



The quality of education in the South Pacific

C.D. Throsby and K. Gannicott

This article is based on *The Quality of Education in the South Pacific*, Islands/Australia Working Paper No. 90/9, National Centre for Development Studies

Educational quality: a good investment

Although it has long been established that investment in education has rates of return comparable with other forms of public expenditure, it is being increasingly recognized that there exists a trade-off between increasing the quantity of education (i.e. expanding the number of enrolments) and pursuing improvements in the quality variables.

Educational quality refers to variables such as the training and standards of teachers, the supply and quality of teaching materials (for example, textbooks), the standards of school buildings and facilities, the health, nutritional status and prior learning of students themselves, and the nature and efficiency of educational administration and infrastructure. Twenty years ago the prevailing view amongst educationists was that quality had little direct influence on educational outcomes. Since then this view has given way to an active interest in quality issues owing to changing economic circumstances and 'educational awareness':

- Tightened budget constraints have forced governments in many developing countries to reassess spending priorities and to seek ways of improving educational efficiency by attending to such quality variables as teacher training, textbook provision, and the effective use of school buildings and facilities.
- Many governments have become aware that the rapid expansion of enrolments during the 1960s and 1970s was

achieved at the expense of educational quality and that the time is right to shift the balance back in the other direction.

- Improved social and economic equity is an explicit goal of virtually every developing country; providing more equitable access to education to traditionally disadvantaged groups, especially girls, the rural poor, and children from religious or ethnic minorities, is not just a matter of creating school places, but is inextricably linked with the quality of education provided.
- Progress has been made in dealing with problems of data and methodology in the analysis of quality issues.

It is now well established that the pay-off to quality improvement in education is high. The problem from the policy standpoint is to determine which specific aspects of quality investment should take priority. Educational administrators need to know whether the highest returns are to be gained from improved teacher training, providing more textbooks, constructing or equipping more laboratories or workshops, or from some combination of such measures. To consider this question, ten hypotheses have been formulated, based on current research, which encapsulate the state of thinking on quality issues. They are presented here in no particular order of priority.

- *Trained teachers make a difference.* In many developing countries, shortages of trained teachers are so widespread that underqualified persons are frequently employed as teachers, especially in primary schools and in remote areas.

- Low levels of teacher quality are directly linked to low levels of student achievement.
- *Class size is not relevant.* A number of developing countries have attempted to improve school quality by reducing student to teacher ratios. Yet, research on the relationship between class size and student achievement has shown that, within a reasonable range of the median class size, students learn just as well in larger as in smaller classes.
 - *The provision of instructional materials is one of the most cost-effective ways of raising the quality of education.* The evidence on the importance of textbooks and other instructional materials in developing countries is overwhelming. Yet instructional materials are generally the most neglected input into the educational process, especially at the primary level, and especially under conditions of budgetary restraint when expenditures on materials are frequently the first to be cut. These two facts—contribution of textbooks to learning and low levels of current provision—indicate that returns at the margin to increased supply and improved quality of materials, especially textbooks, are likely to be very high. Indeed, expenditure on textbooks is likely to be one of the most cost-effective means of quality improvement available in developing countries.
 - *Education is most effective if initial instruction uses the mother tongue.* The national language is a matter of great political and social importance in many countries. If the national language differs from the mother tongue, the educational authorities may be faced with a difficult choice in deciding on the language of instruction at elementary levels of schooling. Research suggests that, on educational grounds, there is no clear answer to this question, though recently the view appears to have hardened that primary instruction in other than the mother tongue is detrimental to student performance.
 - *Lavish buildings and equipment will not raise quality.* While there is a strong case for adequate school buildings and equipment, there is no evidence that lavish facilities will result in improved student performance. Furthermore, the construction of buildings to international, rather than local, standards and the use of high-technology teaching aids (such as television, video recorders and computers) have not been shown to be more effective than other more basic means of raising school quality. Aid programs often provide for buildings and equipment at donor country standards yet fail to include basic teaching materials.
 - *Curriculum reform will not necessarily raise educational quality.* Curriculum reform aimed at introducing a stronger vocational component into schooling has generally failed to meet expectations for two main reasons. Students' vocational aspirations are determined by innate preferences and by wider economic incentives; the belief that these aspirations can be altered by massive changes in school curricula has little empirical justification. Also, it is now accepted that vocational skills are taught more effectively in the work environment than in school. Thus, the prospect of increasing the output of skilled workers by providing specialized vocational curricula in secondary schools is largely illusory.
 - *Examinations are a useful way of monitoring school quality.* Examinations administered outside individual schools are very good indicators of quality and can themselves help in raising quality levels by providing a monitoring and feedback function for staff and students. However, examinations can be misused, as, for example when the teaching program becomes geared to the examination which becomes merely a hurdle to the next level of schooling, or when the numbers of students passing is set as a predetermined fraction of those sitting.
 - *Healthy, well-fed children learn better.* The adverse effects of poor nutrition and ill-health on a child's development are well documented. In some countries, school-level interventions are practised, such as feeding programs and parasite treatment measures, with consequent improvement in school performance.
 - *Amount of learning time affects educational outcomes.* The length of the school year, within-school time allocation, and unscheduled interruptions to teaching are related to student perfor-

mance. Other things being equal, longer learning times mean improved educational achievement.

- *Quality depends on good decentralized educational management.* Good educational management underpins all the other aspects of educational quality, whether at the central, regional, local or school level. Research suggests that *when the local infrastructure is strong decentralization of educational management can lead to improved performance.*

Costs and funding

Many developing countries face problems of low levels of educational funding combined with limited scope to expand educational finance from central government resources. There are four main sources of increased educational finance.

- At the central government level, it may be possible to make budgetary reallocations or to investigate new sources of revenue.
- At the local level, financing of education increasingly involves the raising of local taxes, the use of local resources such as labour and building materials, and the imposition of user charges.
- At the school level, fees or cooperative programs can be introduced involving parents, school staff and local administrators.
- Foreign aid could be an important source of additional finance for improving educational quality. However, to date, aid resources have not been widely used for this purpose, being more often directed to tertiary training, building programs and general budgetary assistance.

Educational quality in the South Pacific

This study examines the particular educational situations in Fiji, the Solomon Islands, Tonga, Vanuatu and Western Samoa. Although these countries are at different stages in the development of their educational programs, they are all faced with problems in their attempts to determine appropriate educational strategies, with quality issues playing a major role.

In the **Solomon Islands**, there have been impressive recent gains in enrolment ratios; but there are pervasive problems of educational quality at all levels. In **Vanuatu**,

the trade-off between quantity and quality of education is in sharp focus, with a clear indication that, no matter how pressing the need for expansion, priority must be given to quality improvement. In **Tonga**, the quality issue is not as stark because universal primary education and high levels of literacy and numeracy have been achieved. Nevertheless, there are some shortcomings in school quality that are reflected in lowered student performance. In **Western Samoa**, there have been some creditable achievements, but there are problems of school quality that span the spectrum of issues discussed here. Finally, in **Fiji**, quality issues are central to the relative achievements of the ethnically divided educational system. The primary and lower secondary education of the ethnic Fijian population is seriously prejudiced by poorly trained teachers, inadequate textbooks and equipment, and ineffective management. The cohort survival rates of children enrolled at Fijian and Indian schools indicate the differences in achievement (Table 1).

Table 1 Cohort survival rates by ethnic group, Fiji, 1986

Primary					
Class 1 enrolment 1981		Class 6 enrolment 1986		Cohort survival rate %	
Fijian	Indian	Fijian	Indian	Fijian	Indian
9,085	8,399	7,354	8,031	80.9	95.6
Secondary					
Class 7/Form 1 enrolment 1981		Form 4 enrolment 1986		Cohort survival rate %	
Fijian	Indian	Fijian	Indian	Fijian	Indian
6,215	7,341	3,855	4,945	62.0	67.4

Source: Calculated from Fiji Ministry of Education, *Annual Report*, Suva, 1988 pp87-98.

Analysis indicates that there are five major quality issues affecting schooling in these Pacific island countries.

- *Quality of teachers.* Many teachers in the region have received no teacher training, with the use of unqualified staff being especially prevalent in more remote locations where it is difficult to attract teachers. However, insufficient professional teacher-training is not as great a problem as the fact that many teachers themselves have inadequate formal schooling. Some secondary teachers have no more secondary schooling than the pupils they teach. Teacher education itself may, under

these conditions, simply become a process of rectifying basic educational deficiencies in the student teachers. The low professional status of teachers is an additional problem, making it difficult to attract or retain good staff. Problems of teacher quality are especially acute in Vanuatu and the Solomon Islands (Table 2), although they exist in every one of the countries under study.

Table 2 **Untrained teachers by province, Solomon Islands government primary schools, 1987 (per cent)**

Central	52
Makira	52
Malaita	48
Temotu	47
Guadalcanal	41
Isabel	21
Western	18
Honiara	8
Average for Solomon Islands	39

Source: Solomon Islands Ministry of Education and Training, *Education sector plan 1990-1994*, first draft, Honiara, 1988 p.18.

- *Provision of textbooks and materials.* There are problems of inadequate facilities and shortages of materials and equipment throughout the region. Although data are incomplete, there is sufficient evidence in most countries to point to a need for improvement in standards of school buildings. The need for more and better textbooks appears even more acute. Several countries have taken positive steps towards rectifying these problems, including the Solomon Islands, Fiji and Tonga, but much still remains to be done.
- *Instruction in the mother tongue.* Practice in relation to language of instruction varies throughout the region. In Tonga, Western Samoa and Fiji, initial primary instruction is in the vernacular language. By contrast, English is used in the Solomon Islands, and both English and French in Vanuatu. It seems likely that at least part of the reason for the higher standards of education in the first three of these countries is because of their use of the local language in the early years of schooling. Although political, cultural and social factors influence this question, it is not without important economic dimensions: the cost of main-

taining multi-language school systems is considerable, as are the costs of lowered educational performance when instruction is hampered by language difficulties.

- *Educational management.* Although there are educational administrators of high calibre in every one of the countries under review, the administrative infrastructure is frequently inadequate to provide proper support. The Solomon Islands and Vanuatu have insufficient planning capacity at the centre and an inadequate regional inspectorate. The latter problem is also present in Fiji. In Western Samoa, there is insufficient administrative support for curriculum development and evaluation. In Tonga it has been suggested that observed learning difficulties could be attributed to problems of educational management. Better administration and management are essential components of improved quality of education in the Pacific, but it has to be appreciated that investments in this area take a long while both to implement and to show any returns.
- *Curriculum reform.* In recent years, many of the island countries have invested heavily in curriculum reform. Education systems in the region, shaped by former colonial administrations to meet European-style criteria for advancement, have inherited 'academic' curricula that are blamed for many of the systems' problems. Several countries have sought to replace such curricula with more vocationally-oriented approaches at the secondary level. For instance, Western Samoa has now embarked on a reform of its school structure to try to ensure that the curricula will be 'de-academicized'. There is much in favour of adapting curricula to suit the realities of life that students will follow and to reflect local needs and conditions. However, the evidence suggests that a diversified or vocational curriculum is unlikely to result in an improved quality of schooling. In this respect, it is instructive to consider the case of Tonga which has decided to strengthen traditional academic subjects at primary and secondary levels, arguing that vocational curricula tend to entrench existing patterns of life and become obsolete too quickly.

Conclusions

Although the elements of school quality have been treated separately here, they are not independent of each other and strategies to improve quality will be less than fully effective if important complementarities between components are ignored. Raising the quality of science teachers, for example, may have little effect if the teachers do not have adequate laboratories and equipment to work with. This means that quality improvements will generally have to be delivered as a package rather than as one-off projects concentrating on a single aspect of the problem.

Strategies to improve the quality of education in the South Pacific are likely to contain most of the following measures:

- Improving the quality of teaching inputs, for example raising the basic educational standards of teachers, improving their professional status, and providing targeted in-service training programs.
- Increasing expenditure on basic teaching materials such as textbooks.
- Establishing use of the mother tongue for elementary education (although social, political and cultural factors will continue to influence decisions in this area).
- Improving educational management in the region through long-term measures.
- Focusing attention on flexibility and adaptation to local conditions with regard to curriculum reform, with particular attention being given to strengthening basic and general education.

There is also a critical need for diversification of funding sources including a more effective mobilization of local resources. Programs to improve educational quality can and should be a major focus for Australian aid in the region. The analysis of the current state of the quality of education in the South Pacific region shows that contemporary thinking regarding the role of quality in educational development has considerable application. The issue poses fundamental choices for educational policymakers in each of the island countries studied.