Tonga and Kiribati receiving aid for this purpose in 1986-87.
### Table 27
Estimated proportions of sponsored post-secondary students from Pacific island countries (PICs) studying in Australia, 1987-88

<table>
<thead>
<tr>
<th></th>
<th>AIDAB-sponsored students</th>
<th>Private subsidized students</th>
<th>Proportion of AIDAB-sponsored students (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>67</td>
<td>750</td>
<td>8</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>29</td>
<td>13</td>
<td>69</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>10</td>
<td>5</td>
<td>66</td>
</tr>
<tr>
<td>Tonga</td>
<td>43</td>
<td>65</td>
<td>40</td>
</tr>
<tr>
<td>Western Samoa</td>
<td>53</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>Kiribati</td>
<td>7</td>
<td>-</td>
<td>28</td>
</tr>
<tr>
<td>Other PICs</td>
<td>13</td>
<td>33</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>222</strong></td>
<td><strong>866</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>


There would seem to be a strong case for increased assistance to improve both the quantity and quality of teacher training, for example through inservice training, the upgrading and expansion of teacher training facilities in the region itself, and the provision of programmed training awards specifically for teacher training. In some of these cases the skills of teachers could be upgraded in ways that did not necessarily lead to a specific qualification. Some of these issues are touched on further below. It should be noted also that increased emphasis on teacher training in isolation could be unproductive unless teachers are also provided with appropriate curricula and support materials. In other words, delivery of teaching services must be seen as a package containing a number of interrelated elements, the lack of any one of which could seriously hamper the productivity of the others.

Post-secondary Training. Australian aid to the South Pacific for training purposes is very comprehensive, ranging from on-the-job training in association with capital works projects in the production and infrastructure sectors, to the payment of expenses incurred by Pacific island students undertaking postgraduate study in Australia. Aid to Pacific island countries for training purposes is of three types (not counting on-the-job training which is regarded as part of project aid and does not fall within the ambit of aid for educational purposes):

- **sponsorship**, that is, the payment of a student's travel expenses, living costs and tuition fees while he or she is studying in Australia, in his or her own country, or in a third country;

- **payment of overseas student cost subsidy**, payment of the overseas student charge (OSC) levied by the Australian government on all overseas students studying at Australian tertiary institutions (and, from 1987, in colleges of technical and further education and secondary institutions as well); and

- **payment of overseas student charge**, payment of the overseas student cost subsidy.
Let us focus first on the latter two types.

The third type of aid accrues to all overseas students whilst the OSC is set at less than ‘full-cost’ levels. Aid under the second type accrues specifically to students from the Pacific island countries and Papua New Guinea, since the overseas student charge is waived in their case. Thus, no Pacific island student studying in Australia, whether private or sponsored, pays anything towards the resource costs of his or her education. Taken together, aid under the second and third types accounted for about A$8 million in 1986-87, or nearly 60 per cent of the total aid for training purposes to Pacific island countries in that year. Periodic changes in the overseas student charge make no difference to the overall level of assistance to Pacific island students, merely shifting the balance between the second and third types. Hence over half of Australia's aid to the region for training purposes is aid over which AIDAB has little or no direct control.

Figures from AIDAB sources do indicate clearly that the great majority of Pacific island students studying in Australia are private students. As Table 27 shows, 80 per cent of the places occupied by Pacific island students in Australian post-secondary institutions, even though they attract substantial levels of aid, do not come under the aegis of AIDAB, the body providing the aid.

Applications from these students are processed in the normal way through the Overseas Student Office of the Department of Education, but no control is exercised over the courses they enrol for, and no monitoring of these students’ progress is conducted, other than by the institutions themselves. Moreover, no follow-up (tracer) evaluation of this important aid item appears to have been undertaken.

No AIDAB sponsorship is available to Pacific island students at the secondary level, but in the tertiary and vocational sectors a variety of forms are provided. Awards for study in Australia have been available until recently for students undertaking Australian Development Assistance Courses and for other selected undergraduate and postgraduate courses in universities and colleges of advanced education, as well as some offered by colleges of technical and further education. Training assistance is also given for a wide range of courses not leading to formal qualifications, mostly short ad hoc courses conducted by colleges of technical and further education and other public and private training bodies, and by AIDAB’s own International Training Institute, which is now re-named the Development Training Group of the AIDAB Centre for Pacific Development and Training. Development Training Group courses are mostly in the fields of education and administration, whilst the other ad hoc courses are generally in the trade and technical areas.

Awards for study in a student’s own country are available, chiefly in the field of teacher training, to enable teachers in Pacific island countries to upgrade their teacher qualifications and to undertake
inservice training. Awards for study in a third country are also made available to Pacific island students at the tertiary or immediately pre-tertiary (foundation) level at the University of the South Pacific (which also has its own separate awards), at other Fiji-based institutions such as the Fiji School of Medicine or the Regional Telecommunications Training Centre, and at tertiary institutions in Papua New Guinea, such as the University of Papua New Guinea and the Papua New Guinea University of Technology.

The spread of courses undertaken by AIDAB-sponsored students is quite wide, as can be seen from data assembled in Table 28.

The importance of engineering and business as areas of study is noteworthy, as is the relatively low proportion undertaking courses in the education field.

These considerations raise the question of the appropriate mechanisms and criteria for determining the distribution of training sponsorship between Pacific island countries, the destinations of students, and the courses that they follow. Aid for training purposes is nowadays required to be incorporated into the broader context of the total education aid package which Australia provides to each recipient country, and this in turn is meant to be integrated into Australia’s overall aid program for each of them. The Country Training Package is

The Country Training Package is an approach to co-ordinated assistance to education

the basic tool for programming education and training assistance in a country program. It represents AIDAB’s response, over a multi-year period, to the priority development training needs of a country in designated sectors, in key fields of activity and in key institutions. It ensures that a significant and predictable volume of assistance is set aside for training in the overall country program (AIDAB 1988c:1).

Table 28 AIDAB sponsored tertiary students from Pacific island countries (PICs) by field of study, 1988

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitality and transport</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>Agriculture</td>
<td>28</td>
<td>9.5</td>
</tr>
<tr>
<td>Architecture</td>
<td>22</td>
<td>7.4</td>
</tr>
<tr>
<td>Arts</td>
<td>39</td>
<td>13.2</td>
</tr>
<tr>
<td>Business</td>
<td>52</td>
<td>17.6</td>
</tr>
<tr>
<td>Education</td>
<td>25</td>
<td>8.5</td>
</tr>
<tr>
<td>Engineering</td>
<td>61</td>
<td>20.6</td>
</tr>
<tr>
<td>Health</td>
<td>30</td>
<td>10.1</td>
</tr>
<tr>
<td>Law</td>
<td>5</td>
<td>1.7</td>
</tr>
<tr>
<td>Science</td>
<td>32</td>
<td>10.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>296</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The task of seeing that training aid to Pacific island countries is programmed in this way, along with all other components of aid to these countries, could be undertaken by the Pacific Regional Team. In practice, however, the small size of the individual countries, the differences that exist between them in their requirements, the lack of clear guidelines as to what training aid should be trying to achieve, and the competing interests of the relevant educational institutions, have tended to inhibit the development of programmed training aid, especially for training in Australia or a third country, for any Pacific island country.

The initial nomination of candidates for training assistance is made by the Pacific island governments, through their respective nominating authorities, which also stipulate the sorts of training they would like students to undertake. AIDAB screens these applications and places the selected candidates in whatever educational institutions it thinks appropriate and which it can get them into. 'Appropriate' here generally means 'can best provide the sort of training required' and/or 'is the one the student is most likely to be successful in'. However, a particular course might also have been chosen for a student because it is considered desirable that Pacific island students should be spread around the educational institutions in Australia or in the region, or concentrated in particular areas. Such strategies can be incorporated into the country training packages. AIDAB can also determine the level of a student's course (for example, degree or diploma) according to its assessment of the student's academic background and chances of success.

The amount and type of monitoring received by sponsored Pacific island students during their training depends upon the location and type of course they are undertaking. Students studying in Australia receive much more than students going to third countries. The regional offices of AIDAB can keep a close watch on those students in their own areas. However, there appears to be no systematic collection and analysis of data on student progress in Canberra. Only anecdotal and impressionistic information appears to come in from the field. For students in third countries AIDAB has to rely on the institutions in Fiji and Papua New Guinea to keep them informed, but no systematic monitoring takes place, and what is done does not appear to be integrated into any overall appraisal of the effectiveness of training aid. In some cases failure rates are known to be extremely high. The economic waste and personal stress associated with such failure need no emphasis and point clearly to an urgent requirement for improved selection and monitoring procedures.

Once Pacific island students have completed their courses, or once they have ceased to be sponsored by AIDAB, contact with them is lost. There are no procedures for evaluating the effectiveness of the training they have received. There is no way of telling, for example, how many students return to their own countries upon completion of their courses,
obtain employment in areas for which their training most suited them, or use their training to obtain more highly paid jobs outside the region. (See Western Samoa/New Zealand Ministry of Foreign Affairs 1987) for a study in this area.) It is apparent, therefore, that there exists no means of judging the impact on Pacific island countries of a major portion of Australia’s educational aid, and hence no way of providing the feedback mechanisms necessary to adapt that part of the aid program to changing circumstances.

These considerations suggest that more effective procedures need to be introduced in providing aid for training purposes to the Pacific island countries. Moves towards an integrated system for selection/monitoring/evaluation of students should be stepped up and encouraged, with mechanisms built in to allow adaptation of the system over time as experience accrues. In this process it is very desirable that aid policy be coordinated with Australia’s overall policy towards overseas students. Hence the ‘integrated system’ referred to above should embrace private as well as sponsored students, to the extent that it is desirable and possible to regulate private student movements.

Regional facilities at the tertiary level. The major expression of regional cooperation in the provision of within-region tertiary educational facilities in the South Pacific is the University of the South Pacific, whose headquarters are in Fiji. Australia has been involved with this University from the outset, and is now its most important financial supporter outside the region. Of the University’s total recurrent budget, 10 per cent is financed through aid, mainly from Australia and New Zealand. Australian aid for recurrent purposes is primarily intended to cover staffing assistance, educational program development, and contacts between staff at the University of the South Pacific and academic staff in Australia. In addition, Australian aid provides for capital project funding for construction of new buildings and campus upgrading, and for support for a curriculum development adviser. A separate appropriation is made for third-country awards tenable only at the University of the South Pacific.

Australian aid to this University has grown from just over A$0.5 million in 1976-77 to nearly A$5 million in 1986-87. As we saw in Table 26, this latter amount represents just under one-quarter of all Australian bilateral ODA for education to Pacific island countries in that year. There has been considerable debate over the years as to whether aid for the establishment or upgrading of the University’s extension centres in Pacific island countries outside Fiji should come out of the bilateral aid allocation to the Pacific island countries in which they are located, or whether it should be funded from the University’s own aid appropriation. The current position is that it comes out of the latter.

The small size of the market for post-school educational services in the Pacific means that some form of regional cooperation is the only possibility for reaping at least some scale economies in the delivery of
teaching outputs. Although individual countries might wish for their own independent universities for political and prestige reasons, the economic arguments all point to regional level facilities. Even so, in the short run, costs per student are likely to remain higher than in Australian or New Zealand institutions, and the development of academic standards to international levels will continue to be difficult. Nevertheless, long-run arguments point to the desirability of local (that is, regional) capacity at the tertiary level, and the University of the South Pacific clearly provides the basis for achieving this, provided the existing anomalies in its organization and financing are resolved, and a means established for rational planning in both academic and administrative areas.

At the same time there is considerable scope for the development of strong, viable post-secondary community colleges in all but the smallest countries of the region, offering a wide range of technical, vocational and academic courses tailored to suit the needs of each country, and coordinated to share facilities and to exchange students wherever possible. Such colleges could be expected to make a particular contribution towards teacher training, health-worker training, other vocational and technical training, preparation for formal tertiary entry at the University of the South Pacific or elsewhere, and non-formal education. Their focus might change over time, and their range of operations should be kept flexible to accommodate such adjustment, although they should not be allowed to duplicate areas and levels of training best handled by the University of the South Pacific. The development of such a network of facilities could become a major initiative for Australian aid in the immediate future.

These suggestions are consistent with the recommendations of AIDAB's own recent review of the University of the South Pacific (Johnstone et al. 1987). The review sees a 'collaborative' model for development of post-secondary facilities in the region, in which the University of the South Pacific concentrates on higher-level teaching, research and consultancy, with other within-country institutions being developed in the region to cater for a variety of broader vocational, technical and other educational needs at the post-secondary level. The need for coordination is stressed in this review, and a program for Australian aid participation in this process is laid out, involving a continuation of direct aid to the University of the South Pacific at a somewhat expanded level, and an approximately equal amount for 'national assistance' to help national governments 'assume their rightful responsibilities in the resourcing and/or the operation of education and training activities basic to the social and economic development of their countries'. The targeting of this aid is not specified, though it is to be 'focused on identifiable high-priority, fixed-term projects' (Johnstone et al. 1987:29). The need, advocated earlier in this study, for proper appraisal procedures, placed in the context of an articulated...
Vocational and technical education — an important focus for Australian aid

Technical advisers train local workers in routine maintenance — but local workers not equipped to tackle major malfunctions

Technical training facilities expensive to set up and maintain — but courses inappropriate for Pacific island conditions if trainees study in Australia

Regional basis for technical and vocational training appropriate

overall aid strategy for educational development in the region, will be of prime importance if this recommendation is to be put into effect.

Vocational and technical education and training. Assistance with the development of the range of technical and trade skills needed both in the modern and in the traditional sectors of Pacific island economies, especially for application in small-scale labour-intensive production processes, is an area where aid can contribute significantly to the economic development of South Pacific countries, and indeed this has been an important area of focus for Australian aid. However, considerable difficulties have been encountered.

The sort of training provided by technical advisers attached to aid projects in the production and infrastructure sectors has largely been confined to that needed to enable local workers to run the projects after the Australian input has ceased. This can sometimes mean simply teaching islanders how to operate any machinery involved, and perhaps undertake routine maintenance. However, in a number of cases in the past, the training, tools, workshops and spare parts, needed to diagnose and rectify major malfunctions have been lacking, and the Pacific island countries have not been able to provide the necessary back-up themselves. In these situations the effectiveness of whole projects can be seriously impaired.

Technical training facilities are often expensive to set up and maintain, especially if staffed by well qualified instructors, and if they are to provide adequate follow-up refresher and extension services. The small scale of most Pacific island countries does not warrant setting up the facilities to cover all trades and technical areas in-country. If trainees are required to go off-shore to undertake their training, the question arises as to the best place for them to go. There are problems if they are brought to Australia. Secondary technical colleges and colleges of technical and further education are oriented to Australian requirements, and may not always be able to give islanders the sort of training that will prepare them for the conditions they will face back home. Specific courses tailored to Pacific island needs can overcome some of these problems but cannot be relied upon to cover all fields. In addition, such courses miss out on one of the principal benefits of courses in Australia, namely the interaction between Australian and Pacific island students. For example, courses conducted at the Development Training Group which are solely devoted to meeting the requirements of Pacific island countries have the effect of isolating their students completely. Moreover, the Development Training Group is clearly limited in its facilities and staffing, and cannot always respond with as much flexibility as is required.

Thus, it can be suggested that technical and vocational training are strong candidates for development along regional lines, and that AIDAB has a responsibility to foster a high degree of cooperation between Pacific island countries. This is of course already well under-
way, as for example in the Regional Telecommunications Training Centre in Fiji. Australia has strongly supported these efforts. Future developments in aid to this sector should focus even more upon such initiatives. In addition, however, much more attention should be given to encouraging and supporting training carried out in conjunction with employers in both the private and public sectors. Technical and vocational education that contains a strong element of on-the-job training can be shown to be far more effective than when the on-the-job component is lacking.

Finally, technical and vocational education and training, like more general academic schooling, suffers enormously when those doing the teaching and instructing are themselves inadequately prepared for the job. The provision and/or the financing of the training of technical and vocational teachers and instructors is an area where Australia could make a greater contribution in the future.

**Educational administration.** A problem area for most Pacific island countries, especially the smaller ones, lies in their administrative and managerial capacity to plan and implement policies for rapid educational development. Despite the existence of trained and experienced administrators in some countries, the task of planning and coordination in times of change is daunting, and the lack of adequate skills and infrastructure constitutes a significant constraint. Imaginative schemes exist which Australia could pursue for upgrading managerial skills in the region, for example by short- or medium-term secondments of expatriate personnel to assist in setting up or extending local educational planning units and to train staff in running them. In due course such units could become very important in policy formulation in key areas such as educational financing (including the use of fees), and the promotion of equity in educational opportunity.

**Student certification.** A perennial difficulty faced by employers and educational institutions is the problem of judging the standards of ability and achievement of students presenting themselves for employment or for progression to higher levels of education. The lack of objective standards for student assessment which are comparable across countries in the region and which can be recognized in other countries such as Australia is a serious constraint on educational development. Australia could assist in remedying this problem by supporting a regionally-based system of certified standards in education, based on graduated sets of curricula in core subjects such as English, mathematics and science, and subject to a common objective means of assessment, including formal external examinations. Such a system might make it possible for Pacific island students to qualify for a series of graded certificates marking the level of achievement at various stages in their schooling. The aim of such a system would be to provide students, their parents, their teachers, those involved in enrolment at educational institutions, student sponsors such as AIDAB and prospective employers, whether they be in the students’ own country,
Importance of sustainability in aid programs

Sustainability in educational aid programs
- capacity to staff and maintain new schools
- willingness of recipients to accept recurrent costs

Sustainability in training programs
- students need good basic skills to succeed in training undertaken
- training should be relevant to labour market needs of home country

elsewhere in the region or outside, with clear, accurate and impartial information on the standards students have so far attained, in a manner that is standardized across countries in the region.

Such a system could not be introduced overnight, and considerable research and testing would be necessary to develop it to the point of introduction. Implementation would then need to be phased over a period. The development of such a system would make a useful project for the allocation of aid funds. The body most likely to be able to develop and administer such a system is the South Pacific Board of Educational Assessment.

Sustainability of aid programs. One of the major criteria for judging the effectiveness of any development program is that of sustainability. In the context of aid projects, sustainability can be defined as the ability of the program to continue to function and to yield benefits after the donor input has ceased. Sustainability relates importantly to the capacity and the willingness of the recipient country to carry on the project on its own.

In the area of educational aid to the South Pacific, sustainability takes different forms depending upon the type of aid in question. With capital works projects, such as new schools, sustainability would require it to be shown that the recipient government could continue to staff and maintain the schools after completion. A sustainable curriculum development assistance program would require developing and printing materials and curricula that could be handled within the available human and financial resources of the recipient country's education system. Similar considerations would apply to programs designed to raise the administrative and planning capacity of educational systems. In all of these cases, the willingness of recipient governments to accept full responsibility for provision of recurrent costs of projects is likely to be one of the key elements in determining sustainability.

The notion of sustainability is somewhat more difficult to apply to aid-assisted training programs. If, however, we can take it to mean the student's ability to apply in full measure in his or her own country the training received with Australian assistance, then two factors are important. The first is the extent to which the student is prepared for the course which he or she undertakes, and has the ability to take maximum advantage of the training received. Here we come back to the pivotal role played by primary and secondary schooling in providing students with the basic skills necessary for future study. The second factor is the extent to which there are jobs available in the student's country that require the training undertaken. In this respect, training is likely to be more sustainable if it is matched as closely as possible with the skills that are perceived to be needed in the foreseeable future. However, this does not mean that training programs should be based on slavish adherence to precise forecasts of labour force requirements. It is now generally recognized that labour force planning provides at
Sustainability enhanced by integration of training into overall aid program

— emphasizing employment-related training programs

— choosing broadly-based courses which enhance student’s employment flexibility

Nevertheless, there are a number of things that can be done to improve the potential for sustainability of training programs in the sense discussed above. First, training can be integrated into the overall aid program to a particular country, so that it can be tailored to meet the job creation aspects of the total program. This is something that is already being worked upon in Australian aid programs to Pacific island countries. Second, greater emphasis can be given to particular employment-related training programs (inservice, staff upgrading, employment release, employer-nominated schemes) than to widespread pre-employment training. Third, whatever pre-employment training assistance is provided should be aimed towards those courses which are broadly based, with emphasis on multi-skilling, and hence which enhance the student’s flexibility in employment. Pre-employment training should in general be oriented away from those courses that prepare students for only a limited range of occupations.

Conclusion

A wider perspective

In this study we have looked at the pattern of Australian aid for education to Pacific island countries over the last ten years. We have noted the importance of education as an avenue of provision of aid to the region, and pointed to the significant and growing volume of resources committed by Australia in this direction. In this final section we draw attention to some general points that should be borne in mind in interpreting the data presented in this chapter and in looking towards the future.

Firstly, it would be wrong to interpret the problems and difficulties facing the Australian aid program to Pacific island countries that we have highlighted in this study as being unique to this sector, to this region, or to Australia as an aid donor. In fact, a number of the complex issues that we have discussed bedevil aid programs by most major donor countries in most parts of the developing world. For example, in the educational field, bilateral aid flows from donors to recipients in a number of parts of the world have been biased towards the tertiary level.1

Furthermore, recipient governments are sovereign nation states with their own development agendas, into which an aid program must

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1 As the World Bank has noted: ‘Although no comprehensive statistics exist on the distribution of total educational aid by level of education, it is estimated that as much as 80 per cent of the aid has been allocated to the support of secondary and higher education, whereas relatively little has gone to primary and out-of-school education’ (World Bank 1985a:75).
be integrated. Thus, as we have noted earlier, the observed pattern of aid distribution between educational levels in Pacific island countries owes as much to the wishes of recipient governments and their constituents as it does to the views of the donor as to desirable development paths. For the future, this observation suggests that there will be continuing restraint on the capacity of Australia, or any other donor, to redirect aid resources in ways that might be judged more beneficial from an external point of view.

Thus, the task of donor countries, who have no wish to see scarce aid resources squandered, yet who desire above all to respect the sovereign rights of recipient governments, is to find ways in which a harmony of interests can be given expression through the aid program. Australia has in fact a creditable record of seeking to devise aid strategies in the education area that meet these requirements, through a variety of measures including: regular high-level consultations between AIDAB specialists and Pacific island governments; planning missions which seek to identify needs and produce an ongoing schedule of development activities; regular meetings with other donors, especially Japan and New Zealand; use of specialists from both within and outside AIDAB to identify needs to carry out feasibility studies, and to prepare wide-ranging country reports and issues papers; joint arrangements with personnel from Pacific island government departments for project evaluation and management; and development of appropriate monitoring procedures. There is ample scope for building on these and other means of pursuing the joint interests of Australia as a donor and Pacific island countries as recipients of educational aid in the future.

Secondly, it is useful to reiterate that many of the problems noted in this study concerning the effectiveness of aid for post-secondary training derive from inadequacies at earlier stages of the educational cycle. These shortcomings arise from a number of sources, including the problems of educational quality at primary and secondary level in the region, the lack of comparability between standards of curricula in Pacific island countries and curricula at comparable preparatory levels in donor countries, an insufficient standard of English-language preparation amongst potential trainees, and sometimes a lack of motivation on the part of recipient students. These considerations help to explain some disappointing results in aid-assisted training programs in the past, and give added weight to the sorts of arguments expressed in this study for a reorientation of some aspects of the aid program in the coming years.

Finally, a basic issue in any development context is the extent and strength of the in-country infrastructure which has to support an aid program. As noted in this chapter, the geographical problems alone, quite apart from lack of institutional development, present serious obstacles to implementation of effective aid programs in Pacific island countries. To rectify infrastructural problems requires both long-term
planning and the commitment of substantial resources, probably
larger volumes of resources than can be mobilized by a single donor.
The scope for joint aid and lending programs in this area clearly needs
further investigation.

Over the decade to 1987-88, Australia spent over A$100 million at
1987-88 prices on direct aid to education in the South Pacific. Al-
lowance for the implicit student subsidy, which was not included in
the aid statistics before 1984-85, raises this figure by at least a further 25
per cent. Yet, notwithstanding some good results in particular cases,
the overall impact of these aid flows has been far less beneficial than it
might have been. The distribution of funds amongst alternative types
of aid and amongst educational levels does not appear to have been
based on any thoroughly worked-out strategy of where the Australian
aid dollar could, at the margin, yield the highest benefit. (In this
context, ‘benefit’ should be interpreted in the manner of social benefit-
cost analysis, to include not just narrow financial consequences, but
also broader social, political and cultural effects.) As a result the pat-
tern of Australian aid for education in the Pacific has been at best ad
hoc, at worst ineffective.

The Australian government, through its aid agency AIDAB, com-
mands considerable expertise in planning and decision-making in
these areas. At the present time these administrative resources cannot
be deployed to best effect because so much of current Australian aid
for education is beyond AIDAB’s influence or control. A re-thinking of
educational aid could give AIDAB a clearer and more effective role in
directing and monitoring Australia’s aid effort in the educational field.

There are three interrelated areas where improved procedures are
necessary:

- the adoption of more soundly-based means for determining the
  overall level of aid to be provided for educational purposes in the
  Pacific;

- the implementation of more effective means for identifying the
  broad avenues for educational aid that are most productive in
  economic and social terms in particular countries, and for formulat-
  ing more precisely the specific aid strategies to pursue these
  objectives; in these processes it is imperative that the countries them-
  selves be directly involved in project identification, to avoid the
  suggestion that development strategies are being imposed from
  outside in accordance with some supposedly superior model; and

- the development and adoption of improved methods for data
  gathering and reporting, for monitoring of progress within given aid
  programs, and for evaluation of the effectiveness of specific
  programs while they are going on and after they are completed.
It would not be possible, however, to make immediate progress on all these fronts, and in some areas further research will be necessary before action can be taken. For example, it would be useful and timely for immediate research to be directed towards evaluating, in a broad social benefit-cost context, the potential 'productivity' of educational aid under major functional classifications in different countries or groups of countries in the region. In this way a framework could be built up within which more specific project identification studies could be undertaken.
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In recent years rates of economic growth have been low in the island nations of the South Pacific. Shortages of educated labour are an important contributor to poor economic performance. This volume brings together a series of studies on educational development in the region. An overview surveying major issues of curriculum and financing is followed by an examination of ethnic differences in educational attainment in Fiji. The next study contrasts the curriculum policies being followed in Western Samoa and Tonga. This is followed by studies which survey recent policy developments in Vanuatu and evaluate the role of fees for education in the Solomon Islands. The volume concludes with an evaluation of the past and future role of Australian aid.

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