

SECONDARY EDUCATION IN FIJI: AN INVESTIGATION INTO SCHOOL
EFFECTIVENESS IN A CHANGING SOCIETY.

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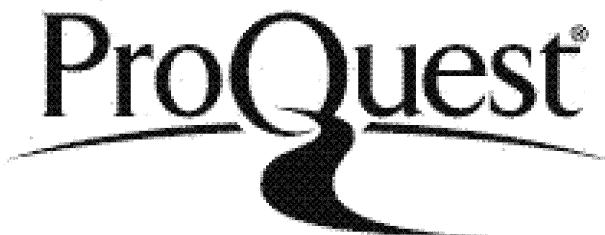


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ABSTRACT

The major issue addressed in this thesis is the quality of secondary education in Fiji, investigating the variables which affect school effectiveness. The theoretical and conceptual perceptives on the quality of education are initially examined with a review of the literature, contrasting western perspectives with those specifically related to developing countries.

The main empirical part of this thesis is based on a study of eleven secondary schools in Fiji and the Form Four students in these schools. The aim was to investigate what the critical factors are for improving school effectiveness, measured largely in terms of pupil achievement. The thesis concludes that in-school factors are more important than the antecedent variables of the individual children, such as race or socio-economic status. The stability and strength of school management, principalship, combined with the judicious use of resources emerged as the critical factors in school effectiveness. Various policy implications relating to secondary education in Fiji are drawn on the basis of these findings.

A historical study of education in Fiji from pre-colonial times to the present focusses on education within its socio-political parameters and tests the hypothesis that socio-economic and political contexts provide the demand for education.

The Grant-in-aid system of education was established in 1916 which provided for government and the people to enter into a partnership in the provision of education. This system is studied as it has proved to be both a strength and a major weakness of the Fiji's education system.

ACKNOWLEDGEMENTS.

Research in the social sciences inevitably involves many people other than the researcher. The research on which this thesis is based is no exception.

According to the Brazilian sociologist Maria Edy Ferreira, thematic investigation is only justified to the extent that it returns to the people what truly belongs to them; to the extent that it represents, not an attempt to learn about the people, but to come to know with them the reality which challenges them. (In Freire, 1972:102). I hope this is true of my thesis, for what it contains belongs to the many people in Fiji who directly and indirectly made it possible.

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Helen Tavola.
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CHAPTER ONE INTRODUCTION

1.1 The Issues Under Study.

(In the approximately 150 years since formal schooling was introduced to Fiji, education has gained importance in the national agenda. Primary schooling is now virtually universal, although it is not compulsory, and a high proportion of primary school leavers proceed to secondary school. The country annually spends some 20% of its budget supporting this system. However the quality of schooling varies greatly. The broad focus of this thesis is an investigation of policy variables affecting the quality of secondary education in Fiji.)

The major hypothesis of the thesis, on which the field-work is based, deals with the issue of whether socio-economic variables or school variables determine school achievement. This has been the topic of much debate in recent decades. The World Bank holds that school variables are of greater importance than socio-economic variables in developing countries, compared to developed countries. While social, economic and political variables provide the context for education, they are not easily altered. At the school level, it is intra-school variables which can be adjusted to improve the learning and teaching environment. Thus it is hypothesized that in secondary schools in Fiji, school variables are of major importance in explaining variation in school performance and variations in overall school

effectiveness.

An historical analysis tests a related hypothesis that the socio-economic and political contexts provide the demand for education. Prior to and during the colonial period, the demand for education gradually gained momentum with differing responses from the various ethnic groups in Fiji. As the economic and political agenda altered before and after independence, the demand for more education at higher levels continued unabated. The political upheavals of the late 1980s have altered the socio-political context, which has had concomitant effects on the education system. Previous research has related the history of education in Fiji, but has not analysed the development of education within its socio-political parameters.

A further hypothesis examines the Grant-in-aid system which is the basis of education in Fiji. The establishment of the Grant-in-aid system in 1916 by the colonial government initially allowed the rapid expansion of schooling. It is hypothesized that it is the Grant-in-aid system which is the root cause of the government's inability to effectively control the education system today and is the cause of major inequalities in the quality and provision of education throughout Fiji.

1.2 Methodology.

Studies into school effectiveness in developing countries have come to be seen as important for improving the quality of education. Although most studies do cite the Coleman/Jencks thesis of the importance of antecedent factors such as socio-economic status, it is becoming widely accepted that school variables are of great significance in poor countries, as suggested by Heyneman and others. The policy implications are crucial to such research. It is more relevant to concentrate on variables which are subject to intervention rather than situational variables which have less potential for adjustment. The central issue is to discover which educational resources or educational processes are most likely to positively affect the teaching and learning process, in situations where finance is scarce.

Colm and Rossmiller (1987) have noted that school effectiveness studies tend to fall into two distinct types of research: quantitative studies using multi-variate statistical analysis and qualitative research using case studies. Each method has certain advantages and certain inherent weaknesses and there has been much debate on this subject in the past three decades. The main criticisms of the quantitative method are problems of arriving at unambiguous results in research of human acitivities, where variables cannot generally be held constant, let alone estimated. Related to this is the controversial issue of causality which is

often assumed. A major criticism is the lack of attention paid to contextual or situational variables which may qualify data and the lack of description of processes. As Neumann has pointed out "Education does not take place in a social vacuum" (Neumann;1987:161). Campbell (in Landsheere,1982) claims that social scientists have weakened their approach by ignoring common sense explanations to cross-validate quantitative data. He maintains that "quantitative knowing depends on qualitative knowing" (Landsheere;1982:27). Qualitative studies have been criticized for their typically case study nature and the consequent lack of representativeness or ability to draw generalizations from them. The lack of 'scientific rigour' and objectivity are inevitable criticisms from empiricists.

After decades of debate, there appears to be a growing consensus that there should not be a clear dichotomy between a quantitative or qualitative research methodology. "It is now widely recognized that no single research paradigm can answer all the questions which arise in educational research" (Neumann;1987:161). An integrated dialectic to social science research methodology is gaining a wide acceptance. Keeves and Rist have summed up this approach thus: "We see quantitative and qualitative studies as complementary emphases within the research program. While both sides of inquiry have the potential to provide generalizable findings, the resource demands of the qualitative studies usually limit them to small non-representative samples. Their role then

is to provide the rich observational detail that suggests explanations for the more gross effects in the quantitative survey work, and to advance propositions for subsequent research" (in Landsheere; 1982:39).

The research undertaken in this thesis follows the methodology of the integrated dialectic. Quantitative studies are undertaken with some statistical analyses and a qualitative approach is also used to explain the specific social realities and to describe the school 'process', a phenomenon much recognized but not easily quantifiable.

1.3 The fieldwork.

The field research for this thesis took place in July and August 1988. Because of the great diversity among secondary schools in Fiji, it was decided to narrow the study down to schools that had a common factor, while at the same time including schools of different ethnic composition, religion, size and location. The common factor was that of non-selection in entry criteria.

The Grant-in-aid system in Fiji, described in detail in Chapters Three and Four, has given rise to a multiplicity of schools with widely differing characteristics. In theory, parents are able to choose schools which suit their religious or ethnic preference, or schools which are suitable because of geographic location. In practice however, especially in urban areas, the schools select

the pupils. Schools acquire their reputation largely through examination success rates, thus schools with high prestige are able to screen their pupil intake and limit themselves to those of superior scholastic ability or compatible social or religious backgrounds. In rural areas such selection is not so prevalent. Children, especially those of poorer families, are likely to attend the nearest school. Rural schools are often small and are in no position to be selective about their pupil intake. Theoretically, a wide range of abilities should be represented in rural non-selective schools.

Selection criteria are decided upon by individual schools and are largely a matter for the principal's discretion. There are no hard and fast rules regarding selection laid down by the Ministry of Education, apart from a regulation which disallows discrimination on grounds of race or religion.

The schools included in the sample are drawn from four geographic areas in Fiji. The Nadi area in the west of the main island of Viti Levu is represented by three schools: one urban, one peri-urban and one rural. Two small junior secondary schools in the rural Sigatoka Valley of western/central Viti Levu; three secondary schools in the Suva urban area and three on the island of Kadavu are the remaining areas included in the study. These 11 schools vary widely in their ethnic composition, size, location, socio-economic context and management. Six of the schools are run by local committees, one by

the Methodist Church, one by the Roman Catholic Archdiocese, one by the Church of Jesus Christ of the Latter Day Saints, one by the Muslim League and one by the government. (The actual names of the schools are not used in the thesis).

All of the Form Four students in the schools visited took part in a survey, responding to questions about their home background, parents' occupations and education, homework problems and their aspirations. In November 1988 these students sat the Fiji Junior Certificate examination and their individual results, both aggregate and by individual subject have been correlated with the information on their original questionnaires. Some 5% of all the Form Four students in Fiji in 1988 were included in the survey. 478 students took part in the survey, but only 456 of these actually sat the Fiji Junior Certificate examination and consequently became part of the final statistical analysis. The information derived from this survey is used in combination with qualitative data, obtained from interviews with principals and teachers and in some cases parents and students in the various schools, and from observation of the schools and their processes. Where possible, classroom teaching was observed.

The questionnaire consisted mainly of open-ended questions. (See Appendix One). This allowed categories to emerge from the answers given and prevented prescribed 'pigeonholing' of answers. All questionnaires were

administered personally by the researcher, enabling the questioning process to be worked through in careful stages with full explanations given for each question. This simulated the interview situation to some extent, but had the added advantage of allowing participants a degree of privacy, also allowing them to reflect as they wrote. This approach allowed a greater degree of sensitivity than the conventional style of precoded questionnaire and allowed participants to be in control of their answers, rather than conforming to external expectations.

The data from the survey was processed (using mainly the SPSS/PC+ package) which gives a strong quantitative element, but it is discussed within the qualitatively observed parameters where they occurred.

CHAPTER TWO THEORETICAL AND CONCEPTUAL PERSPECTIVES ON
EDUCATION IN DEVELOPING COUNTRIES - A
REVIEW OF THE LITERATURE.

2.1 Educational Expansion and the Human Capital Theory.

The 1950s and 1960s were a time of massive expansion of formal education systems in developing countries. Between 1950 and 1975, the aggregate increase at the primary level of schooling in developing countries was 365%, secondary level increased by 920% and tertiary by 1056%. (Hardiman and Midgley, 1982:183). Consequently, poor countries were spending vast amounts on education, both in relative and absolute terms. The increases in secondary and tertiary education inflated expenditure, as these levels were far more expensive to finance than primary schooling. In Asia total expenditure tripled during the 1960s and in Africa and Latin America, public expenditure more than doubled. (Todaro, 1977:257). Todaro also recorded that by the mid-1970s, educational budgets in many Third World nations were absorbing between 20 and 35 per cent of total government recurrent expenditures. (1977:257).

Education, through formal Western style schooling, had become firmly established as an allocator of life-chances in developing countries and demand for school places frequently exceeded supply. Parents perceived schooling

in an instrumental way: as an escape route from the drudgery and poverty of subsistence agriculture. Foster for example, observed that in Ghana, education was not sought for its own sake, but was valued mainly for the opportunities it gave for employment. "African demands for academic education had little to do with the curriculums of the schools but reflected their realistic perception of the differential rewards accorded to individuals within this occupational structure" (1965:105). Political pressure was applied, from both rich and poor, to increase the availability of education. Governments had to make choices about which levels and types of education should have the greatest support and who in society deserved access to the limited educational opportunities. (Thomas, 1983:8).)

The drive towards educational expansion in developing countries in the 1950s and 1960s was concurrent with the emergence of a school of economic theory which fully supported the notion that education was the key factor in promoting economic development. The economics of education was born as an independent discipline in the U.S.A. in the early 1960s when "economists realized that the facts of economic growth demanded a new explanation" (Mundi, 1981:23). Investment in people was its central concept and a definite link between education and economic growth was claimed. Denison (1962) maintained that increased quality in the labour force in the U.S.A. accelerated economic growth. He calculated that between 1929 and 1957, education was the source of 23 per cent of

the growth of real national income, but in the periods immediately before and after, the contribution of education would be only about half as much.

Schultz, another pioneer of what came to be known as Human Capital Theory, made similar claims based on the premise that the national income of the U.S.A. could not be explained by estimates of real capital stock alone: "economists have come upon numerous signs pointing to improvements in the quality of human resources as one of the major sources of economic growth" (1962:3). Schultz attempted to explore the costs and profits (sic) of education by comparing the total costs of education with the total of individual incomes. He also calculated rates of return of different levels of education for both rich and poor countries and he drew a number of conclusions; inter alia that primary schools are operated at the lowest cost and that rate of return is especially high from primary schools in low income countries.

Becker (1962) saw expenditure on schooling, on-the-job training and medical care as investments which would improve the physical and mental abilities of people, thus raising their real income prospects. He saw that it was increasingly evident that factors other than physical resources played an important role in economic growth. Becker, like Schultz, also looked at the opportunity costs of education and rates of return, based on the idea that investments in certain periods would bring returns

in all remaining periods. (1962:26). Rate of return analysis in education has since had substantial influence.

Proponents of rate-of-return analysis see it as a measure of the profitability of investment from the point of view of individual students (private rate of return) or from the point of view of society as a whole (social rate of return). Psacharopoulos has calculated rates of return for education for over 50 countries and has drawn some policy implications from them. He contends for example that because the average rate of return in developing countries is higher for primary education compared to secondary or tertiary education, primary education should be given top priority. Although rate of return analysis is still very influential, it has a number of shortcomings. Salaries and wages are used as a proxy for people's value or contribution and are assumed to be directly linked to their education. Detailed and comprehensive data are required to calculate rate of return. These data are often unavailable, especially in developing countries. But the fundamental flaws of rate of return analysis are more basic: equating people with commodities and the glaring omission of social and political factors.

Harbison and Myers (1964) were educational economists who looked upon investment in education as human resource development, necessary for political, cultural, social and economic development. They were critical of previous human capital theorists such as Denison and Schulz for

allegedly giving only peripheral consideration to the analysis of human resources, concentrating solely on looking at investments in education as 'economic', because they contribute to economic growth. Despite this, Harbison and Myers found "a very high correlation and presumably some causal relationship between enrollments in education (and hence investments in education) and a country's level of economic development as expressed by GNP per capita" (1964:165). They claimed that an initial heavy investment in human resource development is necessary to get a country started on the road to self-sustaining economic growth. The policy implication from this assumption was that investment in education should be directed at the tertiary level, particularly that of a technical nature. Harbison and Myers saw long-term manpower planning based on target setting as an indispensable part of planning for human resource development. Harbison and Myers wrote prolifically in the 1960s and their ideas were very influential in developing countries, especially in Africa.

Manpower planning was an offshoot of the Human Capital Theory with its basic underlying belief that skilled manpower is one of the crucial inputs of a modern economy. "The idea that a country's future manpower structure can be predicted and the forecasts used as a basis for planning the scale of education is intuitively appealing, since it appears to offer unambiguous guidance to the policymaker on how to plan educational investment" (Psacharopoulos and Woodhall, 1985:72). The weaknesses of

manpower planning soon became manifest however. Based on fixed relationships between inputs of skilled manpower and outputs and qualifications and productivity, they failed to take issues such as labour productivity and substitutability into account. Manpower planning emphasized vocational, secondary and tertiary education at the expense of primary education and did not take cost or cost-effectiveness factors into account. The criticisms of manpower planning are numerous, sharing a recurrent theme, that such quantitative estimates exaggerated the need for middle and high levels of skills and that it failed to give clear guidelines to policymakers. (Blaug, 1970; Psacharopoulos and Woodhall, 1985; Coombs:1970; Foster, 1987) The inadequacies of manpower planning were realized when manpower shortages rapidly turned into manpower surpluses. Manpower forecasts have been described by Blaug as "hopelessly inaccurate and little better than guesswork" (1983:13) and by Psacharopoulos and Woodhall as "inaccurate and unreliable"(1985:86).

Bowman and Anderson (1965,1968) were notable for applying the Human Capital Theory to the economies of developing countries. Their cross-section analysis of the world's countries in the 1950s concluded that a literacy rate of 40 per cent is necessary (though not sufficient alone) as a supportive base for sustained economic growth. They maintained that additional literacy brings little additional economic growth until literacy rates reach 70-80 per cent. They concluded, inter alia, that

education changes values and attitudes and causes a society to become 'open' and thus more likely to have vigorous development of human resources. They claimed that major economic changes cannot occur without impressive migration of human capital, bringing skills and knowledge from other societies. (1968:272).

An explanation of why the basic concept of Human Capital Theory held great appeal for developing countries is made by Colclough: "It seemed to be a matter of easy logic to translate the implications of this work to the developing world where skilled manpower was in critically short supply...the assumption was made that 'skilled manpower' was broadly synonymous with 'schooled manpower': by implication, Western modes of education were to become universal modes of skill creation, and educational investment would have to occupy a central part of investment strategy if growth was to succeed" (Colclough, 1980:2). This had great political appeal for governments of newly emergent nations. There was intense social pressure to expand educational provision and the human capital philosophy justified their actions.

International aid agencies as well as governments and planners were influenced by the body of theory which proclaimed the economic value of education. The World Bank, for example, initiated its first education project in 1962. "The justification for this investment was that education is not only a basic human right, but also a basic component of social and economic development, and

that properly planned investments in education pay great economic dividends, especially in the poorest countries" (Psacharopoulos and Woodhall, 1985:4). In 1960, UNESCO optimistically set the target of Universal Primary Education by 1980, but despite the massive expansion that has occurred, the goal was far from being achieved and, according to Psacharopoulos and Woodhall (1985:175), is unlikely to be achieved in Africa and Asia before the end of this century. In 1962, UNESCO launched a mass assault on illiteracy with the publication of a document entitled 'World Campaign for Universal Literacy'. Blaug (1970:258) noted that for a variety of reasons, this campaign was dropped in 1964, although it was later revived in a modified form.

The perceived link between education and economic development as propounded by Becker, Denison, Schultz et al. was in keeping with the then prevalent modernization ideology of development. The underpinning of the modernization school was the assumption that modern industrial economies would bring economic development and, as a result, levels of living and welfare would gradually improve. The role of education was thus to provide skilled technologists for the modern employment sector, enabling economic progress and growth. Manpower planning was a manifestation of the modernization approach as it emphasized technological and vocational education but paid scant attention to primary education.

While it is still widely agreed that education has an

important role in promoting development, the direct causal link between education and economic growth propounded by Human Capital Theorists has largely been denounced. This circular causality was an implicit assumption of the Human Capital Theory, but it was an issue not directly addressed, Blaug has been prominent amongst its critics, as he maintains that "the relationship between education and economic growth may be quite different in one time and place from another" (1970:66). He refutes the assumption that all economies are on the same growth paths and claims that "the really disputable issue about economic growth is not so much whether education is one of the sources of growth but whether it is a more significant source than physical capital or than other types of social expenditure" (1970:100).

According to Todaro, disillusionment with the ability of education to promote economic growth set in as "After almost three decades of rapidly expanding enrollments and hundreds of billions of dollars of educational expenditure, the plight of the average citizen of Asia, Africa and Latin America seems little improved. Absolute poverty is chronic and pervasive. Economic disparities between rich and poor widen with each passing year, unemployment and underemployment have reached staggering proportions, with the 'educated' increasingly swelling the ranks of those without jobs" (1977:255). Dore (1976) observed that the education explosion which had cost developing countries large shares of their budgets, had

produced a 'qualification escalation'. This caused political problems as a large mass of educated unemployed could be a threat to social, economic and political stability. Dore also questioned whether the vast majority of certificated people were educated in any sense other than the ability to pass examinations.

(By the 1970s, many developing countries were independent and had started to evaluate and assess their education systems. In the rush towards expanding educational provision, catering to political and social demands, overworked and understaffed ministries of education neither had the time nor resources to attend to matters concerning quality in education. Issues of efficiency and effectiveness became increasingly important in the 1970s, as it became clear that education was costing countries heavily financially and it was possibly not fulfilling its potential contribution to development. The economics of education changed emphasis from how education contributed to development, to how education systems could make themselves more efficient. Coombs and Hallack identified the most pressing problem of the 1970s as "how to get more and better education from the resources available" (1972:19). Similarly, Blaug asserted "The central principle of educational planning is to maximize returns, in some sense or other, from given amounts of resources devoted to education" (1970:126). Cost-benefit analysis and cost-effectiveness analysis gained credibility especially with international organizations, with the aim of making rational policy decisions.

(Woodhall, 1970). National ministries often however lacked staff skilled in cost-benefit analysis. Political and budgetary considerations more often provided the impetus for educational planning. (McKinnon, 1973). Foster (1987) noted that in the early 1970s there was a realization that macroplanning in education was a failure: "The manifest failures of macroeducational planning suggest the need for new micro- and pragmatically-oriented policies that can be rapidly adjusted to meet changing circumstances" (1987:100).

Disillusionment with education in the 1970s spawned much discussion on the issues of appropriateness and relevance and the 'deschooling' theories such as those of Freire, Illich and Berger won wide audiences. Freire (1972) for example, in a severe indictment of traditional education, maintained that creative power is annulled and thinking and critical consciousness obviated by conventional teacher-student relationships which rely on the concept of 'banking' irrelevant information. Freire proposed a liberating education which would encourage problem solving and critical investigation. Although the radical solutions suggested by Freire and other 'deschoolers' were not pragmatic, their ideas were influential in creating an awareness of the rigidity and inappropriateness of formal school systems.

Education frequently became charged with development tasks, aiming to teach traditional skills and knowledge with new 'appropriate' curricula for rural children. Bude

(1984) called such moves 'pseudo-reforms' which brought only marginal changes. Nash (1980) noted that separate development of rural education has generally failed because people reject it, as happened in Nigeria and Tanzania. The aim of emphasizing agricultural and technical skills in education was, however, not new. Colonial powers had made great efforts to encourage such non-academic skills in many colonies, but there had been a strong preference for formal academic education since the early days of formal schooling. (Clignet and Foster, 1966; Foster, 1965; Hopkin, 1977). Griffiths asserted that parents look upon schools as an escape from the hardships of rural life thus: "To establish special schools for rural children, where the curriculum deliberately attempts to keep them on the land, is to thwart their hopes and ambitions for their children and for their old age. Experience would seem to show that in most areas special schools for rural children would be completely unacceptable" (1968:16). The worth of an academic education was enhanced as it transmitted the skills and communication ability to participate in the polity of the society. An academic education also empowered people to be socially and economically mobile, which did not necessarily entail a rejection of their culture and traditions, but gave them a wider range of options.

The colonial perception of education as an activity for the elite changed as countries became independent. Education came to be seen as a right and the issue of

equity became increasingly important. At a conference of the International Labour Organization in 1976, the Basic Needs Approach to development was conceived. Although its protagonists differ as to what exactly constitutes Basic Needs, they consistently advocate education as a primary need. Prominent Basic Needs advocates Streeten (1981) and Stewart (1985) place paramount importance on education as being crucial in the development process. The Basic Needs Approach has been likened to the Human Capital Theory but its differences are significant. While the Human Capital Theory saw education as causally linked to economic growth, the Basic Needs Approach emphasizes externalities such as improved awareness of health and nutrition and reduced fertility as well as improving the potential for economic growth. (Ul Haq, 1980; Burki, 1980; Streeten, 1980; Isenman, 1980).

Despite the rampant quantitative expansion since 1950, education systems showed high wastage and repetition rates and many children were not attending school at all. "Dropout and repetition appear to be most common among students from a low socio-economic background and are more prevalent in rural than in urban areas, and among females than among males" (Psacharopoulos and Woodhall, 1985:209). Attention was turned to the issue of improving the quality of schooling, as a means of improving both equity and efficiency. "What enthusiasm survived for educational reform came now increasingly to be devoted to qualitative reforms rather than quantitative expansion" (Blaug, 1983:8).

The rationale for improving quality was clear, but the methodology was much less clear. There was little systematic research available in the early 1970s as to what factors determined quality as conventionally measured by achievement. Some cross-national studies such as the I.E.A. studies of the 1960s indicated in a general way that school factors were more important in developing countries than out-of-school factors.(1) This was the converse of the situation in industrialized countries where studies in quality and equality of education had already become a topic of academic and political interest.

1.2 Western Research on Quality and Equality in Education.

In Western countries in the 1960s and 1970s there was a growing interest in research in the field of sociology of education. The belief that education was the great equalizer of mankind was being challenged as areas such as the relationships between home background and school achievement were explored. "The earlier optimism that the expansion of education would effectively equalize life-chances in industrialized societies gave way to a new pessimism about the possibilities of altering the distribution of incomes by educational means" (Blaug:1983:7). There was however no consensus as to the causes of these inequalities, as this section will briefly review.

The Influence of Environmental Factors.

Sociological thought prevalent in the 1960s perceived environmental factors external to the school as strong determinants of achievement. Studies especially in the U.S.A. sought to show that schools themselves had little influence on students' performance.

A major study in the U.S.A by Coleman et al., commissioned by the Civil Rights Act of 1964, drew attention to social inequalities which were perpetrated and not eliminated by education. The research measured 'inputs' to the school system: "It used the characteristics of schools that principals, superintendents and school boards traditionally employ in comparing the 'quality of education' their schools provide" (Coleman, 1969:255), and compared these to the background of students. 'Outputs' of schools were measured using various types of achievement tests, and the relative importance of inputs was assessed. Outputs differed substantially between schools, but the overwhelming impression was that differences between actual school quality was minimal which led the Coleman team to the conclusion that "Schools bring little influence to bear on a child's achievement that is independent of his background and general social context:...For equality of educational opportunity through the schools must imply a strong effect of the schools that is independent of the child's immediate

social environment, and that strong independent effect is not present in American schools" (Coleman et al). Although the methodology of the Coleman study has been subsequently criticized, its findings challenged much of the conventional wisdom and thinking on education and it has come to be regarded as "a seminal study of the factors which influence educational achievement" (Harvard Educational Review, 1969:3).

Stimulated by the findings of the Coleman Report, Jencks et al. (1972) undertook a study of inequality in U.S.A with the aim of reassessing the effect of family and schooling. Their findings concurred largely with those of the Coleman study as they found overwhelmingly that "family background had much more influence than IQ genotype on an individual's educational attainment. The family's influence depended partly on socio-economic status and partly on cultural and psychological characteristics that were independent of socio-economic level" (1972:254). The Jencks study found qualitative differences between schools to be of minor importance in determining educational performance. The study maintains that a school's output depends largely on a single input: the characteristics of the entering children. It suggests that attempts at equalizing educational opportunities through 'compensatory opportunities' would do little, as inequalities are inherent in society.

The implications of the Coleman and Jencks studies were far-reaching. Education could no longer be seen as 'the

great equalizer', if as Jencks contended, increased equality in educational opportunities failed to affect basic inequalities in life-chances. The Jencks study stimulated much research in the 1970s and prominent among it was the work of Torsten Husen. (For example Husen 1974, 1975). Although Husen found a strong correlation between socio-economic status and achievement, he did not totally accept Jencks' view that equality could not be promoted through the school system. He differentiated between physical aspects of the home and school, and psychological aspects of home and school environments. Husen claimed that this distinction was important because physical barriers have the potential to be removed whereas psychological barriers do not. While accepting the powerful influence of socio-economic factors on education, Husen suggested various strategies which could bring about equality of educational opportunity, such as pre-school education, removing selection and opening up further education. Husen also emphasized the need to look at 'process' variables in both home and school: actually studying what goes on, rather than seeing inputs and outputs as static and unchanging. Husen's views were seen as significant for taking a fresh and slightly more optimistic look at social background and education compared to previous researchers such as Jencks and Coleman.

Influential government reports, such as the Plowden Report (1967) in Great Britain, also found associations between social class and initiative, support and

encouragement given by parents to children's school work. The Report confirmed that a more favourable attitude was likely to be associated with higher social class: "The higher the socio-economic group, the more parents attended open days, concerts and parent-teacher association meetings, and the more often they talked with heads and class teachers about how their children were getting on" (Central Advisory Council for Education, 1967:35). In its estimation of percentage contribution of parental attitudes, home circumstances and state of the school to variation in education between schools, the Plowden Report weighted Parental Attitudes 28%, Home Circumstances 20%, State of School 17% and Unexplained (sic) 35%. (1967:33). While the schools had a comparatively small influence, the 'unexplained' category is significant as it indicates the degree of uncertainty and complexity in this area.

The Genetic Determinists.

The contention that intelligence is genetically determined has been propounded by several psychologists in clear opposition to the 'environmentalists'. The contribution of these genetic determinists has had a profound influence on the long running 'nature/nurture' debate. In 1958 for example, Burt had challenged the then prevalent 'hypothesis of general ability' and he proposed that "individual differences in intelligence are hereditary or innate" (1958:5). He claimed that "the child's innate endowment of intelligence sets an upper

limit to the best he can attain" (1958:11), maintaining that 88% of variation in intelligence is due to hereditary factors and only 12% to environmental factors.

Typifying the controversy, Vernon, a psychologist contemporary with Burt, disagreed with the 88:12 ratio Burt had placed on genetic factors compared to hereditary factors. He claimed that it is impossible to set such arbitrary figures, as one can never isolate purely genetic factors. Vernon argued "...one must insist that intelligence doesn't exist until it has been shaped by environment" (1969:13). Vernon contended that intelligence is shaped by culture, especially adult values and child-rearing patterns. He rejected the clear cut dichotomy between genetic and environmental factors, proposing "We need to think in terms of an interacting system rather than the conventional antithesis between heredity and environment" (1969:14). Vernon did extensive research among different cultural groups, or as he termed them 'less civilized', 'backward' or 'primitive' peoples, and he found definite differences in intelligence between different groups compared to his norm of 'the Puritan ethic of the western middle classes'(sic). Although not a genetic determinist, the implications of Vernon's studies were basically of a similar significance: that different types of people think differently and the poor, deprived and 'primitive' are of low intelligence.

Notable among the genetic determinists of the 1970s was Jensen, who had been initially inspired by Burt. Jensen

claimed that 80% of differences in IQ are due to genetic factors and the remaining 20% are due to the interaction of genetically inherited factors with the environment. Jensen's research became highly controversial when he asserted that most of the fifteen point difference in IQ between American whites and blacks was genetically determined. Jensen claimed that genetic factors were much more important than environmental factors for blacks and whites and his experiments maintained that black children raised by black parents of high socio-economic status develop lower IQs than white children raised by parents of low socio-economic status. (Flynn, 1980). Jensen's work has been widely criticized and he has been interpreted as being a racist and supporting segregation and racial stereotyping. He has also been criticized for his extensive use of IQ tests as a measure of intelligence, as they are often perceived as being culturally biased. Jensen has strongly defended his thesis and has attempted to answer his critics, but in the highly sensitive domain of innate racial differences, his findings remain controversial.

In the context of American society in the 1960s, such research findings were often used or misused to support political causes. One of the implications of Jensen's thesis related to the issue of whether the school performance of deprived children could be improved by providing a favourable or compensatory environment. This was of great social and political relevance because at that time in the U.S.A., millions of dollars were being

spent on compensatory projects such as Operation Headstart. The assumption of Operation Headstart was that if poor black and Hispanic children were given a few years of high quality pre-school education, they would 'catch-up' to their white peers. Jensen challenged this assumption, claiming that compensatory education had little if any effect on IQ scores because it was based on false assumptions (Jensen, 1972:69). Jensen's influence was magnified because he presented his research with direct and overt implications for educational policy, rather than as abstract academic theory.

Like Jensen, Eysenck also provided strong evidence to support the 4:1 ratio between genetic and environmental influences. Jensen, Eysenck and other psychologists of the time conducted many studies of identical twins, focussing on the differences in IQ after being brought up in differing environments. Such studies invariably found environmental influence to be weak compared to genetic factors. The genetic determinists were very critical of the environmentalists - sociologists who saw a causal relationship between environment and intelligence and they called for an open discussion of the issue, even if it proved controversial: "those concerned with public policy as well as those more interested in academic questions had better consider the genetic hypothesis as an alternative to the exclusively environmental hypothesis which has dominated our thoughts for far too long" (Eysenck, 1971:151).

Although controversial, the theory of genetic determinism and other related psychological research such as that of Vernon, have been very influential. It justified the argument that different types of people think differently, and when translated into educational policy, gave sufficient grounds for the establishment of different types of schools, such as the tripartite system established by the British 1944 Education Act. In colonial situations, the fore-runners of such theory legitimized the emphasis on manual and agricultural education, because of the assumption that 'primitive' people were less intelligent. It sustained with 'scientific evidence' cultural and class stereotypes of people less able to think in a modern, rational fashion. The nature/nurture controversy will inevitably continue to spawn very polarized viewpoints, as, with so much research on human beings, there is no final answer.

The Structuralist Perspective.

The research of Jencks and Coleman revealed that socio-economic factors were key determinants of individual school achievement. These findings were not totally rejected by the structuralists, but were used as evidence to show that inequalities of capitalist society as a whole are reflected in the school system. They maintain that schools reproduce and legitimize modern class structure.

French sociologist Bourdieu (1979)(2) adamantly claimed

that formal education systems maintain and perpetuate cultural inequalities (sic). He asserts that education is not the liberating force for social mobility that it claims to be, rather it is a conservative force which "both provides an apparent justification for social inequalities and gives recognition to the cultural heritage" (1979:32). Bourdieu's thesis is that families indirectly transmit to their children certain 'cultural capital' and 'ethos'. Such values define attitudes towards education and account for unequal achievement for those whose values are not those of the dominant policy making class. Bourdieu claims that children of working class parents have fewer options because of their internalized attitudes, because of the selective system which implicitly discriminates against them and because of the pedagogy of secondary and tertiary education which conforms to the ideal of the dominant cultural heritage. Although not strongly based on empirical research, Bourdieu's work proposes hypotheses within the conflict model which were later developed both by himself and other social scientists.

Writing from an explicitly Marxist perspective, Bowles and Gintis (1976) eschewed the liberal education theory (such as that of Dewey and Mann) which proclaimed the equalizing power of schooling, dominant in the U.S.A. in the twentieth century. Bowles and Gintis contended that the education system mirrors the increasing contradictions of the larger society. They claimed that the studies of Jencks and Coleman which showed that

schools made little difference to achievement, supported their argument, maintaining that education had never been a strong force for economic equality as family background was more important in social and economic mobility. They also drew upon Jensen's condemnation of compensatory education for support, maintaining that the failure of educational reforms proved that incremental changes within the system could not assist the quest for equality until the whole economic and social structures of society had been reformed. (They disagreed with Jensen however on the issue of the influence of IQ in educational achievement, saying that cognitive capacities, whether genetic or environmental, had little or nothing to do with access to education.) Bowles and Gintis saw a direct relationship between education and the capitalist economy, claiming that "Schools foster legitimate inequality through the ostensibly meritocratic manner by which they reward and promote students, and allocate them to distinct positions in the occupational hierarchy" (1976:11). Their proposed solution to change the education system would be to have a revolutionary transformation of economic life. This would bring about educational changes - as educational change cannot be seen in isolation from other social or economic changes.

Carnoy (1974) has studied education from a neo-Marxian/dependency perspective in both industrialized and developing countries. In all education systems, he claimed, schooling was organized to develop and maintain an inherently unjust and inequitable organization of

production and political power. Carnoy asserted that knowledge itself is colonized and "colonized knowledge perpetuates the hierarchical structure of society" (1974:3). That education promotes social mobility is a myth, as schools favour children from better off homes who are better fed, verbally more articulate and who can understand the authority structure and the system of rewards and punishments. He argues therefore that schooling leads to dependency and alienation both on the personal and national levels. In developing countries, schooling was spread in the context of imperialism and colonialism and even after independence, former colonies retain economic, political and cultural dependency. Carnoy holds that post-war school philosophy in the U.S.A. and developing countries stresses individual responsibility for success and failure, rather than the injustices of the economic system. He argues that formal schooling has helped small powerful social and economic groups to control the lives of the masses, by controlling societal change. Like Bowles and Gintis, Carnoy postulates that schooling is a function of and an integral part of the capitalist social, political and economic hierarchy and cannot be separated from it. He does not however explicitly advocate revolution as a solution, rather a process of 'decolonization' in a non-hierarchical society. At the least, Carnoy pleads for an awareness of inequities, especially in education reform, so that there is an understanding of how changes benefit different groups of people.

British studies in the 1960s focussed on social class as a major determinant of educational achievement. Banks (1976) and Burgess (1986) cite numerous pieces of research (such those of Halsey, Finch and Douglas) which clearly indicate the correlation between class and educational success. The sources of inequality are seen broadly as material disadvantage and cultural disadvantage. Much emphasis has been concentrated on differences in attitudes, especially parental encouragement, different child-rearing practices and language patterns such as Bernstein's. Burgess has criticized this approach which concentrated "upon the child as the unit of analysis and carry with them the notion that educational provision is similar in all sections of society" (1986:93). Burgess and other contemporary sociologists take a structuralist perspective which sees inherent inequalities in society as a whole and which are reflected in educational inequalities and disadvantage. This eschews the static 'culture of poverty' approach which sees deprivation as an internalized psychological phenomenon (after Lewis). A structuralist approach was taken by Mortimore and Blackstone in their review of research on education and disadvantage in Britain which found overwhelmingly similar results between different studies: "that there is a strong and persistent relationship between social class and attainment in primary school, and, in particular between socio-economic disadvantage and low attainment" (1985:12).

The Importance of Internal School Factors.

The dominant opinion that schools themselves could do little to affect achievement was challenged in the 1970s by various pieces of research which highlighted influential internal factors within school systems. The Coleman and Jencks' reports stimulated a number of studies in the U.S.A. Dougherty (1981) reviewed four such studies (by Heyns, Brookover, Rosenbaum and Persell) and found that while all of them took differing perspectives, they each conclude for different reasons that schools do affect educational outcomes and can have a positive effect on social inequality. The authors of these reports do not claim that schools can eliminate inequality, but they imply that there is scope within educational reforms to reduce inequalities.

A longitudinal study carried out in 12 Inner London secondary schools in the 1970s challenged the viewpoints of Coleman, Jencks and the Plowden Report which had all placed a low weighting on the role of the school in educational attainment. (Rutter et al., 1979). This research asserted that schools do make a significant difference to children's performance and behaviour. Rutter et al. disregarded the physical environment of schools and concentrated on the social climate and social organization, in their words, the 'ethos' of a school. "The suggestion is that the impact lies in the characteristics of the schools, in the formal and informal rules they have and in their internal organization rather

than anything directly to do with finances or buildings" (1979:9). The Rutter study also disregarded curriculum and pedagogy and focussed on issues of 'process' in the school which included inter alia discipline and punishment, management, teacher-student interaction and attendance rates. The outcome measures used were examination success, attendance, misbehaviour and delinquency. Although there is a caveat that these research findings are confined only to the 12 schools concerned, there is a strong implication that the causal link suggested between school process and children's progress is generalizable: "We have suggested that there is a causal relationship between school process and children's progress" (1979:181).

This implied external validity has been questioned, as has the methodology and the use of the 'nebulous' concept of ethos: "We believe there are doubts about the magnitude of the school effects found in 'Fifteen Thousand Hours', and that the physical and administrative variables do provide a plausible counter-hypothesis to school processes for the explanation of school effects. In any case, the external validity of the study is low" (Radical Statistics Education Group, 1982:21). Doe (1982) has likewise summarized numerous criticisms of 'the Rutter ethos' (sic) which basically reject the research results as a basis for teachers or administrators to change their practices or policy with the intent of improving quality.

Despite criticisms, the significance of the Rutter study lies in its challenge to previous research which placed very little weight on the role of the school in educational attainment. The research had many implications for policy-makers, as it underlined the the potential schools have to affect children's performance and behaviour.

A recent British study by Mortimore and Mortimore (1986) shows that working class children consistently achieve less well in school than their middle-class peers. The Mortimores attempt to explain this relationship between education and social class on two levels: factors relating to individuals and factors relating to school. On the individual level, they found health a significant factor, as low-income families tend to have poorer health. Poverty, including overcrowding and poor housing, is closely linked with poor educational achievement. Family size was found to be significant especially in working class families, where larger families were a handicap in school performance. The incidence of single parent families was not a significant variable on its own, but combined with poverty, could be important. The frequent combination of many of these factors could exacerbate levels of disadvantage. The Mortimores point out that although some working class children do 'break through' the system, "What must be emphasized is that, in terms of the 'chances' of educational success, pupils from middle-class backgrounds have - in general - many advantages" (1986:19). In their study of school factors,

the Mortimores found many of the differences more subtle, such as teachers' attitudes and expectations. One of the more obvious differences they found was that the poorest children attend the least well provided schools. They claim that moves towards making the education system more equitable must lie within the system itself, as home backgrounds cannot be changed. To this end, they suggest a number of structural changes, mainly through the examination system and the removal of selection to lessen the impact of family background and class factors.

The Mortimores' study reflects a growing awareness that while home background factors are evidently very important in the U.S.A. and Britain, there is a need for and potential for 'the system' to adapt to differing groups of children. This synthesis of perspectives implies a rejection of the static somewhat deterministic sociological studies of the 1960s and 1970s. From a policy point of view, school variables are extremely important as they are subject to intervention, whereas antecedent variables are not.

Lord Swann, as Chairman of the Committee of Inquiry into the Education of Children from Ethnic Minority Groups (1985), found in his extensive enquiry that while low socio-economic status, prejudice and discrimination were significant causes of underachievement by ethnic minority children, changes within the educational system were necessary so that schools could "bring out the best in all their pupils" (1985:9). The Swann Report suggests

that there is much that the educational system can do indirectly to alleviate prejudice which could decrease the extent of social and economic deprivation of ethnic minorities. (1985:9). The Report, which investigated research from many disciplines, highlights the complexities of the issue of underachievement in schools. Clearly there is no simple cause to underachievement and no simple solution.

2.3 The Quality of Education in Developing Countries.

Beeby's Pioneering Work.

In 1966, C.E.Beeby published his work 'The Quality of Education in Developing Countries' and it has come to be regarded as a seminal work in the debate on educational quality. Beeby emphasized the teacher as the key instrument in determining the quality of education and believed that curriculum changes and educational innovations could never be successfully implemented without increasing the levels and quality of teacher education and training. Beeby constructed a theory of stages for primary education, as he put it 'a rough and ready framework' for analysing educational systems. His stages were that of 'Dame School Stage' characterized by narrow subject matter and very formal teaching; the 'Stage of Formalism' with ill-educated but trained teachers emphasizing the '3Rs' and relying on tight discipline and memorization; the 'Stage of Transition' saw teachers better trained and slightly more relaxed and permissive, and the ultimate 'Stage of Meaning' had teachers well-educated and trained with children encouraged to think. Beeby acknowledged that material conditions and the health of children may be important, but regarded them as secondary compared to the role of teachers. Beeby has maintained his theory of stages during the past 20 years and has continued to advocate that qualitative educational changes depend on

teachers. (1980, 1982, 1986).

Beeby's book was based on the subjective intuitive ideas of an educational administrator with many years of experience. It makes no attempt to provide empirical evidence and is entirely non-mathematical. For many years there were few challenges to Beeby. In 1980 however, Gerard Guthrie delivered a slating attack on Beeby's theory of stages and his general lack of academic rigour. He likened Beeby's linear theory of stages to that of Rostow and accused him of Western bias, especially as his final stage of education was that of a typical Western teaching system. Guthrie also criticizes Beeby for ignoring factors relevant to educational change such as a country's political and economic climate, pupils, parents and the community. He concedes however that "...the pivotal role of the teacher in the classroom is often overlooked and Beeby's recognition of that role is quite legitimate" (1980:430). Beeby replied to Guthrie by agreeing that his work lacked scientific rigour but "the central idea I wanted to get across was that the growth of an educational system cannot be explained simply in terms of quantity and types of school, but involves the gradual development of powers to handle new aims and methods of teaching" (1980:440). Beeby wrote that he preferred to call his model of stages a 'hypothesis', inviting others to disprove it. Guthrie, in a final rejoinder, pays respect to Beeby for the continuing relevance of much of his work on quality of education in developing countries, but insists that the concept of

stages "involves an over-rigid conceptual structure" and he notes that there is now "a much more structured and analytical approach to social science research since the mid 1960s" (1980:446).

Despite its alleged methodological weaknesses, and the questionable use of stages, Beeby's work is still frequently cited by writers in the field of educational quality. Attwood pays credit to Beeby for the fact that he is not absorbed with empirical evidence: "Beeby has made a great contribution to our understanding of education in developing countries because he is primarily an astute observer of social reality: too many social scientists analysing achievement studies have become wrapped up in their computer print-outs" (1985:40). Beeby's intention of stimulating thinking in the sphere of educational quality seems to have been fulfilled. Many empirical studies have followed Beeby, but his basic hypothesis has not been disproved.

The Move towards Qualitative Improvements.

Interest in the area of quality in education in developing countries was revitalized in the 1970s. By this time, many developing countries were consolidating their rapidly expanded systems, and in climates of political independence, were keen to reassess their school systems. The often glaring inequalities between different types of schools in colonial times were no longer politically acceptable and issues of equity and

access took on new priority. Educational administrators were faced with the task of improving the quality of education to reduce inequalities, but there was little knowledge of what determined quality. It was not clear whether it was, as much Western research claimed, dependent on antecedent factors of family and socio-economic background; or whether schools themselves were important. Jolly wrote in 1974, "The crucial thing lacking is not the additional scarce resources but understanding of how to mobilize existing resources or better, how to restructure the system so that the energies and resources that have already been released in support of quantitative change can now be directed towards qualitative change" (1974:61). The need for research to find which indicators should be used to assess qualitative outcomes was noted by Husen: "There is evidently a strongly felt need to know which ones, which are manipulable in terms of policy action, account for differences between schools" (1974:167).

The elusive concept of quality in schooling has tended to be measured in terms of achievements which can be objectively assessed - usually results in public examinations. As school qualifications have become increasingly used as a screening device for employment and training, high pass rates are popularly used to assess the quality of a school. The use of examination performance as a criterion of quality is not without critics. Dore (1976) for example, has questioned whether the qualified are actually educated. He claims that the

examination system trains people to be employees rather than innovators and that the qualities of imagination, creativity, honesty and curiosuty are neglected. (3) Most research reviewed in this chapter has however used either standardized tests or public examinations as a yardstick for assessing variations in school quality.

The World Bank has been prominent in research and its Sector Policy Paper on Education (1980) stated that "The influence of school variables on the performance of students is greater in developing countries than in the developed countries. In fact, school variables sometimes explain, more than social background does, the variation in the achievement of children" (1980:32).

Heyneman, a World Bank sociologist, has conducted a number of cross-national studies (such as Heyneman 1976, 1979, 1983, 1984, Heyneman and Loxley 1983) and found overwhelming evidence that "the gap in educational quality between low and high income countries is large but also widening" (1982:3). When comparing educational achievements in 29 countries, Heyneman and Loxley (1983) found that in all low-income countries, school resources were more important than pre-school determinants in measuring achievements. They also found that the poorer the country, the greater the impact of quality improvements on achievements. In practical terms, Heyneman's research indicates that significant gains can result from relatively simple interventions and learning achievement can be raised by making improvements in

school quality. His studies therefore sought to find what improvements and interventions could be made to close this 'educational gap'. His general conclusion was that school resources and inputs are of major importance in determining quality and he regarded external factors such as socio-economic background of students as much less important in developing countries compared to developed countries.

Heyneman's research has been compared to that of Rutter in respect of their claims that school factors do make a difference to pupil performance. A significant divergence between Heyneman and Rutter is, however, that Heyneman largely limits his definition of school inputs to tangible items, whereas Rutter concentrates on the more nebulous concept of 'ethos' in schools.

School factors are of crucial importance to policy makers because, unlike social background, they are able to be changed. A UNESCO report stated: "To a large extent these are the only factors in a child's development amenable to intervention by those outside the family circle" (1978:7). The same report cautions however about over-generalizing from research in this area: "Firstly because association between factors is not proof of a cause-and-effect relationship, and secondly because results vary from one situation to another."

Teachers as the Critical Variable.

Lewin (1985) holds much the same view as Beeby, in holding the teacher as the lynch-pin in educational quality and innovation. He acknowledges the positive effects of physical inputs to a point, but contends that results do not necessarily improve in a linear fashion. "The quality of school experience is heavily dependent on the quality of staff, their motivation and the leadership they experience. If it were not so, it would be difficult to explain the widely recognized differences in performance between schools with similar levels of physical provision" (1985:130). Lewin, like Heyneman, Beeby and others, is somewhat sceptical of curriculum change as a method of bringing rapid qualitative change to education systems. He contends in fact that some of the curriculum changes in the 1970s actually disadvantaged children in rural schools because "they (rural schools) generally experience the least qualified teachers who are least able to cope with new content and pedagogy" (1985:123). Lewin's research found teacher training is often neglected at the expense of costly physical plant which may be necessary but is not sufficient to bring qualitative improvements. His emphasis on 'professional infrastructure' suggests that aid should go into the development of advisory and teacher support systems, especially since these are frequently seen as recurrent costs and are the first to suffer from financial cuts.

A challenge to conventional wisdom on qualitative changes in education comes from Hurst. He criticizes common approaches to qualitative changes which are formulated by bureaucrats with minimal consultation with teachers: ".in education the key to successful and beneficial reform is to consider as central the teacher and his or her willingness to change. While most administrative structures in education are geared to the manipulation of such items as resources, buildings and curriculum they are manifestly incapable of getting human beings to improve themselves" (1981:185). Hurst emphasizes that in impoverished school environments, teachers find that traditional methods of rote learning are more appropriate and efficient. He maintains however that teachers are willing and often anxious to change their pedagogy if it is shown to yield better results than previous practices. Although Hurst sees the teacher as the key to qualitative reform, he places responsibility for successful change with the designers and implementers. "A first step in improving the quality of education therefore is to provide administrators with training that indicates implementing innovation is, intellectually and practically, a very different exercise from allocating resources" (1981:193). Hurst's work provides an insight into the mechanics of qualitative change, as he questions whether the mere provision of a new curriculum or new buildings or hardware will be beneficial without careful planning.

In a cross-national study which aimed to find out if more

and better teacher training would improve student achievement, Avalos and Haddad (1981), Avalos (1980) found contradictory evidence. The study found that trained teachers generally had better teaching practices and attitudes than untrained teachers and that more advanced education required better trained teachers. Evidence was unclear on the effect of differences between graduate and non-graduate teachers and different lengths of teacher-training courses. Avalos suggested that the number of years or level of training may not be the critical factor - rather enthusiasm, commitment and teaching performance could be seen as determining variables. They proposed that research should concentrate on what teacher related factors, that could be altered in training, might produce better classroom results. Although a number of Avalos and Haddad's findings are of interest, they appear themselves to be critical of the nature of cross-national studies. They maintain that too much emphasis is placed on objective correlations, such as the age and sex of teachers in relation to student performance: "...There is not much more to be gained from studies that seek to identify links between classic teacher-related variables (as in Education Production Studies) and student results...much more needs to be investigated regarding the contextual (socio-economic, political and cultural) effects upon teachers and students" (1981:58). Avalos and Haddad suggest that policy oriented micro-studies observing the teaching situation itself, could be more useful than traditional surveys and experimental techniques. Avalos and Haddad's

findings are remarkably similar to those of Beeby who wrote in 1966 without the aid of a sophisticated cross-national survey.

Saha (1983) reviewed 230 school achievement studies in developing countries to assess the effect of teacher variables on student achievement. He found "In general, the cumulative evidence indicates that better trained and more experienced teachers produce higher academic achievement" (1983:76). Saha contends that research into teacher credentials is important because it can be affected by policy decisions. Saha has analysed his findings from a structuralist perspective which looks at education systems in developing countries as reproductions of colonial systems which maintain dependency on western culture and value systems. He sees discontinuities between the external orientation of education and local culture and traditions. Teachers are thus 'outsiders', imparting non-traditional perspectives and knowledge. "The teacher's unique role in the mastery of this knowledge cannot be overestimated, and the more competent the teacher, the greater the impact on student achievement" (1983:86). Saha contends that his findings concur with the research which places a low effect on home background factors - since school is alien to home life, the teacher is the critical variable in determining achievement.

The role of the head teacher or principal (used synonymously) as distinct from that of the classroom

teacher is often overlooked in the debate on the quality of education. Chang, a Malaysian educational administrator, maintains that principals should ideally be closely involved with supervision and evaluation in schools, although he admits that it is rare in practice. (Commonwealth Foundation 1977). Head teachers tend to be heavily involved in administration and limit their 'supervision' to ensuring that syllabuses are covered. Chang proposes that principals should be trained in management skills, initiative and innovative approaches, so that they are able to continue the professional development of teachers.

Somerset (4) maintains that the internal dynamics of schools are vital to their success, and this is generated largely by the principal. He claims that the importance of a good principal is especially critical in rural areas where visits from Ministry of Education officials are rare. The principal has almost total influence on school organization and is capable of motivating and inspiring pupils and teachers. Somerset found in his Ugandan and Kenyan studies that school quality is extremely volatile and that fluctuations in performance often coincided with changes of school principals. He maintains that the success of rural schools is much more haphazard than urban schools. The former are found in predominantly poor communities which tend to be uncritical of teachers, whereas urban schools often cater for wealthier communities better versed in education and more demanding of high standards. Somerset proposes that successful

principals should be used as resources in in-service training for principals, in order to improve the quality of this vital cadre.

Textbooks as the Critical Variable.

Heyneman has been a prominent advocate of the benefits of increased textbook use as a means of raising quality in the schools of developing countries. Heyneman's early research was in Uganda where he found the impact of schools on pupil achievement a powerful influence. On the basis of research which measured socio-economic status of pupils, teacher language ability, textbook ability, pupil health, a standard test, percentage of children at school in the community and school facilities, Heyneman and Jamison reported that "school facilities strongly influence achievement, and that school facilities are statistically more able to predict achievement in Uganda than they are in industrial societies" (1980:208). They found the influence of socio-economic status to be negative and the three strongest variables were text-book availability, the quality of teachers' English and school physical facilities.

Heyneman found in rural Malawi that the very poor physical conditions and facilities of schools and poor health and nutrition of pupils, militated strongly against their success. Heyneman does not believe that changing the curriculum to one more 'relevant' is a significant factor. "Changing the content of what is

learned is the least of the problems facing human capital development in Malawi. The real problem is how much is learned, and by how many" (1980:ii). Heyneman compared science and reading levels of Malawi students with those in other LDCs and found no overall significant differences, but "The major and most consistent difference in achievement is that between students who attend school in an environment characterized by scarcity of resources" (1980:ii). Heyneman places great weight on the availability of textbooks, which he feels often take low priority as large percentages of educational budgets are taken up by teacher's salaries. On the basis of his cross-national studies he resolved: "One conclusion is consistent: higher achievement is associated with the availability of textbooks and other printed materials" (1983:20).

A cross-national study (which included the I.E.A. Study) to examine the association between textbook possession and academic achievement was conducted by Heyneman, Farrell and Sepulveda-Stuardo (1981). The assumption is that when few or no students have a text, the teacher has to write laborious notes on the board or dictate them, which is time and energy consuming. If students at least have access to texts, teachers can use a wider range of teaching practices. Heyneman et al. found a positive correlation between textbook possession and achievement in most studies, but, like many cross-national studies, results were not conclusive. "The little we know about the effects of textbooks upon academic achievement

suggests that they are a consistently important variable, but that the degree of their effect is not consistent" (1981:241). Like Haddad's class-size study and Avalos and Haddad's study on teacher training and effectiveness, this study emphasizes the need to look at the 'process variables' of learning at school and home. While textbooks do usually lead to gains in learning capacity, the actual use that a teacher makes of the texts is critical. Heyneman et al. suggest that textbooks are often regarded as a single panacea, whereas little in fact is known about their true impact in the classroom - whether, for example, they can be an adjunct to or a substitute for other learning aids. The researchers' overall conclusion is however generally in favour of textbooks as an educational investment, as books are relatively simple to purchase and distribute and should be important in promoting equity.

Support for the contention that increased availability of textbooks will improve educational quality in developing countries should not however be oversimplified to an "increased textbook availability equals better performance" equation. Hawes for example, warns "of the preoccupation with changing content and materials without due regard to the problem of devising adequate methodology for teaching them by the average teacher" (1982:41). Hawes laments the number of poorly written and designed textbooks used in LDCs which have been unable to improve the quality of education and which have thus been a great waste of resources. Kajubi (1982), an African

educationist, has expressed concern about textbooks containing Western bias, stereotypes and ethnocentricity. He found that even in independent African countries, textbooks are often rewritten with new names and places and local studies of flora and fauna, but the overriding emphasis remains on recalling facts. Kajubi still places great weight on the potential of well written textbooks, but emphasizes the need for sensitively written books which could be used in African environments and which encourage discussion and research.

World Bank economists Simmons and Leigh (1975, 1980) maintain that increasing the availability of 'traditional school inputs' such as textbooks will not necessarily improve cognitive output. "A school system might be able to increase student reading ability by a few percentage points by increasing the amount of time spent on books by 100 percent. Unless the benefits in terms of more income or productivity that accrued to the worker and the society were greater in value than the cost of the books, the physical efficiency would go up but the economic value of the change would be negative" (1980:88). This comparison of cognitive outputs with economic value could be seen as somewhat spurious.

Two research studies from Fiji appear to contradict Simmons and Leigh's contention, which is based purely on economic criteria. Elley and Mangubhai (1981) and Ricketts (1982) engaged in separate projects with similar aims: to assess the impact of story book availability and

teachers reading stories on the English levels of primary school pupils in Fiji. In both projects, selected schools were provided with numerous story books and the teacher encouraged to read aloud to the children each day. This was a departure from normal teaching practice. The childrens' English was tested before and after the project and a control group's progress was also monitored. In both cases, the children exposed to the orally read stories improved significantly compared to the control group. Ricketts concluded "If English teachers could be persuaded to include regular story reading aloud in English programmes, the level of attainment in English could be expected to rise substantially. This would be a quick, simple and inexpensive way of improving English teaching in the South Pacific. The fact that it is such a simple technique may be one of the factors which, at present, deters many teachers from trying it. Story reading seems too easy, it is 'entertaining' rather than 'teaching' them; it is 'play' rather than 'work'" (1982:35). The perception of school as 'serious' militates against the use of enjoyable activities being incorporated.

Other Education Policy Variables.

The educational effects of class size were studied cross-nationally by Haddad (1978). That smaller classes promote more effective learning is a commonly held view in Western countries, but results from many LDC studies were not conclusive. Haddad's analysis concluded that

class size was not a major determinant of student achievement, but that the "noncognitive domain of the teaching/learning process and educational/social classroom environment" (1978:8) was a more critical indicator of classroom quality. The key variable of teacher quality is seen as teaching methodology plus the attitude and volition of teachers. "It cannot be concluded that an increase in class size will necessarily lead to a decrease in the level of academic achievement of pupils. Likewise, a decrease in class size does not guarantee an improvement in the social environment of learning" (1978:12). Haddad suggests that in the light of these findings, it may be more efficient to slightly increase class size and spend the savings on more inputs such as textbooks or teacher training.

One cross-national survey which showed a high degree of consistency in its results was a study of the effects of promotion and repetition practices. (Haddad, 1979). Although wastage through dropout is common in LDCs, much research is from industrialized countries, especially U.S.A. Haddad found that the educational principles concerned with repetition are similar for all countries and his study did endeavour to include research from LDCs where available. The review of studies showed conclusively that repetition of grades held no advantage in raising achievement levels and that there was no strong evidence to show that retention was more beneficial than promotion, even for children with learning difficulties. Repetition was found to have

damaging social and psychological effects on pupils. It is also wasteful educationally and economically as it limits the capacity of the system, lowers the degree of internal efficiency, contributes to dropout, negatively affects equity of educational opportunities and increases educational costs. Haddad suggested that the issue of whether or not to promote may obscure the real issue, which is how to improve the level of low achievers, thus preventing failure. He was critical of commonly used promotional criteria for testing only in cognitive areas which are only one part of educational achievement. Haddad put forward some radical proposals for avoiding the necessity for repetition as well as some more pragmatic methods. He maintained that achievement in school is determined by many factors, both school related and out-of-school, although he placed more weight on out-of-school factors. Of school factors, Haddad suggested that more appropriate teacher training would be a logical investment, to sensitize teachers to differing needs of children and to train in remedial teaching.

Studies which reveal negative findings such as those on class size and repetition (Haddad 1978, 1979) need close examination. On class size for example, many questions remain unanswered. For instance, the aim of teaching is not defined. If the pedagogy is didactic, lecture-style teaching, then an increase in class size would most likely not affect learning. Such findings are however counter-intuitive and the implications are boundless. Similarly, the study on repetition raises numerous

issues, such as, whether empirical findings in the social sciences can be viewed as objective experimental data. Haddad's repetition study used secondary evidence from previous studies rather than a purposively oriented study, thus the quality of the evidence itself is questionable. Like the study on class size, some of the findings on repetition run counter to professional intuition: for example, whether automatic promotion for children with learning difficulties could be as potentially damaging as enforced repetition. Both the repetition and the class-size studies were instigated by the World Bank whose explicit motive was to assess the degree of internal efficiency in schools. The results of the studies were undoubtedly affected by their preset parameters.

A longitudinal study of the occupational attainment of Chilean students from 1970 until the 1980s carried out by Schiefelbein and Farrell (1984) aimed to open the 'black box' of the education system to find out what educational inputs affect performance. Their study found that family and community characteristics had "by far the lowest unique effect on occupational attainment" (1984:142) and that educational quality was consistently the most powerful predictor of occupational attainment. This did not necessarily coincide with years of schooling or examinations passed. They explained educational quality variables as affecting students "general level of knowledge, perceived level of intelligence and willingness to learn, and/or the subtler traits of

personality, character and 'presentation of self'" (1984:151). Schiefelbein and Farrell admitted that they were unable to say definitely why educational quality had such an important impact on students' lives, but they are adamant that there is more to education than objectively measured achievement indicators such as examination performance or years of schooling. While maintaining that it is school variables that determine performance, the elusive concept of quality in education is only partially explained by Schiefelbein and Farrell. Their proverbial 'black box' revealed a large 'grey' area.

A substantial and detailed evaluation of achievement in the Indonesian education system was undertaken by Moegiadi, Mangidaan and Elley (1979). Among the objectives of the study were the location of regions which performed especially well or especially badly and the identification of particular conditions in school and home which were associated with various levels of achievement. Sharp variations in achievement levels were found between the different provinces of Indonesia, most notably between urban and rural areas. The schools of the capital province of Jakarta, for example, scored a mean some 50% higher than that of more isolated areas. Moegiadi et al found that the reasons for differences in performance lay partly with socio-economic factors and partly with school factors. Their multiple regression analysis revealed that home background factors accounted for 8.8% of their total achievement, which is low compared to developed countries. "Most of this influence

is accounted for by the occupational status of the pupils' fathers, and by indices such as the number of books in the homes, their family religion and the economic status of their homes" (1979:334). When home environment factors were removed, the most influential school variables were the favourable effects of large classes, better classroom facilities and teaching methods, frequent homework and better lighting. The total influence of school factors was however only 6.2%. The study identified a rather vague area termed as 'classroom climate' which accounted for 46.6% of achievement variance. 'Classroom climate' is described somewhat cautiously as "an unmeasured effect of good teaching, probably a feature of the teachers personality and inter-personal relationships with his pupils" (1979:334). They admitted that one of the shortcomings of a study based solely on questionnaires, is that subjective evaluations of the process of teaching and classroom interaction, which are clearly so important, are omitted. The implication from the Moegiadi study is that it is the quality of teaching which accounts largely for achievement variations, but clearly this is a difficult area to measure, especially in a large scale survey. The Moegiadi study proposes a number of practical policy implications based on their evaluation. These illustrate the potential utility of such systematic studies for educational policy makers.

The Home Background Variable

Although there has been a general consensus in the past decade that school factors are very important in developing countries, since they are subject to intervention, several researchers have found that socio-economic factors have strong links to academic achievement. Niles' (1981) study in Sri Lanka; Attwood's (1985) and Weeks (1985) research in Papua New Guinea; Bray, Clarke and Stephens (1986), Datta (1984) and Cooksey (1981) on Africa; Bhagwati (1973) and Seshadri (1976) on India, all support the contention that emerging social classes are creating a system of unequal opportunities in education. This body of research strongly suggests that children of the urban and affluent have greater chances at succeeding in school compared to children of rural dwellers and the poor. It further suggests that stratification along socio-economic lines is being reinforced over time, perpetuating inequalities from one generation to another.

This does not necessarily refute the stance of Heyneman *et al.* who have focussed on the school as a critical factor in determining achievement. Rather, by pointing to the growing inequalities in many developing countries, it emphasizes the need to concentrate on school quality in order to counterbalance the multiple disadvantages of the poor, especially the rural poor. The more articulate and affluent urbanites will ensure that their children attend well-resourced schools, whereas the

poor most often have neither a choice of schools nor any political empowerment to redress inequalities.

2.4 Cross-national studies.

Many studies in the field of educational quality in developing countries are conducted on a cross-national basis. These include a number of studies already referred to such as those by Avalos and Haddad (1981), Avalos (1980), Saha (1983), Haddad (1978) and Heyneman et al. (1981) which have been reviewed in Chapter 2.3. Most such studies offer the proviso that their sources of research are not always strictly comparable, but they aim to reveal trends which apply generally to developing countries.

One of the earliest systematic cross-national studies was conducted in the 1960s and early 1970s by the International Association for the Evaluation of Educational Assessment. The aim of their studies was to arrive at generalizable findings from the study of the relationship between input factors in the social, economic and instructional domains and output as measured by international tests covering both cognitive and affective behaviours. (Husen:1975:8). Such research could establish international indicators of the qualitative outcomes of school education which could be used by planners and policy makers. Their six-subject study covered 21 countries, of which only four were developing: Chile, India, Iran and Thailand. Numerous findings

emerged from this lengthy study, including the overwhelming evidence that in developed countries home background tended to consistently account for more variance in achievement than school and teaching variables. (Peaker, 1975:22). The I.E.A. study revealed a definite divide between education in the O.E.C.D. countries and in the four less developed countries. The average standard of achievement for particular subjects and age groups in developed countries was found to have little variation, whereas the standard of achievement was found to be much lower in developing countries. In developed countries, the average standard of schools was found to be less varied, whereas parental background was very varied. The converse was found to be true of developing countries: the standard of schools and teachers varied enormously within countries, while parental background was relatively more uniform. A conclusion that has been drawn out of this, is that home background is thus of less importance vis-a-vis school factors as determining variables in school achievement in developing countries.

One of the major implications of the I.E.A. study was the recognition of the differences between education in developed and developing countries and the realization that educational studies and theories could not easily be transposed to developing countries. The I.E.A. study is often cited and has certainly stimulated much other research in its wake.

The I.E.A. continues to undertake both cross-national comparative studies and country-level studies. A major purpose of its current comparative studies is, according to Harnqvist, "...mainly for serving as explanatory factors in relation to average performance in the school systems.." (1987:134). Noah claims that I.E.A. studies have moved away from describing differences in achievement and "...have come to recognize that a valid cross-national comparative study will often proceed by demonstrating the ways in which different combinations of factors are associated with broadly similar outcomes" (1987:143).

Postlethwaite, one of the stalwarts of the I.E.A., defends cross-national studies by claiming that the results are of "great practical help not only to the ministries of education in the particular countries but also to bilateral aid agencies" (1987:156). He emphasizes that such research should not be merely an 'academic exercise', but must be utilitarian.

Alexander and Simmons (1975) used various research studies including the I.E.A. study, to formulate an 'Education Production Function' - an algebraic formula designed to reveal which inputs produce the best outputs. While admitting that it is too limited and inaccurate to use as a policy guide, Alexander and Simmons claim that general inferences can be offered to the policy maker regarding the general direction of resource allocation. They found socio-economic status to be an important

variable especially at primary and lower secondary grades, but its importance diminishes at upper secondary level. (They acknowledge however that socio-economic status is less significant in developing countries compared to developed countries, as shown by the I.E.A. and Schiefelbein and Farrell (1984) studies). Alexander and Simmons place less weight overall on schooling inputs than on socio-economic factors: "Schooling inputs do have an effect on academic achievement, although for many school-related variables tested, it is either weak or statistically insignificant" (1975:51). They found a great deal of inconsistency in research from various countries. The effect of class size on achievement for example, was a variable which showed little consistency cross-nationally. Variables positively related to performance included teacher motivation, textbook availability at primary level and amount of homework done by students. They admitted that "The influence of teacher characteristics on student performance is a central issue" (1980:90), but found that length of training, certification and academic qualifications are not significant. This implies that the role of the teacher in the learning process is crucial but it cannot easily be defined or objectively quantified. Alexander and Simmons conclude in an almost contradictory fashion that it is exposure to schools which promotes learning, not the quality of schools themselves.

There is a certain amount of skepticism about mathematical models such as the Education Production

Function. Anderson for example wrote that mathematical models which "attempt to force a neat congruence would rigidify education in the image of the model, thereby reducing its functional utility" (1974: 177). Anderson calls for disaggregated data and research which would lead to 'micro-educational decisions' on a localized basis and warns of the danger of big decisions leading to non-reversible mistakes. Avalos (1980) found in her cross-national study of teacher effectiveness that many research studies, especially in Latin America, used the Education Production Function as a tool. She is critical of its use in that it fails to explain why things happen and "little attention is paid to what actually happens in the classroom and what it is in teacher actions that contributes, for example, to a first grade repetition rate of one of every two children in Latin America" (1980:51). Avalos reviewed many pieces of research using the Education Production Function which were used to gain academic merit and she is critical of their lack of policy orientation or practical utility.

Heyneman (1980c) criticized the Simmons and Alexander Education Production Function studies because of their limitations and their failure to take into account socio-economic and other pre-school influences, especially those peculiar to developing societies. Heyneman's own research strongly supports the importance of school inputs as determinants of achievement and he refutes the findings of the Simmons and Alexander study by saying "It is simply not true that the determinants of

school achievement are basically the same in both developing and developed countries" (1980c:406). In a rejoinder to this critique, Simmons (1980:408) maintains that recent LDC studies show a steadily declining influence of school inputs vis-a-vis home background on school achievement.

Fuller (1986) found in a cross-national study that "school characteristics influence student achievement as least as strongly as does family background" (1986:493) but he went on further to look at how national economic and political environments affected educational quality. He proposes the hypothesis that differences in national wealth, differences in nation-state size, differences in education sector size and in allocation priorities within education sectors all influence variation in school quality. Fuller found contrasting levels of quality between low and middle income countries, with much less spent per capita on education in poorer countries. He contends that school quality is eroding in the poorest LDCs, as pressure to expand prevents increases in quality. Fuller concludes that "a nation's level of wealth certainly plays a large role in providing sufficient resources for improving school quality. However, political will and social commitment to education also help shape levels of quality" (1986:504). Fuller is one of a minority of researchers who has attempted to see the educational process as part of a wider social and political context, but while his observations are valid, one may question their practical

utility and their ability to be translated into policy.

Fagerlind and Saha (1983) criticized cross-national studies, especially the I.E.A. studies, for failing to examine the underlying ideological assumptions of their research. They question whether Western models of schooling are appropriate in developing countries and observe that "desired educational outputs have largely been taken for granted rather than critically examined" (1983:169). Fagerlind and Saha quote an alternative neo-Marxist explanation which sees the act of measuring achievement across societies as an attempt to reinforce Western capitalist and industrial hegemony on the developing world. This viewpoint takes the stance that "differences in achievement on Western-style tests are not, in themselves, very meaningful, but the extent to which these differences are used for policy decisions represent an attempt to continue the presumed cognitive dominance of Western capitalist societies over the less-developed countries, and further, to justify intervention in educational policy" (1983:170).

Theisen, Achola and Boakari (1983) delivered a strong critique on the use of cross-national achievement studies and aggregated national studies as bases for formulating educational policy. They found that most national and cross-national studies do not account for varying factors within countries that may affect standards of performance, especially structural and cultural factors. Local and regional studies of resources, employment

opportunities, socio-economic status of residents and the general school learning environment all provide important information which should set the context for achievement studies. They believe that policy interventions should be directed at the local level in order to improve quality. Regional resource bases may define inequities in academic achievement, as wealthier areas are more able to support better resources for teachers and students. They found that ethnic inequalities and subsequent access to educational benefits often coincided with geographic variations: "The more prosperous ethnic groups are usually better able to turn their relative affluence into educational advantage" (1983:54). Theisen, Achola and Boakari also urge that more attention be paid to issues of gender and age variation. On school resources, so often focussed upon by researchers, they found that the effect on performance is hard to define and it is thus more important not to look at the net amount of possessions or resources but at how the equipment or money is used.(1983:59). The actual process and environment of classroom and school is another important variable, which although difficult to assess, enriches the contextual setting of local studies.

The work of Theisen et al. provides a useful antidote to the authoritative seeming statements of those who make universal recommendations based on cross-national studies. Their emphasis on disaggregated localized studies which will have direct utility to educational planners is indeed pragmatic. Their emphasis on

contextual factors is also a very relevant and often ignored area in educational evaluation. Blaug, writing on early cross-national comparisons of Human Capital Theory, has commented: "In short, we learn from international comparisons, at least in this area, that we do not learn from international comparisons" (1970:100).

Footnotes.

(1) The I.E.A. studies are explained in more detail in Chapter 2.4.

(2) Published first in 1966 in French.

(3) This debate is enlarged upon in Chapter Five.

(4) From lectures by H.C.A. Somerset at University of London Institute of Education, March 1987.

CHAPTER THREE PRE-INDEPENDENCE EDUCATION IN FIJI IN ITS
SOCIO-ECONOMIC AND POLITICAL CONTEXT.

Fiji is an island nation in the south-west Pacific Ocean, comprising some 300 islands, of which 97 are inhabited. The islands are spread over 650,000 square kilometres of ocean, between 15 and 22 degrees south of the equator and between 177 degrees West and 175 East of Greenwich. (See Map, Appendix Two).

The islands of Fiji are mostly volcanic in origin, resulting in a rugged terrain. Only on the two major islands, Viti Levu and Vanua Levu, have significant river deltas formed, providing a reasonably flat coastal fringe. Fiji's location gives her a tropical climate characterized by high and uniform temperatures, high humidity and high rainfall. Rainfall patterns differ throughout the country due to the mountainous relief. The windward easterly facing sides of the mountains on the larger islands receive heavy rainfall throughout the year from the prevailing south east tradewinds. The leeward areas have more distinct wet and dry seasons, which are important for the production of sugar cane.

The economy of Fiji is primarily agrarian and sugar remains its backbone, accounting for some 75% of exports. Tourism is the second largest industry with an annually varying contribution to national income. Gold, coconut oil, fish, timber, ginger, manufactured products and cocoa are other foreign exchange earners. Typical of developing

countries, Fiji's exports are all very vulnerable, depending largely on fluctuations of world market prices.

In the World Bank league table of developing countries, Fiji is termed 'middle income' with an average per capita income of U.S.\$1,700 in 1988. More revealing perhaps are the 'Basic Needs' indicators which show an adult literacy rate of 79% and an average life expectancy of 65 years. (World Development Report, 1988).

3.1 Pre-colonial Fiji.

The indigenous people of Fiji are an admixture of Melanesians and Polynesians. Prior to European settlement, Fiji was not politically united, consisting rather of 14 chiefdoms which were separate political entities with differing dialects. Evidence suggests however that there were many common cultural traits which set the islands apart as a distinct cultural area.

Fijian society is based on firmly integrated clan relationships with strong group solidarity, emphasized by kinship relations. Ascribed occupational roles are inherited through the paternal line. The hierarchical nature of Fijian society has always been of paramount importance. Chiefly titles are ascribed and inherited normally through the male line. Each chiefdom has a chief of great status, with numerous sub-chiefs holding the allegiance of smaller units within the chiefdom. Geddes (1948) has described this as a very efficient political

system for relatively small populations. The chiefly system was a powerful system of social control as "the chief was usually believed to be the living representative of the lineage god, and hence could draw prestige from the respect aroused towards this being" (Geddes:1948:167). The 14 chiefdoms of Fiji were loosely affiliated into three traditional political confederacies, vanua, but there was no traditional overall chief of Fiji in pre-contact times. Inter-tribal warfare was rife, with political supremacy the ultimate goal.

The overriding feature of Fijian society was its strongly communal nature. This was reinforced by a classificatory kinship pattern, which gave each person many relatives. Childrearing was not the preserve of biological parents but was shared by a number of relatives, often of the grandparents' generation. Many early missionaries and colonial administrators lamented the lack of close ties between mothers and their children, as their perceptions were coloured by concepts of English family life. A child learnt early the nature of relationships with his many kin: those to whom he had informal joking relationships and those to whom he had avoidance relationships. The practice of respect and knowing one's place were of ultimate importance in the highly ordered Fijian society. Respect is an important part of vakaturaga which Ravuvu has described as the "most important concept depicting ideal behaviour among Fijians. The concept embodies respect and deference, compliance and humility, loyalty

and honesty. All people should display these qualities in relation to others. They should respond to others as though they were people with authority and respect" (1987:18).

Age-sets were very important, especially for males, and they formed a significant part of the socialization process. Sex roles were strictly observed and children from early ages learnt simple tasks taught by parents and other relatives, specializing in the traditional tasks of their sub-clan. Initiation ceremonies were a land-mark in a Fijian boy's life, signalling the end of childhood and the entry into manhood. The culmination of the initiation process was circumcision at puberty. The equivalent for girls was elaborate tattooing on the thighs and buttocks and the wearing of a short skirt, instead of childhood nudity.

Traditional social and economic relations were based on the communal lifestyle, and exchanges and ceremonies were constantly occurring. Special language and behaviour were required in these elaborate and complex cultural mechanisms, and these were learnt through constant attendance.

The economy was based on subsistence agriculture and fishing, with traditional exchanges between areas of abundance in certain commodities. Because the physical environment of Fiji is benign, abundant food could easily be produced, allowing time for ceremonial and cultural

activities.

Traditional religion was based on rites, rather than doctrine, and it upheld many cultural values and reinforced social control. Fijian society was not literate prior to European contact. Oral histories and genealogies were passed down in the forms of chants, songs and dances, or in myths, legends and story telling.

White Settlers and Missionaries.

Fiji's existence was noted by the outside world in the late seventeenth and eighteenth centuries by European explorers such as Tasman, Bligh and Cook in their searches for 'terra australis incognita'. European settlement was not significant however until the nineteenth century. The earliest recorded settlers were shipwrecked sailors, beachcombers and sandalwood traders. Planters attempted to cultivate cotton, coffee, rubber, tea and ultimately sugar cane in various parts of the group. According to Scarr, the white settlers in pre-colonial days were a mixed lot, predominantly British from widely differing social and economic backgrounds. "Fiji's European settlers were followers of a frontier moving from Britain through Australia and New Zealand" (Scarr; 1984:40). Many sought to make their fortune, but few were successful.

It is commonly thought that English Methodists were the first missionaries, arriving on the island of Lakeba in

1835. Garrett's (1982) research reveals that two Tahitian Christians and a Fijian converted in Tonga, had already been on Lakeba and neighbouring Oneata for some five years and although they had not won many converts, it is apparent that they paved the way for the white missionaries. They also established the precedent for Fijians and other Pacific Islanders, notably Tongans, as an important evangelizing force in Fiji. Garrett noted that the islander missionaries carried great responsibilities and did much of the pioneering work in bringing Christianity to Fiji.

The impact of the white missionaries was initially minimal as the basic tenets of indigenous culture were alien to those of Christianity. According to early reports, it was a violent society with cannibalism, infanticide, widow strangulation and slavery. When the British-appointed 'King' of Fiji accepted Christianity in 1854, the rest of the country soon followed and tribal warfare gradually abated.

Formal education in Fiji began with Methodist missionaries in 1835. The missionaries quickly learnt the Fijian language so that the scriptures could be translated. By 1838 a Fijian grammar had been completed and a printing press had been sent to Fiji. The missionaries diligently compiled vocabularies and dictionaries and began translating the Bible and other related material into the various dialects of Fiji.

Although Fijians were initially reluctant to convert to Christianity, the early mission schools (from 1836) were filled with pupils learning to read and write. By 1839, there were 564 pupils in mission schools, but no converts. The mission schools were however indirectly proselytizing: since all reading matter was religious, the acquisition of literacy automatically gave a knowledge of Christianity. "The Wesleyans' emphasis on literacy in consequence laid not only the basis for an educational system, but also created one of the conditions which could, and did, result in the eventual flourishing of their religion" (Clammer, 1976:56).

The English missionaries had brought several Tongan assistants with them and they became teachers. They quickly established a scheme whereby literate Fijians could go and teach in other mission stations. This system enabled a rapid spread of mission schools providing a very elementary level of teaching of reading and writing the vernacular, arithmetic and scriptural knowledge. There were opportunities for promising students to go to a District Institution to be trained further as pastor-teachers.

Evangelising and education were thus inextricably linked. Reverend J. Waterhouse wrote to the Wesleyan Missionary Society headquarters in 1856: "Thousands of our converts have read through several times all these books which have been supplied to them...Our great want at present is a literature...The people are perishing for lack of .

knowledge" (Methodist Mission Archives). There were constant pleas for more staff and more printed material from mission headquarters in the first 50 years of the Methodist Missions, with a persistent theme that the missionaries were converting and teaching huge numbers with very limited resources in terms of money or materials.

Despite the turbulent state of Fiji at the time, with constant inter-tribal warfare, the expansion of mission schools was so rapid that missionaries complained of "having to rely on native catechists as soon as they could read" (Correspondence to Wesleyan Missionary Society, 1858). By 1869, Calvert, the then Mission Superintendent, claimed 107,000 converts with 56,000 in schools. He reported 1,400 'native agents' and 45 'native missionaries'. (Correspondence, 1858)

The overwhelming early response to mission schooling cannot easily be explained in terms of aspiring to social mobility as there were almost no chances for employment, except for the relatively few openings for catechists and teachers. It can be argued that because schools were small and village based, with only between 15 and 40 pupils (see Table 3.2.1), there was a fairly slight transition from the education of traditional socialization to 'formal' education. The majority of teachers were Fijians or Tongans who were teaching in the vernacular. Mission reports tell of missionary 'inspectors' who toured the schools in their circuits and

found children chanting lessons in unison, to the same rhythms as traditional chants. (Methodist Missionary Correspondence). This implies a strong continuity with traditional socialization. Methodism itself became grafted on to Fijian culture, rather than displacing it, and it would appear that schooling was an offshoot of that graft. The acquisition of literacy was however a powerful motivation to attend school. Fijian culture values highly the telling of stories and the Bible was sought after as a source of stories. Chiefs were reportedly fond of writing letters and often employed scribes if they were illiterate. It is apparent though that the level of literacy attained by the majority was minimal, as only four years of schooling were generally offered. Chiefly influence appears to have been important in the early days of mission schools. Missionaries had to have the agreement and patronage of local chiefs before they could establish themselves, and such patronage was frequently aided by the giving of gifts to chiefs. In return the missionaries would request that children attend school. Chiefly decrees were not subject to question, thus school soon became a normal part of Fijian childhood.

(Roman Catholic missionaries were also active in Fiji from 1844. The teaching order of Marist Missionaries established schools, and by 1868 there were schools attached to five mission stations. Their strategy was quite different from the Methodists. While the Methodists had a widely dispersed system offering very basic

education, the Marists established a few centralized schools with a more intensive and academic education. The Marist schools were under the direct influence of European missionaries, unlike the Methodists' extensive use of Fijian teachers, and English, rather than the vernacular, was the medium of instruction. Catholic schools quickly became the preserve of a select few, a situation which continued for many years.

The first British consul was sent to Fiji in 1858. Although he had little authority, his presence marked the beginning of increasing European interference in local political affairs. Routledge (1985) maintains that due to the manipulation of power by Europeans from 1855 to 1874, power gradually passed out of the hands of Fijian chiefs. The boom in cotton prices in the 1860s had brought about an increase in the settler population and there was a growing desire amongst the planters that Fiji should become part of the British Empire. Pritchard, the first British Consul, offered Fiji to Britain, ostensibly on behalf of the chiefs of Fiji, in 1858. The offer was rejected. Britain was having problems in nearby New Zealand and had no desire to gather more far-flung colonies.

Due to increasing internal political problems both with the indigenous and settler populations the resident British consuls repeatedly requested the British government to intercede. The British backed 'King' of Fiji, Cakobau, had attempted to establish a government in

1871 but its authority was not recognized by all Fijians or settlers. It was an overt attempt by some white settlers to establish their own rule, using Cakobau's traditional status to gain legitimacy. The Fiji Times of 29 July 1871 acknowledged this: "In all other respects the Europeans will rule: the power of education and civilisation must come to the front, and if the prominent figure be a native, whether in the form of a king or a president, it is only a puppet, the strings of which are pulled by a white man" (quoted in Scarr; 1984:57). The downfall of the Cakobau government, which lasted for three years, was caused primarily by disunity within both Fijian and European communities as well as the collapse of cotton prices. The refusal to pay taxes imposed by the government rendered it bankrupt and impotent.

After the unsuccessful requests for British annexation by various influential individuals, Fiji eventually became a British colony in 1874. It retained that status until her independence in 1970.

3.2 Early Colonial Rule from 1874 to 1916: the Period of Non-intervention in Education.

By the time Fiji was ceded to the British crown in 1874, numerous social and economic changes had already occurred in Fijian society. Cannibalism had all but ended and the majority of the population had been converted to Christianity. Inter-tribal warfare was much reduced and tended to be occasional skirmishes, rather than the long drawn out battles of previous times. The Fijian language was written (in the Bauan dialect - the choice of the Methodist Missionaries) and most of the adult population was at least nominally literate. A reasonably well-established network of primary schools had been established throughout the colony, mostly under the control of Methodist missionaries.

The British colonial government established a policy of 'indirect rule' as had been implemented in some of her African colonies. This was perceived as "the development of tribal administration on indigenous lines" (Mayhew; 1938:50) which in practice created a second tier of administration at provincial and village level, under the authority of chiefs. "The native (or, as it was known later, Fijian) administration became an important additional source of power and patronage for the chiefs, and employment for many commoners" (Ghai, 1987:10). The policy of indirect rule has had lasting effects on the social, economic and political development of the Fijian people and thus on the nation as a whole.

After the collapse of the world cotton market following the American Civil War, sugar cane became the dominant crop. Labour was provided by Fijians and other Pacific Islanders brought to Fiji for the purpose. Macgregor (1978:308) noted that "The conditions of employment and the manner of recruitment often differed little from slavery". After cession such practices became illegal and the planters faced an immediate and severe labour shortage as Fijians chose to return to a life of 'affluent subsistence'(1) in their villages. Reinforced by colonial policy of 'protecting' indigenous peoples which prohibited the commercial employment of Fijians, the government's response was to import labour from India, as had been done in the Caribbean, Africa and Mauritius. The first Indian indentured labourers arrived in 1879. Over the next 37 years, some 60,000 Indians arrived in Fiji, of whom just over one third were subsequently repatriated.

For the first 30 years of colonial rule, the colonial government did nothing to either encourage or discourage education of the local population. Schools were however provided for European children in the towns of Levuka (from 1879) and Suva (from 1883). A Commission investigating the decrease of the native population in 1896 acknowledged that "The entire system of native education is sustained and discharged by the Missions, without any assistance from public funds that would entitle the Government to interfere with them" (Colony of

Fiji, 1896:110). This fact did not however stop the Commission from being critical of native education (sic), especially on the grounds of lax discipline which they found inherent in Fijian culture. It was proposed to encourage the settlement of Fijians in towns in order to improve the efficiency of schools and to promote the teaching of English for its 'civilising effects'. This proposal was never implemented.

By 1900, due to the efforts of the missions, there were schools in most Fijian villages offering up to four years of education and school attendance had become a normal part of Fijian childhood. There was consequently a high literacy rate in the vernacular. Compared to Indians who at that time had very limited participation in schools, Fijians were significantly ahead in terms of literacy, access to and attendance at schools.

The first schools for Indians were started in 1898 by the Methodist Mission and the Marist Brothers. By 1916, the Anglicans and Indian religious groups such as the Arya Samaj and Muslims were also operating schools for Indians. The involvement of Indian organizations was significant as it marked the beginning of a self-generated demand for education which was to gain momentum. There was some resentment toward Christian missions because of their tendency to proselytize. There was no government assistance to Indian education prior to 1916 and there was a prevailing colonial attitude that it would be self-defeating to educate Indians as they had

been taken to Fiji to be an unskilled work force.

Early in the twentieth century, Provincial schools were established to offer higher primary education to Fijian boys who showed potential. Most primary schools offered only five grades and the Provincial schools, entrance to which was by examination, offered a further three grades. By the 1930s there were six such schools. These were instituted by Fijian initiative and financed by Fijians although the colonial administration did later offer support, especially in providing European headteachers. Until their amalgamation into one central school in 1955 (Ratu Kadavulevu school) the Provincial schools were an important second tier of schooling. Soon after establishing Provincial schools, there emerged a need for a third tier to cater for promising boys to have a few more years of education, equivalent to the lower forms of secondary education.

The Queen Victoria School was founded in 1906 as the apex in the Fijian education hierarchy and it is significant that like the Provincial schools, it was initiated and largely financed by Fijians. It catered particularly for the sons of chiefs and thus enjoyed great prestige. The chiefs insisted that their sons be taught in English, which gave access to employment in the Civil Service, albeit at the lower echelons, and also to participation in the political arena. When the colonial government became involved in education, it assumed much of the responsibility for Queen Victoria School. The concept of

a school providing an English language education to a traditional elite fitted in well with the colonial policy of indirect rule as it could supply a cadre of traditional leaders who would form valuable links between the government and the people. Queen Victoria School was however basically a primary school with a heavy emphasis on agriculture. Although it offered a post-primary course in practical subjects, it did not become a full secondary school until 1951. Nevertheless, its role as flagship in Fijian education was substantial, especially in the colonial period.

There was no coherent education policy during this period: ad hoc decisions were made by the Governor and Legislative Council. Neither was there a clear overall colonial policy on education. Rather there was, as Mayhew reported, "a few assumptions and a statement of general principles" (1938:33). One of these general principles was the "great importance attached to private education enterprise and non-offical agencies: this is a fundamental feature of English policy at all times and in all places" (Mayhew; 1938:44).

3.3 The Beginning of Government Intervention: 1916-1948.

Colonial education was characterized by a series of enquiries and commissions often initiated by governors dissatisfied at the state of education. While the results and recommendations of such enquiries were largely ignored, several significant ordinances resulted

indirectly from them. Personalities played an important role in colonial education. There were frequent clashes between Directors of Education, Governors and Acting Governors and members of the Legislative Council. Major policy decisions were referred to the Advisory Committee for Education in the Colonies in London and there were long time-lags while reports were sent to and from Fiji and London, surface mails taking several months each way.

The Grant-in-aid scheme was established under the 1916 Education Ordinance. It provided government financial support to schools which met prescribed standards. The system was prevalent in British colonies at the time and allowed expansion to take place with a minimum of supervision and cost to government. The regulations governing the allocation of grants were however quite strict and initially only a few Fijian village schools could meet the required standard. Salary grants were paid to certificated teachers whose training had been in English and there were vaguely defined 'efficiency grants' which were paid annually in a somewhat arbitrary fashion. The inclusion of gardening was a condition of receiving grants, stressing the importance that colonial authorities placed on agriculture. Building grants were subsidized on a pound for pound basis which favoured the establishment of new schools rather than existing schools. By 1929, out of the approximately 700 Fijian schools, only 32 received Grants-in-aid of an average of £116 per school and a few received an efficiency bonus of £31 per annum. (Legislative Council Paper No.113, 1929).

Under the Grant-in-aid scheme many Indian organisations established schools, marking the beginning of substantial Indian involvement in education. This scheme has had a lasting impact on the education system in Fiji. It allowed the creation of a dual system: that of voluntary schools for the majority of the population and of government schooling for a select few.

The end of the indenture system in 1926 again brought labour shortages in the sugar industry and precipitated its restructuring from a plantation system to an industry based on small family farms with an average size of 15 acres. Indians eagerly accepted the offer of leases on such farms and in so doing secured themselves a strong position in the country's economic life, as cane sugar had become the backbone of the economy. With their position in Fiji more secure, Indians looked for means of advancing themselves and education appeared to be the obvious route for upward mobility.

The indigenous Fijians were regarded as a dying race in the 1920s as they had suffered heavy losses of life from introduced diseases. Gillion (1977:10) observed that the colonial government of the day regarded Fijians as "at best, as irrelevant to the progress of Fiji" as their part in the mainstream of economic life was minimal. The Fijian population did not die out however, but was gradually surpassed in numbers by the Indian population as Table 3.3.1 indicates.

Table 3.3.1 Population of Fiji: 1921 - 1946

Race	1921		1936		1946	
	Number	%	Number	%	Number	%
Europeans	3,878	2.5%	4,028	2.0%	4,594	1.8%
Part-Europeans	2,781	1.8%	4,574	2.4%	6,142	2.4%
Chinese	910	0.6%	1,751	0.9%	2,105	0.8%
Fijians	84,475	53.7%	97,651	49.2%	117,488	45.3%
Indians	60,634	38.5%	85,002	42.8%	120,063	46.2%
Others*	4,588	2.9%	5,373	2.7%	9,246	3.5%
Total	157,266	100.0%	198,379	100.0%	259,638	100.0%

* Mostly Pacific Islanders.

Source: Gillion, 1977:199.

The Colonial Political Agenda.

The early decades of the twentieth century saw the start of Fijian and Indian involvement in the Legislative Council - the body of nominees that advised the Governor, whose authority nonetheless remained supreme. In 1905, there were six elected European members and two nominated Fijian members and in 1916 one nominated Indian member was added. In 1929 the structure was altered to have six elected European seats, six elected Indians and six nominated Fijians. Ali noted that "The chance given to Indians to use the ballot box contributed to their political advancement; it increased their political awareness, taught them to make political judgements; accustomed them to the hurly burly of elections, and having tasted the fruits of democracy albeit very limited, their appetite for political growth and power

increased. Fijians were deprived of these opportunities" (1980:139). Indians took to the political arena and used it to air their grievances and demand what they considered to be their fair rights in their country of adoption. Indians had undoubtedly suffered many hardships during the indenture period and they felt that the country's relative wealth had been earned at their expense.

Whereas Fijian political activity at the national level was limited to a few chiefs who wanted to preserve the status quo, Indians were hungry for change. The economic importance of the Indians in the sugar industry gave them strength and eventually many of their demands, including those on education, were met. Race relations between the Indians and the British were poor and tended to be confrontational. This contrasted to the traditional Fijian politics which revolved around consensus.

In the Legislative Council session of October 1932 for example, Indian members asked over 100 questions on every aspect of Indian education, often comparing it to the better financed European sector. They asked, inter alia, whether Indians could attend the exclusively European and Part-European Suva Grammar School to acquire pre-university qualifications. They received a curt negative response. In the 1937 Legislative Council debate on the Mayhew Report, Indian members spoke at length claiming "Indian children are almost neglected educationally" (Hansard Report C083/223/8). This aroused

the ire of European members as spending on Indian education had in fact increased substantially. European members repeated their intention of maintaining education with an agricultural bias and delaying the introduction of secondary education. Only one Fijian member spoke during this lengthy debate: Ratu George Tuisawau briefly requested that the system for sending selected Fijian boys abroad for secondary schooling, which had been in practice for a few years and then abandoned, be re-introduced. Amidst the animosity between Europeans and Indians, Fijian education was largely ignored.

The alien political institution of the Legislative Council evidently had little appeal for Fijians. The lengthy debates in English, largely on issues that did not affect them directly, saw frequent absences of the Fijian members. Under the system of indirect rule there was a separate system of government specifically for Fijians, the Native Administration, which must have been perceived as having greater relevance. For Indians however, the Legislative Council was used as a public platform to express their feelings of injustice and to make demands.

The Emergence of a Tripartite Education System.

In the early 1920s, concern over European education was mounting because of the expense and difficulty of recruiting teachers from England. An arrangement was made with the New Zealand Department of Education whereby

their teachers could work in Fiji on exactly the same conditions as in New Zealand. This system, known as the 'Scheme of Cooperation', lasted until the 1970s and enabled a European system to exist as an isolated enclave, with a totally New Zealand orientation: syllabus, text-books, examinations and teachers.

The colonial government's approach towards the nature of education of non-Europeans consistently insisted on a substantial agricultural and manual work component. Hopkin (1977) noted that although the Department constantly exhorted the benefits of gardening, especially for Fijians, there was little support from parents or teachers, as it was not their perception of the purpose of schooling. The general standard of agriculture was low, with little attempt to relate theory to practice. Anthropologists Quain (1948) and Geddes (1945) noted the low quality of Fijian education in village schools and questioned the practice of emphasizing agriculture. Quain wrote "Though the colonial attitude has always been kindly paternalistic, it is unfortunate that education has not been tempered to realistic needs" (1948:68). Geddes noted that "Perhaps too much stress may be laid on the importance of an agricultural bias in the education of an agricultural community. How important, relatively, is the production of another dalo root to the acre, or an additional quarter of an inch in the circumference of a banana" (1945:31). Indians especially were against agriculture in schools, as they saw schooling as a means of escape from the drudgery of farming. Education was

obviously perceived as inextricably linked with white collar occupations in the modern sector of the economy and social demand throughout the colonial period was for a Western type literary education.

Until the 1920s, the Methodist Church maintained basically the same policy it had begun in the 1830s and 1840s: that of village schools with locally trained teachers. The Church provided its own teacher training institute and standards of teaching slowly improved. In the 1920s, the Methodists established a technical training school and an agricultural school, as well as boarding schools for girls seeking further education. It was also a time for rationalizing the village schools, and in the interests of economy and efficiency, the number of Mission schools diminished, as Table 3.3.2 indicates.

Table 3.3.2 Number of Methodist Mission Schools and Students.

Year	No. of Schools	No. of Students
1855	151	6,628
1909	1,041	17,695
1925	684	16,473
1934	24	2,000 (approx)
1984	26	n.a.

n.a. - not available)

Sources: Hopkin:1977; Mann:1935; Ministry of Education Annual Report for the Year 1984.

Most primary schools had been handed over to local committees by 1931, enabling the Mission to concentrate on fewer, more specialized areas of education. Mission schools have since received substantial Grants-in-aid from the government, and have been increasingly influenced and controlled by the centralized education system.

The relatively sudden drop in numbers of Methodist schools had far-reaching implications in the development of Fiji's education system. Over 600 schools, predominantly village primary schools, were handed over to local committees. The members of these committees would have been barely literate themselves and almost certainly unskilled in management. The problems of financing, staffing and equipping schools, compounded with a general lack of support from the central Department of Education, led to a hiatus in Fijian education. Hopkin maintains "The Government's lack of initiative in providing adequate guidance in the sphere of education, when the Methodist withdrawal left such a gap in the whole pattern of Fijian schooling, permanently crippled the educational development of the Fijian people" (1977:352).

Financing education was a constant problem in the colonial period. Fijians paid substantial contributions through provincial rates, Europeans paid town rates, but no satisfactory system was devised for Indians. The Indians' lack of contribution to government-provided

education was often held against them, despite the fact that Indian members of the Legislative Council expressed willingness to pay an education rate or levy. Indians did however contribute substantially to Grant-in-aid schools, a fact which was often overlooked. One of the difficulties in collecting any form of rate from Indians was their lack of social unity. Most were Hindus or Muslims originating from various parts of India, with minorities of Sikhs and Christians. In the 1920s a small number of free migrants came from Gujerat as traders and they remained socially separate from indentured Indians. Although the caste system disintegrated in their new environment, parochialism based on their origins in India as well as their new domicile in Fiji also caused fragmentation and duplication in the establishment of schools. Indians were however united in their response to education and their demands for access to it.

The fact that Indians were virtually prevented from owning land in Fiji gave further impetus to their drive for education. After cession to Great Britain in 1874, approximately 82% of land was placed in perpetuity as Fijian land which could never be bought or sold, but could be leased. Some 8% was designated freehold land, much of which had been taken over as large plantations by white settlers. The remaining 10% was deemed crown land, which could be leased. The land situation exacerbated the Indians' feelings of insecurity as they felt that they could easily be evicted from their leased land.

The relatively disadvantaged situation of Indians in education compared to Fijians was a topic which preoccupied administrators in the 1920s. A Memorandum on Education of Fijians and Indians in Fiji revealed that in 1927 the percentage of school-age population attending school was 91% for Europeans, 80% for Fijians and 17% for Indians. (Legislative Council Paper No.92 of 1928). In 1929, a programme for the improvement of Indian education was proposed in the Legislative Council and was met by a furore of opposition by the local European members. Personalities were prominent as the then Acting Governor, Seymour, was openly advocating for the proposal. He wrote to the Colonial Office in November 1929, "It is bad policy for the government to perpetrate a local grievance, i.e. the provision of only two schools for 70,000 people while we provide five schools for 4,000 Europeans" (CO83/183/3). A heated correspondence between London and Fiji ensued and lengthy and acrimonious debates in the Legislative Council resulted in the resignation of all the Indian members and a prominent European member.

Although the Secretary of State for the Colonies (then Lord Passfield) agreed in principle to equal education provision for Fijians and Indians, the Colonial administration clearly did not want to upset prominent local Europeans. Acknowledging the importance of local politics, Mayhew wrote from the Colonial Office in 1929 in response to the furore, "How much can and ought to be done at once is a financial and political question on

which I do not feel myself competent to advise" (C083/183/3). Seymour's protestations on Indian education were latterly seen as an 'impetuous outburst' and he was counselled not to act until a permanent Governor arrived. The next Governor, Sir Murchison Fletcher, disagreed totally with Seymour's liberal sentiments and he pointed out that Fiji Indians were well off compared to Indians in India - in Fiji, 5.63% of Indians were school students compared to only 3.47% in India. (C083/197/13). Fletcher was adamantly against academic education for Indians - he insisted on the use of the vernacular and a simple course of vocational and manual training. He wanted to delay the teaching of English to both Indians and Fijians. This approach was strongly endorsed by the European members of the Legislative Council. Fletcher was overtly anti-Indian and he was aware of Indian resistance to agricultural and technical education which made him even more determined to enforce it.

Inevitably education was developing along racial lines. The different races lived separately and were officially discouraged from mixing. Language, culture and religion set the groups further apart. Although the government dealt with education in separate racial categories, it kept its policy obscure, fearing that if schools were declared for one race only, it may be obliged to provide schools for other races if none were available. European schools were exclusive, although children of mixed descent could be admitted if it was felt that they were socially acceptable. Various reports and commissions

suggested that racially integrated schools would be more efficient but such suggestions were anathema to both Europeans and Fijians. Europeans were wholly opposed to any proposal that Indians should be allowed to enter their schools. The racially exclusive school system became entrenched and reflected the socio-political situation of colonial Fiji.

Although primary schooling was relatively widespread by the mid 1930s, the wastage rate was very high with only 11% of Fijian and 15% of Indian children staying at school for more than four years in 1936. Many children stayed at school for less than four years. Mayhew, in his Report on Education in Fiji (1936) reported, for Fijians, a drop in the first four years of schooling from 34% of total enrollment reported in Class One to 12% in Class Four. The drop for Indians was from 39% in Class one to 10% in Class Four. The reasons for the high drop-out rate were various. Few schools provided education beyond the fourth or fifth grade and there was a lack of qualified teachers to teach upper primary levels. There were few economic incentives to proceed far in education as employment opportunities were limited for non-Europeans at the time. Official policy was to discourage Fijians from leaving their villages and education beyond the very elementary level was deemed unnecessary for those whose destiny was subsistence agriculture. The poor quality of much primary schooling delayed the introduction of secondary schooling, as government sought to first improve the primary sector. The lack of centralized

control combined with the lack of finance and manpower meant that in reality little could be done in the field of qualitative improvement.

The issue of secondary academic education had arisen sporadically in the 1920s and 1930s from both Fijians and Indians. Their approaches were different: although Fijians generally supported agricultural education, they requested secondary education for a few, preferably overseas; whereas Indians requested freely available secondary schooling to pre-university level. The Marist Brothers' School in Suva was the only place where non-Europeans could obtain an academic secondary education until the late 1930s. Indians succeeded in securing secondary education at the government Natabua school in the late 1930s.

The issue of secondary education for Fijians became a major debate in both Fiji and London, mainly over whether to send boys overseas or to provide secondary education in Fiji. The colonial policy had been to preserve and protect the indigenous Fijians and it was in principle against allowing too much education for fear of its disrupting influence. This attitude was justified by referring to various 'authoritative' reports on the education of primitive people, concluding that Fijians could not cope with advanced education because of inherently poor reasoning faculties. Reports, such as the Hadow Report on the education of Africans, conformed to then current psychological thinking that mental

characteristics were genetically inherited and bore the overwhelming conclusion that uncivilized peoples were 'uneducable' in the European sense. "The Fijians are an agricultural people. There is, therefore, nothing in the racial composition of the Fijians to warrant their education in European schools either in or out of Fiji" (Despatch from Governor to Secretary of State for the Colonies, CO83/225/8). It was quite acceptable at this time to form social and economic policy on the basis of allegedly genetic inherited racial characteristics. The London Advisory Committee on Education in the Colonies endorsed this stance, proposing that secondary education for Fijians should be non-academic as very few boys would need an academic education. The committee was opposed to allowing a pre-university external examination for Fijians, as they knew from experience in other colonies that academic education would become preferred over agricultural education.

Colonial education policy had been loosely set out in the document 'Education Policy in British Tropical Africa', the main theme of which was not to give so much education as to have a disintegrating or unsettling effect. Thus boys should have vocational or technical education, and girls should learn hygiene and domestic crafts. The then Director of Education in Fiji was also adamantly against academic secondary education for Fijians and he promulgated his thoughts forcefully. For once, all the decision making powers were in accord. In 1937 the Governor reported to London that "The Legislative Council

has accepted the principle of providing funds for the establishment of secondary education up to the matriculation standard for Indians, but the Director of Education opposes the provision of similar facilities for Fijians on the ground that the provision in local schools of facilities for an academic education for Fijians would upset the practical bias at which the Government is aiming" (C083/218/4). Only the Fijians themselves were not consulted on this issue. The move to provide Indians access to an academic secondary education and to deny it to Fijians was to have long-term implications for the social and political development of Fiji.

The late 1930s saw a turning point in participation in education. Although overall, more Fijian children attended school than Indians, the quality of Fijian schools was poorer and many fewer Fijian schools qualified for Grants-in-aid compared to Indian schools. Indians had made many gains through their constant pressure in the Legislative Council. Gaining provision for academic secondary education had been a major triumph. Between 1931 and 1941 expenditure on government education for the different races increased by 19% for Europeans, 7% for Fijians and 97% for Indians. (1944 Annual Report for the Department of Education). Per capita expenditure for Indians now surpassed that of Fijians as Table 3.3.3 indicates.

Table 3.3.3 Expenditure per capita on Education for Children Aged 5 to 15 Years.

	1928	1935	1940	1941	1942
European*	£8.0.0	n.a.	£3.16.4	£4.11.2	£5.4.10
Fijian	12/-	14/7	£1.6.6	£1.8.8	£1.8.1
Indian**	5/-	8/6	£2.5.4	£2.6.3	£2.10.1

* Includes children of mixed descent.

**Includes Chinese.

Sources: Legislative Council Reports, Department of Education Reports.

Clearly European education was the favoured sector in this tripartite system. This reflected the political supremacy of Europeans throughout the colonial period. By 1940 expenditure on Fijian education was significantly less than the other racial groups. This factor, combined with their lack of political muscle and their limited participation in the economy of the country, contributed to the marginalization of indigenous Fijians.

The Fijians themselves did not demand education or place political pressure on the government, as did the Indians. They accepted the colonial policy of educating chiefs to secondary and tertiary levels, and, as per tradition, placed great faith in their chiefs to represent their interests. The chiefs who had enjoyed the fruits of education, did not push the government to provide education for the common people. Undoubtedly the most influential chief of colonial times, Oxford educated Ratu Sir Lala Sukuna, consistently called for 'education with

a local bias' for Fijians. He wrote in 1944: "What is required is a scheme of education that will fit the Fijian child to become a good citizen of his own country which needs above all...farmers, mechanics, boat-builders, men skilled in indigenous handicrafts, girls with a practical knowledge of house-craft: home-cleaning, cooking, washing, sewing, nursing.." (in Scarr 1982:340). Ratu Sukuna and other chiefs feared the emergence of a discontented schooled class who would lose their culture and traditions of respect. Their sentiments were but an echo of colonial attitudes and did not match the commonly held perceptions of education. Spate noted that "The core of Ratu Sukuna's position - and a very natural one in a man of his heritage and experience - was a firm belief in hereditary authority and a corresponding distrust in the capacity of ordinary men to run their own affairs." (Legislative Council Paper No.13 of 1957, p.7, The Spate Report). The lack of pressure for improved education for Fijians thus resulted in government neglect.

As Secretary for Fijian Affairs, Ratu Sukuna advised on the selection of commoners for tertiary education overseas and for government jobs. Ratu Sukuna warned the Council of Chiefs in 1945 that education would increasingly vie with rank in the recruitment of the administrative and political elite. In 1947, of the nine Fijians studying abroad, four were the sons of chiefs. By the early 1960s, a few commoners enjoyed an economic position and its accompanying status approaching that of

the chiefly class. But the influence of the chiefs remained powerful: "The high chiefs formed a dominant status group that guided the social and political values of upwardly mobile commoners" (Norton, 1977:65).

Certain traditional features of the Fijian lifestyle undoubtedly also affected their responses to education. There was no place for individual competitiveness in their communal society. The self-sufficient nature of Fijian society, gave rise to little motivation to join the monetized economy in early colonial days. With ascribed social status, social mobility was not necessarily desired or sought after.

The 'laissez-faire' approach of minimum government intervention in education gradually altered in the 1940s. In social policy terms, the early colonial policy had been one of residualism. (Hardiman and Midgley, 1982; Mishra, 1981). The government had encouraged the voluntary sector especially the churches to play an active role in education, leaving itself in a position of indirect authority.

By the mid 1940s, formal education for most students in Fiji was still limited to primary schooling. In 1944 less than 1% of the total enrollment were in secondary school: 257 students. Table 3.3.4 shows the racial and sex distribution of this minority.

Table 3.3.4 Secondary School Enrolments in 1946.

	Europeans	Fijians	Indians	Chinese
Boys	66	187	203	11
Girls	50	4	8	1
Total	116	191	211	12

Source: Department of Education Report for 1946.

By 1946, Indians had overtaken Fijians in the quality of education they provided for their children and they were making inroads into many aspects of life in the colony. The 1946 meeting of the Fijian Affairs Board expressed concern at such developments, especially since in that year Indians had achieved numerical superiority over Fijians. A petition requesting the colonial administration "to adopt a firm attitude towards the Indians in order that the interests of the Fijian race remain pre-eminent in the Colony" as detailed in the the 1874 Deed of Cession was sent to the King. (Meeting of the Fijian Affairs Board 1946, C083/244/4). Although acknowledged, the paternalistic attitude towards indigenous Fijians did not change. They remained on the periphery of economic life in the colony, while Indians forged ahead as a strong political and economic force.

3.4 Increasing Government Intervention: 1948-1960.

The first attempt at comprehensive planning for education was the Ten Year Plan which became operative in 1947. Although the plan was dropped in 1948 because it was not acceptable to the Secretary of State for the Colonies, since it had too large a proportion of expenditure on social services, several noteworthy achievements resulted from it. Colonies were expected to be self-supporting and social services such as education were seen purely as consumers of government revenue, not having any role in economic production.

In 1948 the government Nasinu Teachers' College was opened and in the same year most teachers became civil servants. This gave government the responsibility for paying teachers, thus relieving some of the burden from voluntary aided schools. It also increased the security and professional status of teachers which reflected positively on the education system. A government school for Fijian girls was opened (Adi Cakobau School) and it rapidly acquired a similar status to that of Queen Victoria School. The government was showing an explicit recognition of the need to adopt a more positive approach to education. Concern about the quality of education was expressed, for example by a Board set up to enquire into post-primary education for Fijian boys. Its report lamented the poor quality of primary schooling, especially in rural areas, and it strongly favoured qualitative improvement at primary level before expanding

secondary education. (Fiji Legislative Council 1953).

There was however considerable social pressure to expand secondary education. Post-war prosperity had spread to Fiji and economic growth was starting to be linked with manpower planning. Eventually the government conceded that secondary education could not be held back any longer, although it endeavoured to insist that it should be of a vocational, agricultural or technical nature. The 1955 Lewis-Jones Report on education in Fiji emphasized the "need to inculcate a sense of dignity and desirability of farming as a way of life as well as a means of livelihood and to counteract the present tendency to regard education ...as an avenue to the acquisition of wealth or of a comfortable income in a white-collared occupation" (Legislative Council Paper No. 34 of 1955). This report and many others revealed the dichotomy between the policy makers and social demands. While fully aware of peoples' perceptions of education, there were persistent attempts, mostly unsuccessful, to change the way people thought and behaved in regard to schooling.

In 1956 the Grant-in-aid system was extended to secondary schools. Thus the scene was set for rapid expansion of secondary education, especially among Indians, as they had already shown their great enthusiasm for education. Primary education had been widely available since 1925 under the Grant-in-aid scheme and Indians had taken every available opportunity to build and staff schools, often

at great personal sacrifice. For Indians clearly saw education as an escape route from an agricultural existence and as a means of establishing themselves in a foreign country where they had only limited rights to land ownership.

Although budgetary allocations were no longer comparable on a per capita basis by race, schools were still seen in terms of their racial orientation. In 1957, only 32 schools out of 540 had racially mixed rolls. (Department of Education Report for 1957). The Lewis-Jones Report of 1955 made tentative proposals towards integrating schooling but these were received with great indignation by the local European community who feared the lowering of standards if Fijian and Indian children attended their schools. They were however grudgingly prepared to accept Chinese children into European schools. The Education Advisory Council had broadened its membership: in 1957 there were 8 Europeans, 5 Indians and 4 Fijians. The disproportionately high number of Europeans typified the attitude that educational decisions were a European domain, as well as the wish to retain superior and exclusive schools for their children.

By the late 1950s, it was clear that Fijians were lagging behind other communities in the colony in economic matters. The Legislative Council commissioned an investigation into the causes of this situation with the mandate to make suggestions and recommendations. (Spate, 1959). The report focussed almost entirely on

land, agriculture and the constraining influences of Fijian customs and traditions. The main recommendation was that Fijians should become independent farmers on traditionally owned land, while retaining villages as communal centres. (Spate, 1959:9). In his conclusion, the Commissioner (Spate) recognized the importance of education and regretted the lack of time to look into it. Evidently education was not regarded as a critical factor in the Fijians' economic progress. A result of the highly esteemed Spate Report, was repeated calls for agricultural education for Fijians, assuming that Fijians would happily remain as agriculturalists in perpetuity.

One result of the emphasis on agricultural education has been that many of the relatively small number of Fijian university graduates in the years following independence were agriculturalists by training. Several government ministers, permanent secretaries of various ministries, and senior diplomats have had a background in agriculture. It is apparent that in colonial days when bright young Fijians emerged who could clearly cope with tertiary education, they were channelled into the agricultural colleges of Australia and New Zealand. These people have subsequently been employed in many spheres in Fiji, a reflection that it may not have been the content of the training that mattered, but the discipline of the training per se which was more significant.

3.5 The Decade Leading to Independence

By the 1960s, the political agenda had changed substantially from what it had been fifty years previously when the Governor's will was supreme. Looking positively towards self-government, the Legislative Council consisted from 1963 of four elected and four nominated members from each of the three major racial groups. Ali noted that "Race continued to be an accepted and institutionalized factor in the colony's politics" (1980:150). World events helped shape developments during the 1960s. Many British colonies had gained independence and Britain was under pressure from the United Nations to give Fiji independence. Within Fiji, Indians were clamouring for independence while Fijians wanted to defer it. In 1965 constitutional talks were held in London to prepare for self-government and eventual independence. There was much acrimonious debate on the topic of fears of Indian domination and, according to Scarr, "Fijians resolved that if independence did come, Indians must leave" (1984:170). A different allocation of Legislative Council seats eventuated, giving indigenous Fijians a slight numerical majority for the first time. Political parties were formed and elections were held for the first time in 1966. Britain explicitly recognized in the 1960s that Fiji's education system shoud gear itself towards training manpower for an independent future.

Despite many recurring problems, by 1960, the education system had acquired certain characteristics and

achievements. Although quality varied greatly, the system had become gradually more standardized. The quality of primary education had improved and the output of teachers from Nasinu Teachers' College was having some effect. There was constant pressure for expansion and equally constant financial limitations. Initially, almost all schools were established and managed by voluntary initiative, but by 1960, government was increasingly in control. Educational policy at this time was consistent with the incremental social policy model which, while responding to social demand, permitted "the expansion of the social services through gradual increases in budgetary allocations and the extension of existing provisions" (Hardiman and Midgley, 1982:19).

The relationship of mutual dependence had been firmly established: without Grants-in-aid the schools could not survive, and without the voluntary sector, very few children would have had access to education. Table 3.5.1 clearly shows that the distribution of school management favours Grant-aided schools with government schools a very small minority. The small number of unaided primary schools represents schools which had not met the criteria of government regulations and does not represent a strong private sector of education. Between 1956 when Grants-in-aid were extended to secondary schools, and 1964, 13 schools had been accepted as meeting the standards for government aid. In 1960, applications for Grants-in-aid for secondary schools were closed as an effort to halt the rapid expansion, but schools sprang up

unaided, optimistic that grants would be forthcoming in the future. The burgeoning number of unaided secondary schools was a worry to government as standards were low: teachers were poorly qualified and poorly paid and most students were admitted without having passed the Secondary Schools Entrance Examination.

Table 3.5.1 Management of Schools, 1964.

	Primary.	Secondary.
Government	28	6
Aided	520	13
Unaided	24	24

Source: Department of Education Report for 1964.

The immediate issue of the 1960s was coping with an insatiable demand for education. With large numbers of children completing primary education, there was an 'upward thrust' for expansion of secondary education. The 1955 Lewis-Jones Report had anticipated a gradual and controlled expansion of secondary education and predicted a secondary roll in 1960 of 3,300 pupils. In reality there were 5,439 secondary pupils in 1960 - over ten times the 1946 roll of 530. Table 3.5.2 shows the build up in secondary enrollments in the late 1950s. Indian secondary enrollments grew more rapidly than those of Fijians, and increasing numbers of girls of both major races were seeking further education.

Table 3.5.2 Secondary School Rolls 1946 - 1960

	Fijian		Indian		Chinese		European		Total
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
1946	187	4	203	8	11	1	66	50	530
1955	502	165	1,104	271	54	6	164	192	2,462
1956	505	168	1,242	408	34	26	145	185	2,713
1957	762	279	1,441	514	56	38	167	223	3,480
1958	961	421	1,571	582	57	18	173	211	3,994
1959	1,044	424	2,195	815	57	57	203	223	5,018
1960	1,042	620	2,299	912	86	71	224	184	5,439

Source: Department of Education Report for 1960.

Table 3.5.3 Schools and School Enrolments 1960-1969.

	No. of Primary Schools.	Total Primary Roll.	No. of Post-Prim. Schools*	Total P.P roll
1960	534	76,182	52	5,762
1963	564	84,587	57	7,281
1966	586	99,138	60	9,479
1967	594	104,971	64	11,153
1968	600	110,912	66	13,128
1969	608	116,154	77	15,068

* Includes vocational and teacher training institutions.

Sources: Report of the Education Department for the Year 1969; Education for Modern Fiji, 1969.

During the 1960s, primary enrollments increased significantly and secondary enrollments almost trebled as shown in Table 3.5.3. The number of primary schools increased by 12% during this period and secondary schools increased by 32% indicating the shift in emphasis towards secondary education. Despite the expansion of secondary education, comparatively few children were reaching secondary school, although the proportion was gradually increasing. In 1960, for example, the post-primary roll was 7.5% of the primary roll and the proportion increased throughout the decade until it was 13% in 1969. One reason for the increase lay with the pass rate of the Secondary Schools Entrance Examination which itself increased markedly during the 1960s, (See Table 5.2.3) although children who did not pass the Secondary Entrance examination were being admitted into unaided secondary schools.

The demand for education was not the same in the major ethnic groups as the disaggregated figures in Table 3.5.4 show. Fewer Fijians were reaching secondary school than Indians. Although Indians were in the slight numerical majority in the population as a whole, there were almost double the number of Indians attending secondary school compared to Fijians. The implications of this are significant, especially for the uneasy race relations of the colony. The secondary school students of the 1960s would be the professionals of the 1970s and the leaders of the 1980s. Table 3.5.4 also indicates that Indians, especially males, were staying at school longer and

gaining qualifications for higher status employment in the community. Fiji was only two years from her independence and was in theory preparing for that goal.

In terms of gender, by 1968 only marginally fewer girls than boys of both major races were attending school. This compares very favourably with other developing countries where female education has lagged considerably. In secondary education, the differences between boys' and girls' attendances are more sharply defined, especially for Indians. The Fijian girls' secondary enrollment was 79% that of Fijian males, whereas the comparable figure for Indian girls was 61%. This was a reflection of cultural attitudes. These figures show a vast improvement on the situation in the earlier part of the century when very few Indian girls in particular attended school. In 1936, for example, only 12% of Indian girls and 58% of Fijian girls between 5 and 15 years old attended school. (Mayhew, 1936).

The examination system in secondary schools with examinations at Forms Four, Five and Six, caused a high wastage rate as shown in Table 3.5.5. Although both races suffered from this process, fewer Fijians remained until the Sixth Form (at least the twelfth year of schooling). Clearly Indians were staying at school longer and gaining qualifications for high status employment or tertiary education. The socio-political implications of this are obvious.

Table 3.5.4 Racial Breakdown of Pupils Attending School, 1968

Race.	Primary.		Post-primary.		Total.		Grand	
	Boys	Girls	Boys	Girls	Boys	Girls	Total.	
Fijians	23,767	21,637	2,276	1,802	26,043	23,439	49,484	
Indians	30,823	27,758	4,709	2,867	35,532	30,625	66,127	
European	1,413	1,532	282	245	1,695	1,777	3,472	
Chinese	581	581	209	164	790	745	1,535	
Others	1,453	1,367	313	261	1,766	1,628	3,394	
Total	58,037	52,875	7,789	5,339	65,826	58,214	124,040	

Source: Education for Modern Fiji, 1969.

Table 3.5.5 Secondary Enrolments 1969.

	Fijians	Indians
Form III	1,626	2,860
Form IV	1,638	3,141
Form V	573	1,917
Form VI	127	412

Source: Report of the Education Department for the Year 1969.

Table 3.5.6 Proportion of Children aged 6-13 years in School

Year	Fijians	Indians	Others	Total
1963	86.1%	74.3%	81.1%	79.9%
1966	86.5%	79.5%	87.2%	82.7%
1967	86.8%	80.9%	87.4%	83.6%
1968	88.7%	82.3%	83.3%	84.8%

Source: Education for Modern Fiji, 1969.

Table 3.5.6 reveals a slight paradox in the ethnic imbalance in education. A higher proportion of Fijian children aged 6 to 13 years attended primary school compared to Indian children of the same age group. This reflects the long history of primary education for Fijians - for well over a century there had been primary schools in most Fijian villages and school attendance, although not compulsory, had become the established norm. As previously mentioned, there were few schools for Indians before 1925 when Grants-in-aid were introduced, thus their involvement in education was comparatively recent.

Comparing Tables 3.5.5 and 3.5.6, it appears that Fijians were content with primary schooling and did not have the drive to push for further education. In the 1960s there were still various avenues of employment, notably the armed forces, which were open to primary school graduates. There are other reasons for Fijians' limited participation in secondary education. The relatively few secondary schools were mostly located in or near urban areas and the largely rural Fijians, many of whom lived on widely scattered islands, had very restricted access. (At the 1966 census, 61% of Indians and 76% of Fijians lived in rural areas) The few children who qualified for secondary school had to attend boarding school which was costly for the families concerned.

The Grant-in-aid system itself discriminated against the

poor, especially the rural poor. In 1966, 45.2% of Fijians were involved in subsistence agriculture compared to 0.2% of Indians (Report on the 1966 Census of the Population). Rural Fijians had to struggle to maintain minimal standards in their community-run primary schools and there was little possibility of building and maintaining secondary schools without cash incomes. Fisk noted, "...these areas where the need and difficulty of entry to the advanced sector is greatest tend to have the least effective educational facilities for that purpose, whilst those already effectively commercialized have the best" (1970:55).

Despite the huge increases in enrollments, there was no concurrent increase in number of teachers trained. The Report of the Education Department for the Year 1969 commented, "the growth of school rolls has far outstripped Fiji's capacity to train the necessary teachers" (p.5). This resulted in the employment of 750 untrained teachers and 400 expatriate teachers in 1969 alone.

Secondary curricula were almost totally geared towards external examinations which were increasingly seen as the major objective of education. Table 3.5.7 illustrates how examinations were used as a process of elimination throughout the 1960s, with high failure rates at all levels. It also shows the rapidly increasing demand for external examination qualifications as the number of candidates for all of the examinations increased by many

times. The examinations at upper secondary levels showed the highest proportional increases of candidates which was indicative of the direction that education was following. Table 3.5.7 also shows that pass rates in the examinations based on Fiji curricula (Secondary Entrance and Fiji Junior) improved towards the end of the period, reflecting better teaching standards, the use of the revised curricula and increased capacity to absorb more students at higher levels.

The demand for post-secondary education became evident in the 1960s. Until then, the majority of post-secondary education and training, with the notable exceptions of medical and primary teacher training, had been overseas. The Derrick Technical Institute was opened in 1963 to provide vocational and technical education. In 1968 the University of the South Pacific opened. Although a regional university, Fiji has always dominated in numbers of students attending. A major role of the university was to be the training of secondary teachers, who were desperately needed. The establishment of the University of the South Pacific accentuated ethnic disparities in educational performance as few Fijians were sufficiently qualified to enter the new university. The issue of tertiary education had previously been easily overlooked since all university students had been sent overseas which removed its immediacy and political visibility.

Table 3.5.7 Examination Results 1961-1969.

Secondary Schools Entrance.		Fiji Junior Certificate.		Cambridge and New Zealand School Cert.		N.Z. University Entrance.		
Year	Sat	Pass	Sat	Pass	Sat	Pass	Sat	Pass
1961	3012	24%	1572	33%	499	49%	110	50%
1962	3393	24%	1704	29%	520	50%	114	56%
1963	3360	32%	1653	42%	633	61%	122	43%
1964	4084	30%	1912	39%	722	68%	124	42%
1965	4861	39%	2051	41%	794	68%	145	58%
1966	5719	40%	2488	55%	934	66%	216	51%
1967	6488	53%	3315	55%	1220	51%	374	37%
1968	7256	51%	3960	53%	1622	52%	455	35%
1969	8300	49%	4965	64%	2395	42%	665	36%

Sources: Education for Modern Fiji, 1969; Report of the Education Department for the Year 1969.

The external examinations taken in upper secondary school changed in the 1960s from the Cambridge Overseas examinations to New Zealand School Certificate and New Zealand University Entrance. (Chapter 5.2 explains the examination system in Fiji in more detail).

The rapid quantitative expansion of education drew attention to the need to revise the curriculum. Attempts to standardize the curriculum had been sporadic, and there had been complaints of "the hopeless inadequacy of a 20 year old syllabus put out by the government, written in English on the basis of a New Zealand syllabus" (Mangubhai, 1984:188). In 1968, the Government established a Curriculum Development Unit, "charged with the task of revising curricula and of producing the necessary supporting texts for both primary (Classes 1-6) and junior secondary (Forms 1-4) schools (Report of the Education Department for the Year 1969:5). The Curriculum Development Unit's work continued well after independence and curricula were rapidly standardized.

The rapid growth of the school system put much pressure on the Department of Education and there was a definite need for long term planning. However, the immediacies of issues led to crisis planning. As Whitehead commented: "they seemed forever to be resorting to ad hoc measures and expediencies to tide them through endless emergencies brought about by a lack of trained teachers, inadequate school buildings and financial resources, and the vagaries of private enterprise on which they depended for the establishment of schools" (1981:97).

The need to assess the system and plan for the future lead to the appointment of a Royal Commission in 1968. Its findings were significant as they formed the basis of educational development in the post-independence era.

Appointing a Royal Commission to draw up a 'responsible document' on the eve of independence had been done in other British colonies. It denoted the end of the era where education was largely non-political in that policies were formulated without any consideration of political expediencies. The Commissioners consisted of four Britons, one Australian and one Malaysian. It was a conscious decision not to include any new Zealanders as it was felt that New Zealand already had too much influence in Fiji's education.

The Commission expressed concern at the narrow, examination-oriented curricula and the 'qualitative shortages' found in many schools: poorly trained teachers, lack of books, laboratories and equipment. They criticised the Grant-in-aid system, saying that the "low quality of schools in the deprived areas has tended to be self-perpetuating" (Education for Modern Fiji, 1969:44). The Commission made 81 recommendations in three major areas: the quality and number of teachers, disparities between geographical and racial groups and the curriculum.

One of the specific mandates of the Royal Commission was to look into the 'special problems of the education of Fijians'. This topic was examined in detail and various factors hampering Fijian education were identified. They found that geographic isolation hindered Fijian education. The Department lacked the capacity to supervise and offer professional support, especially to

teachers in isolated island and rural schools. The Royal Commission reported that about 130 Fijian schools could only be reached by sea and the Education Department had only one small and inadequate vessel. Combined with the rural poverty of these isolated areas, these schools were of a low standard. Rural schools were usually small, necessitating multiple-class teaching. This required great teaching skill, which was lacking due to inadequate training. The few children who passed the Secondary Schools Entrance Examination, qualifying for secondary school, invariably had to attend boarding schools and the cost factor was often prohibitive. Special measures suggested were the establishment of junior secondary schools in rural areas, localisation of curricula and examinations, improvement of teacher training, pre-school and adult education in rural areas and a scholarship policy reserving 50% of all tertiary scholarships for Fijians and 50% for all other races. The '50/50 policy' as it came to be known, was a visible and politically appealing solution to closing 'the education gap' between Fijians and other races and it was immediately adopted.

The colonial government handed over a system of education in 1970 which was expanding rapidly, especially at the secondary level, with no signs of abating. Qualitative improvements such as curriculum revamping were underway, and there were plans to build a second teachers' training college. Despite the many problems in the system, the future of education was seen with optimism and much hope

was vested in it: to rectify manpower shortages, to unify and integrate the races, and to promote the social and economic development of Fiji.

The imbalance in educational achievement had implications for the economic, social and political stability of Fiji as it gained independence in 1970. Education had indeed proved to be the passport for Indians to enter commerce and the professions and Fijians were increasingly conscious of their inferior position in the education stakes. Forging realistic education policies for a multi-racial country was to be a major challenge for independent Fiji.

Footnotes.

(1) Fisk (1970) coined the term 'subsistence affluence' to describe the highly productive traditional agriculture practiced by Fijians. He maintained that this subsistence affluence provided such a secure social and economic base for Fijians that motivation to change this lifestyle was weak.

At Independence in 1970, Fiji became a Dominion within the Commonwealth and adopted a Constitution which had been drawn up after consultation with representatives of all communities in Fiji and the British government. It provided for a bicameral Westminster system of government with a complex voting system which would ensure a fixed ratio of parliamentary seats: 22 Fijians, 22 Indians and 8 of other races. There was also provision for an upper house or Senate consisting of nominated members with a large proportion being nominees of the Great Council of Chiefs, traditional leaders of the indigenous Fijians. Legislation was drawn up to protect the land and rights of the Fijians who, in their position of numerical minority and economic marginality, felt threatened. Elections that took place in 1972, 1977 and 1982 returned a parliament dominated by an alliance between Fijians and General Electors (those neither Fijians nor Indians).⁽¹⁾ This created an environment of political stability and Fiji prided itself on being an example of multi-racial peace and harmony.

In 1987 however, a Coalition backed largely by Indians came to power and it soon became apparent that this was unacceptable to many indigenous Fijians. Four weeks after taking office, the newly elected government was overthrown by a military coup. The aim of the coup was to ensure political supremacy for Fijians. The coup leader, Major-General Rabuka, stated: "The country would never

again see a Government dominated by the Indian population" (Observer 17/5/87). The Governor-General, representative of the Queen, took nominal control after the coup, with the acknowledged problem of working out a compromise political solution: Fijians demanding political control and Indians, who run the economy of the country, demanding rights in the country of their birth. Fiji's much vaunted multi-racial harmony was shattered.

After some four months of bitter political wrangling, a compromise solution for an interim government which included Indian participation was formulated under the leadership of the Governor-General. Before this plan could be implemented however, a second coup took place, led by the same army officer as the previous coup. The aim of the second coup was to fulfil the aims of the first: to guarantee Fijian political supremacy. Some two weeks after the second coup, the military government declared Fiji a republic. One consequence of this was a loss of Commonwealth membership, as the overt wish for racial dominance of the indigenous population was unacceptable to the Commonwealth.

In December 1987, after holding power for some two months, the military government appointed a President and handed the reins of government to civilian rulers. The prime minister who had lead Fiji for seventeen years until the April 1987 election was re-instated, and he appointed a Cabinet which was composed mostly of indigenous Fijians. Four military officers, including

coup leader Major-General Rabuka, were in the newly formed Cabinet, an indication of the ongoing strength and influence of the military. The most immediate task facing the new government was, according to the Prime Minister Ratu Sir Kamisese Mara, to rebuild the nation's economic strength. "This means creating an environment of stability, based on peace and goodwill among all the communities that make up our richly varied nation" (Fiji Times, 9/12/87). The effects of the political instability on the country and particularly on education are examined more closely in Chapter 4.4.

4.1 Post Independence Education Policy.

After independence in 1970, there were no radically new policies immediately implemented. Rather directives initiated in the late 1960s, specifically the recommendations of the 1969 Royal Commission, were the basis of educational planning. The Report of the 1969 Royal Commission has been regarded as a seminal work on the subject of education in Fiji and it has been quoted and discussed extensively, for example by Cokanasiga 1982; Lasaqa 1984; Mangubhai 1984; Whitehead 1981. Indicative of the respect for the Report is Cokanasiga's comment: "...one thought was very real and imposing in everyone's mind, that is, that Fiji's future lies in the Commission on Education in Fiji's recommendations, a set of tasks which must somehow be attended" (1982:41). Not all the Commission's recommendations were adopted however, as unlike the colonial government, the

government of independent Fiji had to take account of political expediency. The Commission had, for example, recommended containing the expansion of the education system, to prevent an erosion of quality, but this was contradictory to the rapidly increasing popular demand for an expansion of school facilities. Whitehead observed that "The British colonial administration could afford to adopt a relatively cautious approach towards educational development because it was not directly answerable to the electorate, but a popularly elected government had to be far more sensitive to the force of public opinion" (1986:4).

The 1960s had seen a sharp increase in enrollments, especially secondary, and this escalated after 1970 as Table 4.1.1 indicates. Primary enrollments dropped due to the decline in birth rate, although the number of schools increased slightly. Secondary enrollments increased by approximately 150%, with the number of girls outnumbering boys by 1981. The expansion of secondary education in the 1970s was largely unplanned and caused problems for educational administrators. Delailomaloma, a Chief Education Officer in the Ministry of Education said in 1972: "...the force of this impact has resulted in an uncontrolled growth of these schools to the extent that they spring up wherever people can put together four walls and gather a group of children, without any clear idea as to what type of education they want these children to have" (in Cokanasiga; 1982:29). Local politics was widely recognized as exacerbating the problem of

duplication, as every community wanted not only its own primary school, but now a secondary school as well. Clearly though, many children were still not reaching secondary school. In 1981 the total secondary enrollments were only some 40% of the primary enrollments.

The majority of schools have remained privately run, as Table 4.1.2 shows, receiving Grants-in-aid and coming directly under the Ministry of Education's curriculum and policy prescriptions. The fact that excluding teacher training institutions, 97% of schools in Fiji are owned and managed by non-government bodies is of wide ranging significance. Although the government gives substantial financial assistance to non-government schools, ultimate decision-making power for individual schools lies with the management of the schools, not the Ministry of Education. This lack of Ministry control has given rise to many anomalies in the Fiji education system.

Table 4.1.1 Number of Schools and Enrolments 1971-1984

(a) <u>Primary</u>	Number of schools	Number enrolled
1972	628	127,908
1981	656	116,318
1984	665	123,340
(b) <u>Secondary</u>	Number of schools	Number enrolled
		Boys Girls Total
1971	73	9,777 8,317 18,094
1981	136	22,693 23,150 45,843
1984	139	21,521 21,756 43,277

Sources: Ministry of Education Annual Reports for the Years 1981 and 1984.

Table 4.1.2 Types of Educational Institutions and Controlling Authorities, 1986.

	Controlling Authority		
	Government	Non-government.	Total
Primary	14	658	672
Secondary	11	129	140
Tech/vocational	3	37	40
Special schools	-	7	7
Teacher training	1	2	3

Source: Ministry of Education Annual Report for the Year 1986

The Grant-in-aid system has also enabled a system of schooling to arise which is far from uniform throughout the country. Although all the schools in Fiji follow the same curricula and Ministry guidelines, there is an enormous amount of diversity among schools. All the numerous branches of the three main religions in Fiji; Christianity, Hinduism and Muslim, have schools in various parts of the country. Many schools are characterized by a dominance of a particular ethnic group or cultural ethos. Schools vary greatly with location and size. In 1986, the rolls of secondary schools varied in size from 27 to 1,121. (See Appendix Three). Schools in rural areas tend to be smaller and less well-equipped than those in urban areas. The Grant-in-aid system stipulates that schools must provide a certain proportion of their capital and recurrent expenditure, thus schools with a more affluent clientele are more able to provide favourable facilities. This tends to favour larger and urban schools. Schools also differ widely in the results they produce, based on the commonly used index of examination results. (See Appendix Four).

The 1969 Royal Commission recommended a change in the school structure from the 8 year primary/4 year secondary, to a system of 6 year primary/4 year junior secondary, with 2 years at a senior college for those who proceeded to that level. The aim was for junior secondary schools to be located mainly in rural areas and to have a practical orientation. This was seen particularly as a means of assisting Fijian education. Linked closely to

these plans, was the proposed restructuring of primary external examinations. The policy of encouraging the establishment of junior secondary schools was pursued during the 1970s, although established secondary schools were reluctant to change their structure.

By the late 1970s however, many junior secondary schools had added Forms 5 and 6, thus becoming full secondary schools. Converting junior secondary schools to full secondary schools is now the aim of the Ministry of Education. The present situation is thus very mixed: some primary schools terminate after 6 years while others have retained the 8 year system. Similarly, some secondary schools start at Form 1, while others start at Form 3. The school structure determines to a large extent what external examinations are taken as a primary leaving examination. (This is explained more fully in Chapter 5.2). The fact that the government was unable to successfully implement its policy of changing school structure exemplifies a problem at the crux of Fiji's education system: the Grant-in-aid system has resulted in the Government having only indirect control. It can encourage school managements to change their policies, but it cannot force them. Hindson noted that "Pressures from the public prevented the restructuring from being successful, and doubts of parents and teachers concerning the non-academic education and the role of examinations worked against the junior secondary school concept... While government rhetoric throughout the decade continued to lay stress on the need to control growth, to

institute a more practical curriculum and to assist the rural junior secondary school, non-government controlling bodies went their own way" (Hindson, 1985:143).

Teacher education had been a priority of the 1969 Royal Commission and it was the focus of the education sector of Development Plan VI, 1971-1975. With ever-increasing enrollments, there was much pressure to increase the number of trained teachers, and teacher education was seen as a way of raising the overall quality of education. Nasinu Teachers' College was restructured and expanded in the early 1970s, and the University of the South Pacific was training secondary teachers. Roman Catholic and Seventh Day Adventist Teachers' Colleges continued to train small numbers for their own schools. In-service training was introduced, especially to familiarize teachers with new curricula that had been developed.

Education became an increasingly important political issue in the 1970s, frequently with racial overtones. In 1975 the then Minister of Education decided that Government would no longer subsidize the school fees of poor Indian children, but would reserve all its assistance for Fijians. There were outraged protests from Indian leaders and eventually the decision was reversed. The fact that such an overtly discriminating policy could emerge at all represented the wish of many Fijians to attempt to hold back the progress of Indians and to allow Fijians to 'catch up'. In the 1977 general election

campaign, education was a major issue. The issue of different entry marks for Fijians and Indians at the University of the South Pacific caused much anguish and anxiety to Indians. (2) Although the governing Alliance Party justified the policy on the grounds that Fijians were in a severely disadvantaged position in the country, it was perceived by Indians as an attempt to make them second-class citizens. Indians saw the life-chances of their children narrowing and the door to their previous success closing. Endorsing the high stake that Indians placed on education, Ali noted that "The progress of the Indian community in all spheres is founded on the opportunity, often self-made, to acquire Western education" (1980:203).

By the late 1970s there was concern at the increasing costs, relative and absolute, of education. Table 4.1.3 shows the proportion of educational expenditure in the government's budgets, and compares it to that of the health sector. Table 4.1.4 shows expenditure per capita of population on education and health, both of which had come to be perceived as universal fundamental rights. The greatly increased expenditure on education between 1964 and 1975 is indicative of both the demand for more and better education, and also of the political visibility of education.

<u>Table 4.1.3 Education and Health in Fiji Government's Operating Budget, 1964 - 1978. (Percent)</u>				
	1964	1968	1974	1978
Education	14.9%	15.8%	22.2%	25.0%
Health	12.3%	10.0%	10.2%	8.8%

Table 4.1.4 Government Expenditure on Education and Health Per Head of Population. (\$Fiji)

	1964	1968	1975
Education	3.5	6.7	45.1
Health	3.6	4.5	15.4

Source: (For both Tables 4.1.3 and 4.1.4) Fiji Government, Parliamentary Paper Number 24 of 1978.

While the share of government expenditure on education was increasing, the proportion of the budget devoted to salaries increased from 74% in the 1970s, to 85% in 1984. (Parliament of Fiji, 1984:1376). This was largely due to powerful teachers' unions who were militant in their demands. The Minister of Education stated in 1984 "...the real issue concerns a better distribution of the resources voted for education...the disproportion of 85% of the budget going to personal emoluments must be redressed, without a remedy here the quality of education will in the end be threatened" (Parliament of Fiji, 1984:1380). The issue was not however redressed as it was simply not viable to do so.

A committee appointed in 1978 to review government

expenditure on education, especially tertiary education, found that tertiary education cost an estimated \$2,000 per head, with University of the South Pacific students costing the government \$3,600 per head annually. This figure was some 80 times the average per capita expenditure on education and, given a fairly high wastage rate at the university especially, this was a cause for concern. (Government of Fiji, 1978).

The 1970s were a time of moderate economic growth, averaging a 3.3% growth rate between 1970 and 1980. The currency was stable and there was no major foreign exchange crisis. Infrastructure expanded considerably during this period. Fiji was very proud of its stable polity which was attractive to foreign investors and aid donors. The 1970s were a period of optimism in social, economic and political arenas. Most key positions in the country had been filled by Fiji citizens and although it was far from being a wealthy nation, there was little absolute poverty. In World Bank terms, Fiji was in the group of middle income countries.

Changes were to come towards the end of the decade. Cameron suggests that the relative prosperity of the 1970s was shattered with the rise in oil prices in 1979, which "highlighted the end of an independence honeymoon in which the building of the basic apparatus of an independent state was largely completed" (1983:11). The early 1980s were a turning point economically, with increased vulnerability especially in the main export

commodity, sugar. The country could have at this point opted for a no-growth oriented economy which would have maintained a stable balance of payments but may have reduced employment opportunities in the country, or chosen a growth oriented path. It was a political decision, and obviously a growth oriented economy had more appeal especially at a time of increasing unemployment. Although Fiji had a good record for debt repayment, the proportion of foreign debt servicing from her annual budget gradually increased. The massive increases of the 1970s in new schools and school enrollments slowed, partly out of economic necessity, partly because of the falling birth rate and also because saturation point in school provision had almost been reached.

Development Plan VII, 1976-1980, shifted the focus from teacher training to qualitative change especially curriculum revision, with a strong emphasis on vocational education. This was in response to emerging problems. "A new problem came to light as the Sixth Plan period progressed and secondary schooling expanded...the manpower needs of the economy cannot cope with the large number of academic school leavers" (Development Plan VII, p.177). There was mention of restraining expansion, as some of the inherent difficulties of the Grant-in-aid system persisted. Rural communities constructed make-shift school buildings, without official permission, and then applied pressure for grants. Since the inception of the Grants-in-aid system, it had been difficult to

refuse requests of already functioning schools, especially where political pressure was applied.

Manpower planning was very evident in Development Plan VII, with many pages of complex manpower projections. There appeared however to be no link between these projections and education sector plans.

The second teachers' college, which had been proposed in the late 1960s, was opened in Lautoka in 1977. By the early 1980s it was clear that teacher requirements had reached saturation point and the recently revamped and restructured Nasinu Teachers' College was closed in 1983. The building of Lautoka Teachers' College had obviously been an expensive blunder, as teacher numbers had increased greatly from the mid 1970s. The urgent need for the second institution had been 10 years earlier, in the mid 1960s. Between 1983 and 1987, teacher unemployment was been a problem and government-sponsored student teachers were no longer promised employment. University of the South Pacific diplomates in teaching staged hunger strikes in 1984 and 1985 to force the government to give them teaching posts. Government was under intense political pressure to act, and its response was to establish a Volunteer Community Service Scheme, whereby newly trained teachers 'voluntarily' worked as teachers, earning a small allowance. It appears to have been an unsatisfactory response to the problem, with few in favour of it. No further students have been sponsored by government for the secondary teaching diploma, in an

attempt to curb the number of unemployed trained teachers. Emigration of many teachers following the political troubles of 1987 put an end to the brief period of teacher surplus.

Development Plan VIII, 1981-1985, gives the impression that quantitative problems had been solved and the emphasis was on qualitative improvements. A major concern was the unemployed school leaver. Revision of the curriculum, new practical subjects, revising teacher education and the emphasis on agro-technical courses were seen as possible solutions to making education more relevant and useful to students.

The current Development Plan IX, 1986-1990, notes that while technical and vocational education was given high priority during the previous plan period, "educating parents and pupils to appreciate the advantages of practical skills proved difficult" (Development Plan IX, p.136). Practical subjects such as crafts, commerce and agriculture remain a priority, with constant pleas to reduce academic bias. A review of curricula and examinations was proposed with the localizing of all secondary examinations by 1989. Computer education was seen as a priority and the aim of the plan was to see computers in every primary and secondary school by the end of its duration. When criticized in parliament for having misplaced priorities and placing more importance on computers than basic items such as textbooks and desks, the Minister of Education refuted, "We are of

course helping towards these facilities and we will continue to help towards ensuring that these facilities come about, but the inadequacy of these cannot delay our march forward so that we enable our children to cope with the 21st century" (Parliament of Fiji, 1984:694).

The necessity to respond to the ever worsening problem of educated unemployment has prompted the government to rapidly expand its vocational education programmes. The subjects taken in the final two years of secondary school give prominence to technical and vocational subjects. There is an apparently assumed link between the teaching of such subjects and increased employment opportunities in the economy at large.

Integration: the post-Independence Goal.

Following independence, there was a sustained effort by government to promote racially integrated schools and to break down the racial tripartism which characterized colonial education. The Permanent Secretary for Education said in a prize-giving day speech in 1979, "...efforts are consciously made to play down racial and sectarian schools and replace them with multi-racial schools that will have locational rather than sectarian identities and are staffed by multi-racial teaching staff" (Bole, 1980:6). Integration became an explicit education policy in the early 1980s and much parliamentary dialogue was centred around the subject. While the majority of Members of Parliament were strongly in favour of the principle of

school integration, the method of transferring large numbers of teachers from one school to another of the opposite community was widely criticized. The then Minister of Education firmly believed that Government should try to positively pursue integration and not wait for it to occur spontaneously and he encouraged schools to adopt a '4:4:2 formula' - a ratio of students with 4 Fijians, 4 Indians and 2 others on a school roll. (Parliament of Fiji, 1984).

While some schools, especially in urban areas, have tended to become racially mixed, Fijians have tried to resist the integration of the more prestigious Fijian schools. These are seen by Fijians as bastions of indigenous culture as well as training grounds for modern leaders. In 1983, an Indian principal was appointed to Ratu Kadavulevu School, one of the two high status government secondary schools for Fijian boys. A public outrage ensued from the Fijian community, notably from former students of the school who included several prominent civil servants in Fiji at the time. The move was seen as an attempt at Indian domination of a very sensitive area of Fijian life, by a Minister of Education who was Indian himself. The education system is seen as an important vehicle for the official ideology of national unity and nation-building, but as Bullivant noted, "It is one thing to advocate multi-racial harmony, but quite another to set up programmes that will implement it" (1981:86). Despite official rhetoric, in 1986, some 89% of secondary schools in Fiji were

dominated by one of the two major ethnic groups, as Table 4.1.5 illustrates.

Table 4.1.5 Racial Composition of Secondary Schools, 1986.

Schools with over 90% Fijian students	-	31%
Schools with 60 - 90% Fijian students	-	11%
Schools with less than 60% either Fijians or Indians	-	11%
Schools with 60 - 90% Indian students	-	36%
Schools with over 90% Indian students	-	11%

(From 1986 Annual school returns to the Ministry of Education.)

Table 4.1.5 indicates that education in Fiji is clearly polarized along racial lines, with 42% of schools dominated by Fijians and 47% dominated by Indians. This makes an interesting comparison to their relative proportions in the population as a whole where (in 1986) Fijians made up 46% and Indians 49% of the total. Such differences have been justified in the past on the grounds of geography, which is certainly true in some rural areas, especially outer islands which are populated almost entirely by Fijians. However even in the Suva Nausori urban area, where 36% of all secondary students in Fiji attend school (15,013 out of a total of 42,107 in 1986) and where there is a high degree of mobility, 75% of schools have a racial dominance of over 60% of one ethnic group. (See Appendix Three). The nature of education in Fiji partly explains this situation -

because schools are largely run by religious organizations and community committees, parents are able to select schools for their children which match their particular preference. History explains the racially separate schooling to a large extent. Colonial policy was to educate the races separately (as detailed in Chapter Three) and a radically new policy put forward by an independent government could not quickly gain acceptance.

4.2 Qualitative Improvement through Curriculum Change

Curriculum change has frequently been identified with qualitative improvements in education and policy makers in Fiji have echoed this view. Criticisms have been levelled at the curriculum since the inception of education in Fiji. Curriculum revision began in 1968 and by 1984 material for the first 10 years (Class One to Form Four) had been completely revised and localized. Substantial 'Fiji Options' had been built into the New Zealand School Certificate and University Entrance examinations.

It has become evident however that the mere existence of a Curriculum Development unit, or even of a new curriculum, does not automatically improve the quality of teaching or learning. The officers charged with the task of revising the curriculum lacked specific training and theoretical background. "One of the unfortunate legacies of the colonial period has been the idea that education officers learn 'on the job' and that successful

experience in teaching is sufficient for an individual to become competent in the sphere of curriculum planning and development" (Hopkin, 1978: 150). Materials produced range from sensitively balanced and carefully sequenced courses of study, to large sections of university level text-books indiscriminately copied with no attempt to guide or explain.

It was intended to have wide participation in the curriculum development process and a series of work-groups for each subject and level were appointed. Draft texts were printed in the form of booklets for each unit of study and were used in trial schools while evaluation and revision took place. Problems arose in sustaining the interest of both the work-groups and the teachers in trial schools. Constant transfers and movement of staff exacerbated the problem of continuity. In many subjects, when final editions were printed, there were few changes from the trial booklets. In reality, major decisions were made by curriculum officers and administrators with minimal participation by practising teachers. (Baba, 1980; Mangubhai, 1984).

The examination system has placed constraints on curriculum change. There has been pressure by teachers to increase the amount of factual information which can be tested by recall, rather than through interpretation or reasoning. This situation is by no means unique to Fiji. Lewin (1984) wrote generally of developing countries, "In situations where a primary motive in going to school is

to be selected for more schooling and acquire qualifications, examinations are likely to exert considerable influence on the curriculum at both design and implementation stages; more than, for example, exhortation, rhetoric and prescription contained in texts and guidebooks" (1984:145).

The major difficulties with the new curriculum have arisen with its implementation: how teachers use the material and how children are able to learn from it. The new curriculum emphasizes child-centred learning and has attempted to leave behind the pedagogy of rote, examination-oriented learning. Many teachers feel uncomfortable and threatened with this approach, often because they lack background in the subjects themselves. Gurmit Singh, as Principal of Lautoka Teachers' College, wrote "This issue - namely the competence of the classroom teacher to implement effectively curriculum change - lies at the heart of all decisions regarding professionalism in teachers in Fiji" (Singh, 1978:121).

Failure to use the new curricula effectively is often due to lack of confidence in the subject areas. Frances Pene, a former curriculum advisor for secondary English, wrote: "In English, teachers fail because they just don't have a wide enough background of reading, nor enough enthusiasm for the language and literature. The last two apply to a lot of teachers in other subjects - a very limited subject knowledge (confined to what is examinable) and a purely exam based and salary based motivation" (Personal

communication, 1986). Francis Mangubhai, another former curriculum advisor, has written in the same vein, "the pace of curriculum development over the decade since independence has outstripped the capacity of many teachers to use the new materials properly.' (1984:194).

In-service courses were intended to retrain teachers in the new curricula. Much faith was vested in these courses of one or two days duration, to change established attitudes and practices. School principals tended to have negative attitudes towards in-service courses as without a system of relief or supply teachers, a school timetable is strained by the absence of teachers. A solution to the problem of lost teaching time, suggested in 1984, was to have all in-service courses run on a voluntary attendance basis during the school holidays.

There is very little follow-up to in-service courses, such as visits of curriculum advisors to schools. Such visits have been curtailed in recent years to cut costs. Inevitably, isolated rural schools are neglected, depriving them of much needed professional support.

The emphasis of the Curriculum Development Unit's work in the late 1980s has been to plan and write the curriculum for the the new Fiji School Leaving Certificate. This was implemented in 1988 and examined for the first time in 1989. Interviews with C.D.U. staff in 1987 revealed that a shortage of staff and funds was hindering progress. Morale was low because of the uncertain political

situation. The changed political situation of the country in 1987 also required adjustments to be made in certain subjects such as Social Science.

A lecturer in education at the University of the South Pacific suggested that too much emphasis is placed on curriculum, in the light of the political instability of 1987. He observed that education had been persistently used as a vehicle for instilling the values of tolerance and respect for the culture of others, and yet the communal bitterness seen in 1987 bore no witness to what had been taught in schools. (Personal interview July 1987).

After independence, the practice of inspecting schools by government inspectors was replaced by that of advisory visits which were another duty of Curriculum Development staff. In practice there was never sufficient financial or manpower resources to visit each school even once a year, and the ill-defined 'advisory' visits had little value as there was no feedback to the schools concerned and very little time available for advisors to talk informally to teachers. Due to transport difficulties rural schools received fewer visits, reinforcing their inferior position vis-a-vis their urban counterparts.

4.3 The Access Issue.

Access to education and equity of opportunity have become increasingly important issues in the post-independence years. In a multi-ethnic society with wide variations in economic power and achievement, education has also become more politically charged than ever. Development Plan VI, 1971-1975, set down the aim for education 'To provide ten years of education for every child who wants it', and this aim has been reiterated in every subsequent Development Plan. Such an aim holds the implicit assumption that all children have equal access to education, and that it is available for the taking. In reality, there are various institutional, geographical and socio-economic reasons why access to education is far from equal.

As inferred earlier, the Grant-in-aid scheme has brought about a very unequal system of schooling, which has tended to discriminate against schools in the lower cash income receiving village communities, while favouring those urban schools in the more prosperous areas. The basis of the Grant-in-aid system has not changed since independence and the inherent inequalities in the system have become self-perpetuating.

School size is significant when examining differential access to education, as small schools, especially in rural areas, are unable to maintain facilities of

quality. The Grant-in-aid system itself has unwittingly encouraged duplication and fragmentation as community groups and religious organizations have been able to establish new schools regardless of existing schools in the locality. This has resulted in some schools with such small rolls that they are effectively supported by only a few families. Under the Grant-in-aid system, schools have to pay for certain recurrent and capital costs. Thus small schools have a very limited parent body to call upon for their income. Table 4.3.1 shows school size in 1986 and reveals that 39.7% of secondary schools have less than 200 pupils.

Table 4.3.1 Student Enrolment in Secondary Schools, 1986

Total roll	Number of schools	Percentage
Less than 100	23	16.3%
101 - 200	33	23.4%
201 - 300	33	23.4%
301 - 400	15	10.6%
401 - 500	10	7.0%
501 - 600	11	7.8%
601 - 700	9	6.3%
701 - 800	3	2.1%
801 - 900	2	1.4%
901 - 1,000	-	-
Over 1,000	2	1.4%

(Source: Ministry of Education annual school returns, 1986)

Research from other developing countries has also suggested difficulties with small secondary schools, especially in rural areas. Vulliamy (1987) found in Papua New Guinea that small rural secondary schools tend to suffer more from staff shortages and high staff turnover than larger schools and the effects of these were relatively more damaging in small schools. This concurs with Somerset's (1984) report on Nepal where he highlighted the same problems for 'schools of sub-optimal size' (less than 200 students). Such small schools struggle to be financially viable and lacking specialist teachers and learning resources, they may fail to maintain educational standards.

A small privileged minority attend the few government schools. "The proportion spent upon the government schools is large and the relatively few children who attend such schools are to continue to enjoy an education much superior to that of their peers" (Hopkin, 1976:226). Selection criteria for government schools are not uniform, but the urban government schools use an English medium from Class One (compared to vernacular for the first four years in most schools) which favours children from homes where English is spoken. These schools used to have strong racial affiliations, but now socio-economic class is the dominant factor. Children of civil servants, business people and politicians of all races dominate the English speaking government schools. This urban elite is very vocal and has much political influence. In 1978, the government decided to hand over its primary schools to

parent committees, in order to cut costs and also to put all primary schools in the country on an equal footing. While some schools 'changed hands' with no problems, the parents of two elite schools in Suva vociferously refused to comply, forcing the government to keep control. Aware of this situation where the more affluent and articulate were receiving better education for their children at less cost, since fees in government schools are low compared to non-government schools, the Minister of Education announced in 1984 that the two primary schools in question would have to comply with the admissions formula of 4:4:2 (a ratio of 4 Fijians to 4 Indians to 2 of other races) and would be obliged to admit 80% of students from families with an annual income of F\$3,000 or less. (Parliament of Fiji, 1984:693) He also threatened to disallow the use of English medium as this was discriminating against children who could not speak it at entry point. These moves aimed to effectively eliminate the privileged position of the schools in question. The Minister of Education stated in parliament: "In short, the Veiuto and Suva Primary parents should face reality, because they cannot have their cake as well as eat it" (Parliament of Fiji, 1984:694).

Rural schools in Fiji are gravely disadvantaged vis-a-vis their urban counterparts. Emphasis for fund-raising tends to be on buildings, and equipment and books take low priority. Baba (1984) found that rural schools had poor science, library and other support services available and often had less experienced and qualified staff.

The degree of geographic isolation is an important variable in Fiji. Schools on small islands often suffer from absent teachers as boats are often unavailable to bring staff at the start of school terms. If essential equipment such as chalk, paper or pencils run out, it may be months before new supplies arrive. Visits from Ministry of Education officials are almost non-existent, due to the cost and time of travelling. Thus professional support is provided least to those in greatest need. There are few secondary schools in the outer islands and remote rural areas, and the few children who do qualify for secondary school either have to board with relatives or attend boarding schools. Children who go from rural to urban schools tend to perform poorly, compared to their urban counterparts. Their spoken English and general school background tend to be poor and they are reluctant to speak out for fear of ridicule. Consequently there is a high drop-out rate of such children.

Poverty, rural or urban, determines and limits access to education. Although in theory the first 8 years of school are now tuition-free, there are many other calls on finances. Schools do charge fees to cover running expenses and these increase at secondary level. The Grants-in-aid system necessitates constant fund-raising and fees, often under the guise of 'building fund contributions', are often levied. Parents have to pay for uniforms, bus-fares, text-books and various incidentals. Knapman and Walter's (1980) research in the villages of

northern Lau reveals a situation where cash income is very limited relative to cash needs due to pressure on land and inadequacy of resources. "In a situation in which even daily personal consumption expenditure puts pressure on cash resources, it is hardly surprising that meeting education outlays constitutes an emergency" (1980:211). The opportunity costs of education are also significant especially for low-income families. "The difference between what could have been and is earned is an important indirect cost of schooling. Tuition, fees, books and supplies, unusual transportation and lodging expenses are other, more direct costs" (Becker, 1962:26).

The racial situation in Fiji clouds all discussion of access to education. This is heightened because the factors of rural location and low economic status coincide largely with the Fijian race, thus creating an easily identifiable disadvantaged group.

The 1986 census figures show that 67% of Fijians live in rural areas, compared to 59% of Indians, but this rural/urban dichotomy masks significant variation within the rural sector. Population distribution maps based on the 1976 census show that rural Indians are clustered around the 'cane-belts', due to their involvement in the sugar-cane industry. Such areas have well established social and economic infrastructure and do not suffer from isolation. Fijians however are scattered throughout the many islands of the group and are found in the interior of the large islands where infrastructure is poor. The

negative factors that apply to rural schools, especially those suffering from geographic isolation, thus apply directly to Fijians.

It is apparent that Fijians are the poorest ethnic group. With over half involved in semi-subsistence agriculture and a history of limited involvement in the commercial sector, the civil service, especially the armed forces, is the major employer of Fijians in the modern sector. (Report on the Census of Population 1976). However the very small number living in extreme poverty in Fiji are Indians. The communal nature of the Fijian extended family prevents its members reaching this point.

Clearly, many factors determining access to education are linked. This reinforces levels of advantage or disadvantage which tend to be perpetuated from one generation to another. The system has hidden methods of selection, apart from screening through examinations. It favours the affluent urbanite and places the poor rural majority of the population at a distinct disadvantage.

Academics have paid attention to differing responses in education and their findings help to lend a degree of objectivity to a highly emotive area. Research on differences in educational achievement is reviewed in Chapter Five.

Psychological and socio-cultural conflicts are difficult to resolve, thus most attempts to aid Fijian education

have been at the institutional level. Efforts have been made though to 'indoctrinate' parents into attitudinal changes. An example is a series of radio talks in the Fijian language programme which advocate greater parental involvement in education. The Ministry of Education has reiterated this theme in public speeches and addresses. Although Fijian parents do attach much importance to education and take part in fund-raising activities with great enthusiasm, they tend to be passive recipients and rarely play an active part in the formal education of their children.

One of the government's main responses has been to implement the policy of allocating tertiary scholarships on a 50:50 racial basis, referred to in Chapter 3.5. At first, there were not enough qualified Fijians to fill the quota, so a dual entry system was established for university, whereby Fijians with lower entry requirements than others were accepted. (2) This system has yielded a high wastage rate as it did not solve the problem of poorly motivated or inadequately prepared students. There is a very high drop-out rate in the first year at university - in 1977, 40% of first year Fijian students failed their Foundation course compared with a non-Fijian failure rate of 9%. Inevitably this system of positive discrimination has its opponents, especially from other races who feel blatantly discriminated against. Although many Fijians have benefitted, the system has not reduced the disparities between the two major racial groups.

The early 1980s saw much pressure put on the Fijian dominated government to take more positive action for Fijian education. After a decade of independence, the glaring gap between Fijians and Indians was still evident. Although various suggestions had been tentatively made in Development Plans and Ministry of Education Annual Reports, there were few visible results, and there were accusations that the government was paying lip-service to this critical problem. In 1984 Cabinet decided to make a special annual grant of F\$3.5million (approximately £2.4million) towards Fijian education. As a matter of political expediency, this was to be administered by the Ministry of Fijian Affairs, not the Ministry of Education, and much of the money was set aside for the construction of new schools. Initially the Ministry of Education had advisors in the Fijian Affairs Board, but by 1987 there were no education professionals involved in the administration of the funds. In comparison with the annual education budget, this grant is substantial.

Throughout the Development Plan Nine period, 1986-1990, F\$3,500,000 was budgetted annually for Fijian education development, as opposed to a total of F\$30,000 research and development. It could be speculated that the large amount accorded to Fijian education would benefit from more research as so many questions remain unanswered in this sphere. Baba has warned that the \$3.5million grant could go a long way towards improving Fijian education only "if professional advice based on research and the

sound understanding of the factors that impede Fijian education is heeded" (1985:6).

Decisions for granting money from the \$3.5million were made by a committee of politicians, the Permanent Secretary for Education and some retired teachers. Buildings and equipment especially for secondary schools have thus far been the dominant item of expenditure. A senior secondary school in the province of Lau to cater for Form Five and Six has, for example, been financed by this fund. The emphasis is on secondary school education and also on tertiary scholarships with the intention of upgrading teacher qualifications. Primary education is not seen as a priority issue. A former Permanent Secretary for Education commented that committee members tend to lose sight of the goal of improving Fijian education as a whole, as they constantly seek explanations as to why some provinces are favoured over others. (Personal interview). Such criticisms of inter-provincial imbalances have been aired in the press and in parliament, highlighting the very political nature of education in Fiji, even within the Fijian community. Although it was intended that \$3.5million be spent annually until 1990, the scheme was abandoned in 1988 for financial reasons.

In 1986, a policy of concentrating resources on one secondary school in each province, creating 'centres of excellence' was proposed. Such assistance was to be directed at schools with at least 75% Fijian students on

their rolls. However investigations in 1987 revealed a lack of knowledge of such a policy and a senior government official claimed that it had become a contentious issue within provinces and the likelihood of creating jealousy between schools had lead to the dismissal of the idea. Aid to rural Fijian schools has thus been somewhat ad hoc , lacking a clearly defined policy. An example of this is the idea of a senior Ministry of Education official to purchase sets of the Encyclopaedia Britannica for rural schools. This was implemented at great cost with little apparent consultation with the recipient schools. A decision to provide computers to rural schools was taken in the mid-1980s. As in the case of the encyclopaedias, a lack of preliminary research resulted in computers being sent to some schools with no electricity. Lack of teacher training in computer skills or relevant curriculum has resulted in an expensive capital outlay which is not able to be effectively utilized.

This response to Fijian educational problems is typical of much educational planning: ad hoc responses to crises or problems, without adequate assessment of the long-term implications. It also underlines the fact that Fijian education has become highly politically charged. As Indians clamoured for education in the colonial period, Fijians in independent Fiji were perceiving education as the key to their survival and demanding that the government should make up for past neglect.

4.4 After May 1987: Education in the New Republic.

Fiji's multi-racial peace and harmony and her relatively strong economy were dealt severe blows by the military coups of May and September 1987. Fear among Indians became widespread and those who were able made every effort to emigrate. The Ministry of Education reported in September 1987 that since the May coup, 150 primary and 70 secondary school teachers had resigned. Many of these were science teachers as they were readily able to find employment in nearby New Zealand and Australia. (Fiji Times, 5/9/87). The previously approved policy to lower the school entry age from six years to five years starting in 1988 was shelved in September 1987 due to the teacher shortage. (Fiji Times, 5/9/87).

The economy of Fiji plummetted following the May coup, as tourism suffered and the Indian dominated sugar industry repeatedly delayed its harvest. Customs and excise duties, a major source of government revenue were greatly reduced. Job losses especially among unskilled and casual workers meant that many school children were forced to leave school because of financial hardship and many secondary school students were unable to pay fees for the Fiji and New Zealand external examinations. Nation-wide appeals were held in an endeavour to raise the required amount for the fees. The Fiji Times reported in September 1987 that "Thousands of children have dropped out of school because they cannot pay school fees", consequently

many schools were facing serious financial problems and were unable to pay teachers their full salary. (Fiji Times, 12/9/87). Civil servants, including many teachers, were given a 15% salary reduction in August 1987.

In many respects the second coup had graver consequences than the first: the economy which had struggled to survive the previous months, experienced further setbacks. International condemnation of the overtly racist military takeover brought reductions in aid, a marked contraction to the tourism industry and expulsion from the Commonwealth. It also led to increased emigration of skilled people, particularly Indians. A reported 4,000 Indians left between May and November 1987, a 60% increase on pre-coup emigration. (The Guardian, 4/11/87). Numerous well-qualified Fijians also emigrated. Above all, the second coup was a confirmation of two aspects of Fiji's current politics. Firstly, that peaceful reconciliation giving Indians an equal say in the decision making process of the country would not be tolerated by hard-line Fijians. Secondly, any reconciliation that does not adequately take into account the interests of the military is likely to be aborted before fruition.

Inevitably the education system suffered. When schools re-opened for the new school year in January 1988, there was an estimated shortage of 500 teachers. While shortages of teaching staff, financial cuts and high dropout rates were evident after the two coups, loss of

morale and heightened inter-racial tension were increasingly damaging to the educational process. Civil disturbances in the wake of the coup caused fluctuations in school attendance. Rumours of unrest in Suva and other urban areas caused parents to keep their children away from school, creating a generally nervous and unstable school environment. (Fiji Sun, 22/9/87). Teachers interviewed in 1987 and 1988 told of increasing tension among the staff of schools, with teachers of different races using different staff rooms and extreme cases of teachers of one race refusing to teach children of another race. Certain multi-racial schools faced discipline problems, with the result that Indian teachers became reluctant to discipline Fijian students for fear of a possible backlash from parents who might have connections with the military. Teachers told of polarization among students from kindergarten to university levels. That the political situation of the country is inextricably linked to its education system became overwhelmingly apparent.

In 1988 all government departments had their budgets reduced by 30%, forcing drastic financial cutbacks. The fundamental choice between a growth-oriented or a no-growth economy no longer existed - the thrust now was on recovery, as foreign reserves had fallen drastically in the latter half of 1987 and all the other economic indicators had deteriorated. Advisory visits to schools, which had been severely reduced in previous years, were curtailed even further. Teachers had already had salary

reductions. Budgetary restraints and the general feeling of uncertainty in the country contributed to a loss of morale in many sectors of society, including the education sector.

Another side effect of the political upheavals of 1987 has been the negative image placed upon educated people, especially indigenous Fijians. The overthrown Coalition government had backing from some Fijian academics, as opposed to those of traditional chiefly ranks. It was commonly asserted that the educated Fijians who supported the Coalition had lost their traditional respect for their chiefs and had come under the influence of foreign ideas, thus casting doubt on the value of their education. Fijian academic Dr. Tupeni Baba, who was the Minister of Education in the short-lived Coalition government, wrote "The implicit values that the coups endorsed through the actions that were adopted such as the use of force, unsolicited aggression, violence, discrimination on the basis of race and religion, unilateral imposition of views, absence of dialogue and discussions etc, were in direct opposition to the more universalistic values previously encouraged by society and transmitted in schools" (1988:6).

In opposition to this, the military, which prides itself on its conformity and obeisance to authority, received public adulation at least from indigenous Fijians. Many schools, especially those with largely Fijian rolls, introduced military cadet training in 1988. These

programmes are government-assisted and are well received by Fijian teachers and students. 'Western values' became to be regarded as the enemy of the Fijian people, and education was seen as the main promulgator of such values. The Prime-Minister of Fiji, Ratu Sir Kamisese Mara, submitted to Queen Elizabeth II in a plea for understanding in October 1987 that "All the highlights of the western democratic values - freedom of speech, association, religion etc. exacerbate the inferior position of the Fijian people in their own country. The Western media ridicules, belittles, villifies, insults and does violence to Fijian customs and traditions. Customary and traditional freedoms have clearly defined boundaries. Western freedom knows no boundary" (From copy of submission, 8/10/87).

The future of multi-racial education - a basic tenet of post-Independence government policy, is in the balance, if post-coup ideologies continue to prevail. Similarly, the use of the education system as a tool for fostering national unity and integration.

Attitudes of school children towards education have been affected by the socio-political situation. Two common attitudes among Indians are, on the face of it, diametrically opposed. Some Indians expressed the feeling that schooling was not worth bothering about, because no matter how hard they tried or how well qualified, they would not get jobs or scholarships because of favouritism towards Fijians. More common however was the attitude

that they must get as well qualified as possible in order to compete for scarce jobs, and also with a long term view to migrating. Fijian attitudes could be perceived as being somewhat more relaxed, perhaps with the idea that they may receive favoured treatment because of their ethnic status. Some Fijian teachers expressed the frustrated wish that Fijian children should see the present situation as a motivating force to achieve more in education.

The ban on public censure of the political situation placed the foundations of the education system under threat: if the aim of education is to teach pupils to think for themselves, expression of such thoughts could now be a punishable offence. After the second coup, both national newspapers and the one independent radio station were forcibly closed by the army. When permitted to re-open, such severe censorship was placed on the newspapers that one (Fiji Sun) closed altogether and the other (Fiji Times) refused to publish under those conditions. After several weeks the Fiji Times restarted but political comment was limited to officially sanctioned news. The government-supported radio station remained open, but was only allowed to issue 'official' news. Television was due to start transmission in 1987, but was deferred indefinitely because of the political and economic situation.

A present Minister of the Interim Government claims that Fijian attitudes have changed since the military coups of

1987. The coups were an illustration that the law could be broken and such an action could be legitimized. Several incidents since that time have shown the same disregard for established procedures. In late 1988, the Interim Government partially lifted the restrictive Sunday observance decree which had been laid down by the military government of 1987. A faction of the Methodist Church organized roadblocks throughout Suva in protest, effectively halting movement within the capital. This precipitated a split within the church, which commands the following of some 90% of the Fijian population. The elected president was ousted unconstitutionally and the 'fundamentalist' faction installed their own leader. The more liberal-minded among the Methodist clergy were accused of being westernized and not true to traditional Fijian culture. The rift in the church is far from solved, as both sides are convinced that their view is the correct one.

In late 1989, there were incidents of arson against Indian places of worship: Hindu, Muslim and Sikh, allegedly perpetrated by Methodist extremists. There were also attempted retaliatory attacks at Methodist churches. In a deeply religious country, these incidents caused widespread outrage and Indians protested by withdrawing their labour nationally for one day, silently demonstrating that they still have the power to bring the country to a standstill. The interim government, and indeed the majority of citizens of all races, were vocal in their condemnation of the incidents which served to

demonstrate that despite the fragility of race relations in the new republic, there was still general respect for the common man.

In the field of education, an incident in late 1988 showed the same disregard for law and order. A dispute emerged in a government secondary school on the island of Taveuni, between the principal, the staff, the students and the community. The students ran amok in the school on various occasions, resulting in physical damage and causing the school to be closed for a period of time. Although conflicts in schools had previously occurred sporadically, the use of violence and the flouting of conventional procedures for resolving problems is a recent phenomenon.

It is worth noting that many post-coup conflicts within Fiji, of which the Methodist conflict is a typical example, have been within the indigenous Fijian community. Another issue of whether to establish a fourth traditional Fijian confederacy has emerged, highlighting the longheld suspicion of the political domination of eastern Fijians over those from the western part of Fiji. While increased power is being vested in the hands of traditional chiefs, their support cannot be assumed to be unanimous. The groundswell of discontent among commoners, especially the urban and educated, that led to the election defeat of 1987, has been stifled but not necessarily quelled. There are constant rumours of the formation of new political parties to oppose the present

interim administration, which is perceived by extremists to be too moderate, and by moderates to be too extreme. The progressives in the community, however, tend to see the administration as lacking in overall dynamism and coherence.

The procedure established in the early 1970s of allocating tertiary scholarships on the basis of racial parity, 50% to Fijians and 50% to non-Fijians, was overturned in early 1989 when the percentage allocation increased for Fijians. The government admitted that selection of students was "heavily weighted in favour of indigenous Fijians. Consideration had been given to Fijian nominees who, in many cases, may have had lower marks than applicants of other races" (Fiji Times, 17/1/89). Naturally Indians felt increased resentment, as they had disliked even the 50/50 policy ever since its inception. An acrimonious row flared up between those who felt that Indians were being denied a basic right, and those who felt that Fijians must be given every chance to 'catch up'. A letter to the Fiji Times typifies the exchange: "Such racial discrimination must make Indo-Fijians more bitter, while discouraging any movement towards national reconciliation" (Fiji Times, 23/1/89).

In early 1990 it was proposed that the intake of students for the Fiji School of Medicine should be 80% Fijians to counter the emigration of Indians with medical training as well as attempting to bridge the gap between the races. (Fiji Times 2/2/90). The Minister of Health said

"..the reality of the situation is that the majority of staff losses through migration and abscondment has been that of qualified Indian personnel." He said that 61 doctors had left Fiji since the coups of 1987, of whom 54 were Indians. Other losses attributed to resignations or abscondment of Indian medical personnel were those of 39 laboratory technicians, 5 consultant pathologists, 30 dentists, 10 pharmacists, 7 radiographers, 8 dietician/nutritionists and 3 physiotherapists. (Fiji Times, 3/2/90). There was considerable criticism of this policy which was seen by opponents as a removal of the rights and opportunities of Indians. Although the policy was eventually modified, it highlighted an important issue which has become somewhat of a tautological problem: since many trained Indians emigrate, they should not be given scholarships; rather the scholarships should be reserved for Fijians who are more likely to stay in the country. However, by excluding Indians from gaining qualifications, it magnifies Indian discontent and encourages further emigration.

Education, and the possible denial of access to it, is an issue which stirs the strongest emotions and it has been one of the few issues on which Indians have spoken out. Generally, since the coups of 1987, Indians have not been openly vocal about political developments, possibly due to the fear of repercussions. Rather they have 'voted with their feet', leaving Fiji as soon as they were able. For the first time since 1946, there is now a slight numerical majority of Fijians compared to Indians in the

estimated population of December 1988.

As teacher shortages have worsened, school leavers have been employed to fill vacancies in primary schools as an emergency measure. American Peace Corps volunteers have been recruited for secondary schools. At the start of the 1990 school year the Fiji Teachers' Union alleged that the country was short of 500 teachers. The Ministry of Education denied however that the figure was that high.

Austerity in the education sector has been a feature in many developing countries in the 1980s and Lewin (1987) has coined a phrase - 'a culture of cuts' - to describe the situation. He explains this syndrome thus: "'a culture of cuts' will normally tend to take a short term view and look for immediate savings, devaluing the long term because of the uncertainties involved; it will be conservative towards change and seek to minimize cost within the existing structure of provision to the point where this ceases to be viable...it will value economy over improved access and equitable distribution of services; it may support the development of a 'siege mentality' where the focus is on eking out existing resources rather than generating new ones from outside its immediate institutional environment" (Lewin, 1987:93). Lewin's paradigm closely parallels the situation in Fiji where long-term planning has given way to the priorities of financial expediency. A senior Ministry of Education official told in 1988 of the inability to fund school visits and buy text books, but

of the necessity to allocate extra funds to politically sensitive areas such as buying food for Fijian boarding schools.

By late 1989 the economy of Fiji had made a significant recovery. This was due in part to the creation of tax-free zones which has been very appealing to textile manufacturers not only from nearby Australia and New Zealand but also from South East Asia. By early 1990, 156 factories had been set up under this scheme, 90 of them manufacturing garments. This has implications for education as it has opened up a new avenue of employment which does not depend on a high level of school certification. Civil Service salaries were restored to their pre-coup levels in 1989. Tourism is flourishing with a 25% increase in arrivals in 1989 compared to 1988 and new hotel plans are on the drawing board.

The Interim Government which took over in December 1987 has had its term extended with the significant change that the coup leader and two other military officers who held cabinet rank have returned to barracks. There has been work on a new constitution which guarantees political supremacy to indigenous Fijians, but allows some representation from other races. It is anticipated that the new constitution will be promulgated in 1990. On the face of it, life is running smoothly in Fiji. The relatively uneventful return to daily life could be seen as a reflection of the essentially grass-roots stability that existed before 1987. On the individual level there

is a strong core of goodwill and a genuine wish to keep Fiji a peaceful place to live in.

Footnotes.

- (1) In 1977 the Indian supported National Federation Party won a narrow majority in a General Election, but procrastinated in forming a government. The then Governor-General annulled the results of the election and formed a caretaker government. A fresh election was held and the Fijian backed Alliance won with a clear majority.
- (2) In 1977, the Government decided to grant scholarships for the University of the South Pacific's Foundation year science programme to Fijians who had passed the New Zealand University Entrance examination with at least 216 marks, while non-Fijians were required to have a minimum of 261 marks.

CHAPTER FIVE EXAMINATIONS AS AN INDICATOR OF SCHOOL
QUALITY.

5.1 The Use of Examinations in Assessing Education
Performance.

Of the various outcomes of a school system, certification as a result of passing external examinations is the most readily visible. Mortimore et al. (1984) suggest that examinations serve various functions, inter alia, providing objective achievements 'benchmarks' relative to a pupil's peers; possibly increasing the motivation of teachers; allowing comparison between different schools and geographic regions and acting as a social control to encourage children to work in a disciplined manner. Individual performances and abilities in non-examination areas tend to become subjugated to the passing or failing of external examinations.

The orientation towards the passing of examinations is frequently criticized in Fiji and elsewhere for stifling and inhibiting the teaching and learning process. In Fiji, various reports and commissions, such as the 1969 Royal Commission, have recommended the abolition of at least the primary examinations, on the grounds that they serve no valid educational function. While many industrialized countries have abolished selection examinations for secondary school, developing countries have retained them primarily as a selection device to allocate the relatively smaller number of places in

secondary schools. Social demand in Fiji has strongly favoured the retention of primary examinations, as Chapter 5.2 examines in more detail.

The Case for and Against Examinations.

Broadfoot (1979) has proposed that assessment practices are an indicator of the link between school and society. She argues that the overt purposes of assessment are accountability, to the society who pays for it, and certification, which is perceived as an apparently neutral allocator of life chances. Both accountability and certification are means of 'quality control' on the education system. Broadfoot is critical of the inherent class bias of the assessment system and claims that "The scientific aura surrounding these tests was highly instrumental in hiding any hint of class bias in the very definition of what should constitute educational achievement" (1979:50). She claims that as assessment is the bridge between school and society, it is one of the most political aspects of education.

Broadfoot maintains that there is a complex series of checks and balances in assessment innovation which ensures that their essential social functions of allocation and legitimization are not threatened. She distinguishes between a soft 'reformist' approach to changing assessment procedures and a hard 'radical' approach. The former soft approach merely makes changes within the basic framework, whereas hard changes call for

moves away from traditional assessment practices.

In developing countries, it is apparent that examinations usually undergo a reformist type of change, as there is a strong wish and indeed necessity to retain a formal examination system. Somerset has noted that "The need to select does not derive from factors which educational planners can control; rather, it has its roots in the context of poverty within which all third-world education systems must function" (1987:4). The allocation factor of selection in poor countries is paramount: to decide who can proceed to the next stage of education and who can find employment in very restricted labour markets. Educational qualifications bring great personal returns in developing countries, which account for the value placed on education. Partly as a result of this severely competitive system, internal assessment is not as viable an alternative for developing countries as it is for industrialized countries. "Because so much more is at stake, considerations of objectivity and fairness in the allocation of opportunities become over-riding. Conversely, subjectivity and personal bias are at all costs avoided" (Somerset;1987:7). Countries that have experimented with internal assessment as a partial or complete substitute for external assessment, such as China and Tanzania, have tended to revert to more traditional objective examinations.

Dore's (1976) celebrated 'Diploma Disease' pointed to the rampant 'qualification escalation' which followed two

decades of massive expansion in the education systems of third world countries. He seriously questioned whether certified and qualified people were actually educated in the sense of having the qualities of imagination, creativity, honesty or curiosity. Dore saw the over-emphasis on examinations as detrimental to the education process and he questioned whether such an orientation in education was actually contributing to development, or having the converse effect of creating political, economic and social problems. He proposed that the link between schooling and life-chances should be broken. His submitted solution was to work within the existing system, reorienting it more towards informal learning and integrating the school with community life. Dore favoured in-service training for higher education and eliminating, or at least reducing, the importance of selection in the process of schooling. He called for a new workable pedagogy which would engage children's interest rather than "the goal of the bread-and-butter, certificate seeking, lifelessly instrumental motive for learning which, I persist in believing, is steadily eroding the quality of schooling throughout the world" (Dore:1980:61).

Dore's 'Diploma Disease' thesis has reached a wide audience. His policy recommendations for alternative means of selection are however somewhat vague. If schools did not certify students, there would undoubtedly be a strong tendency to revert to antecedent factors in selection processes, such as ethnic background or socio-economic

status. The assumed objectivity of examinations retains a strong appeal, as it is less prone to corruption and influence than subjective measures.

Improving Examinations to Improve Pedagogy.

In a search for a selection system which would effectively eliminate the most negative features of the 'Diploma Disease', Little (1984) reviewed four alternatives: earlier selection for jobs, abolition of educational qualifications, selection through restricted lotteries or selection through reformed examinations. Rejecting the first three proposals as untenable, Little deduced that the most realistic path for innovation was within the examination system itself. She eschewed the commonly held notion that examinations must inevitably have a totally negative backwash effect on education, having found that "Evidence from a large number of national examination systems points to an enormous potential for change" (1984:222). Little contends that, on the basis of evidence from various countries, the removal of examinations would lead to high levels of demoralisation and lack of motivation. Examination reform could thus be a positive step in improving the quality of education, as well as improving selection processes.

Working on the same premise that "examinations could be a spearhead of educational reform, instead of a barrier to it", Somerset (1987) has described his work in Kenya in reforming examinations. Radical changes were made in the

type of questions asked and an information feedback system was implemented to guide schools to improving their teaching and learning processes. The allocational goals of reforms also included efficiency and equity: to fairly select students of high ability without bias towards particular groups. The educational goals were concerned with the effects of the reforms of primary schools: the teaching of relevant skills and knowledge, improvement of quality of education nationally and particularly in schools in less privileged areas. While in practice, it proved difficult to equate efficiency, equity and relevance, the Kenyan experience shows there is great scope for reforming examinations, resulting in improvements in pedagogy.

But are examination results a sufficient indicator of the quality of a school? Psacharopoulos and Woodhall (1985) point out the difficulty of finding an accurate and indisputable measure of school quality and admit that the most common indicator does tend to be either results of school examinations or of specially administered tests which test non-cognitive as well as cognitive achievement. The problem with the latter is however "that the tests are costly and therefore only small samples are used, with the result that reliability may be questionable" (Psacharopoulos and Woodhall:1984:213). Many of the studies reviewed in Chapter Two attempted to assess the effect of various school inputs, and they invariably used examinations as an indicator of output. While the use of examination results as an index of

school quality remains a contentious issue, there are few other measurements, and, as Somerset and Little have pointed out, examinations do not by definition need to have a negative effect on schooling.

The research undertaken in this thesis, therefore, uses a school examination in Fiji as the benchmark for the qualitative output of schools. To modify this somewhat quantitative perspective, the teaching and learning process is also studied.

5.2 The Use of Examinations in Fiji.

"To most people in Fiji, education is still equated with passing examinations as a means to future employment and school committees and teachers alike are as firmly wedded as ever to examination pass rates as a measure of their success" (Whitehead; 1986:19). There are many examinations in the Fiji school system: in Class 6, Class 8, Form 4, Form 6 and Form 7. The examinations are selection devices for the next level of education and are thus perceived as being of utmost importance by teachers, parents and students. Schools and teachers are judged by the pass rates their students attain and these become popular indices of a school's merits. Testing, grading and ranking are integral parts of life in many of Fiji's schools. From the start of school in Class One, a child is ranked in order of merit depending on results in class tests.

The Primary School Examinations

The Intermediate Entrance examination, taken after 6 years of schooling, was established as a selection device for children in Fijian primary schools for entry to Fijian secondary schools. The government has, in recent years, attempted to discourage the use of this examination as it invariably causes wastage at an early age. The number of candidates did decline in the late 1970s, but increased again in the mid 1980s. In 1982 for example, 4,805 pupils sat the Intermediate Entrance examination. This increased to 5,561 in 1983, 6,114 in 1984 and 8,143 in 1985, almost doubling the number of candidates in just four years. (Ministry of Education Annual Report for 1985). Parental pressure has strongly favoured the retention of the examination and there has been widespread opposition to its proposed phasing out.

The Secondary Schools Entrance examination (since 1985 renamed the Fiji Eighth Year Examination) sat after 8 years of schooling, is the selection criterion for entering a secondary school at Form Three. It was introduced in 1954 when secondary education was starting to expand rapidly. Until the mid 1960s many children proceeded to secondary school without having passed the Secondary Schools Entrance Examination (S.S.E.E.), although it was necessary to gain entry to government or more prestigious church schools. In 1955 for example, only 471 children passed the S.S.E.E. but the intake to Form Three in the following year was 1,100. (Department

of Education Annual Report for 1957). In the first few years of the examination the pass rates were low, but the numbers sitting and passing increased rapidly as Table 5.2.1 shows.

Table 5.2.1 Secondary Schools Entrance Results,

1954 – 1969

	Sat	Passed	Pass Rate
1954	1,198	214	17.8%
1955	1,622	266	16.3%
1956	1,970	471	23.9%
1957	2,123	601	28.3%
1959	2,710	664	24.5%
1961	3,012	719	23.8%
1962	3,393	821	24.1%
1963	3,360	1,079	32.1%
1964	4,084	1,223	29.9%
1965	4,861	1,896	39.0%
1966	5,719	2,341	40.9%
1967	6,488	3,434	52.9%
1968	7,256	3,704	51.0%
1969	8,300	4,083	49.2%

Source: Department of Education Annual Reports.

The proposed structural changes to a 6-year primary/6-year secondary school system (explained in Chapter 4.1) were intended to eliminate the need for the Secondary Entrance examination and from 1973 to 1979, the proportion of Class 8 pupils sitting this examination declined. The Ministry of Education Annual Report for

1975 contained the government policy then prevalent: "To encourage the change-over from an 8-year primary/4-year secondary to a 6-year primary/6-year secondary course, children in Form 2 (Class 8) of secondary schools are no longer required to pass an examination for admission to Form 3." Many schools, especially those which had been traditionally selective in their entry policies, were reluctant to admit students who had not sat the S.S.E.E. and parents found that they were unable to send their children to the schools they preferred without some form of paper credential. Not all schools were able to change to the 6-6 structure, as their physical amenities prevented enlarging secondary sections and reducing primary schools. Because many schools retained the old structure and also kept the Secondary Schools Entrance examination, a dual system emerged. Children who had sat the S.S.E.E. clearly had an advantage in selecting their secondary school, and after a few years of declining numbers of candidates for the examination, it regained its popularity, irrespective of official policy. Table 5.2.2 shows that despite the drop in numbers between 1973 and 1979, from 1980, the proportion of Class 8 pupils sitting the examination increased to a level similar or higher than it had been in 1972.

Table 5.2.2 Percentage of Class 8 Children Sitting the Secondary Schools Examination, 1971 - 1986.

Year	Percent of Class 8 writing the examination.
1971	88.8%
1972	93.9%
1973	79.4%
1974	72.9%
1975	63.0%
1976	60.3%
1977	59.2%
1978	56.1%
1979	55.4%
1980	95.4%
1981	95.2%
1982	94.2%
1983	93.1%
1984	94.4%
1985	93.3%
1986	93.5%

Source: Ministry of Education Annual Reports.

There was no explicit government reaction to this phenomenon, but it is apparent that consumer demand in the form of parental pressure has created the need to retain the S.S.E.E. Despite the fact that secondary education was widely available by the mid 1970s, different schools are perceived very differently and in order to gain entry to schools commonly perceived as 'good', a pass in the S.S.E.E. was desirable. Recognizing this, the government has attempted to modify the nature

of the examination to some extent. In 1985 it was renamed the Fiji Eighth Year Examination and passes and failures are no longer stipulated in the results - only subject marks are given. Secondary schools are free to establish their own 'cut-off points' which retains its use as a medium of selection, but lessens the dichotomy between passing and failing. (This policy was also introduced for the Intermediate Entrance Examination in 1984).

Education professionals in Fiji are largely very critical of the stringent adherence to external examinations, especially at primary level. A common criticism is the influence of examinations on curriculum and teaching. "As a pupil's passage through the education system depends on his success at each examination, and as the pass rate in most of the examinations is relatively low, it is not surprising that preparation for exams becomes a major pre-occupation and concern of teachers, pupils and parents" (Elley and Achal; 1981:5). Cokanasiga (1982) has criticized the over-use of examinations because of the high wastage caused. He also claims that examinations, especially the Secondary Schools Entrance Examination, contradict the government policy of giving 10 years of schooling to those who want it, since examinations are a means of instrumentalizing rigorous selection which discriminates against the poorer sections of society. Baba and Harrison (1973) have also added to the extensive criticism of the influence of examinations on education, claiming that the examination system is antithetical to the Pacific lifestyle. They condemn the use of

examinations as a selection device and advocate that employers and institutions should establish their own testing.

A professional educator and former Permanent Secretary of Education lamented the importance that indigenous Fijians place on examinations. He contended that the two primary examinations exacerbate wastage rates of Fijian children and cause the wastage of much potential. He condemned the attitude of Fijian parents for withdrawing children upon failure of primary examinations, rather than giving them a second chance. As a previous principal of Queen Victoria School, a prestigious government boys school, he had occasionally admitted boys who had failed their entrance examinations and he found that their performances were no worse than those who had passed.
(Interview, Suva, July 1987)

The pass rates for different ethnic groups in Fiji indicate that more Fijians fail the Secondary Schools Entrance examination than other races, as Table 5.2.3 shows.

Table 5.2.3 Secondary Schools Entrance Examination Pass
Rates for Different Ethnic Groups, 1966 -1984.

Year	Fijians	Indians	Others	Total
1966	26.4%	50.5%	61.4%	40.9%
1967	39.7%	61.9%	67.5%	52.9%
1968	36.7%	62.7%	60.9%	51.0%
1969	35.0%	60.3%	61.0%	49.2%
1971	51.6%	65.8%	73.8%	60.1%
1972	46.1%	61.3%	74.9%	56.0%
1973	44.7%	62.3%	81.2%	56.1%
1974	42.1%	66.8%	83.1%	58.1%
1975	46.5%	68.4%	83.2%	59.4%
1976	49.9%	69.7%	80.0%	61.6%
1977	55.6%	71.6%	82.5%	65.6%
1978	62.5%	76.4%	85.4%	71.0%
1979	70.3%	82.5%	93.5%	77.8%
1980	69.6%	82.0%	93.4%	77.0%
1981	73.0%	82.4%	93.9%	78.8%
1982	73.9%	84.7%	93.1%	80.3%
1983	77.5%	83.2%	92.6%	81.1%
1984	75.5%	84.4%	89.2%	80.7%

Source: Ministry of Education Annual Reports.

A suggested reason for the lesser performance of Fijians is that the best Fijian pupils are 'creamed off' by the Intermediate Entrance examination and they would not therefore be sitting the Secondary Entrance examination. The number of pupils thus involved would however be relatively small and could not possibly account for differences of up to 15 percentage points. It does appear that the Secondary Entrance examination militates against Fijians, the very group who adamantly wish to retain it.

The consistently superior performance of the numerically small category of 'Others' is worthy of note. This group consists largely of children of European and mixed European descent whose mother tongue is normally English. Their success in all external examinations could point to the fact that it is language ability which is being tested, rather than general competence. The issue of inherent bias in examinations, as suggested by Somerset (1987), does not appear to have been addressed.

Bennett, an educational psychologist, studied the Secondary Entrance examination and found it to be a test of cognitive capacity relatively independent of home background, school standard or parental encouragement. He commented that "Educationally this solution has little to recommend it if there are children whose primary education is poor or who come from a background such that they are disadvantaged in their educational performance" (1972:77). He points to the dangers of assuming that a test which measures certain factors in a

relatively homogeneous society, measures the same factors in a society where home and school environments differ drastically.

Table 5.2.3 also shows the changing overall pass rate from 1966 to 1984. The huge increase in numbers passing the S.S.E.E. between these years indicates the improving quality of primary schooling in Fiji. It also reflects the upward thrust for secondary education: as more places in secondary schools became available, more children were permitted to pass the selection hurdle. The increased pass rate could also be interpreted as a tacit disapproval by the Ministry of Education of the use of the examination as a selection device. If 80% of candidates pass, it may serve to reduce the competitive orientation attached to the examination. It has also been suggested that the pass rates in this and the Fiji Junior Examination have been raised as a political gesture to mask the differences between the races, especially the lagging Fijian pass rates.

There are some students who would not sit either of the primary external examinations, and indeed few would sit both, depending entirely on the structure of their primary and secondary schools. A few primary schools are feeder schools to secondary schools and promotion from one to the other is automatic, not requiring any external testing.

The Fiji Junior Certificate Examination.

The first external examination that all children in Fiji sit is the Fiji Junior Certificate (F.J.C.) examination, taken in Form 4, after 10 years of schooling. At that level, some 60 - 70% of the cohort who entered school 10 years previously, would still be attending school. (Whitehead, 1986:71; estimates from Ministry of Education statistics). This is a relatively high retention rate compared to many other developing countries.

The F.J.C. was introduced in the mid 1950s to replace the Junior Cambridge Overseas examination. With the extension of the Grant-in-aid system to secondary schools and the subsequent increase in enrollments, there was a need for an examination which would serve primarily as a school leaving certificate, and secondly to select the small number who could proceed to the Senior Cambridge examination. For well over a decade, the F.J.C. was the minimum requirement to enter Government service or teachers' training college. The Department of Education favoured practical subjects as the basis of the new examination, but the demand since its inception has clearly been for academic subjects. It was hoped that the F.J.C. would standardize education, but instead it "became simply a selection device instead of an indicator of achievement" (Hopkin, 1977:265). The F.J.C. was important in that it was the first local secondary examination.

Table 5.2.4 shows that the number of candidates has risen greatly since the start of the examination, peaking in 1977 and declining gradually since. (This decline is due to the reduction in the birthrate from 3.5% in the early 1960s, to 2% by the late 1970s. Emigration could also be a contributory factor.) After fluctuations in the pass rate for the first few years, standardization was introduced in 1966 and the pass rate stayed within a range of ten percentage points until 1984. The pass rate, which is politically determined, rose almost 20 percentage points in 1985. This coincided with increasing government concern over youth unemployment and could be construed as a means of keeping young people in school longer, thus delaying or avoiding unemployment. It was also a time of much political sensitivity about Fijian education, and as has been earlier suggested, a rise in overall pass rates tended to mask the ethnic differential to some extent. The differences between Fijian and Indian pass rates, however, have not been as marked as in the Secondary Entrance Examination. As in the Secondary School Entrance examination, the 'Others' pass rate is significantly higher than either Fijians or Indians as Table 5.2.5 shows.

Table 5.2.4 Fiji Junior Certificate Pass Rates and
Numbers of Candidates 1955 - 1989.

Year	Pass Rate	Candidates	Year	Pass rate	Candidates
1955	59.8%	520	1974	51.0%	9,398
1956	54.3%	389	1975	52.9%	9,556
1957	52.8%	427	1976	50.1%	10,364
1958	53.5%	1,105	1977	50.5%	11,474
1959	31.3%	1,414	1978	51.5%	11,424
1960	28.6%	1,585	1979	53.6%	11,292
1964	38.7%	1,912	1980	54.9%	11,003
1965	41.2%	2,051	1981	55.0%	10,626
1966	55.0%	2,484	1982	56.4%	10,642
1967	55.3%	3,315	1983	59.7%	10,302
1968	52.9%	3,960	1984	61.9%	9,945
1969	63.6%	3,158	1985	80.1%	9,359
1970	56.0%	4,966	1986	79.5%	8,737
1971	60.4%	6,030	1987	80.3%	8,898
1972	54.5%	6,822	1988	80.0%	9,254
1973	49.8%	8,395	1989		

Source: Ministry of Education statistics.

Table 5.2.5 Fiji Junior Certificate Pass Rates by Ethnic Group, 1971- 1986.

Year	Fijians	Indians	Others
1971	54.3%	60.5%	83.8%
1972	51.9%	51.1%	N.A.
1973	47.8%	48.5%	78.3%
1974	48.4%	50.6%	71.9%
1975	50.8%	51.8%	76.2%
1976	48.7%	48.6%	72.2%
1977	50.6%	48.2%	72.4%
1978	50.5%	50.3%	70.5%
1979	50.5%	53.5%	76.4%
1980	54.0%	53.5%	74.8%
1981	50.0%	56.7%	72.4%
1982	53.0%	57.1%	74.1%
1983	54.6%	61.3%	79.8%
1984	57.3%	63.1%	80.8%
1985	78.9%	80.3%	79.6%
1986	78.4%	79.5%	87.9%

Source: Ministry of Education statistics.

Although the F.J.C. is no longer a major qualification for employment purposes, its retention is certain, if only as an allocator of Form 5 places. The examination and curriculum have recently been restructured, theoretically to widen student choice and to emphasize practical and commercial subjects and vernacular languages. Such subjects have not been widely subscribed to in the past, but the new structure requires students

to take four core subjects (English, Mathematics, Basic Science and Social Science) and two or three less academic subjects such as Home Economics, Technical Drawing, Accounting or vernacular languages. This reflects a strong policy bias away from purely academic education to what is termed 'relevant' education. The rationale is to offer some form of training in potentially income-generating activities, in an effort to counter growing youth unemployment.

There are definite differences between schools in their F.J.C results. (See Appendix Four). These can be partly explained by the selective admission policies of individual schools, but there are many other potentially influential variables regarding both the teaching and learning environment of the school, and the influence of a child's home background. A major concern of this thesis is to assess the influence of these variables, relating them to performance in the F.J.C. examination.

Research into the reliability of F.J.C. as a predictor of achievement in the New Zealand School Certificate has been carried out. (Kishor and Elley, 1981). The F.J.C. results of a large national sample were compared with the New Zealand School Certificate (N.Z.S.C.) examination results of the same pupils a year later. The study found F.J.C. to be a very precise indicator of performance in the N.Z.S.C. which had previously had its reliability tested and proven. A threshold of 330 marks in F.J.C. was arrived at to give a 50-50 chance of passing the N.Z.S.C.

Kishor and Elley found slight differences in favour of Indians compared to Fijians, although the threshold was the same for both groups. They also found that females have slightly better chances than males at passing N.Z.S.C. based on their F.J.C. marks. Their overall conclusion was that "...the F.J.C. examination is a very good predictor of Form 5 academic success" (1981:42).

Senior Secondary Examinations.

As a British colony, it was considered natural to take British examinations at senior secondary levels. The Senior Cambridge Overseas examination was thus the final school examination taken until the 1960s, when schools gradually changed to the New Zealand system - sitting School Certificate in Form Five and University Entrance in Form Six. There were many advantages in following the system of a geographic neighbour. The school year was the same, whereas the northern hemisphere Senior Cambridge had fitted poorly with the Fiji school calendar. There were many New Zealand teachers working in Fiji and many Fiji citizens had had their training in New Zealand. Inspection and advisory visits could be organized relatively easily and without excessive cost. In the 1970s, many New Zealand School Certificate subjects developed 'Fiji Options', which in fact meant that the examination was largely set and marked in Fiji to a locally oriented curriculum, but administered from New Zealand. The same approach was taken for the University Entrance English paper.

In the early 1980s, the New Zealand education authorities warned that the University Entrance examination was to be phased out altogether by the end of the decade. There had been occasional moves towards completely localization of examinations, but calls for 'international recognition' had remained paramount. The New Zealand withdrawal forced the Fiji education authorities to set up their own senior secondary examination. This has resulted in the Fiji School Leaving Certificate - a two year course for Form Five and Six with an examination at the end of Form Six. (Form Five students in 1988 were the first to be taught under the new system and they were examined in late 1989). The intention was to offer a wide variety of subjects, with particular emphasis on practical and vocational subjects such as engineering and computing. Considering the failure of such approaches in the past, it will be interesting to observe its progress. In reality many of the course prescriptions differ very little from those under the previous New Zealand examinations.

Although the new Fiji School Leaving Certificate had been planned for some time before it was implemented, certain issues have arisen from its implementation. By eliminating an examination at the end of Form Five, the numbers entering Form Six are substantially increased. Under the previous system with New Zealand School Certificate, approximately 60% of Form Five students failed and were effectively prevented from continuing

into Form Six. Table 5.2.6 takes a cohort through the three secondary examinations and illustrates the wastage at each level. The higher numbers sitting the New Zealand School Certificate and University Entrance than passes at the previous level represent repeaters, estimated at 15% and 27% of the total numbers of candidates respectively. Under the new system, the approximately 7,000 students entering Form Five could remain for Form Six, instead of the previous Form Six roll of around 4,000. (In 1989, 6,855 students sat the new Fiji School Leaving Certificate; compared to 4,233 who sat the New Zealand University Entrance in 1986).

Table 5.2.6 Wastage for 1983 Form Four Cohort.

Year	Examination	Candidates	Passes (%)
1983	F.J.C.	10,302	6,152 (59.7%)
1984	N.Z.S.C.	7,187	3,116 (43.4%)
1985	N.Z.U.E.	4,236	1,398 (33.0%)

Source: Ministry of Education Annual Report for 1985.

Interviews with school principals in 1988 revealed a number of areas of concern over the new Fiji School Leaving Certificate examination (F.S.L.C.). There is a strong feeling that without an examination in Form Five, students will lack motivation to study diligently during that year. A concern that the new structure would discriminate against Fijians was expressed in that relatively few Fijians achieve Form Six standard, and in the absence of a Form Five examination, many would leave school with effectively no qualifications. Rural schools

also feel disadvantaged because of the lack of communication with the Ministry of Education in Suva, and subsequent difficulties with new prescriptions and problems obtaining textbooks and equipment. With increased numbers of Form Six students, it would be necessary to purchase more textbooks and equipment, the high cost of which was a concern for many principals. The need to provide more laboratory space to cater for Form Six work was also causing financial hardship to some schools.

It is unlikely that schools will have the physical capacity or teaching staff to allow all Form Five students to continue to Form Six, thus some form of elimination at the end of Form Five is likely to occur. The Ministry of Education has not issued a standardized procedure for disallowing students to proceed to Form six, rather it has allowed each school to set its own criteria. Interviews with school principals (1988) revealed dissatisfaction and confusion over this policy. Principals are unwilling to take the responsibility of internal assessment without any clear guidelines which would give an impression of objectivity. Overall, a feeling of uncertainty regarding the new examination prevails. All principals interviewed felt that there is a great deal of confusion and lack of understanding among teachers, parents and students. Indian principals in particular expressed concern with the recognition of the F.S.L.C. outside of Fiji.

There is also a large gap between the difficulty level of Fiji Junior and Form Six studies. Under the former system, some children could manage to pass the New Zealand School Certificate at the end of Form Five but would not be able to cope with Form Six work. Unless the new Fiji School Leaving Certificate has a substantially lower level of difficulty than the New Zealand University Entrance, these children would not be catered for. The strong social demand for certification and the pragmatic needs of schools may cause the Ministry of Education to create an examination at the end of Form Five to replicate the New Zealand School Certificate and to serve its functions: to act as a terminating certificate for those who leave school at that point and to select students for the Form Six course.

Due to the political crisis of 1987 and its concomitant social and economic effects, the new course could not have been introduced at a worse time. Because of increased emigration of qualified Indians, when the new school year started in 1988, there was a shortage of approximately 400 teachers, many of whom were senior secondary teachers. The new course has a heavy emphasis on technical and vocational subjects which are costly to implement due to the high capital costs of equipment. It was apparent at the start of 1988 that there were insufficient teachers trained in these specialist subjects, which caused further problems. The expense of training and provision ^{of} _^ equipment was incompatible with the budgetary cuts of 30% which were made in 1988.

A pass in the New Zealand University Entrance examination was for many years recognized as the ultimate school achievement. It was a passport to many jobs or forms of further education or training. By the late 1970s however, many students, especially Indians, were attaining University Entrance passes but could not find employment or training. 'Qualification Inflation' (coined by Dore, 1976) had made it impossible to obtain even a relatively menial job without adequate certification. In 1979, following the New Zealand system, some secondary schools added on a Seventh Form to cater for such students, hoping that they would be allowed to take the New Zealand Bursary and Scholarships examinations - a course of action which the New Zealand authorities refused to allow. Although initially reluctant, the Ministry of Education in Fiji accepted the existence of Form Sevens and started to conduct external examinations for their use. By 1986, 17 schools offered Form Seven studies, with an enrollment of 308 students. Of these, 22 were Fijians, 277 Indians and 9 Others. (Ministry of Education Annual Report for 1986). The high number of qualified Indians compared to that of Fijians is significant. Due to attempts to achieve racial parity in the award of scholarships, the relatively small number of Fijians with passes in University Entrance had many openings available in the civil service and some areas of the private sector, whereas competition among Indians for available places has been increasing markedly.

When the first group of students sat the new Fiji School Leaving Certificate in late 1989, there was a 50% overall pass rate. This compared to a 35% pass for the previous New Zealand University Entrance. There was an immediate demand for Form Seven places and more schools were accordingly granted permission to expand. The large number of students passing the F.S.L.C. has thus created its own upward thrust, and there have been calls for a second university to be opened in Fiji to cater for the increase in school leavers.

Setting Examinations in Fiji

External examinations in Fiji are set largely by panels of practising teachers with advice from staff of the Curriculum Development Unit and the Examinations section of the Ministry of Education. Overall co-ordination comes from the Examinations section of the Ministry of Education. It has been suggested that the wide use of teachers in setting examinations brings about a biased situation whereby the students of such teachers, implicitly or explicitly, are taught examination techniques. Teachers who set examination papers are exclusively from the greater Suva area, which adds more weight to the bias of the primate urban area.

The quality of locally set examinations is extremely variable. The two primary examinations and F.J.C. have a high proportion of multiple choice questions, the purpose of which is to facilitate marking. (Marking is however

done manually). The future intention for F.J.C. is to limit multiple choice to 50% of the total marks. Question papers in some subjects contain a high proportion of factual recall questions, whereas other papers have increasing proportions of interpretive questions. Bennett (1972) noted that because of the relatively small size of the education system, pretesting is impossible and weaknesses inevitably exist in question type, adequacy of coverage, reliability of marking and equivalence of papers. The lack of specifically trained personnel and the degree of reliance on practising teachers create a less than perfect situation, in spite of which, the examinations section of the Ministry of Education has a reputation for great efficiency in its organization.

There have been various attempts since 1935 at introducing the use of standardized tests in Fiji. In the late 1970s, a major attempt was made with funding from New Zealand aid. Tests were constructed and piloted nationally. The intention was to use the tests in Class Six as a diagnostic tool for guiding teachers towards more effective teaching and learning. (Elley and Achal, 1981) Despite the large amount of human and physical resources which went into the development of the standardized tests, it appears that they are not used widely and have little effective follow-up. The ingrained mental attitude that tests and examinations must 'count' could be a reason for their lack of support.

Despite various calls for the abolition of different

examinations in the Fiji school system, it is clear that the public wishes for their retention. As explained earlier, examinations are perceived as a public indicator of a school's efficiency as well as providing certification to individuals in an increasingly competitive society. While recognizing these factors, a positive policy measure to improve the utility of examinations would be to follow Somerset's theory of using examinations as a means of improving pedagogy. Examinations should thus exert a positive influence on teaching and learning, rather than the deadening influence of which they are so often accused.

5.3 Research on Educational Performance in Fiji: A Brief Review.

In recent years there have been various research studies on factors affecting educational achievement in Fiji. Research on education in Fiji invariably focusses on differences in achievement between the two major ethnic groups and seeks to find an answer as to why disparities exist. There has been much attention paid to the 'Fijian education problem', since as under-achievers in comparison to Indians, it is an area of political and social as well as academic interest. Research emanating from the University of the South Pacific, such as the work of Kishor, Stewart, Basow and Bennett, has tended to have a psychological emphasis. In-depth studies from a sociological or policy stance are few. Case studies with a socio-cultural dimension, such as that of Tierney, are valuable for their depth but cannot necessarily be used as a basis for generalization. Baba, a Fijian academic, wrote extensively on Fijian education in the early 1980s. He tended however to outline research areas rather than rigorously pursue a narrow specialization. Nabuka's study of differing achievements of Form Four students is oft-quoted in the context of Fiji education, and despite its somewhat loose methodology, is one of the few studies to link its findings to educational policy.

Research overall has tended to be somewhat ad hoc and fragmented as various aspiring academics produce theses on their particular specializations. The Ministry of

Education has little capacity for in-depth research and it limits itself to collecting quantitative statistics.

Psychological and Socio-psychological Research.

Kishor has written several articles (1982, 1983, 1984) on his psychological research among Fijian and Indian Form Five students. His results show that Fiji Indians had higher self-esteem as well as a greater internal locus of control than Fijians. Fijians tend to have a stronger 'external locus of control', blaming success or failure on luck or fatalism; compared to Indians' 'internal locus of control' which holds personal achievement as a responsibility of the individual. Kishor maintains that these variables are significant in a wide range of behaviour and could provide insights into research relating to academic achievement. His research shows that Indians performed better in academic tests than Fijians and "there was a significant relationship between the internal locus of control orientation of Fijians and Fiji Indians and academic performance" (1983:302). Kishor claims that the correlation between internality and socio-economic status is insignificant and suggests that cultural values and beliefs may be more relevant.

Basow's (1982) research on self-esteem using a differing measuring instrument confirms that of Kishor. Basow also tested work orientation and competitiveness among different ethnic groups in Fiji, with Form Four and university students. She found that Fijians outscored

other groups in both fields: work orientation and competitiveness, but she cautiously concluded "The implications for actual achievement are not clear" (1982:90). Basow claims nevertheless that understanding motivation and self-esteem is important for understanding achievement patterns and also for social planning (sic). Stewart (1982) and Stewart et al. (1980) tested beliefs in trustworthiness among adolescents in Fiji and discovered that Indians have significantly higher levels of belief in the trustworthiness of people compared to Fijians. The implication is, "Particularly for indigenous Fijians, it may be that people perceived as being close (extended family and village) may be trusted substantially more than people at a distance" (1980:127).

Maas (1986) conducted research in Fiji schools to test the extent of creative thinking (divergence as opposed to less creative convergence) among some 2,500 Fifth Form students. She found that "there appears to be a larger percentage (31%) of divergent thinkers in the sampled Fiji schools than convergent thinkers (22%) and a still larger percentage of students who fall into the 'neither' category (47%)" (Maas, 1986:104). She found it surprising to find such a high proportion of divergent thinkers since Fiji schools are usually thought to be conventional and examination oriented. Maas recognized however that Form Five students in Fiji could be expected to be above average ability as they had by that time sat up to three external examinations which are strongly selective. Maas suggests that Fiji's multi-cultural environment may be a

factor in encouraging people to think more fluently and flexibly, especially since most Fiji people are bilingual or trilingual. Maas's study also took account of the background factors of students tested and she found that higher educational and occupational groups produced more divergent thinkers, except for Fiji Indian divergent males whose parents' education was significantly lower. This finding is consistent with that of Harris (1975) and implies that the Fijian 'middle class' is becoming self-perpetuating with relatively less mobility from uneducated parental backgrounds compared with Indians who are still using education for social and occupational mobility.

While such research may help explain achievement differentials to a certain extent, how it is transmuted into educational policy or practice is not clear. It could be suggested that stereotypes could emerge: the 'typical Fijian' blaming others for success or failure, having low self-esteem and finding outsiders untrustworthy. The 'typical Indian' would hold himself responsible for his or her success or failure, have high self-esteem and find people trustworthy. It may have been more useful if Kishor, Maas, Basow et al. had attempted to discover which cultural values and beliefs affected educational performance, rather than merely dichotomizing Fijians and Indians. The application of such psychological theories in developing countries has been criticized by Little, who wrote: "The socio-economic context that gave rise to attribution theory and its main

experimental base is Western, industrialized, predominantly American and, until quite recently, adult" (1988:13). She suggests that such research should be set within the social and cultural values of a country, so that an analysis of how different cultural beliefs affect educational performance could be effected.

A methodological limitation of this research is that much of it was conducted in urban schools or schools with a selective intake. In a country with such a diversity of social and economic variation, this could limit the extent to which reliable conclusions can be drawn and policy implications can be construed. Stewart, in his capacity as professor of education at the University of the South Pacific, has used his psychological research as a basis for numerous speeches to teacher organizations. He maintains that of institutional, socio-cultural and psychological factors in education, the latter could be the most critical. (1983:3). He exhorts teachers to build up their pedagogical and personal skills, to enhance the self-esteem, especially of Fijian students, and to positively reinforce desirable behaviour. (1983, 1984).

Bennett's (1974) study of predictors and determinants of educational performance in Fiji found wide variations in school situations. "Where there is diversity in school and teacher quality they can contribute as much or more to the variance on the criterion as a predictor based on some attribute of an individual student. It may be that the situational variables in these instances go beyond

contaminating the individual variables to, in fact, supersede them" (1974:10). As mentioned in Chapter 5.2, Bennett expresses concern with the danger of assuming that tests or examinations measure the same factors in societies with drastically differing environments. He suggests that objective tests of cognitive capacity which are independent of home background or school standard are inappropriate for such a society as Fiji. In practical terms, although it would not be possible to have different examinations for different parts of the country, there could be more done to avoid the hidden urban bias which exists in many examinations.

Sofield's study used a socio-psychological perspective to explain the disparity between the achievement of the two major ethnic groups in Fiji. She found that for both ethnic groups sampled, there was a large variance in academic achievement that could not be accounted for by independent variables which were related to the social psychological environment of the family. Like other researchers such as Harris, Nabuka and Kishor, she found a lack of correspondence between socio-economic status and achievement in Fiji. Sofield reported a very low level of communication between parents and children, although all parents stressed the importance of schooling in order to get a good job. Although Sofield's conclusions were tentative, she found that there was a relationship between ethnic group and family learning environment. Indian parents, who on the whole were less educated, had a higher educational press (sic) for

success and held higher educational and occupational aspirations for their children.

From a socio-linguistic perspective, Griffin (1983) argues that "in ethnic Fijian society the use of speech prescribed by culture makes, in a rapidly changing world, for an increasing amount of 'cultural deprivation'" (1983:1). He claims that traditional Fijian socialization places a premium on silence and conformity and sanctions curiosity and innovation. This leads to Fijians starting off in formal education from a disadvantaged position as their culturally prescribed language and thought processes inhibit the type of cognitive development favoured by an academically oriented school system. Griffin's assertions on language and culture are contentious. Like all languages, the Fijian language is changing to adapt to the changing world. Most Fijian children do in fact attend schools where Fijian language is the medium for the first four years. At secondary and tertiary levels, Fijian students excel at language and arts subjects and tend to perform poorly in mathematics and the sciences. Griffin's concept of 'cultural deprivation' is ill-defined and is of little constructive benefit to the education debate.

Socio-cultural Educational Research.

Socio-cultural factors highlight the conflict between a school system which emphasizes individual achievement and a cultural system based on cooperation. Baba also found

Fijians more susceptible to peer group and other social pressures: "The higher he goes in the school system, the more he becomes alienated from his peers in the village" (1979:5). The fact that there is no strong literary or academic tradition amongst Fijians is also put forward as an inhibiting factor.

Harris (1975) studied the socio-demographic correlates of educational attainment in the Fiji sixth form. She found a complex set of relationships between school performance and socio-economic strata: generally lower socio-economic status and isolated geographic origins correlated with poor educational performance. Harris found that Indians were over-represented in the Sixth form compared to Fijians, due largely to high wastage rates for Fijians between Forms Three and Six. The parents of the Sixth formers were of higher socio-economic status and better educated than the population as a whole, with Fijian parents, both mothers and fathers, being significantly better educated than their Indian counterparts. This confirmed Harris's hypothesis that the relative chances of offspring of persons in higher occupational status and higher educational levels are greater than those from lower socio-economic levels, although she conceded that the fact that 25% of Indian students came from homes where neither parent had attended more than 3 years school showed that life-chances at that time (1973) were still relatively open. Harris's study concentrates on the home background of the students themselves and places very little weight on the influence of school variables

in determining achievement.

Nabuka's (1983) study examined reasons for poor performance of Fijian students in secondary schools, especially at Form Four level, in comparison to Indian students. In an analysis of Fiji Junior Certificate results, Nabuka found that Indians achieve better results in every subject except Geography. His survey found that Fijians read less than Indians and have fewer textbooks in school. The variable of father's education showed little difference between races however. Most students interviewed about their aspirations revealed high ambitions in the professional or technical field, with less than 10% aspiring to blue collar jobs. Nabuka concludes that school inputs such as textbooks are critical for school achievement, as home background variables do not bear significant differences. Nabuka's methodology is subject to criticism. His survey was postal and administered by teachers in respondent schools. It was thus limited to visible quantitative inputs such as textbooks and omitted the critical areas of teacher-pupil interaction, school management and the general school environment. The study did not attempt to match specific test or examination results to the students who had responded to the survey, thus he had one set of student data for examination results and a different set for socio-economic variables.

Other research by Nabuka under the aegis of the Project on Fijian Education Achievement (1982) found that in a

sample of 43 secondary schools, 43% of Fijian schools were located more than 40 miles from the nearest town, whereas 89% of Indian schools were within 10 miles of an urban centre. Of the school principals in the sample, 60% of the Fijian principals had been in the job for less than two years, in contrast to 22% of Indian principals with less than two years experience as principals. Fijian schools were worse off in regard to science laboratories, libraries, school furniture and school office equipment. The only possible advantage Fijian schools had was that of smaller classes. Home background variables measured from a survey of some 3,000 pupils showed that generally Fijian students have a less advantaged home environment, with more attending boarding schools or living away from parents with relatives or friends. While the information in this report certainly suggests that Fijian students are disadvantaged both in their schools and homes, particularly the former, the lack of correlation with a standardized set of achievement results prevents the identification of factors which directly affect achievement.

Baba's and Nabuka's research has been influential. After highlighting the relative material deprivation in Fijian schools, especially rural schools, the government subsequently directed large sums of money into purchasing books and equipment for these schools. Evidence of this was seen in the field survey described in Chapter Six.

A study of a primary school in rural Fiji by Tierney

(1971) highlighted a number of weaknesses associated with rural education and with the 'committee system' of running schools under the Government's Grant-in-Aid regulations. He found that when relying on parental financial support for running the school, poor rural areas could not compete with urban areas in financing schools of quality. Tierney studied children in Classes Seven and Eight who would be sitting the Secondary Schools Entrance Examination in Class Eight. He found that teaching was geared totally toward passing the examination with drilling, rote learning and trial testing the normal practices. If children were likely to fail the examination, they would be held back to repeat Class seven to improve their chances. Tierney claimed that teachers, especially head teachers, have their career judged on examination pass rates, thus they are very motivated to see high pass rates from their students. Tierney maintained however that rural schools receive inferior teachers: many doing 'country service' to gain salary increments and others being sent to rural areas as a punishment for poor teaching performance or as a disciplinary measure. On ethnic differences, Tierney observed "When individual classroom performance takes on a competitive tone, the Fijian student is apprehensive to grasp any glory which would place him above his peers....this point approaches the very core of the Fijian student's dilemma; the educational goals of the school come into conflict with the cultural attributes of the Fijian race" (1971:62). The high value placed on conformity, the lack of competition and the clearly

defined social roles in traditional Fijian society make it more difficult for Fijian children to achieve in a Western system of education compared to their Indian peers who have greater parental pressure to achieve. These socio-cultural factors combined with rural poverty and a rigid examination based school system form the parameters of the rural school which is nevertheless "the focal point of the community and a great source of pride" (1971:55).

In the late 1970s, the Ministry of Education in Fiji requested the University of the South Pacific and the New Zealand government for assistance in developing a set of standardized tests. It was recognized that despite the many external examinations, there existed few if any diagnostic means within the education system which could be evaluated and the results used to improve teaching and learning in schools. The lengthy process of development and trial testing of the tests, which were devised to be administered to Class Six pupils, was completed in 1980. The coordinator and consultant to the project, Achal and Elley, have published results of their trial tests which show some interesting conclusions. They found for example that girls consistently performed better than boys in the tests. Very little difference was found in the performance of different ethnic groups. The implication of this finding is most significant when compared with external examination results sat in the secondary years of schooling where marked differences between the ethnic groups emerge. When disaggregated into geographical areas

of large urban area, towns and rural areas, it was found that pupils from the large urban area had a marked advantage in all English tests, but that they did not do better than town children in Mathematics and Social Studies. They found however that "In all subjects, the city and town pupils gained higher means than rural children, and the margin was similar in each case" (Elley and Achal, 1981:29). This lends weight to the assertion that the education system and examinations favour urban children. Although designed for completely different purposes, the results of the standardized tests were compared with those of Intermediate Entrance for those pupils who had sat both in the same year. The correlations were positive averaging 0.70, which the test developers claim indicates validity of both the tests and the Entrance examination.

As indicated earlier, the Ministry of Education in Fiji has little capacity for research. There is a Senior Education Officer responsible for Fijian Education and part of her brief is research. She is however continuously occupied with affairs demanding immediate attention such as counselling and advising students and parents as well as preparing and presenting daily and weekly radio programmes. (Personal interview, Suva, 1987).

There has been a strong tradition since colonial times of gathering quantitative data, culminating in Annual Reports of the Ministry of Education. These offer fairly

detailed descriptive statistics which are mainly frequencies relating to enrollment details, teacher training and examination pass rates. No causal relationships between variables are suggested, nor are statistical inferences drawn. No qualitative data is presented in the Annual Reports, which have had almost the same format for some fifteen years. Apart from giving a general picture of education in Fiji at a given time, it is not clear how this data is used. This situation is not however unique to Fiji. Espinola has written on the same subject in Chile: "In the end, the results in terms of the use given to the information are poor compared to the effort and costs implied in data collection. Statistics are used by central planners and administrative authorities, but they are not utilized in supervision or in the schools. The system does not include effectiveness indicators or attainment measurements to judge the efficiency of the education system" (1989:10).

There has been little apparent coordination between the research on educational performance in Fiji, except possibly for the psychological research of the the University of the South Pacific academics. Much of the research cited in this section was carried out as part of post-graduate studies and it is thus somewhat fragmented.

It is evident that the different performance of Fijians and Indians has been a major field of research. The assumption has tended to be that ethnicity per se is the

critical factor. The commonality in most of the research referred to is its emphasis on studying the students and how they fare in the education system, which is implicitly seen as a fixed variable. In view of this research, which throws some light on the various thought patterns and socio-cultural reactions of the main ethnic groups in Fiji, it may be timely to have some research on schools: the teaching and learning process, the examination system and its influence on teaching and learning and what factors make a difference in pupil achievement. Seeking the elusive concept of school quality needs not only a study of quantitative inputs and outputs, but a close study of the processes within schools.

CHAPTER SIX THE FIELD STUDY - THE SCHOOLS

6.1 The role of management.

Given the nature of school management and administration in Fiji - largely decentralized with only minimal intervention from Ministry headquarters - the role of the management of individual schools assumes very great importance. The fieldwork study of individual schools bears out this contention.

The case of Dua School clearly illustrates how weak and corrupt management can almost destroy a school. This school was established in 1970 by a Fijian community. Located in western Viti Levu, in an area where there are no other purely Fijian secondary schools, there were high hopes initially that it would become the most prestigious Fijian secondary school in western Fiji.

It was a typical committee-run school, whereby the local community was responsible for electing a management committee which in turn controlled the general running of the school. In this case however, Fijian culture intervened. The chiefly family of the area established themselves firmly in the management of the school and they soon had authority over everybody including the committee itself, the principal, clerical staff, teachers, students and resources. Despite widespread discontent which increased over the years, nobody was prepared to challenge the chief or his family because in

Fijian tradition the chief has the ultimate say. The chief in question was indeed from a high-ranking family of great status.

The chief's daughter became the clerk, treasurer and trustee of the school and as such, all money received by the school, whether in the form of school fees or grants from the Ministry in Suva, passed through her hands. According to very reliable informants, thus started a gross misuse of school funds, from the start of the school in 1970 to mid 1987 when this person was ousted. The situation was widely known, but because of her chiefly status and that of her father, people did not dare complain. The parental response was to send their children to other schools. From the optimism of 1970 when the school had a roll of around 500, by the mid 1980s, the roll had fallen to less than 100. Parents and students expressed their feelings by voting proverbially with their feet.

This unique management style had direct and immediate consequences on the school itself. Very little money was put into the school and it fell into a state of disrepair. The physical conditions were very poor by 1988: many students lacked chairs, there were many missing windows and a number of doors had broken and smashed locks from repeated burglaries from the adjacent village. Break-ins had become so numerous that they had given up replacing locks. As a consequence, after weekends it was commonplace to find missing chairs and

desks. Although the school is next to a town and thus has the benefit of urban infrastructure such as electricity, water, telephone and transport services, there were few in-school facilities. There was no duplicating machine, so examinations could not be set.

The domineering style of management undermined the confidence of successive principals who rarely lasted for more than a year or two. Staff morale was low and there were frequent transfers. Teacher performance was very poor in this environment. Teachers told how they got accustomed to the poor conditions and knowing it was useless to complain, they kept their silence. The teaching and learning process was affected by the scarcity of resources and the inevitable vandalization of any attempts to brighten up classrooms. A former principal of this school told how the chief would walk into the school unannounced and interrupt lessons, call sudden assemblies and overrule teachers and the principal in front of the students.

Gradually the school became a school for those children who could not gain admission anywhere else. Parental expectations were very low - they expected little from the school and gained little. There was minimal parental involvement in the school. Examination results in the Fiji Junior Certificate were among the worst in the country, (See Table 6.1.1) and the school seemed to have become rooted in a cycle of decline.

Table 6.1.1 Fiji Junior Certificate Examination Pass
Rates for Schools in Field Survey
1983 - 1988. *

School	Pass Rate (Percent)					
	1983	1984	1985	1986	1987	1988
Dua	46	18	42	50	69	44
Rua	41	39	69	56	62	55
Tolu	41	52	65	76	82	80
Va	57	26	57	59	30	42
Lima	30	36	50	71	81	69
Ono	60	62	98	85	88	79
Vitu	57	49	84	85	78	75
Walu	93	50	89	93	90	100
Ciwa	93	95	100	100	100	100
Tini	47	47	69	54	82	65
Tinikadua	48	39	83	71	64	62

* Not actual names of schools.

Note: National pass rates for above years:

1983 - 59.7%

1984 - 61.9%

1985 - 80.1%

1986 - 79.5%

1987 - 80.1%

1988 - 80.0%

There are however brighter prospects for Dua School due to change in management. In 1987, the aforementioned high chief died. A well qualified and strong minded principal ousted his daughter, whose power was substantially weakened by the demise of her father. The new holder of the chiefly title, although a close relative of the former chief, did not wish to have any involvement in the running of the school. Slowly, the school is recovering, but the many years of decline will take time and a good deal of money to repair. Reputations fall easily but building new ones take time. In 1988 the Ministry appointed a new principal to the school. This man was recalled from retirement after a long teaching career and he is optimistic for the future, working with a supportive committee.

The management problems of Dua School overrode all else for seventeen years. It was impossible for the school to function normally in such a situation, and it rapidly became known as one of the worst schools in the country. Fortunately, this particular problem is over, although others of its making remain, and it is the difficult task of those left in the community and the school to rebuild the shattered dream.

Vitu School is another school which has had severe management problems, and is struggling to recover from them. Located on one of the outer islands of the Fiji group, Vitu is one of the oldest schools in the country. It was first registered as a school in 1858 and was a

prominent Methodist mission station for many years. It was a primary school for a long time, but now is a secondary school. Although under the umbrella of the Methodist Church in Fiji, the school is managed by a committee which consists of local residents and the local Methodist minister. The committee makes all decisions affecting the running of the school, in consultation with the principal.

Problems arose in 1980 when the then committee borrowed around F\$80,000 from a commercial bank to fund the construction of a new school building. The school simply did not have the capacity to repay the loan and interest started accumulating. When the present principal came to the school in 1982, he was immediately faced with a debt of F\$72,000. It was apparent that quite a high proportion of the loan money had been misused, as there was no evidence of its proper use. Whereas in other societies there may have been a police investigation to seek out any possible wrong-doers, it was not deemed appropriate in this rural church school. Fijian society as a rule avoids conflict. Thus began an endless round of fund-raising in an attempt to repay the loan, with its ever increasing interest.

The financial problems that face the school dominated management considerations in the 1980s. Any money that has been raised, has been used to repay the loan, which by 1988 had decreased to a debt of \$34,000. The school has therefore suffered a lack of basic resources,

essential for teaching and learning. This has subsequently affected teacher and student morale and eventually affected examination results. The principal has been so preoccupied with the financial problems of the school that he has not been able to spend much time on professional issues facing the school. Although the present committee is apparently dedicated and hard-working, the misdeeds of its predecessors have taken a severe toll on the school as a whole. It may take a decade or more to recover from this setback.

Vitu School has certain advantages over Dua School however. Although currently weakened by its financial situation, it is basically a strong school because of its established history and its links with the Methodist Church, which is the main Christian church in Fiji. The buildings and infrastructure, although poor perhaps by urban standards, were well in place before the present crisis. This stability has given the school the strength to cope with the crisis. Although the children in the school are almost all the sons and daughters of semi-subsistence farmers, they are optimistic about their ability to raise the necessary money to repay their debt.

Financial problems tend to be the plague of committee-run schools and these are often exacerbated by natural disasters. Rua School, a predominantly Indian school located in the cane area of western Viti Levu, has faced the usual problems of a committee-run school but when a hurricane severely damaged the school in 1984 it was

indeed a major setback. The roof was blown off one of the main buildings, destroying all the equipment inside it. Due to a bureaucratic oversight, the insurance premium had not been paid, thus there was no insurance compensation. The school continued to function for some time in tents lent by the army, until eventually the committee raised a loan to repair the buildings. The Ministry of Education apparently gave relatively little help and the school is still trying to repair the damage. In 1988 it was still in a poor physical state. The committee is heavily in debt and there is constant fundraising just to pay for the basic running costs of the school. As with other schools, once it faced major problems, the roll fell, morale fell and it became even more difficult to recover.

A combination of financial and physical problems has also been the bane of Va School, located in the Sigatoka Valley, in the dry zone of Viti Levu. This school has no source of water in the dry season which lasts up to six months of the year. Some water is delivered to the school by the Public Works Department, but this supply is unreliable. Pit latrines have to be used in the dry season, which is unpleasant for students and teachers. The management committee, comprising of local people, has not been able to resolve the water problem, although at the time of the fieldwork, it was active with the intention of trying to get a borehole-well which would be subsidized by the Ministry of Education. The well would however need electricity to pump the water to the

surface, and that raises another set of issues, as the school has no electricity and has little prospect of being connected to the national grid. The physical problems arising from the lack of water affects the teaching and learning at the school. Teachers quickly tire of living in such a setting and ask for transfers. There have been five principals in the past five years. The roll had fallen from 145 in 1973 to 88 in 1988. Examination results are well below the national average. Because it is a committee-run school, ultimately the committee stands responsible.

Urban schools without overwhelming physical problems also have problems if management is weak. Tinikadua School in the capital city, Suva, was established in the 1950s to cater for Fijians moving to the city from rural areas. Like many other schools, it started as a primary school, then added a junior secondary school, and is now a full secondary school separate from its parent primary school. The school committee consists of local people who are often retired or older people few of whom have had a secondary education. According to the principal, most of the committee members are inactive and they are not energetic or innovative. He accused them of having generally a 'low level of thinking'. The principal complained that personality problems and ignorance always cause conflicts and difficulties in dealings with the committee, and consequently this affects the smooth running of the school. Conflicts between management and principals inevitably create ill-will within schools and

communities, and such situations are not uncommon.

This school has had a history of bad management and has had some serious financial problems. There have been instances of treasurers absconding with school funds. At times the water supply to the school has been disconnected by the Public Works Department due to non-payment of bills, and the school has had to be closed until money could be found to pay the bill. When the payment of recurrent expenses proves a major problem, acquisition of other items regarded as non-essential, such as library books and other equipment, is out of the question. Like many schools in Fiji, Tinikadua School has a constant round of fundraising activities. These typically consist of mufti days, where children pay a small amount to wear non-uniform dress; 'tuck-shops' where food is sold and, on a larger scale, a typically Fijian form of direct public donation called soli. This is a very fast way of raising a large amount in a short time, but it is a drain on the families concerned, most of whom are from the lower socio-economic group.

At the other end of Kadavu, the same island as Vitu School, is Walu School. This school was established by the provincial council in 1971, when the establishment of junior secondary schools in rural areas was being encouraged. There was great optimism about its future, and initially the roll was over 100 students. The problems of running a school have become manifest since its creation. From a very depressed position in around

1980, the school has since become almost a model of what a small rural junior secondary school can achieve, and the role of management has been critical.

The school was almost completely destroyed by a hurricane in 1979 (Hurricane Meli). The community was discouraged by constant fundraising for rebuilding, and for some years very little was done. In the meantime, students left to go to other schools. With a declining roll and a small parent body in a poor community, it was difficult to achieve results of any kind. The mid 1980s saw the appointment of a dynamic principal and a robust local committee. Although not educated in the formal sense, the committee worked in partnership with the principal and they became determined to rebuild the school. The principal was very innovative about procuring government and other sources of aid, and gradually the school recovered. Due to its links with the Provincial Council, the school has no pressing financial problems at present and the committee has used its money wisely.

Walu School has only 60 students on its roll and it is destined to remain a small school. In terms of its examination results, it is amazingly successful. All of its 18 candidates passed the Fiji Junior Certificate in 1988, 2 with 'A' grade and 11 with 'B' grade. These results supersede by far most rural secondary schools. Obviously strong management cannot take all the credit, but it has helped to give the school a stable and secure environment within which it can function, without

constantly recurring financial problems.

Tolu School, in the cane area of western Viti Levu, started in 1977 and has a mainly Indian roll. It is a typical committee school with a management committee of local people. According to the principal, they are not especially educated people as they are mostly cane farmers, but they are dedicated and interested in seeing the school do well. Many of the committee members have served for many years, some since the start of the school. The school does not have financial problems, although the fees are not higher than other schools. The committee has been able to supply most of the requests of the principal, for example for text-books and recently for video equipment. The school has a small canteen to help with recurrent expenses, but has not needed to engage in any extra fund-raising for some years. This school is unquestionably very well managed, and the harmonious relationship between the principal and committee has provided a stable environment for the school to prosper in. Examination results from Tolu School have steadily improved over the past six years. The well equipped and well organized nature of the school must have contributed in part to this.

Ciwa School in Suva is run by the Suva branch of the Fiji Muslim League. As with other schools, it has emerged from a primary school as the demand for secondary education grew. It started as a 'school for drop-outs' - children who could not find places in any other school, usually

because of academic weakness. Due to the perseverance of the previous principal, Ciwa School has become one of the most successful schools in Fiji, in terms of academic success and in other spheres as well. The role of the committee has been to give the principal free rein to run the school as he chooses, while providing financial support. The lack of conflict between management and principal has obviously been a positive element in this school. As a religious school, there are certain moral goals to pursue, which may have given unity to the school.

The exception to schools run by committees or religious organizations is government schools. Only 11 out of the 139 secondary schools in Fiji enjoy this status. Management in government schools is vested entirely in the hands of the principals, with general directives coming from Ministry headquarters. This situation normally is highly preferred by the principals, and usually works out satisfactorily. It can potentially cause problems however, if the principal is underperforming in any way, as there is no immediate authority to check a problem. The government school in the fieldwork sample had a small problem that probably would not have arisen or been allowed to continue unchecked in a committee school. There were allegations, freely admitted to the researcher, that the principal had been sexually harrassing girls in senior forms. Although it was widely known and discussed, nothing was done about it. The principal was seen as the ultimate authority and

it was felt (albeit mistakenly) by the community that there was no higher authority to whom complaints could be addressed.

Of the 139 secondary schools in Fiji, 72 are managed solely by committees of local residents and 53 by various religious bodies. It is apparent that committee schools have the greatest problems, especially those of a financial nature. Committee schools are independent and therefore isolated, lacking the umbrella of a national organization that schools run by religious bodies have. Many committee schools are located in rural areas, a fact which tends to multiply their problems, as they have to cope with a lack of basic infrastructure such as the case of Va School, and they depend entirely on the local community for support. Many committee schools are very small, which means that there is a small parent body from which to raise the necessary funds to run the school, and in rural areas parents are often very poor. A major problem of many committee-run schools appears to be poor management. Committees often comprise people with little if any training or experience in running an organization, and cases of financial mismanagement are frequent, as stated earlier. Previous research and reports on schools in Fiji (such as Hopkin 1979, Royal Commission 1969) have also asserted that poor management has handicapped the development of education.

Particularly in rural communities, school committees reflect the community they serve. Divisions in committees

tend to be reflections of divisions in communities. The local press frequently reports rows and conflicts within school committees which sometime result in temporary school closure, boycotts or strikes. Such disruptions must affect the morale of teachers and students. Disputes often arise out of decisions made by the Ministry of Education involving the transfer of teachers or principals, reflecting the somewhat ambiguous relationship between the Ministry and non-government schools. As described in Chapter 3, the Grant-in-aid system gives the government only indirect control over non-government schools. The schools themselves meet a substantial portion of capital costs for buildings and expanding facilities; and they also bear maintenance costs. Government contributes substantial grants to help schools meet their operating costs. The ministry appoints civil servant staff to non-government schools, but committees feel that they have the right to veto such staff appointments.

In February 1988 for example, the Fiji Times reported a dispute in the Labasa Muslim High School. "The initial dispute was over the ministry's appointment of Mr Noor Basha as school principal. This was opposed by parents and students who had wanted the acting principal to be confirmed to the position. The ministry had to revoke Mr Basha's appointment after attempts to try and solve the dispute failed." (Fiji Times, 1/3/88). The school concerned was closed for several days and brawls between different factions had taken place. This typical case

indicates how schools, especially in rural areas, are often the base for local politics.

When a school has had management problems and entered the spiral of decline with falling rolls, high staff turnover, poor morale and poor examination results, it would clearly take a very long time to recover. The case studies of Rua and Vitu Schools show that financial mismanagement has long-term consequences which can be very damaging to the whole school community. There have been isolated cases in Fiji whereby schools have been forced to close permanently because of falls in enrollment.

It would be wrong to suggest that effective management alone can ensure the success of a school, but this research suggests that it is certainly a necessary precondition. School management is an oft ignored area in the global study of educational quality. More attention should be paid to the background and administration of schools, as they set the parameters for the physical and intellectual functioning of the institutions.

6.2 The School Principal.

The role of school principals is so obvious that it seems to have been overlooked in much research on school effectiveness and quality. In Fiji, the role of principal is perceived as one of high authority, and as such, holders of such positions have much power vested in them. In both Fijian and Indian cultures, status and authority hold great sway. Principals are the proverbial captains of the ships - they have the capacity to steer the ship on a course that will weather the storms. Society in Fiji watches the changing fortunes of schools closely. When school reputations and fortunes 'go down' or 'come up', the principals are normally held responsible.

Schools that have had continuous problems tend to have had frequently changing principals. Va School for example had had five principals in as many years. Dua School had also had changes of principal every year or two in the eighteen years of its existence. Tinikadua School has also had frequent changes in its headship. It happens that these schools also have suffered management difficulties and financial problems but it is not always possible to see which problems are the cause and which are the effect.

Principals are moved for differing reasons. In committee schools, sometimes the committee requests the transfer of a principal who it feels has not been satisfactory. Sometimes the principals themselves request transfers,

especially if they are located in rural areas and they wish to move to a town or city due to their personal circumstances. This was the case of the previous principal of Va School, who wished to return to Suva where his wife worked and for the sake of his own children's schooling. In the cases of Tinikadua and Dua Schools their previous principals had been well-qualified and respected members of the education fraternity in Fiji. They had apparently been sent to these schools which were known to be difficult in order to 'clean up' existing problems. In both cases, they were at these schools for only a short term when they were both promoted to more senior positions in the national education hierarchy. While they may have made some progress at these schools, the lack of continuity can negate the good that may have been done.

Continuity in principalship certainly appears to have positive effects. The principal of Tolu School had been there since the school was established in 1977 and he clearly was very involved with the progress and development of the school. Walu and Ciwa Schools both had new principals at the time of the fieldwork, but the previous principals in each school had been at the schools for several years continuously and had left legacies of strong control. It was clear in each of these cases that the successors to these strong principals intended to continue the good work of their predecessors. The new principal at Walu School had been the deputy to the previous principal for around five years and was very

familiar with his predecessor's style of operations. Although Walu School is an isolated rural school, the previous principal had been very innovative in seeking aid. He had, for example, enlisted the interest of the Ministry of Energy, and had had a solar lighting system installed at very little cost to the school. The Ministry of Energy also assisted in the construction of a smokeless stove which means that cooking is done efficiently using locally available wood, rather than kerosene as before. He had also taken an interest in nutrition and ensured that the boarders at the school had a reasonably balanced diet, which is the exception rather than the rule in Fijian boarding schools. The new principal has continued to be innovative and his latest idea was to purchase video equipment. He felt that the children at the school needed to see some aspects of the outside world, to which they had no immediate exposure, living in an area with no telephone, roads or electricity. He also felt that it offered an attractive incentive for the students to do other work well, knowing that there was a treat in store as a change from the monotony of rural boarding school life. With more direct effect on the classroom, he has been able to obtain many library books and equipment to set up a science laboratory from the Ministry of Education and the Fijian Affairs Board. This school has become reasonably well equipped through the careful exploitation of available sources of assistance, but it has obviously taken much time and effort to obtain such aid.

Rural principals such as those at Va, Lima, Ono, Vitu and Walu Schools, are required to perform many tasks outside their normal professional mandate. Repairing generators and water pumps and pipes are among such jobs reported by principals. All of these schools had boarding facilities and any problems are reported to the principal who is on call 24 hours a day. In many cases rural principals have to spend time mustering community support for fundraising, as well as general support for the school. Such multiple demands on their time and energy leaves little time for an academic supervisory role.

The case of Ciwa School is interesting as when it started as a secondary school in the late 1970s, it was clearly branded as a school for 'drop-outs' and repeaters, as mentioned earlier. The appointment of a highly-motivated and hard-working principal who was determined to raise the standard of the school, heralded a gradual change in its fortunes. While the school did not become more selective in its intake, examination results improved from being among the lowest achieving schools in the country to being one of the highest achievers. The school has also excelled at sports, quiz, speech and debating contests and art competitions. It is clear that in this school the principal has been the motivating force behind the school and his enthusiasm and dedication seem to have imbued perseverance and diligence into both teachers and students. Facilities are not outstandingly good in this school, although they are well cared for, and classes are large, often exceeding forty or forty-five students per

class. The combination of several years of strong headship and sound management has given the school stability and enabled it to substantially improve the quality of the education it offers.

Principals and School Ethos.

Rutter et al. (1979) claim that the 'ethos' of a school is very important. If ethos is interpreted to mean the general atmosphere, then it is the principal, who to a large extent, determines the ethos. Where principals are industrious and energetic and are firm disciplinarians, an atmosphere of general enthusiasm tends to prevail. Where principals are weak, frequently absent, and known to be ineffective in their work, inevitably a general atmosphere of slackness takes over the school. The role of principal in Fiji and the status and authority that he possesses sets the tone for the school. Although such concepts as ethos and atmosphere are impossible to quantify, they are very obvious to visitors to schools.

In keeping with this emphasis on creating a school culture, Hoyle (1988) claims that conventional research on school heads concentrates on management of personnel and resources, rather than the more elusive ideographic and inspirational aspects of the role. He maintains that schools seek to forge a distinctive identity and that this is achieved largely by principals who create a 'mission' (sic) encompassing the goals of the school. Hoyle contends that the micropolitical dimension of

leadership has been ignored, as most models are too altruistic and rational.

Religious schools have certain advantages in this field, as there already exists a framework for moral instruction. Four of the eleven schools in the sample were run by religious bodies and this had a definite influence on the schools concerned. Although all of these schools accepted children of all faiths, participation in religious activities was mandatory. Despite this, the personal qualities and degree of professionalism of the principals concerned, still create the essential ambience of a school.

Second only to examination passes, strong discipline is commonly regarded as the hallmark of a good school. Principals are expected to be firm disciplinarians, although this is interpreted differently depending on the nature of the school. Fijian schools, especially rural ones, use corporal punishment. One principal told proudly of his length of rubber hose pipe which he uses to punish wrong doers who are caught at such offences as taking fruit or coconuts from school trees. Hard physical labour - weeding with machetes - is commonly used in urban schools, but it is an everyday chore in rural schools. Traditional Fijian reprimanding involves the shaming of the individuals concerned - students may be made to sit on the floor keeping their eyes lowered while a lecture is delivered and an apology forced out. The new principal of the troubled Dua School felt that discipline would be

promoted by conducting school assemblies three times daily - before lessons, after lunch and before afternoon dismissal. The students stood in the hot tropical sun and listened to lectures on behaviour while trouble makers were singled out for their misdeeds. It appeared however that rather than learning from this experience, the students seemed to resent it. The formula for gaining the respect of students and teachers while developing a working relationship with them does not appear to be easily acquired.

This research found that many of the principals in this study did in fact have a clear idea of the ethos that they wished to foster in their schools, although they did not use that specific terminology. In the purely Fijian schools, traditional Fijian culture was perceived as the guiding philosophy, particularly the values of respect, obedience and conformity. Several principals expressed the sentiment that such values were diminishing in the face of modern influences and it was thus their duty to reinforce them at school. In practice, respect, obedience and conformity were generally inculcated through strict, authoritarian discipline which emanated largely from the principal. Military cadet training was favoured by the principals of Ono and Tinikadua Schools as this reinforces these critical values. Christian values were often seen to be important in Fijian schools. Regular church attendance was a feature of all Fijian boarding schools and many had lessons in religion as an extra non-examinable subject.

The field-study shows an apparently close link between pupil achievement and strong principalship. The link between principals and classroom pedagogy is however hard to define, let alone quantify. While principals generally have little direct contact with classroom teaching, the physical structure of schools in Fiji, with wide open doors and windows, means that there is little privacy in the classroom. Principals can thus be well aware of the teaching in their schools and teachers also know that their teaching is open to the scrutiny of anybody who passes. Principals vary in the degree of interest that they take in the classroom, but their interest and influence appear to have an effect on pedagogy. Principals of larger schools have a great deal of administrative work to handle and often tend to stay in their offices, handing over other roles such as general school supervision to their deputies. The principals who were actively aware of what was happening in their schools tended to be able to set more clearly defined parameters for the school culture, and were able to foster a school life which provided motivation for both teachers and students.

It is apparent from the case studies that sound management is closely linked to effective principalship. When financial affairs are satisfactory and the principal has a free rein in the daily running of the school, there tends to be a relationship of trust which creates a stable environment for the educative processes of

teaching and learning to take place unimpeded. Weak and ineffective leadership from either or both principal or management lead almost inevitably to a poorly functioning school, within which even the most highly motivated and qualified teachers cannot teach effectively.

6.3 The Role of Material Resources.

Various World Bank reports on the quality of education in developing countries hold that school resources are the critical factor in determining and improving school quality. The research on which this thesis is based suggests that while there is certainly a minimal base line for school resources, they alone are not sufficient to ensure efficient teaching and learning. Conversely, if a school has less than the absolute minimum of resources and infrastructure, effective teaching and learning become extremely difficult.

The continuous difficulties facing Va School have already been mentioned. The lack of water in this school, compounded by the lack of electricity and poor communications have all contributed to a demoralized attitude among teachers, parents and students. This has in turn led to the physical buildings and grounds of the school falling into a state of deterioration. The harsh tropical climate of Fiji with its alternate hot sun and heavy rainfall takes a heavy toll on buildings, and unless maintenance is kept up, decay is rapid. When school buildings are literally falling apart, there is no

incentive to attempt to keep them clean or neat, and little encouragement to put charts on the wall as stimuli for learning. Va School does in fact have a reasonably well stocked library due to donations from the Fijian Affairs Board, but the room in which the books are kept was untidy and dirty with a general air of disorganization. The Principal felt that many of the donated books were inappropriate to and too difficult for the students at their particular stage of schooling and it was hard to encourage the enjoyment of reading on such books. Similarly, the Home Economics department had received donations of several large items such as a gas stove, a kerosene refrigerator and some sewing machines. A number of these items were out of order and were not being used. The Home Economics room was badly in need of essential repairs and it was far from being the model kitchen it was meant to portray.

The fact that many Fijian schools lacked good libraries was observed in the early 1980s, and recognizing the importance of reading in education, much money has been spent on purchasing library books for Fijian schools. Library books donated by the Fijian Affairs Board were in evidence in a number of schools in the sample, but there was a common lament that children did not like to read. Most of the books were in English, which is the second language for almost all pupils, but even where books were available in Fijian, apparently reading them was not popular. The level of difficulty and the subject matter of the books was criticized as being inappropriate to

rural children. In many schools, the donated books lay in a pristine condition in locked rooms with little evidence of frequent use. In one case the books were still in their packing cases as there had apparently not been enough time to process them for use. The problem of encouraging children to read is partly cultural. Reading is a solitary activity which has little value in the Fijian culture where oral discourse is the main communication. In a culture where conformity is valued, people who read a lot tend to be ridiculed or branded as lazy because they are not physically active.

One school which appeared to have some success in promoting reading was Ono School, a government school with an entirely Fijian enrollment located on an outer islands. The students at this school have a regular weekly library period and are actively encouraged to read. The library is full of simple adventure stories such as 'The Famous Five' and 'The Hardy Boys'. While these books may lack literary value or self-improving aspects, they do appear to inspire a love of reading. The sight of silent students absorbed in cheap paperback novels bore witness to this. It appears not to matter what the content of the books are, if reading as an activity per se is to be fostered. The English teachers at this school claimed that by the time the students are in the senior forms, they are sufficiently self-motivated to enjoy reading and to be able to use books effectively as a tool in their education.

Ciwa School, a predominantly Indian urban school, also had a reasonably well stocked and well used library. Whereas most schools have an English teacher doubling as librarian, this school had a librarian who was able to spend about half her time on library work. She also opened the library voluntarily in lunch hours to encourage children to use the library, and many took advantage of this extra time. The librarian found over the years that mystery, romance and fairy stories were the most popular and she purchased books accordingly. The books at Ciwa School were in good condition and the library itself was clean and tidy, with an area set aside for quiet study. This was the only school where art work by students was displayed on the walls, which helped to create an attractive environment. It is worth noting that Ciwa School, with an essentially non-selective intake, has exceptionally high examination pass rates with very high grades.

Clearly the mere presence of books does not promote reading. Encouraging children to read and to find enjoyment in reading can only be achieved by sensitive and dedicated teaching. There is a great deal of human effort required in organizing a library efficiently, and the schools that had more teacher time devoted to the library were the ones with better libraries and a better utilization of books by students.

While library books are often regarded as an optional extra, textbooks are essential for secondary schooling.

The curricula for all subjects leading to Fiji Junior are set out clearly in the books which must be covered before the examination. Most teachers deviate little from these set texts, which are in effect the only curriculum document. Lockheed has observed that "Because textbooks typically deliver the curriculum, they are regarded as the single most important instructional material" (1989:19). Schools have differing policies on textbooks. Many schools provide all the textbooks necessary. This eliminates the problems which arise when pupils do not have a book. When schools do not provide textbooks, difficulties can emerge. In the troubled Dua School, students are expected to buy some textbooks and the school provides some. Constant problems arise because students have no books and therefore cannot do homework, and they fall behind the rest of the class. One of the English teachers at Dua School reported that 18 of the 32 pupils in Form One had no English textbooks. This created an almost impossible situation. Teachers blamed poor parental attitudes rather than poverty for the problem, as the textbooks in question are printed by government and are not expensive. Many Indian dominated schools require their students to buy their own books, and they have found that this is not an area of difficulty as it is absolutely insisted upon that each student must possess a set of textbooks.

Science is a compulsory subject up to Form Four level and practical work is meant to be an important component of the syllabus. A number of schools had very poor science

laboratory equipment and in the case of Walu School, there was no laboratory at all, although one was planned to be constructed. In almost all cases, it was apparent that the teachers demonstrated experiments without students taking an active part. This was generally because of lack of the necessary equipment and chemicals, but also a reflection of the didactic teacher-centred approach to teaching which is the norm in Fiji. In some cases, the laboratory had to double as a classroom if teaching space was short in the school. Only a few science laboratories visited had charts or project work on the walls which would help create an atmosphere of scientific investigation.

As in the case of library books, excellent laboratory equipment on its own is not sufficient. The Basic Science curriculum up to Form Four level has in fact been designed to utilize simple equipment while making the most of the natural environment. An imaginative teacher can teach effectively with minimal equipment and it is very much up to him or her whether to extend the basic curriculum or not. It is interesting that the children from Walu School with no laboratory did reasonably well in Fiji Junior Basic Science with a median score of 70.1%. This is most likely due to the quality of teaching, rather than an advocate for teaching science without a laboratory.

Tini School is atypical in Fiji. It is funded entirely by the Church of Jesus Christ of the Latter Day Saints and

does not receive any financial assistance from the Fiji government. The school is located in an affluent suburb of Suva and is set in a landscaped garden in architect-designed buildings. The material resources and equipment in this school are of a very high standard compared to other schools in Fiji. The sports and music facilities are undoubtedly superior to those of many schools in affluent societies. The school provides all textbooks to students and has an impressive looking library. On close examination however many books in the library have a religious orientation and there was not a large number of general reading books. The school has excellent equipment for vocational and technical courses, although on close inspection, certain equipment was found to be out of order. For example, out of 16 electric typewriters, only eight were working. Although the school owned 16 computers, they were locked away as there was no teacher qualified to teach computing.

Despite the excellent material resources of Tini School, certain problems pervaded the school. Academic pass rates were generally below national averages. This was not a particular concern of the school, as it claimed not to aspire academically, emphasizing rather the importance of spiritual character building. However it certainly disproves the simplistic equation that more and better resources will automatically bring about better achievement. Discipline is a problem in the school. The students were noticeably noisier and more disruptive than in other schools visited. Teachers complained of the

students' lack of motivation and they blamed the poor home backgrounds of the children. Certainly many of the children at Tini School come from large peri-urban settlements, the majority from the poorer socio-economic groups, but this is not a problem unique to Tini School. The school placed a great deal of emphasis on sporting achievements. At the time of the field visit, the school rugby team was 'camping' in the school for a week of solid training in preparation for a national secondary schools rugby match. The school provided the team with a high protein diet and all possible facilities were made available to them. Such activities appeared to take priority over academic pursuits and could be seen as a proxy for them.

6.4 The Role of Teachers

Children attend school to learn and teachers are the disseminators of the knowledge they seek. It is logical therefore that the role of the teacher is fundamental to the teaching and learning process as Beeby (1966) and many other theoreticians have proposed. The field study investigated whether teachers are the lynch-pin of the system, or whether they are but a part of the educative process.

Most teachers encountered in the field study were qualified with a teaching diploma and often a degree. Despite the recent exodus of qualified Indian teachers noted in Chapter Four, there was not, at the time of the

fieldwork a noticeable shortage of teachers. There is a general impression of dedication and professionalism among teachers in Fiji. All speak excellent English, know their subject matter well and have a sound grasp of the theory of teaching.

In practice however, theories learned in teacher-training appear to have given way to satisfying the practicalities of meeting syllabus deadlines and teaching in the most pragmatic way given the abilities of the students, the resources available and the leadership and management of the school concerned. A 'laissez-faire' approach exists in most schools, where teachers are left very much to their own devices. Principals are usually too preoccupied with administration to be involved with the professional side of teaching and only a few appeared to actually know what was happening in the classrooms of their schools. There appears to be an implicit agreement that principals are in charge of discipline and administration, while teachers concentrate on teaching.

There is a tendency towards formal relationships in the classroom, particularly in rural areas. Traditional concepts of authority and status, important in both Fijian and Indian cultures, come into play resulting in a didactic, teacher-centred style of instruction. Teachers tend to be high-handed, verging on arrogant in dealings with children, issuing commands in a manner which calls for no questioning. The power and authority relationship also extends to that between principal and teachers.

Decisions on policy come from the principal. Bright ideas from junior staff are definitely not appreciated. Age and experience rather than qualifications and enthusiasm give status and authority in most school situations.

Possibly because of the constant pressure to cover the syllabus before external examinations, it was observed that there is a general lack of creativity and innovation in teaching. It is difficult however for teachers to show initiative when the principal does not foster it. Three schools encountered in the field study had teachers that were clearly innovative in their work and their brightly decorated classrooms were a testimony to this. Each of these schools had a principal who was more than usually aware of what was going on in the classroom. It was apparent that weak and ineffective principals can feel threatened by bright innovative teachers, especially when younger and better qualified than themselves. Teachers therefore tend to maintain the status quo, plodding through the syllabus in a most pedestrian manner, ignoring the shortcomings of the school.

A common method of teaching is giving model answers to old examination papers. A teacher of English at Dua School was observed writing copious answers on the blackboard to questions from previous Fiji Junior Examination papers. The students spent the whole lesson copying the answers. The lesson was English literature and they were practicing answering questions on a novel they had read. Questions such as 'Who was your favourite

character in the story? Give reasons for your answer' and 'Describe an incident that you found exciting or interesting, and say why you liked it' were answered in full by the teacher, with no input or discussion from the class. The teacher, a young graduate, justified giving model answers because of the shortness of time to cover the syllabus and because she felt the children were poor at expressing their own ideas. The children at Dua School did poorly at English nevertheless, achieving a mean score of 46.9% in 1988.

The vernacular languages of Fijian and Hindustani are widely used both inside and outside of the classroom. Officially, only English is used for teaching purposes, other than for vernacular language classes. But particularly in rural schools and schools where one racial group dominates, the vernacular is used a great deal among students and teachers.

The stability of a teaching staff appears to have an influence on the morale of a school. A stable teaching staff is often a reflection of the overall stability of the school in terms of management and principalship. Schools such as Tini and Tolu Schools which have no problems with management and have principals serving long and successful terms, have few staff changes. Trouble-beleaguered Dua and Va Schools on the other hand have constant problems with staff requesting transfers and both schools have a high turnover of teachers. Such schools become known by the teaching fraternity as

unpopular and tend to become blacklisted. Young graduates who have to do service in rural areas are frequently sent to rural schools where they tend to stay for the minimum time possible.

A lack of resources and poor management can severely hinder effective teaching, creating a negative school environment. Sometimes where the management is weak and the school is desperate for resources, teachers have to take a very active role in fundraising, such as the cases of Dua and Vitu Schools in the field study. In both cases, teachers had recently been actively involved in organizing bazaars to raise funds for essential running costs of the school.

Almost all teachers and principals encountered lamented a general lack of motivation on the part of students, and they were universal in blaming the home background for this situation. Poorly disciplined children created problems particularly in urban and peri-urban areas. Dua School for example is close to a number of large hotels as well as the international airport, and a number of parents of students work shifts. Teachers felt that the lack of parental support and discipline in this environment affected students negatively. Rural schools, especially in the cash-cropping areas of western Viti Levu, had problems with absenteeism during harvesting seasons and teachers find it annoying that parents appeared to place a higher priority on gathering the harvest to attending school.

Teachers and Attainment.

The end product of teaching at secondary level is often seen in terms of examination results. It is significant that when comparing the mean subject marks from the eleven schools in the survey, the marks especially for the four compulsory subjects tend to be similar within each school, falling within a range of from 2 to 12 percentage points, as can be seen in Tables 6.4.1.(a) and (b). This could of course reflect many things such as the general abilities of the students concerned. It could also suggest that the school sets an implicit level of expected achievement and thus a threshold is established whereby marks across the subject range do not differ widely. If for example the subject marks of Dua and Walu Schools are compared, one sees a vast difference but within each of these two schools there is much less variation. The two schools in question are both Fijian schools which are totally non-selective in their in-takes, albeit in very different environments, and on paper the qualifications of the staff are very similar, although those of Dua School are slightly higher. It is suggested that if a teacher from Dua School were transferred to Walu School, he or she would be forced to improve his or her teaching standard to conform to the expected norms. Conversely, if a teacher from Walu School went to Dua, standards may unconsciously decline to match the ambience of the school.

When the marks for the four compulsory subjects are correlated with each other for each school, significant levels of correlation appear as can be seen in Appendix Six. This implies that in most cases, the levels of subject achievement are similar within schools, which supports the contention of an implicit plateau of attainment for each school.

It is often assumed that Fijian children will achieve well in the subject Fijian, but the marks for this subject indicate that native ability with the vernacular is not sufficient. Two isolated rural schools both on the island of Kadavu, Lima and Walu, achieved means of 49.9% and 79.3% respectively. In both cases the marks fit with the general range of marks for that school bearing out the contention that there is a threshold of achievement for each school. The means for English for both schools were 44.6% and 67.7% respectively. But the essential point here is the vast difference in marks between the two schools. In a subject which requires little in the way of equipment or facilities, the difference must lie in the teaching. The quality of teaching is in turn determined to a large degree by the leadership of the school and the atmosphere therein.

Table 6.4.1 Fiji Junior Certificate Subject Marks: Mean Percentage Marks for Fieldwork Schools.

(a) Marks for Four Compulsory Subjects.

School	English	Maths.	Basic Science	Social Science	Total	No. of Students
Dua	46.9 (17.3)*	43.7 (11.5)	49.0 (14.6)	34.3 (13.1)	352.2 (90.7)	33
Rua	48.3 (16.7)	55.0 (15.3)	48.3 (15.6)	56.2 (16.4)	309.5 (100.9)	63
Tolu	62.9 (18.4)	61.9 (17.0)	62.5 (15.9)	60.8 (12.2)	379.0 (82.7)	42
Va	45.2 (9.9)	44.9 (14.3)	41.1 (11.6)	49.4 (15.5)	251.5 (92.9)	23
Lima	50.6 (15.7)	56.3 (14.9)	52.0 (16.0)	62.5 (14.0)	331.7 (84.7)	13
Ono	51.4 (11.3)	64.6 (14.0)	54.2 (12.4)	63.6 (11.9)	356.9 (60.6)	56
Vitu	44.6 (14.0)	51.1 (6.4)	47.1 (9.7)	47.6 (14.9)	328.3 (57.0)	16
Walu	67.7 (9.7)	61.1 (10.8)	70.1 (9.8)	69.9 (9.8)	410.3 (47.2)	18
Ciwa	69.9 (11.5)	82.6 (10.3)	68.4 (12.3)	78.5 (11.0)	465.1 (54.3)	82
Tini	62.1 (15.7)	50.8 (14.7)	56.9 (11.8)	60.5 (15.0)	336.3 (80.4)	37
Tinika- dua	56.2 (14.2)	51.6 (13.8)	48.7 (12.0)	44.2 (14.1)	312.4 (75.5)	73

* Numbers in brackets are the standard deviations for the means above each.

Totals are aggregates of marks in English and best five subjects. No subject with a mark of less than 30% is included in the aggregate.

Table 6.4.1(b) Marks for optional subjects.

School	Agric. Science.	Home Econ.	Metal- work.	Tech. Drawing	Wood- work.	Acct- ing.	Fiji- an.	Typ- ing	Urdu
Dua	46.0 (16)*	56.5 (7)	41.1 (6)	41.1 (10)	62.8 (8)	39.4 (14)	53.3 (33)	-	-
Rua	- -	61.2 (27)	- -	50.5 (19)	64.4 (16)	54.6 (63)	- -	- -	-
Tolu	- -	65.9 (21)	- -	55.6 (21)	67.1 (19)	58.8 (42)	- -	57.2 (21)	-
Va	- -	40.5 (17)	- -	- -	56.5 (6)	43.6 (23)	- -	- -	-
Lima	55.6 (13)	- -	- -	41.9 (13)	- -	- -	49.9 (13)	- -	-
Ono	- -	55.1 (21)	- -	66.2 (30)	- -	63.0 (24)	66.1 (35)	- -	-
Vitu	- -	63.2 (4)	- -	51.2 (11)	65.9 (11)	59.0 (5)	60.3 (16)	- -	-
Walu	- -	54.7 (11)	- -	78.0 (7)	- -	- -	79.3 (18)	- -	-
Ciwa	- -	80.5 (36)	- -	81.8 (49)	77.3 (30)	76.5 (82)	71.1 (25)	- -	80.7 (12)
Tini	- -	71.4 (10)	52.2 (7)	49.8 (13)	57.2 (9)	58.6 (13)	- -	60.6 (20)	-
Tinikadua-		56.8 (21)	- -	65.3 (28)	56.1 (19)	56.4 (35)	61.0 (37)	- -	-

* Numbers in brackets refer to number of candidates who took each option. (These are the numbers of survey participants taking each subject which may not be the same as the total number of candidates per subject from each school).

The teacher is the main practitioner in the education process, but evidence suggests that he or she is only a part of a wider network of interactions and personalities in the total school system. The social, economic and political contexts of the school and community provide the setting for the school to function. Due to the management situation of many of the schools in Fiji, communities are intimately involved with providing schools with their resources and their budgets. Principals provide leadership and motivation within the school, and where this is strong and effective, schools thrive. Where such leadership is weak or non-existent, teaching generally becomes dull, uninspiring and pedestrian and morale is sapped. Within the authority and power structure of the school micro-community, the teacher looks to the principal for guidance and example. Poor leadership inspires the best teachers to apply for transfers to other schools, and comforts the worst teachers that they may plod on making as little effort as possible.

6.5 School size - does it make a difference?

The issue of school size generally in Fiji was discussed in Chapter Four and it was noted that some 40% of all secondary schools have less than 200 pupils. This situation has occurred for various reasons. In some rural parts of Fiji the population density is relatively low, thus the number of pupils in local schools is low. In

urban areas and more densely populated rural areas, ethnic, religious and sectoral differences give rise to a multiplicity of schools with overlapping geographic catchments. The Grant-in-aid system has enabled fragmentation and duplication to occur along these lines. In the fieldwork study three schools were very small with less than 100 pupils and a further two had rolls of between 100 and 200.

The effectiveness of very small secondary schools must be called into question. There are a number of commonalities that these schools share. All three very small schools in the survey were junior secondary schools, established in the 1970s when it was government policy to promote them. Va School had a roll of 88, Lima a roll of 60 and Walu a roll of 81. All of these schools were located in rural areas, varying in degrees of isolation. All three schools had boarding facilities. Many children were from villages fairly close to the school, but due to transport difficulties, it was not possible to travel daily.

The popular perception in recent years has been that junior secondary schools are inferior to 'full' secondary schools which have fifth and sixth forms. Junior secondary schools, especially small ones, have suffered from these negative attitudes and have often been regarded as second best. In all cases of the very small schools in the field study, the principals contended that students would have gone elsewhere if their parents could have afforded it, or if they had passed their

Intermediate Entrance with sufficiently high marks. In the case of Va School for example, the option would be to attend one of the secondary schools in or around Sigatoka town, which would involve two to three hours travelling per day plus the cost of busfares. Children attending Walu School on the island of Kadavu could have attended Ono School which is often preferred as it is a government school known to have superior facilities. The implication is that the schools in question are a second option. This has a demoralizing effect on teachers and students.

Even without doing a detailed cost-effectiveness study, it is still apparent that the cost per student of schooling in such small schools is very high. Lima School, for example, with its 60 pupils, has a staff of 7 teachers. At a modest estimate, staff salaries would exceed F\$60,000. Even excluding grants for buildings, equipment, textbooks, library or recurrent expenditure, this yields a high cost per capita. Despite this high cost, the facilities at such schools tend to be distinctly sub-standard. This is due directly to the nature of the Grant-in-aid system because schools must still rely on local fund-raising for much of their budgetary needs. With very small rolls, there are few parents to call upon to donate money. Located in rural areas, most parents do not have secure sources of income and therefore do not have the capacity to contribute generously to schools.

Singh (1986) has put forward a thesis that small rural

schools in Fiji, while expensive and possibly inefficient, often come to symbolize the aspirations of the communities in which they are located. He suggests that "rural communities view schools as satisfying their social, cultural and psychological needs as much as catering for the educational needs of their children" (1986:28).

When schools have very small rolls, individual class sizes must also be small. Lima School for example had 13 students in its Fourth Form while Walu School had 18. With such small class sizes, obviously subject choices must be very limited. This can be seen in Table 6.4.1 (b). In the case of Lima School, the Form Four students had no options. They all pursued the same seven subjects for Fiji Junior: the four compulsory subjects - English, Mathematics, Basic Science and Social Science; plus Agricultural Science, Technical Drawing and Fijian. While instinctively, small classes may appear an asset, it is not necessarily the case. Ciwa School with its outstandingly high pass rates had Form Four classes exceeding 40. While this may not be ideal, class size did not appear to hamper examination performance.

Examination performance varied greatly among the three small schools in the survey. Problem-beset Va School had the second lowest national pass rate in the Fiji Junior Certificate (1988) with 41.9%. (1 'B' grade and 12 'C' grade passes of the 13 passes). Lima School had a 69.2% pass with 4 'B' grades and 5 'C' grades of its 9 passes.

Walu School had an amazing 100% pass rate with 2 'A' grades, 11 'B' grades and 5 'C' grades from its 18 students. The high grades achieved by the Walu students were substantially better than those of many larger and better equipped schools.

Walu School's academic success is very significant. It proves that it is possible for a small, isolated rural school in a poor community to produce enviable results. Klitgard (1975) maintains that it is of great importance to study such schools, which he labels 'outliers' and he writes: "If unusually effective schools can be identified, even if they are rare, there is hope that their superior performance can be replicated elsewhere in the educational system" (1975:60).

The evidence from this, albeit limited survey, would suggest therefore that size, as a single factor, does not necessarily affect the efficiency of schools in terms of student performance. The issues of management and leadership appear to have a far greater impact on the school, directly affecting the learning and teaching process, than the actual size of the school roll. Small schools have a fragile status, verging on that of a lottery. If managed well, they can succeed beyond expectation. If managed poorly, they can crumble to the point of barely justifying their existence. Unlike larger schools, they have little resistance to changing fortunes, and relatively less ability to recover from severe problems. In terms of economic efficiency, they

undoubtedly do poorly, providing education to a small number of students at high cost both to the supporting communities and to the Government. In terms of equity, they perform an important political and social role, bringing secondary education to the most remote and inaccessible areas of Fiji.

CHAPTER SEVEN THE STUDENTS IN THE SCHOOLS.

7.1 Social, Economic and Political Contextual Variables.

The discussion on management in schools suggested that schools are a mirror of the community they serve. Thus the same social, economic and political factors that shape the communities, also have a great influence on their schools. Conflict-ridden communities tend to bring conflict into the local school situation and news reports of school-based disputes abound. Different stakeholders such as the parents, committee, the Ministry of Education, principal, teachers and students perceive situations in diverse ways. There may be factions within the groups of stakeholders and schools can become arenas for local battles. There is a complex web of relationships between the different stakeholders and boundaries between them may be ill-defined. Changes may require elaborate negotiations which raise another set of tensions. With the Grant-in-aid system in Fiji, for example, the Ministry of Education appoints staff including principals, but school committees feel as if they have or should have the power to veto such decisions.

Dua School is an example of a school in a Fijian community where traditional customs and local politics have had a negative effect on the school. Because it is taboo to question the motives and actions of high chiefs,

financial mismanagement was tolerated for a prolonged period. The community showed its attitude indirectly however, by removing children from the school and by failing to give any kind of support to the school. Without the backing of the community at large, the school foundered and within a decade became one of the most problem-beset schools in the country. The demoralized state of teachers and students has been reflected in its academic achievement: it had been among the lowest pass rate achievers nationally since 1983 in Fiji Junior, and in 1988, it was third lowest in the whole of Fiji with a 44% pass rate.

Management aside, the general context of Dua School is somewhat different to many other purely Fijian schools. Dua School is located next to the town of Nadi, close to several large tourist hotels and resorts, close to the international airport and in the heart of the canelands of western Viti Levu. The Fijian land-owners collect land rents from the lease of their land to Indian cane farmers and there are more employment opportunities at differing levels of skills in the area than in most other parts of Fiji. The majority of the children at Dua School (73%) had fathers in regular employment or cash-cropping, which is a high proportion compared to other Fijian schools. The relative ease of obtaining employment could be a reason for the low motivation to succeed among children in this area, as jobs can be found with or without school certification. Within the context of Fiji, the Fijians in this area enjoy a degree of relative affluence.

It has been observed that there is a type of cultural malaise when tourism is mixed with traditional Fijian culture, and there is evidence of this in the Nadi area. A Ministry of Health nutrition survey in 1988 found, for example, that Fijians in the villages around Nadi town had very poor nutrition with the women especially having very low levels of haemoglobin. This is caused to a large degree by the cessation of traditional food planting for subsistence consumption as land is leased for sugar cane cultivation. Less nutritious food such as white bread and rice are purchased from shops as an alternative to traditional staples. Dua School suffers from widespread indiscipline and teachers there were quick to blame the shift-work nature of employment of many of the schoolchildren's parents for the breakdown in family life and lack of discipline among children at the school.

Va School, situated in the fertile Sigatoka Valley, is another case of a school located in an area of relative rural affluence. Half of the children surveyed at this school had fathers who were cash-crop farmers growing crops such as tobacco, maize, watermelons and vegetables. This school suffered from frequent absenteeism especially during the harvest season and the principal complained that parents emphasize farming rather than schooling. Most of the students, equal numbers of whom were Fijians and Indians, leave school to join the family farming venture, and there is apparently little motivation to succeed academically. Va School has had a history of poor

examination performance and in 1988 it was second lowest nationally in the overall pass rate for the Fiji Junior Examination with a 42% pass rate.

The three Fijian schools on the island of Kadavu were attended by children from communities with a somewhat different economic base. The majority of children's fathers were semi-subsistence farmers, eking out an existence from the rugged and often barren rocky island. Cash income for the Kadavu people is erratic, usually derived from surplus yaqona crops. There are hardly any employment opportunities on Kadavu itself. Although there is a government station, most professional and technical staff are from outside Kadavu, with the exception of a small number of auxilliary staff. The majority of the students surveyed aim to leave Kadavu, and in fact their education is preparing them to do so. Most parents want their children to succeed at school so that they can go to the main island (Viti Levu) and gain secure employment. They can then help support the remaining family in the village by sending money to them. The relative poverty of their environment appears to provide impetus to succeed, to escape from the limited prospects of their island home. These three schools achieved considerably higher exam pass rates in the 1988 Fiji Junior examinations than the Fijian schools in western Viti Levu. (Ono had a 79% pass rate, Vitu had 75% and Walu had a 100% pass rate).

The national political agenda also affects schools.

Chapters Three and Four explain how Indians in Fiji have long felt marginalized and have used education as an escape route from agriculture. The present uncertain political situation in Fiji has its effects on education, as it provides a strong motivation for Indians to succeed in order to prepare for possible emigration or at the least to study overseas, even though this is not a viable option for many. Writers such as Lal (1988) have suggested that the post-coup Fiji Indian community is under enormous psychological and emotional stress as its members come to terms with the realities of their situation. Although many aspects of life in Fiji have long been defined in terms of race, it is likely that Indians will face further discrimination in many areas. They have strong feelings of uneasiness and bitterness especially over the issue of scholarships for tertiary education which are allocated on a racial basis. The antithesis to this situation is that some Indian pupils and their teachers apparently lose all motivation to succeed, as they feel that no matter how hard they try, they are not likely to achieve their goals.

Indian teachers share the fears and uncertainty of their pupils and large numbers have migrated or are intending to migrate. The previous principal of Ciwa School, for example, who was a qualified and experienced professional, had recently left for a much lower status teaching job in New Zealand at the time of the survey. Teachers of science and mathematics especially have found it relatively easy to obtain teaching posts in nearby

Australia and New Zealand. Science and mathematics are areas where many secondary schools in Fiji are short of qualified teachers, and the repercussions are inevitable.

The prevailing political situation does not appear to have had such a strong direct influence on pupil performance in Fijian schools but it has affected ethos and attitudes in a number of areas. Some Fijian principals and educationists said that they thought the coups should be seen as a motivating force for Fijians to succeed, since they had opted to be the dominant race in the country, but they felt that this ideal was not being translated into direct action by pupils. One effect of the political situation has been the introduction of 'cadets', in other words military training, into various schools, especially Fijian schools. This is a manifestation of the strongly-felt nationalism among Fijians and the current high status of the army, which is seen as a symbol of Fijian strength. Two of the schools in the survey had introduced cadet training since the coups of 1987 and in both cases the principals felt that it was a positive move. The principal of Tinikadua School, for example, felt that cadets reinforce 'the values of uniformity, obedience and cooperation.' This particular principal was very much in favour of teaching Fijian culture and traditions and was clearly in favour of the 1987 coups. He had invited the coup leader to the school as chief guest for a prominent occasion and was full of praise for him. This principal was blatantly anti-Indian and was proud to share his opinions with his

students. Undoubtedly exacerbated by the present political situation, he appeared to feel that strengthening and exerting Fijian culture is a very important part of school life. This view was shared by all the Fijian principals encountered in the survey, but it was viewed more aggressively in the urban areas where multi-racialism appears to be perceived as a threat. In rural areas the entire social and cultural context of the schools is Fijian, thus Fijian culture is promoted intrinsically rather than as an act of defiance.

It is also apparent that some parents perceive schooling in a specifically Fijian context to be of equal importance to academic excellence. In the greater Suva area, for example, there is a wide choice of schools. Schools with entirely Fijian enrollments are often favoured by Fijian parents, even though their reputations for examination passes may be relatively low compared to other schools. Thus, unlike in societies with a state-run secular education system, parents in Fiji are able to consciously choose an ethos, often based on socio-cultural or religious foundations.

7.2 Parental Occupations and Education.

Western sociologists have strongly favoured the thesis that a child's home background shapes his or her future and strongly influences success or failure at school. The fieldwork survey has attempted to assess the relative importance of home background influence on children from varying backgrounds in Fiji on their school performance. Table 7.2.1 shows the mean scores in the Fiji Junior examination for the different occupational groups of the students' fathers in the sample.

The highest mean scores were achieved by the relatively small number of children whose fathers run their own businesses. Excluding groups with less than five members, the second highest category is that of children with fathers in professional careers. This is consistent with other research and suggests that academic success is becoming self-perpetuating between the generations. Other categories of white collar workers, skilled manual workers, all of the uniformed forces and farmers who had another source of income all scored means above the overall average. All of these groups would have secure incomes, which implies that financial security in the home may be a determinant of success at school. This could be for material reasons such as the ability to purchase books and other items for school or for less tangible reasons such as values and incentives passed from parents to children.

Table 7 2.1 Mean Scores in F.J.C Examination (1988)
by Occupations of Fathers in Sample.

Father's Occupation	Mean	Std. Devn.	Number of Cases	Percent
<u>White Collar</u>				
Clerical	362.7	105.6	28	6.1%
Bank Officer	487.0	53.7	2	0.4%
Administrative	365.8	77.3	5	1.0%
Professional	415.5	110.6	25	5.5%
<u>Manual</u>				
Casual labourer	333.2	98.4	9	2.0%
Unskilled	326.3	98.1	33	7.2%
Semi-skilled	321.5	110.3	38	8.3%
Skilled manual	375.2	86.6	40	8.8%
<u>Commerce</u>				
Business owners	438.4	77.5	20	4.4%
<u>Uniformed Forces</u>				
Army or Navy	368.2	73.1	11	2.4%
Policemen	372.6	63.2	10	2.2%
Prison Officers	387.6	109.8	3	0.6%
<u>Farmers</u>				
Semi-subistence	331.6	75.0	90	19.7%
Cash crop	305.0	110.1	77	16.8%
Farmers plus other job	386.7	63.9	26	5.7%
<u>Other</u>				
Retired	516.0	00	1	0.2%
Unemployed	359.6	38.2	3	0.6%
Deceased	397.8	66.3	21	4.6%
Dont know/not stated	366.6	108.6	13	2.8%
Overall	352.2	98.8	456	100.0%

incomes, which implies that financial security in the home may be a determinant of success at school. This could be for material reasons such as the ability to purchase books and other items for school or for less tangible reasons such as values and incentives passed from parents to children.

There are substantial differences within the classification of farmers. Cash crop farmers' children have overall scored worse than the children of semi-subsistence farmers. The children of farmers who have another source of income as well have scored means on a par with white collar and other urban groups. The difference between semi-subsistence and cash-crop farmers is surprising as semi-subsistence farmers have a more precarious existence with very low cash incomes, as they sell only their surplus to pay for their most basic needs. This suggests that there must be other factors involved. For example, because of geographic necessity, many semi-subsistence farmers send their children to board at schools. This survey has shown that pass rates among boarders are higher than those of children living at home or with relatives. (See Table 7.3.3). Cash crop farmers also use a great deal of family labour, especially that of teenagers. School principals in the cash crop areas of Nadi and the Sigatoka Valley lamented the frequent absenteeism especially in harvesting seasons, commenting that parents placed a higher priority on reaping the harvest than having children attend school regularly. It could also be speculated that the very

poverty of the semi-subsistence farmers encourages them to seek a sound education for their children, to raise their level of living above that of their origin. This complies with Heyneman's thesis.

The third category of farmers who have farming as their main source of income but who have subsidiary means such as truck or taxi driving, cane-cutting or labouring, would have the greatest financial security of all those in the farming genre. When asked to describe their fathers' work, children wrote answers such as:

"My father is a cane farmer. He also cuts cane".

"My father is a cane farmer and also he is a sugar-cane truck driver".

"My father works on his farm where he grows many types of vegetables. He is also a carpenter and he builds houses of other peoples."

It could be suggested that the fathers' motivation to work hard is transferred to his children.

Table 7.2.2 Major Occupational Groups by Race.

	White	Manual	Business	Uniform	Farmers	Others	Tot.
	Collar	Forces					
Fijian	11.5%	26.1%	0.3%	6.4%	48.6%	7.1%	100%
Indian	13.6%	24.8%	10.6%	3.5%	37.2%	10.3%	100%
Others	25.0%	37.5%	12.5%	6.2%	12.5%	6.3%	100%

Table 7.2.2 shows that there are significantly more Fijians in the uniformed forces and farming and many more Indians than Fijians in business. For manual and white collar jobs, the proportions of the two major ethnic groups were almost the same. This indicates an overall similarity of occupational background for urban dwellers regardless of race.

Rural and semi-rural schools showed a majority of fathers who were farmers, with a strong tendency to have had fewer years of schooling compared to urban fathers. In urban areas, most fathers were in wage or salaried occupations - white collar, manual, business or uniformed forces. The educational levels of the mothers in the survey differed little between rural and urban areas.

Occupations of mothers did not have a strong bearing on success in the F.J.C. examination. There was a much narrower occupational base for mothers - 79% were primarily occupied with domestic duties. (Of this group however, 26% also were involved in farming and fishing, and 14% had some informal money earning activity such as selling goods from home, sewing or minding children). The pass rate of children of white collar working mothers was the same as that of mothers who were not employed outside the home. The other occupational categories had so few cases, that any attempt at drawing conclusions would be invalid.

The education of both parents appeared to bear relatively little relation to the success of children. It is worth noting however that 62% of Fijians did not know their fathers' education, compared to 18% of Indians. Similarly, 55% of Fijians did not know their mothers' education as against 20% of Indians. It could be implied that education is a topic less discussed in Fijian homes, compared to Indian homes.

Although certain connections have emerged, it is not possible to make direct causal linkages between parental background and a child's success at school. There are a myriad of complexities in relating socio-economic status to educational achievement, none of which is easily quantifiable. It is difficult to accurately assess the levels of motivation coming from parents or the positive help that is given to children at home. There may be push factors which motivate children to escape from poverty, or pull factors which provide goals of family achievements. Parents or other relatives may provide role-models and possibly guidance. Cultural and ethnic influences may affect a child as much as socio-economic factors. It is with caution therefore that socio-economic factors are taken into account. A child's background may determine to some extent how he or she reacts to school, but it is the interaction of school factors with the child which appears to be critical. Chapter 8.1 attempts to draw together the data on background with the data on schools, exploring the intricacies of the interacting variables.

7.3 Homes and Homework.

No clear relationship emerged between the number of children in a family and success in the F.J.C. examination. Table 7.3.1 details the mean marks in F.J.C. for the differing family sizes. This table shows that the highest total mean score was achieved by children who were members of families with two children, followed by five-child families, three-child families and six-child families. Families with seven children or more or no siblings at all had low passes compared to other family sizes in the survey. Fijians tend to have the largest families - 57.8% of Fijian children in the survey were members of families with six or more children, compared to 23.6% of Indian children.

Table 7.3.1 Number of Siblings and Fiji Junior Means for Fieldwork Sample.

Number of Siblings	Mean	Std Deviation	Number of Cases	
None	333.2	105.1	19	(4.2%)
One	341.0	112.3	35	(7.6%)
Two	380.7	93.6	55	(12.0%)
Three	353.4	93.3	92	(20.2%)
Four	346.6	98.0	92	(20.2%)
Five	367.5	104.4	79	(17.3%)
Six	347.5	88.4	38	(8.3%)
Seven	312.5	88.1	20	(4.4%)
Eight	301.7	90.1	7	(1.5%)
Nine or more	<u>336.0</u>	<u>107.3</u>	19	(4.2%)
Overall mean	352.2	98.8	Total 456	(100.00)

Homework is an area which presents problems to a number of school children. At the Fiji Junior level, children can expect to have set homework every night. 61.5% of the children in the survey reported having problems with homework. Of these, 36% said that the work itself was the problem - it was too difficult, too much or was poorly understood. 41% of children with homework problems attributed the difficulties to their homework environment. This included having too many chores, too much noise or disturbances, a lack of light or space or insufficient books to work with. A further 36% complained that they did not have enough time to do their homework. Some children reported more than one problem, as the following typical responses indicate:

"The work is difficult and sometimes I've got plenty work to do at home and I dont have much time to do my homework".

"Sometimes my homework are too difficult and also there are people in my home which they always make too much noise and also not enough light at home".

"There is not a good light and too many jobs to do".

"It is too overcrowded and my brother and cousins make too much noise".

"Sometimes I cant understand the questions and sometimes I have too much job and lack of time to do my homework".

The children were asked if they had anybody who they could ask to help them with their homework. Table 7.3.2 shows the result of this question.

Table 7.3.2 Possible Sources of Homework Help.

Nobody to ask for help	10%
Father	7%
Mother	11%
Siblings	52%
Cousins	18%
Teacher	37%
Prefect	0.2%
Friend	3%

(Note: some respondents gave more than one possible source of help)

It is significant that the main source of help is from the same generation as the school child - siblings, cousins and friends. Whereas western research has often suggested that a large number of siblings can be a negative factor in school achievement, it appears from this study that siblings and cousins are a much more important source of help than parents. This is most likely due to the fact that many parents had less education than their children and thus they would not be able to help them effectively. It also points to the degree of alienation between parents and their children's schoolwork. It is not usual for Fijian parents to discuss matters such as school work with their children. There is also an avoidance relationship between Fijian fathers and daughters which is commonly observed.

It also highlights cultural factors such as the importance of age sets, especially for Fijian teenagers.

Fijians tend to have a close group of cousins and siblings and possibly friends with whom they spend a great deal of time. This is much stronger than the western concept of a peer group, as the Fijian age-set may also live together. Teachers are also commonly perceived as possible sources of help, highlighting the clear demarcation between school and home. This points to the importance of the role of teachers and schools vis-a-vis the home. This concurs with Saha's (1983) research, discussed in Chapter Two, where he concluded that school is alien to home life, and schools and teachers have a profound influence on a child's achievement. It is worth noting however that only 6% of all the students in the survey seek help regularly.

Significantly more Fijians mentioned problems with homework compared to Indians. (73% of Fijians compared to 39% of Indians). Most Indian children complained about the homework itself, its difficulty and amount, whereas Fijians complained about the actual work as well as other factors such as lack of time and a difficult environment. This is consistent with Kishor's thesis of locus of control, mentioned in Chapter Five. He found that Indians tended to have an internal locus of control, i.e. they took more personal responsibility for their own success or failure; whereas Fijians tend to blame factors external to themselves.

Of the 45 children who achieved 'A' grades in the F.J.C. examination, half said they had no problems with homework

and only one said there was a problem with the homework environment. (1) It could be construed that a problem-free homework environment is conducive to high achievement, whereas average passes may be achieved in less than perfect environments.

Field-survey investigations did reveal that homework facilities in many Fijian homes were lacking. Most rural homes lack electricity which effectively prevents working after sunset and most homes lack space or any form of privacy. Equally as important as physical amenities is the apparent lack of understanding of parents, both urban and rural, of the necessity to allow time for homework. In a status-conscious culture, children are at the lowest level. Teenagers, especially girls, work extremely hard at home, preparing food, fetching water or firewood, caring for younger children and generally being at the beck and call of all the older members of the extended family. Children are often obliged to stay up very late at night to assist with yaqona (2) drinking and to serve and clear away meals. Fijian parents do genuinely want their children to succeed at school, but quiet study time is often an impossibility in a crowded, bustling extended family household. Students commented typically: "The problems is that many people make a lot of noise and the house is so small." "The difficulties for doing my homework is that plenty people live in my home. They always disturb me"

Because many Fijian parents do indeed understand the

conflicts between Fijian family-life and school obligations, boarding schools are frequently favoured for the presumably more disciplined environment that they offer. Some of the children in the boarding schools on the island of Kadavu were in fact from Suva. Their parents had sent them to board in order to increase their chances of success.

Although overall scores were higher in boarding schools than those of children who lived with parents' or relatives, a fairly high number of boarders (81%) did nevertheless complain about having homework problems at boarding schools. The most commonly reported problems were lack of time, too much noise and disturbances and too much and too difficult work. This suggests that there is scope for improving the supervision and assistance offered at boarding schools, as they are a much-favoured option, especially for Fijians. While the mean scores at boarding schools were higher than other categories of abode, as shown in Table 7.3.3, they are still only the equivalent of a 'C' grade pass.

Table 7.3.3 Fiji Junior Certificate Means by Place of
Abode

	Mean	SD	Number	Percent
Living with parents	353.7	104.0	336	73.6
Living with relatives	318.9	91.7	54	11.8
Boarding at schools	369.8	66.4	65	14.2
Other/not stated	472.0		1	0.2
Total	352.2	98.8	456	100.0

The standard deviations (SD) are very significant in Table 7.3.3. The SD for the group of boarders is much lower at 66.4 than that of students living with relatives or parents. This means that there is much less variation within the group of boarders than in the other groups. This shows how a boarding school levels students out with a stable and uniform regime, compared to the variety of environmental contexts for students in the other groups. To some extent the boarding school mutes the socio-economic influence, as it is a total environment which becomes a proxy for home background. The homogeneity of boarding schools strengthens the idea of the school as a total institution.

Life at Fijian boarding schools is disciplined but it is also a harsh regime. Students are required to spend long periods in physical labour to keep school food gardens productive. Schools try to grow as much food as possible in order to keep boarding fees low. Some students resent this work and find it very tiring. The main crop grown is cassava which is a quick growing crop of 100% starch and low nutritive value. Other Fijian root crops such as yam and sweet potato require more skill and are slower growing, but contain more nutrients. Research by the Fiji Food and Nutrition Committee has shown that a diet consisting mainly of cassava is unsuitable for growing children and may inhibit educational performance. There has been encouragement for boarding schools to improve their diets, but there is not much evidence that advice

has been heeded. Walu School was an exception, where the boarders had some variation to the usual diet of cassava and tea. Apart from discipline being severe in Fijian boarding schools, conformity is also mandatory. Punishments are normally corporal, with straps or equivalent. Church attendance is compulsory and often choir practice and Sunday School are also obligatory.

The disciplined nature of the boarding environment can, however, have negative educational effects. It has been suggested, for example by Veramo (1984), that the high failure rate for Fijian students in their first year of university is caused by a reaction to the structured, coercive nature of boarding schools, as students are unable to cope with a less structured situation.

The vast majority (94%) of Indian children in the survey lived with their parents. This compares with 62% of Fijians. 15% of Fijian children lived with relatives and 23% were boarding at school. Fijian children live with relatives other than their immediate family for a number of reasons, but commonly they are children from rural especially outer island areas who come to urban areas to attend school. Various studies, such as that by Davis (1986) have related the difficulties faced by Fijian children living with relatives. They work very hard in the household, have virtually no free time and no privacy. It is certainly not an environment conducive to study and it is thus not surprising to see in Table 7.3.3 that the mean for children living with relatives is

significantly lower than those who live with their parents or attend boarding school. Some typical comments from Fijian students living with relatives were:

"There is not much space at home and too many people coming home for telling stories."

"Plenty work given by my aunty to do at home"

"Living with my relatives, we come back from school, we have many jobs to do, then we have not much time to do our homework."

Many Indian children, especially in rural areas, also work hard at home helping with agricultural tasks and domestic work such as cooking and child-care. It is evident though that Indian parents do usually allow time for homework. Extended families are somewhat less common in the Indian community, whereas they are the norm among Fijians, thus there may be more chances for privacy in Indian homes. As has been spelt out already, Indian parents are strongly motivated to have their children succeed academically, so a great deal of encouragement comes from home.

7.4 The Age Factor.

Government policy is that children in Fiji start school in the year in which they will be six years old on or before the 30th June. In practice, a good deal of discretion is left to the head teachers to accept younger children if they feel that it is appropriate and if there are places available. Many children are therefore younger than the prescribed norm and some children are older. In the field survey, only 52.6% of all the students interviewed were within the set age limits for that cohort, 27.6% were younger and 19.7% were older.

Repetition of classes is a typical feature of many education systems in developing countries. One result of repetition is a widely-spread age range within one form or year group. Automatic promotion is now widely accepted practice in Fiji. Since the two primary examinations and F.J.C. all now have pass rates of around 80%, relatively few children wish to or need to repeat. Indeed many schools refuse to accept repeaters, feeling that standards and reputations may be tarnished by their presence. Some schools take in repeaters from other schools, possibly to boost their own numbers. In the field survey, 3.5% of the students were more than one year older than the norm, and were most likely repeaters. Schools differed widely in their age spreads as Table 7.4.1 shows. Table 7.4.2 shows the age pattern by race.

Table 7.4.1 Age Spread in Field Study Schools.

School	% older than norm*	% younger than norm
Dua	41%	15%
Rua	23%	28%
Tolu	14%	31%
Va	12%	21%
Lima	28%	43%
Ono	18%	35%
Vitu	23%	18%
Walu	22%	39%
Ciwa	10%	32%
Tini	26%	10%
Tinikadua	22%	23%

* The 'norm' included children born between 1 July 1972 and 30 June 1973. Older children were born before 1 July 1972 and younger ones after 30 June 1973.

Table 7.4.2 Age Patterns by Race.

Race	% older than norm	% younger than norm
Fijians	26%	24%
Indians	10%	34%
Others	19%	19%

It is noticeable that relatively few Indians are older than the standard age, but a high proportion are younger. This is consistent with the assumption that Indian parents are enthusiastic about having their children succeed at school; thus they encourage an early start. The national figures for age spread show similar

tendencies, as the 1986 figures in Table 7.4.3 show.

Table 7.4.3 Age and Race in Fiji Primary Schools 1986.

(At 31 May, 1986)

	Fijian	Indian	Others
Class One Roll	24.7%	37.3%	32.2%
younger than 6 years			
Aged 14 and over at Primary School	2.3%	0.89%	0.7%

Source: Ministry of Education Annual Report for the Year 1986

Younger students overall had significantly better examination success than older ones in the field sample as Table 7.4.4 indicates.

Table 7.4.4 Fiji Junior Certificate Means for Field Sample by Age Group. (Mean of Total Marks)

	Mean	Number	Percent
Over 1 year older than norm	322.31	16	3.5
Up to one year older	312.0	74	16.2
Norm age group	353.36	240	52.6
Younger than norm	377.39	<u>126</u>	<u>27.6</u>
Total		456	100.0

Clearly older students do not necessarily perform especially well when compared to younger students. This challenges commonly held 'folk wisdom' in Fiji, that age and maturity will necessarily bring success.

7.5 Wastage.

The retention rate in Fiji's education system is relatively high for a developing country. Of the cohort who started school in 1979, some 60% were still at school ten years later in Form Four. (Ministry of Education figures). The wastage rate increases markedly after Form Four when examinations act as screening devices. The survey found that there was a slight but significant trickle of school leavers throughout the school year for Form Four students.

None of the principals interviewed in the survey claimed to have a major problem with students leaving throughout the school year although most acknowledged that a few students do generally leave for various reasons. Most schools had had one or two Form Four students already leave in the 1988 school year although Va School had had five Form Four pupils and one Form Three pupil leave during that school year, mainly to help with farmwork. It was apparent that it would be regarded as a poor reflection on the principal if such a problem was admitted.

Between the time of the survey in July and August 1988 and the Fiji Junior examination in early November of the same year, 21 of the 478 students (4.3%) who took part in the study had left school. These children were in the final stages of the two year course for the Fiji Junior examination which may be thought of as an unusual time to

leave school. Table 7.5.1 shows the spread of schools that had 'dropouts'.

Table 7.5.1 Students who left school between July and November 1988, by school, race and sex.

School	Number	Fijians	Indians	Girls	Boys
Dua	1	1	-	-	1
Rua	7	1	6	2	5
Tolu	0	-	-	-	-
Va	1	1	-	-	1
Lima	1	1	-	-	1
Ono	4	4	-	1	3
Vitu	1	1	-	1	-
Walu	0	-	-	-	-
Ciwa	3	2	1	1	2
Tini	2	1	1	1	1
Tinikadua	1	1	-	-	1
Total	21	13	8	6	15

It is clear in this sample that more Fijians than Indians left school early, although not in large numbers from any particular school. The relatively large number of Indian children leaving Rua School is interesting. Rua School is a low-achieving school in a rural area and it could be surmised that Indian children who are doing poorly feel no reason to stay at school when they will probably fail their external examination, as they have little chance of improving their life-chances anyway. This situation could reflect the inverse of the commonly assumed motivation attributed to Indians.

The reason for early school leaving most commonly cited by school principals was that of financial problems, not only with school fees but with also the myriad of other costs involved in keeping children at school such as busfares, uniforms and the cost of textbooks. A lack of interest was also suggested. It is likely that children who felt sure that they would fail their Fiji Junior may leave before the examination. A number of principals saw children leaving to help at home, either on the family farm or, particularly for girls, to help with domestic chores. In urban areas where both parents work, girls may be withdrawn from school to mind young children. This reflects the opportunity costs of education, rather than the direct costs. Children leave school if their family is emigrating, although that is not a likely reason for most of this sample.

The fact that many more boys than girls left school early possibly also reflects the opportunity costs of education. Boys aged between 15 and 17 years are valuable units of labour, especially on family farms and success in the Fiji Junior examination would not enhance their labouring capacity.

7.6 Aspirations and Perceptions of Education.

The participants in the survey were asked questions about their aspirations. This information yields strong indications of their perceptions of education.

The overwhelming career preference is for white-collar jobs, although this is slightly less for Fijians than Indians (58% of Fijians as against 68% of Indians and 62% of Others). 82% of girls aimed for white collar jobs (compared to 45% of boys), particularly the professions of teaching, nursing and medicine.

Parental occupations do not affect their childrens' aims - children of all backgrounds aim for jobs with security. Second to white-collar, uniformed forces or skilled manual jobs (especially that of ships' engineer) were popular choices. Parents' education was more significant than their occupation in shaping their childrens' aspirations. The children of better educated parents aimed for more secure jobs than the children of less educated parents.

Only three respondents opted for farming as a future occupation. This is very significant, as 206 of the participants in the survey were children of farmers. The perception that education will raise people above being tillers of the soil is obviously still very prevalent. Children of farmers know that farming involves long hours of physical work with an insecure return. It is not

surprising, therefore, that they aspire to secure salary earning positions with apparently fewer hours' work for greater rewards. Despite over a century of colonial and post-colonial education authorities endeavouring to impress upon people the dignity of an agricultural lifestyle and attempting to get rid of the assumption that secondary education leads to white collar employment, the perception is clearly still dominant. Unskilled labouring jobs were similarly not sought after, with only one respondent choosing that as his aim.

Naturally, aspirations are not always realistic. Of the 152 students in the sample who failed the F.J.C. (31.7%), there was a wide spread of aims, including some semi-skilled occupations such as truck-driving. But even the failures still aimed overwhelmingly towards white-collar jobs. The reality is that the majority of failures will most likely end up with unskilled work, farming or unemployment. On the other hand, all of the 'A' grade students aimed for professional careers and skilled employment, which could indicate that they had a firm idea of their own abilities.

In order to cross check the reality of their aspirations, the participants were asked "What work do you think you probably will do when you leave school?". Not all were able to answer this hypothetical question and many merely repeated their aim. This could be interpreted as showing determination to succeed, or a basic misunderstanding of the nature of the question. On close scrutiny of the

responses, however, it can be seen that many students, including many of those who failed their F.J.C. had high aspirations, but in reality they had a fairly clear idea of their destiny, often naming farming or domestic work as their probable future. Some typical responses from those who failed are:

Aim: "When I leave school my ambition is to work in a bank".

Probable future: "I think I would be probably become a cashier of any shop".

Aim: "I want to be a teacher".

Probable future: "When I leave school I will probably become a house girl for someone else".

Aim: "I would like to be a teacher".

Probable future: "I think I will left school if I not pass my examination I will be helping my mother at home".

Aim: "I would like to be a carpenter".

Probable future: "When I leave school I probably be farmer".

The aspirations listed were confined to a fairly limited range. For girls, nursing, teaching, medicine, banking and accountancy were most popular and for boys, teaching, uniformed forces, medicine, engineering and accountancy. Many of these occupations would be known areas in the sense that the children would most likely to have seen or known people in these careers. Very few chose careers with which they would have little immediate familiarity. The second-choice careers, or those that they might see themselves in if they did not fulfil their ambitions were

largely the army, the tourist industry, farming, domestic work, teaching, shop work or clerical work.

The aspirations of the students in this survey offer a clear insight into the way they perceive their future. Despite decades of tailoring curricula to offer 'relevent' subjects such as Home Economics and subjects with a supposed vocational bias such as Technical Drawing, the overriding aim is for traditional white-collar and professional employment. Subjects as such appear not to matter. It is the end result of passing examinations to gain credentials for the future which dominates the system.

7.7 Ethnicity: does it override all else?

Fiji is a very racially conscious society. The issue of race arouses emotion, and much political rhetoric has been delivered. Often however the rhetoric is based on simplistic stereotypes and assumptions and does not delve into realities. One's every action is defined in terms of one's race. This is exacerbated by the marked differences between the two major races in many facets of life. Academics, politicians and laymen have long been debating over disparities in achievement between the two major races in Fiji in an effort to find out why Fijians consistently perform less well than Indians in examinations. In the 1987 F.J.C examination for example, the aggregate pass rates were 78.3% for Fijians and 80.9% for Indians. This is not a significant difference but the passes by grade are more revealing. 16% of all Indian candidates obtained an 'A' grade pass as against 4% of Fijians; 30% of Indians obtained 'B' grade passes against 27% of Fijians and 35% of Indians passed with a 'C' grade compared to 47% of Fijians. The grades are important, especially in an examination with a high overall pass rate. Predictive studies, such as that by Kishor and Elley (1981), show that only students with the equivalent of an 'A' or 'B' pass are likely to succeed in post Form Four studies. In higher level examinations the racial disparities become increasingly marked.

There are obviously many different forces at work. Education has long been used as a means to social

mobility by Indians. The socio-political situation in Fiji places Indians in an increasingly marginalized position and it is becoming more and more difficult for Indian students to gain scholarships for tertiary education, or to find a career with promising prospects. Emigration is the preferred option for many Indians, and skills and qualifications are essential to qualify for acceptance by other countries. Although emigration has certainly increased after the two coups of 1987, Indians have been leaving Fiji for over 20 years. This situation provides a powerful motivating force for Indian children to succeed at school.

The situation in Fiji with Indian children being high academic achievers is by no means unique. Children of migrant populations in other countries have also used education as a means of gaining a secure footing in their new homelands. In the U.S.A. for example, Asian Americans are surpassing their peers in "almost every educational gauge" (Time magazine, August 31, 1987, p.40). Prestigious universities are allegedly rejecting Asian American students, fearing domination of one ethnic group. In Britain, an analysis of the 1987 O level results by ethnic group, revealed that Indian children outstripped other groups in their achievements. Commenting on this result, Professor Desmond Nuttall said: "We know that many families of Indian background have very high aspirations for their children. They want them to enter the professions, like law and medicine." (The Times, 10 March 1990). In both the American and

British cases, the suggested reasons for the superior academic performance of Asians and Indians was high parental expectations, high levels of motivation and hard work.

Motivation alone is not sufficient for Indian children to succeed. In the weakly organized Rua and Va Schools, performance in the F.J.C. examination was poor, with comparatively high failure rates for both Fijian and Indian children. This shows the strong influence of school factors interacting with antecedent factors. Even within these deprived situations however, Indians did gain more passes than Fijians. Tolu School and Rua School are both predominantly Indian, drawing their pupils from rural cane-farming backgrounds. Although they are both committee schools, their pupil achievements differ greatly. Table 7.7.1 details the comparative achievements of different ethnic groups in schools in the field study.

In all cases of mixed-race schools, the mean of Fijian students is lower than that of Indians and also lower than the overall mean for the school. The differences vary however. For example in Rua School, there are only 2 marks difference between Fijians and Indians whereas in Tolu School there are 93 marks difference.

Table 7.7.1 Fiji Junior Certificate (1988) Means for Schools in Field Sample, by Race.

School	Fijian	Indian	Other	Overall
Dua	274.6	-	-	274.6
	(33)*			(33)
Rua	308.7	310.9	-	309.5
	(11)	(51)	(1)	(63)
Tolu	299.8	392.8	-	379.0
	(6)	(36)		(42)
Va	212.7	281.3	-	251.5
	(10)	(13)		(23)
Lima	322.1	-	-	331.7
	(12)	(1)		(13)
Ono	356.9	-	-	356.9
	(56)			(56)
Vitu	328.3	-	-	328.3
	(16)			(16)
Walu	410.3	-	-	410.3
	(18)			(18)
Ciwa	443.2	477.1	-	465.1
	(28)	(52)	(2)	(82)
Tini	311.4	395.5	363.5	336.3
	(23)	(6)	(8)	(37)
Tinikadua	312.4	-	-	312.4
	(73)			(73)

* Number of students in each group. Groups of less than five students are not included.

The reason for the relatively poorer performance of Fijians in education has often been thought of as lack of motivation. Fijians have not had the drive to use education to establish themselves, as they are secure in their own land. In recent years, poorly-equipped schools have been the target of blame. As mentioned previously, this is due partly to the Grant-in-aid system which requires schools to provide a great many inputs from their own funds. Poor communities, especially in rural areas are less able to provide well- equipped schools. Chapter Five mentioned the research by Nabuka which led, directly or indirectly, to a drive to improve the physical conditions in Fijian secondary schools. Observations from the field-survey indicate that the inputs of books, equipment etc have certainly arrived in Fijian schools, but that they are not always being utilized effectively. Many schools have found for example that the reading materials are too advanced and inappropriate. Some schools lack adequate library space for storage or have insufficient manpower to process the books for use. Costly equipment for subjects such as Home Economics was idle in some cases due to malfunctioning and the inability to afford repairs. Laboratory equipment was sent to one school, but there was no room to put it in. Evidently creative management and administration are needed to maximize the use of equipment.

A frequently addressed question is whether Fijians perform better in single-race schools or in multi-racial schools. The data in Table 7.7.1 does not give a clear

answer to this issue. In order to make comparisons, the figures are examined in geographic zones. In the Nadi area, Fijians performed better at the mixed race Rua and Tolu schools than at the purely Fijian Dua School. But it is not clear whether that is because of a peculiarly ethnic issue or because Dua School is particularly deprived. It is also not clear why there is only a slight difference between Fijians and Indians in Rua School, which is overall a low performing school; and a very substantial difference of 93 marks between the races in Tolu School. (From observation it could be suggested that the overriding cultural ethos of Tolu School favours Indian children as all of the staff were Indian and Hindi was the lingua franca of the school. Although Rua School was also predominantly Indian, there was a Fijian teacher on the staff which appeared to make a noticeable difference). The two schools in the Sigatoka Valley present a different picture. In mixed race Va School, Fijians do poorly compared to Indians, lagging some 69 points behind. Fijians in Lima School, which is virtually all Fijian, have considerably higher means than in nearby Va School. The three Suva schools also present a conflicting picture. While Fijians at monoracial Tinikadua do marginally better than at multi-racial Tini, the performance of Fijians at multi-racial Ciwa far exceeds either of those two schools. Tinikadua and Ciwa Schools are geographically only about 500 yards apart and children from the same neighbourhood attend both schools. The data suggests that if two children from the same family attended these two different schools, their

chances of achieving better results would be much higher at Ciwa School. It is proposed that this is not because it is a multi-racial school, but because it is better in many other ways especially management, leadership and in terms of physical facilities. These factors contribute to an ethos in Ciwa School which encourages competition and dedication to academic achievement.

While not denying the importance of ethnicity as a contributory factor in the differing performance of the two groups, this information suggests that race on its own is not a significant issue. It reinforces the contention that children achieve well in 'good' schools and poorly in 'bad' schools, regardless of race. It is suggested that the almost obsessive theme of racial difference in educational achievement may obscure other areas of concern. It may be more constructive to seek the commonalities which may help improve school effectiveness.

Footnotes.

(1) Note on grades in Fiji Junior Certificate Examination: A pass requires an aggregate of 300 or more in English and the best five other subject marks. No subject with less than 30% is included in the aggregate.

A grade: 480 - 600 (average of at least 80%)

B grade: 390 - 479 (average of 65 - 79%)

C grade: 300 - 389 (average of 50 - 64%)

(2) The root of the piper methysticum which is the traditional drink in Fiji.

CHAPTER EIGHT SCHOOL EFFECTIVENESS - THE CRITICAL
FACTORS.

8.1 Bringing the Data Together.

In order to assess what factors are vital in determining school effectiveness, it is necessary to bring together the data on schools and the data on student background. It is also desirable to disaggregate the data as much as possible in order to see how one affects the other within each school community. Table 8.1.1 looks at each of the schools in the sample and breaks down the socio-economic groups (using fathers' occupation as the indicator) and compares the total mean marks in the Fiji Junior Certificate examination for each group to the means for each socio-economic group.

Table 8.1.1 Mean Marks in Fiji Junior Certificate Examination (1988) for Schools in Field Sample by School and Father's Occupation.

School	White Collar	Business	Manual Skilled	Manual Unsk.	Uniform Forces	Farmer	Other	Total
Dua	- (3)	-	-	247.8 (12)	- (1)	295.1 (16)	- (1)	274.6 (33) *90.7
Rua	- (1)	- (1)	- (1)	309.4 (15)	- (1)	285.0 (37)	- (7)	309.5 (63) *100.9
Tolu	397.8 (6)	- (2)	- (1)	332.2 (11)	- (1)	411.4 (17)	- (4)	379.0 (42) *82.7
Va	-	-	- (4)	- (1)	-	236.2 (17)	- (1)	251.5 (23) *92.9
Lima	-	-	-	-	-	324.8 (12)	- (1)	331.7 (13) *84.7
Ono	- (2)	- (2)	- (3)	- (2)	- (3)	360.2 (40)	- (4)	356.9 (56) *60.6
Vitu	-	-	- (1)	-	-	328.0 (15)	- (4)	328.3 (16) *57.0
Walu	-	-	- (1)	-	-	402.0 (16)	- (1)	410.3 (18) *47.2
Ciwa	482.7 (23)	476.6 (15)	480.2 (8)	432.9 (14)	448.6 (6)	411.4 (5)	- (11)	465.1 (82) *54.3
Tini	334.9 (11)	- (1)	332.2 (8)	335.4 (7)	334.4 (5)	- (1)	- (4)	336.3 (37) *80.4
Tini-kadua	308.4 (14)	-	359.0 (13)	283.6 (18)	361.8 (7)	285.1 (17)	- (4)	312.4 (73) *75.5
TOTALS:	60	21	40	80	24	192	39	456
As % of total:	13.2	4.6	8.8	17.5	5.3	42.3	8.5	100%
SES group mean	389.1	438.4	375.2	324.8	372.5	328.4	387.2	352.2
S..D.	107.4	77.5	86.6	102.9	70.5	92.9	72.5	98.8

Notes:

* = Standard deviation.

(i) Occupational categories with less than five have been omitted.

(ii) 'Others' comprises deceased, retired, not known responses.

(iii) Lines mark off geographical groupings of schools.

Comparing the school by school total means with the means for the socio-economic (SES) groupings, it is immediately apparent that the variation between school means is much greater than between SES groups. Va is the lowest school mean at 251.5 and Ciwa is the highest with 465.1. This difference of over 200 marks is the equivalent of two times the standard deviation (SD) for the whole population - this standard deviation being 98.8. The range of means for SES groups is smaller with the group of manual unskilled workers at the lowest extreme at 324.8 and the business group the highest at 438.4. This difference of 113 marks is the equivalent of only 1.14 times the population standard deviation. This difference is illustrated in Figure 8.1.1.

In Figure 8.1.1 the variation in school and SES means are indexed using the formula:

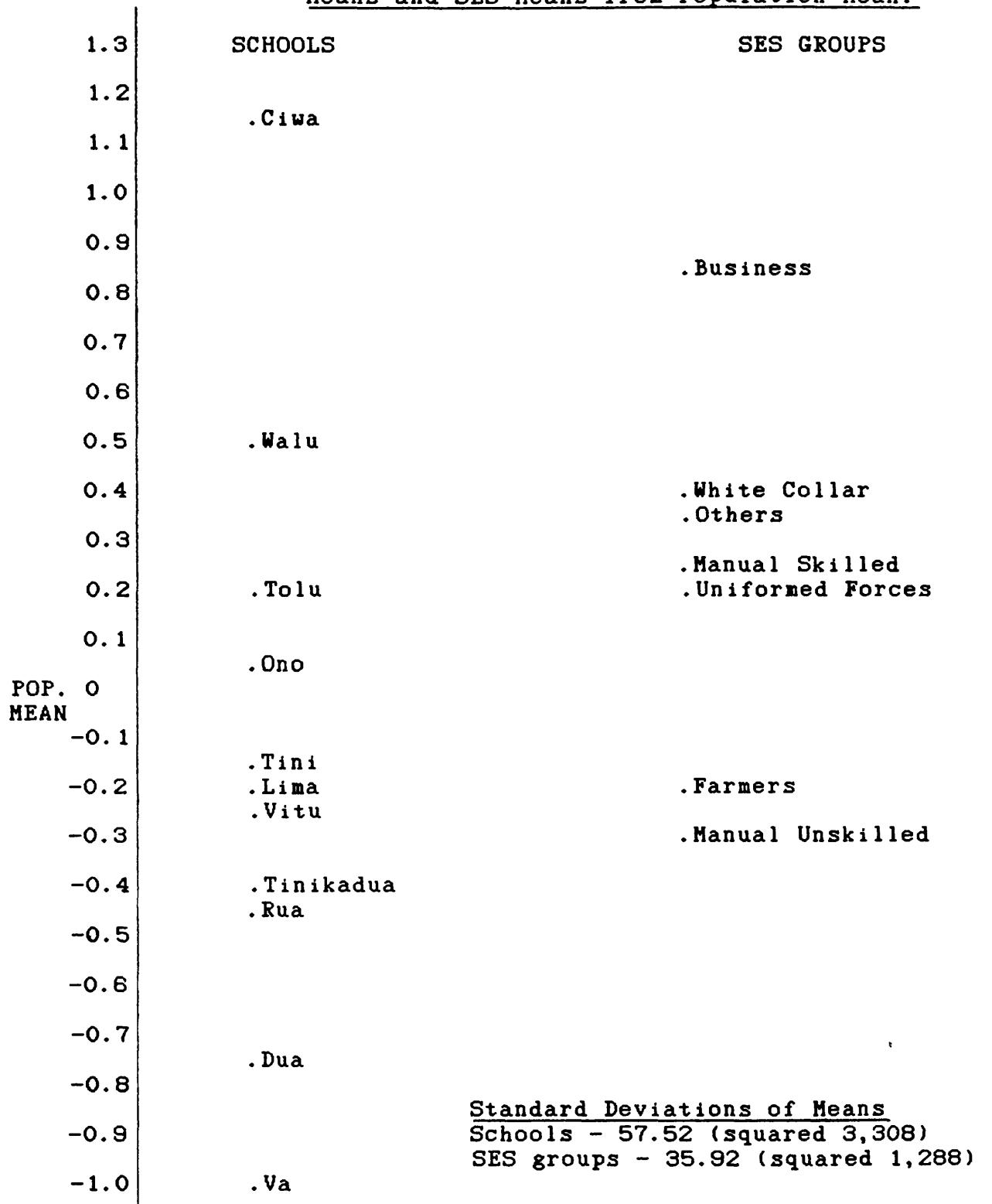
$$\frac{x - \text{population mean}}{\text{Population standard deviation}}$$

(where x is the sample mean, be it schools or SES groups)

Zero represents the situation where the sample mean equals the population mean, and the scatter of observations on either side of zero represents the measure of the variation of the sample from its population. As indicated, the variation on the basis of school means is wider than that of SES means.

Figure 8.1.1 also indicates that the squared SD of means (variance) for SES groupings is 1,288 which is less than

Figure 8.1.1. Chart Showing Indices of Spread of School Means and SES Means from Population Mean.



half of the 3,308 for the squared SD of school means. This further shows that variation between schools is much greater than between SES groups. The emphasis on schools is justified also as they are much more clearly defined categories than SES groupings. It is difficult to place strict boundaries on SES groupings and to assess definitively the influence of SES on an individual. Socio-economic status is a crude indicator of a child's home life and cannot be taken as an absolutely accurate predictor of academic achievement. SES groupings are thus somewhat ambiguous structures whereas schools are clearly bounded. The variation in school means lays stress on the strong influence of schools as institutions. The influence of boarding schools is even greater than that of day schools, as they become total institutions, dominating every aspect of the child's day and possibly overriding the influence of SES factors. It is noticeable that the SDs for schools with a high population of boarders (Ono, Vitu and Walu) are generally significantly lower than for day schools, stressing the imposed uniformity of the boarding environment.

Among and within the schools and SES groups there are interesting differences. Invariably the differences between schools for the various SES groups are greater than differences within schools. In other words, the children of a particular SES group perform quite differently depending on which school they are in, whereas within any one school the variation among SES groups is less. Using data from Table 8.1.1, Table 8.1.2

shows differences in SDs when holding first schools then SES groups constant.

Table 8.2.1 (a) Standard Deviations of SES Groups

Within Schools. (Using FJC Mean Marks)

School	SD
Tolu	34.5
Ciwa	26.6
Tini	1.2
Tinikadua	<u>34.4</u>
SD of all SES means	35.9

(b) Standard Deviations of Schools Within

Groups. (Using FJC Mean Marks)

SES group	SD
White collar	67.1
Manual skilled	64.3
Manual unskilled	57.3
Uniformed forces	48.7
Farmers	<u>57.6</u>
SD of all School Means	57.5

Table 8.1.2 shows that within each SES group there are wider variations in performance as indicated by their respective SDs than there is within each school. This again indicates the relative weakness of using SES as a predictor. The lower variation across SES groups within schools implies that the ethos of individual schools helps to 'iron out' differences of SES background.

The case of Tini School clearly exemplifies this contention. Tini School shows a remarkable lack of variation in achievement scores among the different SES groups. The SD for the different SES groups in Tini School is a low 1.2, compared to 26.6 for Ciwa School and 35.9 for the whole sample. This reflects the strong Mormon ethos of Tini School. Religious instruction is daily and compulsory and the influence of Mormon doctrine is all pervasive in the school. This dominating Mormon ethos thus diminishes to a large degree differences between SES groups, emphasizing again the influence of the school as an institutional force and the potential power of intra-school cultures.

The group of farmers' children which is by far the largest group in the sample has means varying from 236.2 to 411.4. The four schools achieving the highest marks for this group are the same four that have the highest overall achievement rates. This emphasizes how the influence of school can mask SES differences. A high achieving school can exert a positive influence on children of all groups, likewise a weak school tends to have a minimal influence across the board. Of the ten schools with farmers' children, seven schools had means lower than the overall mean for the school concerned. Farmers' children in Ciwa School have the lowest mean score of all the SES groups in the school being a whole SD lower than the overall mean for the school, but it is the highest actual score for farmers' children in the sample (equal to that of Tolu School). Ciwa's mean for

farmers' children is significantly higher (129.2 marks higher) than its immediate geographic neighbour Tinikadua School, where again this SES group fares poorly in comparison to other groups. Tolu School is an exception, where the group of farmers' children performed better than other groups in the school. It can be conjectured that the competitive, achievement-oriented ethos of Ciwa and Tolu Schools had positive effects on the farmers' children, whereas the lack of such an ethos in Tinikadua School emphasized the comparative disadvantage of the farmers' children, rather than overcoming it. This shows the varying ways that SES and school factors interact: schools have the potential to be powerful influences, but the antecedent factor of SES has a strong and lasting effect on a child's life. (1)

A similar pattern to that of farmers' children emerges with the children of manual unskilled workers where there is a huge difference of 185 marks between the lowest and highest achieving schools. In all six cases where this group occurs, their mean is lower than the mean of the school concerned. As with the case of farmers' children, the score of unskilled workers children varies with the school. In low-achieving Dua and Tinikadua Schools, their scores are low, whereas in higher-achieving Ciwa and Tolu Schools, their mean scores are markedly higher. It is again apparent that a strong school can substantially influence pupil achievement.

Although the aggregate mean for the children of white

collar workers is the second highest in the whole sample, the school by school analysis shows important variations. Four schools have groups of children with white collar fathers. In two cases the mean of this group was higher than the overall mean for the school, and in two cases it was marginally lower. It is frequently assumed that children of white collar workers will be the highest achievers, but this is true in only one school in the sample. In Tolu School for example, farmers' children gain higher marks than their white collar counterparts. In Tini School, the children of manual unskilled workers do better than the white collar group. In Tinikadua School, the children of manual skilled and uniformed force fathers outstrip the white collars workers' children. This reflects the weakness of placing too much weight on SES as a determining factor in school achievement.

Ciwa School is the only school in the sample which shows a pattern typical of a western urban model, with a full range of socio-economic groups and a clear hierarchical pattern of achievement within the groups. This reflects how urban schools with high achievement records cater for a widely ranging clientele, in contrast to rural schools where the background of students is much more homogeneous.

A Closer Look at School Effectiveness.

The effectiveness of a school does not depend on any single factor, rather there appears to be a combination of factors which together set the parameters within which a school develops its own sub-culture and identity. In order to analyse what these parameters are and their relative importance, the schools from the sample have been grouped into three broad categories according to their levels of achievement in the 1988 Fiji Junior Examination, i.e. on the basis of their total means. Table 8.1.3 therefore sets out this grouping and also shows the ordered ranking by subject marks of each school in the four compulsory subjects in the F.J.C. Group A contains the three highest achieving schools, Group C the four lowest achievers and Group B the four in-between. Table 8.1.4 uses these groups to explore common features which coincide with these groupings based on student achievement.

Table 8.1.3 Position of Schools in Fieldwork Sample
Relative to Each Other by way of Total
Means and Compulsory Subjects in Fiji
Junior Certificate Examination. (Placed
in descending order based on total mean in
F.J.C. examination 1988).

School	English	Maths.	Basic	Social	Total
			Science	Science	Mean
Ciwa	1	1	2	1	465.1
(A) Walu	2	4	1	2	410.3
<u>Tolu</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>5</u>	<u>379.0</u>
Ono	7	2	5	3	356.9
Tini	4	9	4	6	336.3
(B) Lima	6	5	6	4	331.7
<u>Vitu</u>	<u>11</u>	<u>8</u>	<u>10</u>	<u>9</u>	<u>328.3</u>
Tinikadua	5	7	8	10	312.4
Rua	8	6	9	7	309.5
(C) Dua	9	11	7	11	274.6
Va	10	10	10	8	251.5

Table 8.1.4 Summary of Critical School Factors by Groups Defined in Table 8.1.3.

	Group A	Group B	Group C
Principal	Two had long term principals, two schools had had recent changes: new ones replacing strong principals who had been longterm. One had worked under predecessor for several years at that school.	All had principals who had been at the school for at least 3 years.	All had history of frequently changing principals
Management	Strong and stable. 1 govt. & 3 cttee. schools. Cttee schools gave active support but left most decisions to principal.	Generally fairly laissez-faire management: not active or innovative.	All schools had history of weak ineffective management.
Finances	All reasonably secure financially. Finances appeared to be well managed.	1 had severe financial problems. 1 had moderate financial problems. 1 had no financial problems.	All had chronic financial problems.
Physical Resources.	3 of the 4 schools had satisfactory levels of resources. 1 school had no lab and rather spartan equipment in other areas.	Physical resources in 2 of the 3 schools barely adequate. 1 school very well equipped in every respect.	Very poor physical resources. Buildings furniture, books etc inadequate and in poor condition.
Location of school and fathers' SES.	1 urban: mixed SES. 1 semi-rural: mixed SES but mainly farmers or unskilled manual workers. 2 rural island: mostly semi-subsistence farmers.	1 urban: mixed SES. 2 rural (1 island): mostly farmers.	2 urban: mixed SES, but many unskilled manual workers and farmers. 1 rural: mainly cash crop farmers.
Schools: racial composition.	2 mainly Indian with substantial minority Fijians. 2 wholly Fijian.	1 mixed races. 2 Fijian.	1 half Indian, half Fijian. 1 mainly Indian, few Fijians. 2 Fijian.

Commonalities emerge in areas of management, principalship and finances and to some extent physical resources. Clearly there are strong links between all of these factors, and also with the nebulous but important factor of school ethos which tends to be largely derived from strong management and leadership. The socio-economic groups (SES) of students based on their fathers' occupations show no consistency nor does race or location of school. Teachers are not included as a variable because of the lack of substantial variation - all schools were fully staffed with qualified teachers. Teaching styles do indeed vary, but they appear to vary in response to standards set by the principal and his level of involvement in the actual classroom. Teachers in Fiji possibly have less opportunity to build a level of sub-culture around themselves and their teaching styles than in countries where classrooms are more physically separate and behind closed doors. As noted earlier, due to the tropical architecture in most Fiji schools, the doors and windows are normally wide open, opening on to a verandah running the length of the school. Such verandahs are public domains and principals can be amply aware of classroom proceedings.

The schools in Group A are generally problem-free schools, at least in terms of management, principalship, finances and physical resources. Significantly, their examination performance is also high, implying that when the structures of the school are stable, teaching and learning can take place effectively. A strong, stable

structure tends to give rise to a positive ethos within the school which is inclined to be magnified with time. The abstract concept of ethos is of itself difficult to define but appears to have its roots in pride of the sub-culture of that school.

The three Group B schools have varying positions. One of these schools was worn down by long-term financial problems which had affected both the level of resources in the school and the morale of principal, teachers and students. One school, the Mormon school, had excellent facilities but was unable to raise academic standards. It appeared to be using moral training as a proxy for academic excellence. The third school in this category is also poor, in terms of finances and resources, but it is not on the point of financial ruin. All the schools in this group were under the broad umbrella of a religious body - the Church of Jesus Christ of the Latter Day Saints (Mormons), the Methodist Church and the Roman Catholic Church. Apart from the Mormon school, the other two churches did not involve themselves in the daily running of the school, but their existence provided a backdrop of stability. The church administrations appeared to be a safety net which provided another level of advisory services and possible financial security.

Group C schools are characterized by weak management, frequently changing principals and chronic financial problems which in turn means that physical facilities are lacking in both quality and quantity. Examination results

for this group of schools are poor. It is very obvious that effective teaching is extremely difficult in schools suffering from physical deprivation and lack of strong leadership. It is significant that all of the schools in this group are committee schools with no backing from religious or other groups.

The socio-economic background of the children at the schools appears to have little significance as schools with various 'clienteles' appear in the different groupings as can be clearly seen in Table 8.1.1. Relative poverty could be a loosely unifying factor however, as the lowest performing six schools in the survey have children largely from rural or poor urban populations. When this is seen in combination with a poorly organized school, the result tends to be a general lack of support for the school by the community. Children from impoverished families attending schools which are deprived in terms of resources as well as being weakly managed, tend to end up with poor examination performance. The Grant-in-aid system in Fiji exacerbates this situation as communities are required to financially support their own community schools. There is a definite limit to the amount of money that can be raised from communities who have a very low cash income. Small schools especially suffer as they have a small body of parents to call on for fund-raising. Chronic financial mismanagement is not uncommon, which in itself acts as a further deterrent to monetary donations. When a well organized school is part of a poor community, the effects

of poverty can be to some extent mitigated by the school itself as in the cases of Walu and Ono Schools. Principals can become capturers of resources, as in the case of Walu School which had received aid from many sources for a wide variety of school equipment. This evidence underlines the interaction between home and school factors as determinants of children's performance.

8.2 Case Study: the Three Schools on Kadavu.

Schools in the outer islands of Fiji face a different set of issues to those on the two main islands Viti Levu and Vanua Levu. Their geographical position means that isolation is inevitable. These schools receive few visits from outsiders, including those from the Ministry of Education. When essential supplies run out, there may be long delays before they are replenished. Teachers and principals are also isolated professionally. Principals of island schools are possibly in even more critical positions than those elsewhere, as they usually have total responsibility for the school and may have no-one to refer to for second opinions. With an almost total lack of supervision, there is a great deal of personal pressure on island principals from the community and the Ministry to maintain a well-organized school. There is a lack of support services for teachers, and due to the relative poverty of island communities, schools on outer islands tend to be poorly endowed with books and equipment.

Island schools are isolated in other senses than the purely geographical. Located mainly in traditional Fijian communities, schools are imparting essentially foreign wisdom largely in a foreign language amidst the cultural hegemony of the Fijian way of life. The values of Western education and the traditional Fijian lifestyle are not always complementary. For example, formal education encourages learning through enquiry and questioning, whereas traditional Fijian parents often discourage excessive curiosity. (2) Schools are required to maintain their externally-set routine regardless of local events such as deaths, marriages, harvest and planting seasons; all of which strongly affect rural communities. Although schools are regarded as important in Fijian communities, they are still in many respects alien institutions. This is more pronounced in the outer islands than in urban areas, as in the latter many types of foreign influences exist.

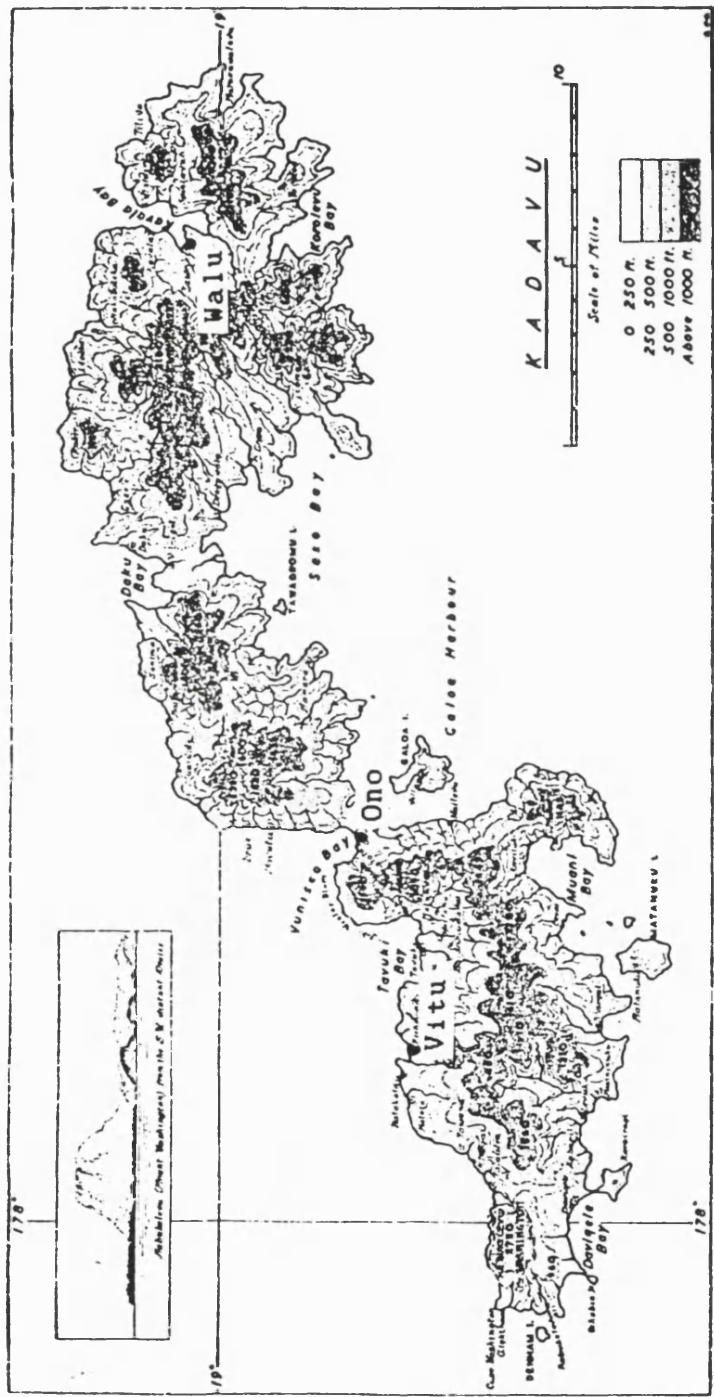
Isolation also means that there is little contact with other schools, thus children lack sporting contacts and involvement in activities such as debating, speech, drama, music and quiz contests. The small size of many island schools means that it is difficult to organize such activities within a single school. It is within these general parameters therefore, that the three secondary schools on Kadavu function.

Kadavu is an island lying 55 to 60 miles to the south of Suva. It is a long narrow island, approximately 36 miles

in length and varying in width from a few hundred yards to eight miles as shown in Figure 8.2.1. It has an extremely rugged landscape with steep volcanic hills dominating the island. Most agricultural cultivation takes place on the limited areas of coastal lowland. There are no truly urban areas on Kadavu, as it is essentially an island of Fijian villages (68 in all) dotted around the coastal periphery. There are 26 primary schools on the whole island. In the centre of the island there is a small area of flat land and a government station has been established there. There is an airport, a jetty for inter-island ferries, a small hospital, primary and secondary schools, government offices for agriculture, telecommunications and administration, a post office, a police-post and a few shops. The only stretch of road on the island runs from this centre, Vunisea, in each direction for some miles. There are twice-weekly flights to Suva and Nadi, and weekly boat trips to Suva. While flying takes 30 minutes as against six to eight hours by boat, it is considerably more expensive. With regular transport links to Suva, travel is frequent for many people.

Ono School is located in Vunisea. It is housed in a collection of buildings, the oldest of which dates back to 1924 when a Provincial School for boys was started at this site. Many buildings are more recent, but they give a unified impression of white verandahed colonial architecture poised high on a hilltop overlooking the government station and the bay. The view from the school

Figure 8.2.1 Map of Kadavu Showing Schools in Case Study.



Kadavu Island
Based on Admiralty Chart No. 167.

Source: Derrick, 1948.

is idyllic.

To the south of Vunisea, several villages are found on both the north and south coasts. Vitu School is located about half way between Vunisea and the southern tip of the island. The road from Vunisea does not reach this area and the normal mode of transport is by boat. There is however no regular service plying along the coast and people either charter village or individually owned boats, or take lifts with government boats. (The researcher in this case went to the school in the Agriculture Department boat and returned in the Medical Department boat). In former times it was normal to walk to the school from surrounding areas and there is a well-worn network of foot tracks around the island. The location of Vitu School has historical importance in Fiji as it was the first Methodist Mission station in the early part of the nineteenth century and was the headquarters of the church for some decades. The present secondary school is located on raised ground adjacent to the sea, with a vista typical of travel brochures of a tropical paradise.

Walu School is near to the northern end of Kadavu, and while it is geographically closer to Suva, communications are poor and it shares a similar degree of isolation to Vitu School. It is possible to travel by boat from Vunisea, but it is a long voyage and likely to be rough due to the prevailing currents and winds. In the case of the fieldwork for this research, it was necessary to

return to Suva from Vunisea and travel by boat in two stages to reach this school. Walu School has very little infrastructure that it has not created for itself. It has its own water supply, no electricity except for its own small generator and a fairly low capacity solar power unit, no telephone and erratic transport to Suva or Vunisea. It is not located directly next to the sea, rather it is set back among slightly swampy valleys and hills. It is not adjacent to a village but as in the case of Vitu School, there is a network of foot paths in the area.

The students who attend these three schools are almost all from the villages of Kadavu, with the exception of a small number of civil servants' children living in Vunisea and a few children sent from Viti Levu to board in Kadavu. The three schools tend to draw their catchments from villages which are close to them geographically.

There are few income earning opportunities in Kadavu and the vast majority of people are semi-subsistence farmers and fishermen. Because of uncertain transport links with Suva, perishable crops are not a viable income earner. Most students in the survey wrote that their fathers grew yaqona (3) as a cash crop. Typical responses were:
Ono School:

"My father is a villager. So he always doing farming work and sometimes he go fishing. He is growing yaqona, dalo and vegetables."

"My father is a villager or farmer. He plants taro, cassava, yaqona and yams. He is a good fisherman too. He went out fishing three times a week."

Vitu School:

"My father has a farm in a village. He plants yaqona and crops. When these things are ripe, my father selling it to Suva to get some money."

"My father is a farmer. He is growing crops in the village. He also is breeding goats in the village and he sells them to earn our living."

Walu School:

"My father is a farmer. He always plants root crops like cassava but especially yaqona, which is source of income in our family. He is also a shopkeeper of the village store."

"My father is a farmer in my village, he always plant cassava, dalo, yams, green vegetable, and he also a fisherman in my village."

Given then the similarity of their socio-economic backgrounds, it is interesting to examine and compare the examination results for the three schools on Kadavu.

Table 8.2.1 Fiji Junior Certificate Subject Means (1988)
for Kadavu Schools. (Extract from Tables
6.4.1 and 6.4.2)

(i) Marks for four compulsory subjects.

School	English	Maths.	Basic Science	Social Science	No. of Students
Ono	51.4	64.6	54.2	63.6	56
Vitu	58.0	51.1	48.8	48.1	16
Walu	67.7	61.6	70.1	69.9	18

(ii) Marks for optional subjects.

School	Home Econs.	Tech. Drawing	Wood- work.	Acct- ing.	Fiji- an.	Total
Ono	55.1 (21)	66.2 (30)	-	63.0 (24)	66.1 (35)	356.9 60.6**
Vitu	63.2 (4)	51.2 (11)	65.9 (11)	59.0 (5)	60.3 (16)	328.3 57.0**
Walu	54.7 (11)	78.0 (7)	-	-	79.3 (18)	410.3 47.2**

* Numbers in brackets refer to number of candidates who took each option. (These are the numbers of survey participants taking subject which may not be the same as the total number of candidates per subject from each school).

**Standard deviation.

In all but two subjects (Mathematics and Home Economics) Walu School surpasses the other two schools. In terms of physical facilities, Walu is the worst off, surviving in spartan buildings with the most basic of equipment. At the time of the field research Walu did not have a science laboratory and yet its Basic Science mean was well above those of the other two schools. As detailed in Chapter Six, this school is characterized by strong management and an enthusiastic principal, and it has no pressing financial problems. This is partly because the Kadavu Provincial Council assists the school financially. The walls of the classrooms are covered with pictures of diverse subjects as the principal, ever conscious of the school's isolation from the mainstream of life in Fiji, tries to open the eyes of his students to the outside world. There were also informative notice boards in each classroom which displayed a high degree of organization within classes and the school as a whole. The principal was clearly at home in the classrooms and had a firm control of the school. The teachers in this school were not better qualified than elsewhere, in fact they often had teachers with lower qualifications when there were difficulties attracting teachers to this isolated outpost. At the time of the fieldwork for example, there was a teacher who had a degree in land management teaching English and Social Science. He had not been able to find employment in his field and was filling in time teaching.

The well-equipped, government Ono School has a fairly

mediocre range of marks, averaging 60.5% overall (compared to 56.1% for Vitu School and 68.7% for Walu). As a government school, Ono has an advantage in recruiting staff as the Ministry of Education ensures that its own schools are fully staffed with qualified teachers. In terms of resources, government schools are advantaged as books and other equipment are supplied as of right. Whereas principals of committee-run schools are burdened with finding funds to pay recurrent expenses, government schools are freed from the shackles of endless fundraising. Ono School is not doing badly, but given its level of inputs, probably has the potential ^{to do} _{a lot} better with inspired leadership and motivation. The leadership of this school appeared to be somewhat laissez-faire rather than innovative.

Vitu School is the lowest performing school on Kadavu. As previously described, this school has had severe financial difficulties in recent years which have affected the level of resources in the school and has had subsequent effects on the morale of teachers and students. The leadership of this school has been forced to concentrate on reducing the school's debt plus a multitude of matters requiring immediate attention, such as repairing water pipes, and has apparently left academic and professional matters to take care of themselves.

Table 8.2.1 shows that these schools, typical of outer island and isolated rural schools, are able to offer only

a limited range of subject options. This is partly a reflection of their size, in the cases of Vitu and Walu Schools, which obviously curtails the number of staff they are able to employ. It again raises the issue of the quality of education that very small schools are able to offer. It is significant that in schools where the overwhelming majority of students are children of farmers, agriculture is not offered as a subject. The overall low means in Home Economics could reflect the lack of facilities compared to urban schools which have items such as electric stoves and sewing machines, and access to shops to purchase necessities.

The variation between the means for the various subject passes may be an indicator of the quality of teaching offered. This could be particularly the case in subjects where little equipment apart from basic textbooks are required, such as English, Social Science and Fijian. There are significant differences in the marks ranges of these subjects. It is possible to plod through the set texts in a mechanical fashion, but inspiring motivation and interest from classes to gain better performance requires motivation and interest on behalf of teachers. If the school has high expectations of its teachers and students, it is suggested that the extra effort required will be made. If expectations are low, performance tends to be concurrently low regardless of the training or qualifications of the teachers concerned.

What is the future for children from Kadavu schools?

Since schools are teaching knowledge which is not in keeping with Fijian traditions, inevitably they are educating children away from their environment. Certainly the aspirations of the students in the field survey reflect this contention, as Table 8.2.5 shows.

Table 8.2.5 Career Aspirations of Students from Kadavu Schools in the Fieldwork Sample.

	White Collar	Skilled Manual	Farmers	Uniform Forces	Domestic Duties	Total
Ono	37	7	1	15	-	60
Vitu	8	2	1	4	2	17
Walu	<u>14</u>	<u>1</u>	-	2	1	<u>18</u>
Total	59	5	2	21	3	95

Clearly the overwhelming preference is for white collar careers while uniformed forces were also a popular choice. For these career options, as well as the third most popular category of skilled manual workers, it would be necessary to leave Kadavu. It is significant that only 2 of the 95 respondents wanted to have a future in farming. This illustrates the divergence in thinking between the policy makers and politicians and the actual consumers of education. The former have endeavoured to make education 'relevant' by incorporating a local flavour in the national curricula and by attempting to positively promote the virtues of rural life. It is apparent however that schooling is still perceived as the passport to employment in the formal sector of the economy where earnings are more reliable than in

agriculture.

The three Kadavu schools present a microcosm of education in a harsh isolated environment. Due to transport difficulties even within Kadavu itself, these schools do not have a great many contacts with each other. Drawing on essentially the same community with the same cultural background, the performances from each school are very different and the ambience within the schools differ from each other. The case study of the three Kadavu schools bears out the contention of this thesis, that the success of a school depends largely on a combination of management, strong principalship and financial security.

Footnotes

(1) It is partly for this reason that it is not appropriate to use statistical techniques such as stepwise multiple regression in this analysis. Socio-economic status does not predate school influence to the extent that it ceases to be important when a child enters school. The two sets of variables constantly interact with one another rather than adding on directly visible outputs. In a sociological field the variables are not discrete entities, comparable to inputs such as rainfall and fertilizer in agricultural usage. It is also impossible to rank SES groups in a meaningful scale of values, as they are nominal classes rather than having ordinal or interval values. The fairly small numbers in

some categories would also not render satisfactory results for stepwise multiple regression.

(2) Children who ask a lot of questions and make uncalled for observations are often negatively branded as siosio which is interpreted as excessively curious and cheeky.

(3) The root of the piper methysticum bush which is the traditional drink in Fiji.

CHAPTER NINE CONCLUSIONS AND POLICY IMPLICATIONS.

9.1 The Quality of Education: Setting the Parameters for School Effectiveness.

Fifteen years ago, when planners drew up Fiji's Seventh Development Plan (1976-1980), attempts at qualitative improvements in education were based on several assumptions. It was assumed that if more education was available and teachers were better qualified, standards would improve. There was also a strong focus on home background with a call to attempt to change attitudes, especially of Fijian parents, to be more oriented to education, as the following quotation reveals: "It is a well known result of educational research in other countries that the achievement of children in school is highly correlated with home background. Encouragement of children by parents, taking a tolerant attitude toward natural curiosity, and providing a home atmosphere conducive to concentrated study are important components of educational success. These may sometimes be at variance with traditional attitudes and patterns of behaviour. Thus a continuing public relations campaign, coupled with appropriately designed community education programmes, will be an important component of Fijian education during the Plan period" (Development Plan VII, p. 184).

A decade later in Fiji's Ninth Development Plan the emphasis was different. There was no mention of changing

attitudes, merely a brief mention that Government would ensure that schools, especially rural and Fijian schools, were well equipped and fully staffed with trained teachers. This is a reflection of changing thinking in the quality of education in keeping with the World Bank's Sector Policy Paper on Education, published in 1980. While not denying the importance of home background, there was an implicit recognition that policy options within the actual school context were more subject to intervention.

Before policies can be altered with the intention of making qualitative improvements, the critical factors need to be identified. What factors combine to make a school effective or otherwise?

Teachers, Principals and Managers.

Teacher training has long been thought of as a crucial area of concern in Fiji and elsewhere. Indeed improving the quality of teachers and their training is the basic tenet of Beeby's thesis on the quality of education in developing countries. Fiji has worked hard at this area for two decades and has reached the stage where virtually all primary and secondary teachers have some form of tertiary teacher training. (95.3% of secondary teachers and 99% of primary teachers were trained teachers in 1986, Ministry of Education Annual Report for 1986). While this professionalization of the teaching force has had many positive effects on education in Fiji, the

research on which this thesis is based suggests that while qualified teachers are certainly necessary, they are not sufficient in themselves to improve and equalize the quality of schooling in the country. The teachers encountered in the survey were on the whole dedicated professionals, often doing their best in difficult circumstances. In a well run school teachers undoubtedly give to the best of their ability in the classroom. When a school is run down and poorly organized and managed and lacking in essential equipment, morale slides rapidly and the will to perform well diminishes. As children in many Fiji homes are discouraged from showing initiative, junior teachers likewise are not encouraged to put forth their views on the running of a school. Lack of professional supervision both at the school level and at the Ministry level can unwittingly foster indifferent teaching habits. It is much easier to be a lazy teacher and to have students working passively from books with the minimum of classroom interaction, than to create active learning and teaching situations which require preparation and are more taxing on a teacher's energy.

While many have argued that it is the teacher who is the lynchpin in the educative process, this thesis submits that while effective teachers are indeed essential, they are a necessary but not sufficient factor for a successful school. Table 6.4.1 showed individual subject marks from the eleven schools in the field study. These marks show that a threshold is established in each school and marks do not tend to deviate far from this implicitly

set level of achievement. There are few incentives for well-trained teachers to teach to the best of their ability in a school with weak leadership and management. Teachers in Fiji are deeply affected by the school leadership, management and resulting ethos.

The case studies in Chapter Six demonstrated how mismanagement at the administration level can impair a school's successful functioning. Because of the peculiar situation in Fiji, the vast majority of schools are managed by small committees often comprising people who have comparatively little education themselves and little experience in running an organization. Financial problems are commonplace, causing long-term hardship to schools. Personality clashes between committee and principal can result in an undermining of the latter's position with a subsequent loss of morale for the school as a whole. On the other hand, schools with a strong stable committee and no financial problems tend to foster a stable school environment, especially where the principal is given a free rein in the daily running of the school. It is the contention of this thesis that management and administration set the parameters within which a school can function and are thus critical factors in determining school effectiveness.

The role of the principal is closely linked to that of management committee, as both parties are concerned with the running of the school. Relations can be strained if the boundaries of each are not defined. In the fieldwork sample, it was apparent that the most successful

principal-committee relationships occurred when the committee limited itself mainly to fund-raising, while giving the principal a free hand in the daily running of the school.

Principals are undoubtedly key figures in the school environment. They are regarded as leaders and decision makers and have overall authority over the school. Principals are in most cases required to be in charge of financial affairs, administrative matters such as setting the timetable, professional and academic supervision as well as liaising with parents and the community. Principals are expected to set the 'tone' of the school and to be in overall charge of discipline. There is however no specific training for school principals. It is assumed that principals learn 'on-the-job' after some years as teachers. While principals do normally acquire management skills with time, there is substantial variation in individual abilities to cope with the diversity of tasks. Continuity is important in principalship. Schools which have had constant changes of principal, such as Dua, Va and Tinikadua Schools in the sample, have suffered from having changes in the leadership of the school every year or two. Long-term plans can never be implemented and just as the staff and students become used to a particular principal, there is another change. Principals set a critical level of expectation to their teaching staff. They can motivate and inspire teachers to perform to the best of their abilities. Conversely, if they adopt a 'laissez-faire'

attitude and take little active interest in the school, especially if they are frequently absent, standards slide.

Schools in their Local and National Contexts

Schools in Fiji tend to be a reflection of the community they serve. Thus the social, economic and political contexts are of vital importance to their functioning. The cultural attitudes of the two major ethnic groups in Fiji are clearly manifested in the nature of their schools despite the apparently Western hegemony of the curriculum and examination structure. Socio-economic environments vary greatly throughout Fiji. Suva and other towns have infrastructure typical of any urban area, but large parts of the country have no electricity or reliable water supply and have poor transport and communications. Urban children wear shoes and watches to school and buy ice-cream in their lunch-hour. Rural children are barefoot and slightly ragged, have no watches or schoolbags, and have cold leftover food for their lunch.

There are significant differences within the rural sector. The relatively more affluent Fijians in western Fiji appear to have less motivation to succeed in school than their counterparts in the barren islands of eastern Fiji. The western Fijians can reap a livelihood from their immediate environment, whereas the easterners look towards out-migration to urban areas for future wealth, a

factor which seems to motivate them to work hard to acquire qualifications.

Economic factors determine to a large extent the physical assets of a school, since the management committees must turn to their communities to raise funds for buildings and facilities. Poor communities therefore tend to have poorly equipped schools while the more affluent can provide a better school environment for their children. The cases of Va, Lima and Vitu Schools in the field-study exemplify this contention.

Schools and the education system as a whole reflect politics both at a local and at national level. The control of committees especially in rural areas often becomes a hotly contested issue and can be the initiation for aspiring politicians. The present national political agenda is one of uncertainty, particularly for the Indian half of Fiji's population. The two military coups of 1987 aimed to keep political power in the hands of indigenous Fijians for all time. There is a strong move to involve Fijians in commerce and to close the longstanding gap in educational achievement. Positive discrimination towards Fijians in education is an important part of achieving this goal. Disenchanted Indians are increasingly seeing emigration as the only solution to their difficult situation, and as they have done for most of this century, they are using education as a stepping stone. The extraordinary motivation that Indians have had for attaining educational qualifications has been heightened

by the current situation. Although Fijians have claimed a dominant position in Fiji, this does not as yet appear to be translated into motivation to succeed in school. It could be speculated that as relatively fewer Indians compete for scholarships and university places, there will be greater competition within the Fijian community and positive discrimination may be phased out or applied with a different emphasis.

Resources and Facilities.

Well qualified teachers can be deterred by a lack of material resources and facilities. The relationship between resources and achievement is not at all automatic however, as the case of well-equipped but low-achieving Tini School exemplified. Many schools in the survey had certain resources such as library books in reasonable quantity, but failed to use them effectively.

There does appear to be a minimal baseline of material resources. Absolutely essential is a weatherproof building with lockable doors and windows. There should be chairs and desks for all pupils. The lack of sound buildings and adequate classroom furniture in Dua School had a definitely negative effect on morale and on the whole teaching and learning process. A reliable source of water is necessary. The case of Va School illustrated the enormous difficulties that can arise when there is an inadequate supply of water. A school can function without electricity, but there must be some alternative sources

of power, especially in boarding schools where night time homework is done. Walu School's use of solar power and wood stoves was a good example of using alternative energy sources. An adequate supply of basic set textbooks is necessary for each student to be able to at least share a book, although it is preferable to have one each.

A duplicating machine is also essential, so that additional material can be supplied to pupils at low cost, and so that examinations can be set. Dua School was the only school in the survey without a functioning duplicator and they felt their lack acutely. Duplicators can function without electricity and are a vital piece of technology.

The Basic Science course up to Form Four level has been designed to require a minimum of laboratory equipment, but a room set aside for science with equipment such as bunsen burners is obviously a great asset. Most schools do have science laboratories, varying a great deal in the quantity and quality of equipment. Some schools are forced to teach science without a laboratory, and it is probably due to imaginative teaching that they manage at all. At the time of the fieldwork, Walu School had no laboratory although it intended to build one. The average mark at Walu School for Fiji Junior Basic Science in 1988 was 70.1%, which compares very favourably to other schools which did have laboratories and was in fact the highest Basic Science mean in the survey. (See Table 6.4.1). Such a situation is not an advocate for teaching

Basic Science without a laboratory, rather an illustration of how imaginative teaching can overcome many difficulties caused by shortages of equipment and facilities.

It is clearly desirable to have a well-stocked library in schools and various pieces of research in Fiji have attempted to show a positive correlation between libraries and achievement. Much of the Fijian Affairs Board grants to rural Fijian schools has been spent on purchasing library books, and the presence of libraries in these schools is heartening. The utilization of these libraries is, however, the critical factor. A well stocked but permanently locked library collects only dust. It is apparently difficult encouraging children to read and it appears that teachers need special training in this sphere of work. It is also vital that books purchased for school libraries are sufficiently simple and interesting in order to appeal to children who are struggling with English as a second language. While simplified reading matter such as comics and magazines are abhorred by traditionalists, they do have great appeal for school students and the use of such material may ease them into enjoying reading as an activity and realizing the potential books have as 'silent teachers'.

While many teaching aids are costly there are others that are not. Government Supplies sells basic equipment to schools at very modest prices and among their products are large sheets of cardboard and coloured felt-tip pens.

Very few classrooms visited showed any attempt at decoration with the products of group work or student projects. Teachers can use cardboard to make charts, maps etc to supplement the meagre supply of textual material available to pupils. This is a simple and inexpensive teaching aid, but it requires some imagination and creativity to implement.

There are many other resources which may be desirable but are not absolutely necessary. Although telephone or radio-telephone communication makes life easier, many schools function without it because the infrastructure does not exist in certain areas. Many schools have video equipment, but the lack of specifically educational videos makes it a large investment for relatively little use. It appears that especially in boarding schools, watching video is used as a treat for students, rather than as a supplement to learning.

9.2 Improving School Quality: Policy Implications.

The quality of secondary schools varies greatly throughout Fiji. There is for example a huge disparity between the quality of government and grant-aided schools, which is due largely to the Grant-in-aid system. It is not however realistic to suggest, as many have previously done, that government should take over grant-aided schools. Government has clearly stated its policy of retaining the present school structure. Although this two-tier system is full of inherent

weaknesses, it is also in some respects the strength of the system as it has made education very much a community issue and has spread access to schooling throughout the country. It is vital therefore that policy proposals must be aimed at strengthening the existing system with the intention of equalizing and improving the quality of schooling. Working within the system to improve school effectiveness is more constructive than abstract suggestions of major structural change.

Given that management and administration of schools are to a large extent the parameter setters determining the effectiveness of individual schools, it would be logical to focus attention onto this area for qualitative improvements. There should be many foci to such an approach.

School Support Services.

Schools welcome visits from Ministry of Education officials, especially when they come with practical advice on particular subject areas. Many principals mentioned that most visits are concerned with physical issues such as discussing new buildings or intervening in crises such as staff transfers. Guidance and supervision from the Ministry is sought after by schools but is spread very thinly throughout the 140 secondary schools in Fiji. In most subject areas there are only one or two education officers assigned, and they also are responsible for curriculum writing and external

examinations in that subject. Despite their multiple responsibilities, these officers are not specifically trained. They are generally teachers who have had some classroom experience and who have applied for the posts as a form of promotion. There appears at present to be no clear schedule as to the frequency of school visits. When budgetary cuts were enforced in 1987, school visits were one of the first areas to be axed. They do not attract a high political profile and can quietly slip into oblivion.

It is suggested that school visits need to be reinstated and defined more clearly so that there is a supervisory element as well as an advisory role. The inspectorate system was abolished at independence, and there is very little direct accountability between schools and Ministry headquarters. One of the links between schools and the Ministry at present is the use of confidential staff reports which head teachers complete each year. It is however widely acknowledged that these are ineffective, as the strong colleague relationship compromises the assumed objectivity of the report. The re-establishment of the school inspectorate is a matter worthy of careful consideration. Inspectors' reports could give another indicator of school performance other than the imperfect index of examination results. Such reports would be based on the actual process of education, rather than the common concentration on the end product. Simons has observed "We need to know not so much what pupils can be demonstrated to have learned...rather what transpires in

the process of learning and teaching, the outcomes we could reasonably expect from such transactions and the strengths and weaknesses of educational provision... evaluation on process lines allows schools to demonstrate and to account for what they can reasonably be held accountable for, i.e. creating the opportunities for children to learn and for the quality of provision" (1981:119). For qualitative improvements to be made, qualitative data must be collected.

School management and administration should be a priority area for the Ministry and it is submitted that a unit be set up within the Ministry specializing in this area. Such a Schools Management Unit could have two main functions, one purely advisory and one actively involved in remedying problems. In its advisory role, workshops could be organized for school administrators with unit personnel on specific areas, for example accounting. In its remedial role, unit personnel could actually go into schools on request to work with school staff on problem areas. The unit could be staffed by former school principals as well as those with specific school accounting and managerial expertise. This could help avoid some of the disastrous financial crises which have plagued many schools.

There is a very real need for support services for schools, especially those in rural areas. Fijian education has been a matter of concern for several decades and it has been observed (for example by Baba)

that Fijian principals are on the whole less qualified and experienced than their Indian counterparts. The tendency has been to give responsible posts to relatively young and inexperienced people without offering back-up and support from the Ministry of Education. The need for support services has been acknowledged by others, and Lewin, for example, has written "Reducing these cadres and compromising their effectiveness (e.g. by reducing travel budgets to zero and eliminating support for in-service work to support practising teachers) may damage disproportionately the school system" (1987:74).

It is simple to make grandiose suggestions regarding policy without considering the cost. Fiji receives aid from various donors for educational purposes, especially in the field of vocational education. The New Zealand government, for example, has supported the ailing multi-craft vocational programme for school leavers for many years. This has been a very high cost project with a poor record of success. This is typical of the tendency in the past two decades to sponsor technical and vocational education projects, with the assumption that such aid will benefit the economy. Aid is often used for capital projects such as building tertiary institutions, as the result is concrete and visible. Establishing and maintaining effective support services for schools would be regarded as recurrent expenditure. It is suggested nevertheless that it would be an area for which aid could be sought if the matter was well presented to aid donors as a clearly defined project. It is time to challenge the

politics of aid.

Research and Statistics

The Ministry of Education collates vast amounts of descriptive statistics which are brought together in Annual Reports. There is scope for more analysis to be carried out using these data to identify trends and patterns in the system. The reason that analysis is not done is apparently due to a lack of computerization as well as a lack of expertise on the part of Ministry of Education staff. Fiji Junior Certificate Examination results for example are not entered onto a data base, but are laboriously copied into ledger books. There is little processing of this data except for aggregate pass rates by school and race, which are kept for the confidential use of the Ministry. Finding subject or question means per school which could highlight areas of weaknesses and also areas of inequality, are not possible without considerable effort. The basic data exists, but lack of analysis means that it is not being used for diagnostic feedback and qualitative applications.

The role of research both within the Ministry of Education and outside of it generally has not been developed. While it would be wrong to suggest that research can solve problems, it can at least link existing information and focus on trends, assessing and evaluating in a support role to policy makers. It is apparent that research has therefore had little impact on

the system as a whole.

The Roles of Curriculum and Examinations in School Effectiveness.

An irrelevant curriculum is frequently blamed for the ills of education. In the Fiji context, curriculum and examinations are inextricably linked and a change in one automatically renders a change in the other. The curricula to Fiji Junior level are truly localized in that subject content is based on the Fiji environment. The critical areas to guard against are those of inherent bias, especially against rural children.

One subject area which is glaringly problematic in today's Fiji is that of Social Science in its present format. This course was designed largely by under-graduate university students in the early 1970s in the euphoria of enquiry learning. It deals largely with abstract concepts such as 'Learning to Be' and 'Freedom'. Many of the questions in the examination depend very much on understanding subtle language differences, thus it is a test of English rather than of conceptual understanding. The subject by subject correlations (in Appendix Six) bear out this contention. The most consistently high correlation between subjects is that between English and Social Science, often as high as 0.7 or 0.8. Sections on 'Government' and on 'Planning' have become out-dated because of changes in the country since the curriculum was written. There is a substantial

section of work on urbanization, with a high proportion of this being a unit on a study of Suva. This obviously favours children who live in urban areas, particularly Suva and adds a further handicap to rural children.

Teachers and principals interviewed in the field-study frequently commented on the apparent lack of interest and motivation displayed by their students. It is suggested that in many cases the lack of student enthusiasm is because school is stultifyingly boring. This is due both to the subject matter but perhaps more to teaching styles. Although many subjects are intended to have a basis of enquiry-learning, teachers have often managed to teach them in a pedagogical style based on factual recall. Teachers in the field-study were seen to be giving set answers to enquiry type questions and pupils learnt them in preparation for examinations. Teachers claimed that they were constrained by lack of time, books and other resources to teach the subjects as prescribed.

The possibility of extending the range of Fiji Junior subjects to include such subjects as music and art should be explored. These subjects could offer scope to children with a creative bent, especially those who could benefit from courses not based on reading and writing English. Traditional music and art could be large components of these disciplines which could lessen the cost of implementation. Initially these subjects could be offered only at a few schools to monitor their progress. At present art and music are in theory compulsory up to and

including Form Four as non-examinable subjects, but in reality they are not always offered. Because they are not examined they are not taken seriously, although many students do show talent and interest. A reflection of the status that is given to art and music is the fact that one teacher is required to teach Physical Education, Music and Art and Craft and they are given the acronymic title Pemac teachers. Small schools do not have such specialist teachers and rely on teachers of other subjects to organize sports etc.

Improving the standard and style of examinations must have a positive effect on pedagogy, as Somerset (1987) has proposed. Teachers in Fiji rely heavily on past examination papers as teaching aids, indeed as a basis to much of their teaching. If the quality of questions alters to reflect more reasoning rather than straight factual recall, it is justifiable to assume that teaching styles will accommodate the changes.

Examinations as such are obviously held in high regard in Fiji, but the section which is responsible for setting all of the external examinations is relegated minor status within the total education framework. The Examinations Section comes under the Curriculum Development Unit of the Ministry of Education, thus it is not even a significant section in its own right. At the time of the fieldwork, there were only three professional staff employed in the Examinations Section and they were responsible for organizing and setting five national

examinations. This included the establishment of the new Fiji School Leaving Certificate which involved the trialling and setting of sample papers. The dedicated and highly professional staff recognize the need for research into various aspects of the examination situation in Fiji, but they do not have the manpower to undertake detailed research. Because the Examinations Section is a section within a section of the Ministry, it is constantly thwarted by the red tape and bureaucracy of the civil service which makes changes and innovation very difficult. It is proposed that the Examinations Section of the Ministry should be devolved into an autonomous Examinations Board which would be ultimately responsible to the Minister of Education, but which could operate independently in its ordinary functioning. This quasi-government situation is not unusual in Fiji, where many government funded bodies operate as statutory authorities.

Rationalization for Qualitative Improvement: The Future of Junior Secondary Schools and Very Small Schools.

Education administrators in Fiji have often skirted delicately around the issue of size as it is a highly sensitive area. The Grant-in-aid system has given communities and religious bodies the mandate to create schools, and although theoretically there were meant to be safe-guards in the system against unnecessary duplication, the end result is a large number of schools, many of which are very small. Whereas in countries with a

totally state-run system of education, the state can force the closure or amalgamation of schools, Fiji's Ministry of Education has no such power. Rural depopulation and falling birth rates have left some rural schools with rolls of less than 50 pupils and many with rolls of less than 100. The argument between equity and efficiency is tempered by politics. Every community and religious group has the right to its own school, but the end result is one of inefficient fragmentation. While this system may be able to be sustained for the primary school sector, for the more capital intensive secondary sector the issue will have to be addressed with a degree of realism from all parties.

In the field-work sample, for example, Vitu School had a Form Five of nine pupils. Because of the new examination structure introduced in 1988 which eliminated the Form Five examination in favour of a two-year Form Five and Six course, this school felt that it had to provide a Form Six for its students. This necessitated the building of a new classroom and new laboratory which the school could ill afford. At the time of the field-study, intense fund-raising was being carried out to raise money for this purpose. Such funds could have been used with great effect in the lower forms of the same school as they lacked many basic facilities. With such small numbers in senior forms few subject choices could be offered. In fact of the nine students who started the course in 1988 and sat the Fiji School Leaving Certificate examination in late 1989, only one passed.

Relatively close to Vitu School is Ono School, a government school with a well established Form Six, a well qualified staff to teach a range of subjects and adequate laboratory facilities and textbooks to cater for Form Six studies. Since both Vitu and Ono Schools are boarding schools on the same island, it would appear logical to concentrate Form Five and Six studies in one school. The Ministry of Education can only recommend this path of action but has no power at all to enforce it, as Vitu School belongs to the Methodist church, not the government. Management decisions such as Vitu's to expand upwards are costly for both the school and government, as the latter heavily subsidizes the running costs of schools particularly staff salaries. This case is a lucid example of one of the inherent weaknesses of the Grant-in-aid system. It has fostered duplication and fragmentation of education resources in Fiji because the Ministry of Education has no direct control over the majority of schools although it finances them indirectly.

The idea of establishing an intermediate level of schooling catering for Forms One to Four, was borne out of the 1969 Royal Commission on education. The motive was to increase access to secondary education to all parts of the country, especially the remoter rural and island regions. The policy was welcomed with great enthusiasm and between 1970 and 1976, 43 such schools were established. By 1980 however, the number of schools in the junior secondary category started to decline as

increasing numbers started to add Forms Five to become 'full secondary' schools. The status of junior secondary schools also declined and by the mid 1980s, such schools were popularly deemed second best. Current Government policy is to develop all Junior Secondary Schools into fully fledged secondary schools by adding on Forms Five and Six. This may prove to be a highly expensive and inefficient policy, as the case of Vitu School has illustrated.

The remaining junior secondary schools continue to cater for isolated populations and consequently tend to have small rolls, often less than 100. Many of the problems of the Grant-in-aid system are magnified in the case of these very small schools. Their size militates against financial security as they have a small catchment of parents to call upon for fund-raising. Their isolation tends to result in frequent staff transfers, and of great importance, frequent principal transfers. There are often problems of physical infrastructure, as some of the junior secondary schools in the field sample amply illustrated.

It is not realistic to enlarge all junior secondary schools into full secondary schools for many physical and financial reasons. Although economically inefficient, in their present state they fulfil an important role in providing an intermediate stage of schooling to rural areas. They need not be disasters or be seen as second best. With good administration and support and

supervision from the Ministry, there is scope for junior secondary schools to provide a high standard of education to rural children, as the case of Walu School has shown.

The Grant-in-aid system prevents rationalization because the Ministry lacks direct authority over schools, as previously stated. However within this constraining framework there could be a development of specialization of schools in order to avoid expensive duplication. In the Suva-Nausori area alone there are 37 secondary schools, often very close to each other geographically, which suggests that there would be scope for sharing certain facilities such as those for metalwork or woodwork or specialist laboratories for senior science subjects. Since the government does in fact pay a large share of the cost of maintaining schools, there should be more direct authority over schools in certain practical policy issues.

In the mid 1980s, a policy of establishing 'Centres of Excellence' especially in rural areas was floated. The idea was to concentrate resources on particular secondary schools, developing them to a Form Six level. It was aimed especially at boosting the standard of rural Fijian schools which have long been a matter of concern. The plan was not received with enthusiasm and was not implemented. It was felt that jealousy would arise if particular schools were selected for favoured treatment. This policy would have in any case been difficult to implement because of the lack of control that Ministry of

Education has due to the nature of the Grant-in-aid system.

The concept of 'Centres of Excellence' could be construed as merely a new label to describe what already exists: the few government schools in Fiji are far superior in every respect to most Grant-aided schools. The buildings are better constructed, facilities such as laboratories and workshops are well equipped and there is normally a full complement of textbooks and a well-qualified staff. Government schools are also free from the yoke of perpetual fundraising which relieves the principal from financial worries. The comparative affluence of such schools only serves to accentuate the vast differences between them and Grant-aided schools.

There is clearly both a need for and demand for boarding schools particularly for Fijian students. Improving and enlarging the boarding facilities of rural schools would be a positive move. Boarding schools which do not have electricity obviously have a problem with homework organization. The diet offered to students in Fijian boarding schools has been an area of concern in recent years and there are many ways that this could be improved at little extra cost. Vitu School, for example, is located next to the sea, but the boarders eat no fresh fish which is in abundance. The reason given was that the school nets had holes in them and no-one knew how to repair them. Thus the students were eating a diet almost devoid of protein as there is very little meat available

and Fijians do not traditionally eat other forms of protein such as eggs or dairy produce. The basis of the diet of most boarding schools is subsistence crops especially cassava, which is grown by students. They have to spend long periods in the garden to help with food cultivation. Government boarding schools by contrast are able to offer a more varied and balanced diet. The evidence suggests overall that the potential exists in boarding schools to create very effective learning environments. The example of successful boarding schools can be repeated elsewhere with wise administration and management at the school level as well as support from the Ministry of Education.

The relative effectiveness of a school is thus derived from various sources but it depends to a large degree upon administration and management. This effectiveness can be seen conceptually as the relative strength or weakness of a school. Such strength or weakness is not static but it is subject to fluctuations as the vital elements which contribute to it change. When a school is weakened by poor management and leadership, its reputation inevitably suffers. This is manifested in falling rolls, often physical deterioration and low morale in the entire school community. It is a difficult and long process rebuilding the strength of a weakened school once momentum is lost but it can be done with dedication and determination.

A step towards controlling expansion and promoting

rationalization could be taken with the formation of a central Board of Education. This would be a high-level body headed by the Permanent Secretary. Divisional education officers would be members and would present reports and plans from their regions. Representatives of various stakeholding organizations in Fiji's education system, such as religious bodies and teachers' unions, should also be part of the board. One of the main functions of the board would be to decide on plans for the next period of time, to give a measure of coordination to educational processes and to assert government's controlling hand in the handling of the system.

For some years after independence, there was a body called the Education Forum, whose main function was to advise the Minister on education policy. It has apparently been non-functioning for some years. According to reports, the infrequent meetings had degenerated into a series of confrontations and negotiations, especially between the teachers' unions and managing bodies. Discussions used to concentrate on relatively trivial matters and the decision making role was largely ignored. Whitehead commented on the Education Forum that "it is sharply divided by sectional interests and that it is not an effective policy-making body" (1986:59).

It may be thought that since the Education Forum essentially failed in its task, the proposed Board of Education would be doomed to the same fate. With clearly

defined terms of reference, this would not necessarily be so. The Board could assert government's role in education, endeavouring to reduce some of the worst anomalies of the Grant-in-aid system, and building on existing strengths. This could contribute towards a compromise situation, whereby the Grant-in-aid system remains, but the government affirms its overall control.

9.3 Concluding Remarks.

Tying in the Theoretical Ends.

The debate on the quality of education in developing countries started with Beeby some 25 years ago. Beeby focussed on the teacher as the critical facilitator in the educative process and he proposed a relatively simple premise: a well-trained teacher would teach well. In the Fiji context this is not necessarily so. The teaching force is on the whole well-trained but school quality and teaching quality are both very variable. It is apparent from this research that in Fiji, although the teacher is indeed very important in the classroom situation, he or she is not able to define the overall quality of a school but merely makes a contribution to it. If the prevailing ethos of the school is negative and the leadership and management are weak, even the best trained teachers find it difficult to perform effectively. The antithesis of this is that if the school has a strong leadership and management style, even teachers whose formal training may be lacking can be inspired to teach to a high standard.

Heyneman's contention that school variables are of greater impact on educational performance than the antecedent variables of individual students appears to be confirmed by this study. But it is with some reservation that Heyneman's proposals are accepted, as he emphasized material inputs almost exclusively as being important in improving quality and standards. Heyneman found the three

strongest variables to be textbook availability, the quality of teachers' English and school physical facilities. His cross-national study with Farrell and Sepulveda-Stuardo (1981) came out in favour of textbook possession as an important variable in determining school performance. Heyneman failed to look at the process variables within the school, which this study in Fiji has found to be of vital importance. It is contended that while the emphasis on school variables is worthwhile, human processes are as important or more important than physical inputs such as textbooks.

The findings of this study have certain parallels with those of the Rutter study, which disregarded the physical environment of schools and emphasized the social climate and organization - the 'ethos' of schools. In the Fiji context 'ethos' is important because the vast majority of schools (97%) are not secular state-run institutions, but have the distinct character of the religious organization or community which owns and manages them. The tone of the school is further set by the style of management and leadership, as has already been stated. The Rutter study emphasized school processes including issues such as discipline and punishment, management, teacher-student interaction and attendance rates. It dismissed however matters concerning finances or buildings which may be of lesser importance in the more affluent United Kingdom, but are certainly of importance in contributing to overall ethos in poorer countries such as Fiji. In the context of Rutter's study in the U.K., ethos was a

concept abstracted from behaviour of various types, whereas in Fiji ethos appears to derive from behaviour which is inextricably linked to the management of physical resources. The ability to cope and run a school in an environment of financial hardship is a key quality in a principal of a Grant-aided school in Fiji. Once that is mastered, the more abstract qualities can be emphasized.

Returning to the Hypotheses.

The research contained in this thesis has focussed on issues affecting quality in the secondary schools of Fiji. More specifically, three main areas were addressed: a study of the historical development of education; an analysis of the Grant-in-aid system which is the backbone of the school system in Fiji; and, based on an empirical fieldwork, a closer look at eleven schools to examine the processes which contribute to school effectiveness.

The historical analysis of education in Fiji intended to find whether socio-economic and political contexts provided the demand for education. Prior to the colonial period Methodist missionaries established numerous schools throughout Fiji and they were very well patronized by Fijians. There was then no economic advantage in becoming literate or numerate thus there was no apparent external force motivating the demand for schooling. It is apparent that the pedagogy used by the early missionaries and their local trainees was closely

linked to traditional Fijian chanting and singing. Thus schooling became grafted onto traditional socialization and was not seen in an especially instrumental way for at least the first five decades of schooling in Fiji. Another important factor in establishing motivation and demand was the conversion to Christianity. Schools were overtly used by missionaries to disseminate knowledge of Christianity. The main employment opening for Fijians was with the church itself, as pastors or teachers. That carried some status but very little economic reward. Even after cession to Great Britain in 1874, there were almost no employment opportunities for Fijians in the small monetized sector of the economy. It is evident therefore that early education in Fiji, from its inception in 1835 to around the end of the nineteenth century was not motivated by economic factors. Nor was it seen as a tool in gaining political power, as the climate of colonialism excluded Fijians from any part in the decision making process.

The twentieth century saw a change as the indentured Indian population started to look beyond the canefields for their future. The establishment of the Grant-in-aid system in 1916 enabled schools to be built by communities and religious organizations and a rapid expansion ensued. The socio-economic and political context of the time now provided the driving force for educational expansion. Education became a prominent item on the political agenda during the last decades of the colonial era. Independence in 1970 coincided with the rapid growth of secondary

education and the realisation that there was a growing gap in the educational achievements between the two major ethnic groups. The latter issue became a highly sensitive political question in post-independence years.

Socio-economic and political contextual factors are also significant in the micro-situations of individual schools. The fieldwork study showed how the supporting communities of various schools contribute to the nature of the school in very definitive ways. The collective socio-economic status of groups appears to be of greater consideration than individual backgrounds. For example the marginalized position of Indians appears to be more important than the socio-economic or educational background of individual parents.

In sum, the hypothesis that the socio-economic and political contexts provide the demand for education has been found to be true, although in the early decades of formal schooling there was a negative relationship: when the environment provided little direct incentive for education, there was little demand for more than a minimal standard of education.

The Grant-in-aid system, which is the partnership between the community at large and the government, in the provision of education, was examined both in a historical context and also as an essential part of the empirical fieldwork based study. The research found conclusively that the hypothesis 'that it is the Grant-in-aid system

which is the root cause of the government's inability to effectively control the education system today and is the cause of major inequalities in the quality and provision of education throughout Fiji' to be proven true. The Grant-in-aid system has increased inequalities between affluent and less affluent and has exacerbated the differences between rural and urban areas. This system has tended to multiply the disadvantages of poorer socio-economic groups, rather than diminish them. Although education in Fiji is highly centralized in terms of following a common curriculum and examination policies, and although government largely finances the education system; the Ministry of Education has very limited powers to implement policies such as rationalization as it does not own 97% of the schools in Fiji. The result is one of fragmentation and costly duplication. On the other hand, the Grant-in-aid system has enabled schooling to be widely available in Fiji, particularly at primary level, and also at secondary level. This wide access has resulted in high attendance and retention rates in a country where schooling is neither free nor compulsory. While the hypothesis is certainly proven, the Grant-in-aid system can be seen overall as both an attribute and a handicap in Fiji's education.

The major hypothesis of this thesis on which the fieldwork was based is that 'in secondary schools in Fiji, school variables are of major importance in explaining variation in school performance'. The evidence

produced clearly supports this hypothesis having found that variation in pupil achievement between schools is much more significant than that between socio-economic groups. This is supported by the fact that schools are discrete entities with clearly defined boundaries, whereas socio-economic groups depend on only one factor of a child's background and are much less circumscribed groupings. The direct effect of socio-economic status on childrens' school performance is thus not clear, and it emerges as a somewhat weak indicator. Socio-economic status is best seen in interaction with school factors rather than as a causal factor on its own. The research found that schools have the potential to be powerful influences on the lives of children. In some cases, especially in boarding schools or schools with a strong religious or cultural ethos, the influence of the school as a uniform, total institution substantially modifies the effects of childrens' antecedent factors.

Given then that school variables are of major importance in explaining performance, the thesis has identified certain variables which are of crucial importance. Chapter 8.1 set out the minimal requirements for material resources without which a school cannot function effectively: solid buildings, desks and chairs, water and basic textbooks inter alia. There is not however an automatic relationship between these inputs and school performance. This research found the critical school variable and in fact the crux of the whole issue of school quality in Fiji to be on the human level: the

quality of leadership, management and administration within the school itself. These factors establish the basic strength or weakness of a school - the essential ethos. This ethos appears to have a profound influence on the quality of the teaching and learning process in the school. The reputations and fortunes of schools in Fiji are subject to change. This appears to depend very much on leadership and on the partnership between principal and management. When the 'ethos builders' leave, it takes time for a new ethos to be established.

Schools are complex social organizations. Set within communities, they are influenced by the ambience of their social, economic and political surroundings. Schools are subject to government policy, but are organized at a micro level by individuals who have the power to create a definite ethos. The children who enter the schools are products of their backgrounds, and it is the interaction of background and school factors, and the process of learning and teaching, which produce results. The enormous variation in results offers a challenge to investigate further the processes and interactions in secondary schools in Fiji.

APPENDIX ONE FIELDWORK QUESTIONNAIRE.

FORM FOUR STUDENT QUESTIONNAIRE

.....

11. Is there anybody you can ask to help you with
your homework? Yes/No.

If you answered yes, could you say who you ask for
help? (For example, mother, brother, cousin, teacher)

.....

How often do you get help with your homework?.....

.....

12. What kind of work does your father do? Please say if
he has more than one type of work and describe his
different kinds of work.....

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13. Please say how much schooling your father had.....

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14. What work does your mother do? Does she have any work
that earns her money?.....

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15. Please say how much schooling your mother had.....

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16. What languages do you usually speak?

At home?.....

.....
.....

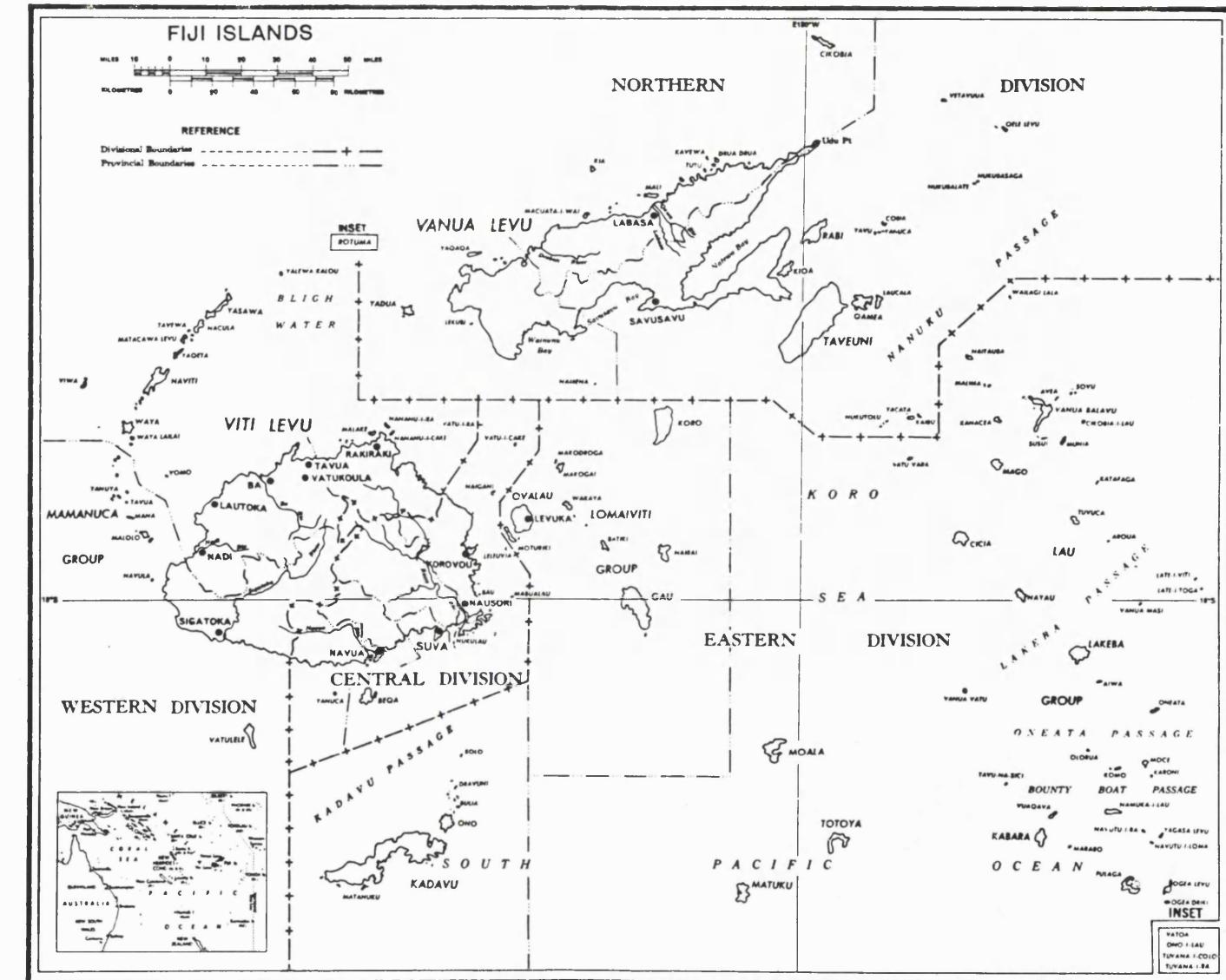
With your friends.....
.....
.....

17. If you were completely free to choose, what work
would you like to do when you leave school?.....

.....
.....

18. What work do you think you probably will do when you
leave school?.....

.....
.....



APPENDIX THREE RACIAL COMPOSITION, SIZE AND LOCATION OF SECONDARY SCHOOLS IN FIJI (1986).

	Fijian	Indian	Others	Roll	Location
A.D.Patel Memorial School	-	100%	-	153	R
Balata High	12%	88%	-	140	R
Ba Methodist High	73%	23%	4%	338	U
Ba Muslim College	15%	84%	1%	564	U
Ba Sanatan College	5%	95%	-	104	U
Ba Sangam High	12%	87%	1%	283	U
D.A.V.College	3%	97%	-	543	U
Khalsa College	5%	95%	-	589	U
Nadarivatu Junior Secondary	99%	1%	-	64	R
Nilsen High	54%	34%	12%	226	ST
Nukuloa Secondary	3%	97%	-	173	R
Tavua College	19%	79%	2%	608	ST
Xavier College	27%	66%	7%	601	U
Bucalevu Secondary	94%	4%	3%	278	R
Napuka Junior Secondary	96%	4%	-	215	R
Nuisawa Methodist High	64%	22%	14%	169	R
Rabi Secondary	1%	-	99%	221	R
Saqani Junior Secondary	100%	-	-	76	R
Savusavu Secondary	65%	21%	14%	247	U
St.Bedes College	85%	3%	12%	224	R
Vatuрова Koroalau Junior Sec.	97%	-	3%	63	R
Wairiki Secondary	83%	5%	12%	276	R
Adi Maopa Junior Secondary	100%	-	-	96	R
Delana Methodist	91%	2%	7%	132	U
Gau Junior Secondary	100%	-	-	127	R
Kadavu Provincial Junior Sec.	100%	-	-	67	R
Koro Island High	99%	1%	-	280	R

Levuka Public School	70%	12%	18%	331	U
Ratu Finau Junior Secondary	100%	-	-	127	R
Richmond Methodist High	100%	-	-	120	R
Rotuma High	1%	-	99%	220	R
St. John's College	79%	5%	16%	449	R
Vunisea Government Secondary	100%	-	-	327	R
Yasayasa Moala Junior Secondary	100%	-	-	133	R
Ba Provincial	69%	26%	5%	209	U
Drasa Secondary	10%	89%	2%	291	U
Jasper Williams High	30%	64%	6%	457	U
Korovuto Secondary	4%	96%	-	241	R
Lautoka Muslim	18%	81%	1%	290	U
Maharishi Sanatan College	2%	98%	-	96	R
Mulomulo Secondary	-	100%	-	149	R
Nadi College	51%	46%	-	377	U
Nadi Muslim High	7%	91%	-	305	U
Natabua High	28%	65%	7%	594	U
Pundit Vishnu Deo Memorial Sec.	9%	91%	-	488	U
Ratu Navula Secondary	99%	1%	-	143	U
Sabete Secondary	14%	85%	1%	327	R
Sangam (S.K.M.) College	9%	90%	1%	377	U
Shri Vivekananda High	14%	84%	2%	841	U
St. Thomas's High	42%	22%	36%	418	U
Tilak High	10%	89%	1%	789	U
Votualevu High	18%	82%	-	277	PU
Yasawa Centenary Memorial Jun. Sec.	100%	-	-	205	R
All Saints Secondary	23%	71%	6%	729	U
Batinikama Junior Secondary	2%	97%	1%	138	R
Bua Central College	93%	6%	1%	160	R
Bulileka Secondary	2%	98%	-	324	PU

Dreketi High	54%	35%	11%	153	R
Holy Family Secondary	45%	38%	17%	268	U
Labasa Arya Junior Secondary	2%	98%	-	100	PU
Labasa Muslim High	8%	92%	-	246	PU
Lekutu Secondary	54%	45%	1%	223	R
Nadogo Secondary	23%	77%	-	224	R
Naikavaki Junior Secondary	8%	92%	-	48	R
Nabala Junior Secondary	98%	1%	-	80	R
Naleba College	6%	94%	-	206	R
Sangam (K.M.) High	19%	77%	3%	557	U
Seaqaqa Junior Secondary	37%	63%	-	124	R
Shri Guru Nanak Khalsa Sec.	6%	91%	2%	97	R
Solevu Junior Secondary	95%	-	5%	149	R
Tabia (S.D.) Junior Secondary	7%	93%	-	167	R
Vunimoli Junior Secondary	7%	93%	-	143	R
Waiqele Junior Secondary	7%	93%	-	185	R
Andhra High	33%	64%	-	185	R
Bemana Catholic Junior Secondary	97%	2%	1%	69	R
Cuvu College	14%	85%	1%	617	U
Kavanagasa Secondary	17%	83%	-	63	R
Lomawai Secondary	25%	75%	-	150	R
Nadroga/Navosa High	98%	2%	-	130	R
Navosa Central College	86%	14%	-	193	R
Nawai Junior Secondary	18%	82%	-	27	R
Sigatoka Methodist High	33%	66%	1%	279	U
Sigatoka Valley Junior Secondary	60%	40%	-	81	R
Adi Cakobau	97%	1%	2%	346	R
Baulevu High	11%	88%	1%	234	R
Bhawani Dayal High*	5%	94%	1%	605	PU
Central Fijian Secondary*	96%	2%	2%	479	U

Fulton Junior Secondary	34%	9%	57%	108	R
Lelean Memorial*	79%	17%	4%	545	U
Lomaivuna High	91%	5%	4%	302	R
Naitasiri Junior Secondary	94%	6%	-	78	R
Naiyala Junior Secondary	95%	4%	1%	142	R
Nasinu Muslim Secomndary*	13%	86%	1%	307	PU
Natovi Junior Seconndary	89%	5%	6%	164	R
Nausori High*	8%	92%	-	83	U
Pundit Shreedar Maharaj College*	40%	60%	-	68	PU
Queen Victoria School	95%	2%	3%	372	R
Ratu Kadavulevu School	95%	2%	3%	446	R
Rewa Secondary	97%	3%	-	174	R
Saraswati College	23%	77%	-	267	U
Tailevu North High	78%	21%	1%	337	R
Vunimono High	29%	71%	6%	1,069	U
Vunicibicibi Junior Secondary	23%	77%	-	79	R
Waidina Junior Secondary	97%	3%	-	76	R
Wainibuka Junior Secondary	98%	2%	-	141	R
Wainimala Junior Secondary	100%	-	-	93	R
Nakauvadra Junior Secondary	96%	4%	-	78	R
Navesau Junior Secondary	51%	1%	48%	178	R
Penang Sangam	14%	84%	2%	501	ST
Rakiraki Public High	33%	64%	3%	188	ST
Ra Junior Secondary	82%	17%	1%	229	R
Assemblies of God High*	63%	35%	2%	293	U
Ballantine Memorial*	96%	-	4%	400	U
Cathedral Secondary*	64%	14%	22%	417	U
D.A.V.Boys College*	7%	92%	1%	823	U
D.A.V.Girls College*	19%	81%	1%	505	U
Dudley High*	31%	59%	10%	722	U

Fiji L.D.S. Technical College*	63%	16%	21%	298	U
Gospel High*	39%	55%	6%	566	U
Indian College*	24%	72%	4%	648	U
Lami High*	93%	-	7%	208	U
Laucala Bay Secondary*	56%	34%	10%	553	U
Lomary Secondary	85%	7%	8%	227	R
Mahatma Ghandi Memorial High*	1%	99%	-	667	U
Marist Brothers High*	32%	37%	31%	616	U
Nabua Secondary*	98%	-	2%	403	U
Namosi Secondary	99%	1%	-	198	R
Navua High	23%	74%	3%	273	ST
Rampur College	33%	65%	2%	206	R
Ratu Latianara Junior Secondary	98%	2%	-	101	R
Ratu Sukuna Memorial School*	98%	-	2%	541	U
Rishikul High*	11%	87%	2%	659	PU
St. Joseph's Secondary*	28%	28%	44%	415	U
Suva Grammar School*	40%	35%	25%	1,121	U
Suva Muslim College*	38%	60%	2%	462	U
Suva Sangam High*	48%	46%	6%	269	U
Yat Sen Secondary (Form 3 only)	27%	21%	52%	66	U

Abbreviations: R - rural

U - urban

ST - small town

PU - peri-urban

* denotes in greater Suva-Nausori urban area.

APPENDIX FOUR FIJI JUNIOR CERTIFICATE RESULTS, 1983 - 1988

	Pass rates (percent)					
	1983	1984	1985	1986	1987	1988
A.D.Patel Memorial School	61	37	62	61	100	100
Balata High	39	33	78	55	67	53
Ba Methodist High	58	50	72	66	63	61
Ba Muslim College	78	94	100	100	99	99
Ba Sanatan College	-	30	58	91	83	73
Ba Sangam High	40	38	71	59	60	39
D.A.V.College	62	65	87	78	78	71
Khalsa College	48	56	84	73	68	66
Nadarivatu Junior Secondary	50	69	91	86	87	88
Nilsen High	34	27	68	70	78	78
Nukuloa Secondary	43	39	24	26	68	67
Tavua College	73	59	84	80	90	83
Xavier College	86	86	88	94	90	95
Bucalevu Secondary	93	90	100	97	93	86
Napuka Junior Secondary	88	72	91	83	81	92
Nuisawa Methodist High	57	81	68	70	90	87
Rabi Secondary	91	91	62	88	70	82
Saqani Junior Secondary	67	70	90	100	80	78
Savusavu Secondary	58	64	68	81	66	79
St.Bedes College	54	42	83	88	94	71
Vatuрова Koroalau Junior Sec.	45	62	92	100	43	82
Wairiki Secondary	75	80	81	86	88	81
Adi Maopa Junior Secondary	69	52	70	87	72	80
Delana Methodist	43	37	82	73	95	58
Gau Junior Secondary	65	62	95	97	94	93
Kadavu Provincial Junior Sec.	93	50	89	93	90	100
Koro Island High	48	39	68	50	51	72

Levuka Public School	73	79	91	91	87	85
Ratu Finau Junior Secondary	59	72	100	82	95	90
Richmond Methodist High	57	49	84	85	78	75
Rotuma High	60	78	84	89	100	93
St.John's College	87	81	94	96	93	98
Vunisea Government Secondary	60	62	98	85	89	79
Yasayasa Moala Junior Secondary	25	84	93	91	100	91
Ba Provincial	42	55	69	65	37	62
Drasa Secondary	51	54	55	52	80	74
Jasper Williams High	97	97	100	99	100	99
Korovuto Secondary	59	49	82	72	58	58
Lautoka Muslim	47	44	51	90	76	96
Maharishi Sanatan College	37	35	44	65	69	67
Mulomulo Secondary	46	51	64	62	61	62
Nadi College	63	40	74	64	61	53
Nadi Muslim High	44	67	82	89	79	81
Natabua High	99	95	99	98	98	99
Pundit Vishnu Deo Memorial Sec.	49	52	73	68	70	60
Ratu Navula Secondary	46	18	42	50	69	44
Sabete Secondary	41	39	69	56	62	55
Sangam (S.K.M.)College	57	52	78	77	86	83
Shri Vivekananda High	68	61	78	83	87	83
St.Thomas's High	73	67	87	92	82	87
Tilak High	75	84	92	95	96	96
Votualevu High	41	52	65	76	82	80
Yasawa Centenary Memorial Jun. Sec.47	55	81	92	84	79	
All Saints Secondary	81	67	85	85	91	82
Batinikama Junior Secondary	65	81	93	96	71	100
Bua Central College	59	48	80	72	60	93
Bulileka Secondary	73	89	91	85	81	87

Dreketi High	61	65	74	92	82	75
Holy Family Secondary	89	77	89	97	93	91
Labasa Arya Junior Secondary	50	52	94	76	78	85
Labasa Muslim High	53	57	76	76	81	75
Lekutu Secondary	64	63	90	85	85	72
Nabala Junior Secondary	52	72	69	-	92	92
Nadogo Secondary	78	67	48	79	66	92
Naikavaki Junior Secondary	-	0	78	75	86	93
Naleba College	64	88	81	70	64	79
Sangam (K.M.) High	77	67	79	88	81	85
Seaqaqa Junior Secondary	57	85	89	78	100	94
Shri Guru Nanak Khalsa Sec.	29	69	78	39	62	64
Solevu Junior Secondary	59	61	81	83	90	89
Tabia (S.D.) Junior Secondary	78	66	95	92	78	89
Vunimoli Junior Secondary	-	86	100	95	93	87
Waiqele Junior Secondary	66	54	76	85	87	78
Andhra High	0	41	90	65	62	88
Bemana Catholic Junior Secondary	30	36	50	71	73	69
Cuvu College	39	53	79	69	73	76
Kavanagasau Secondary	34	30	58	74	90	60
Lomawai Secondary	43	66	68	61	74	72
Nadroga/Navosa High	38	50	56	68	58	32
Navosa Central College	63	50	66	70	56	66
Nawai Junior Secondary	47	67	75	71	85	70
Sigatoka Methodist High	78	52	75	95	73	98
Sigatoka Valley Junior Secondary	57	26	57	59	30	42
Adi Cakobau*	90	98	98	100	84	96
Baulevu High*	50	41	81	66	77	65
Bhawani Dayal High*	43	48	66	57	65	63
Central Fijian Secondary*	49	45	80	64	61	68

Fulton Junior Secondary	52	64	81	74	64	76
Lelean Memorial*	44	86	91	90	94	94
Lomaivuna High	54	71	92	86	88	86
Naitasiri Junior Secondary	48	44	80	57	72	66
Naiyala Junior Secondary	67	77	92	89	97	100
Nasinu Muslim Seconndary*	56	43	100	100	100	88
Natovi Junior Seconndary	46	63	58	81	88	94
Nausori High*	17	40	56	75	83	100
Pundit Shreedar Maharaj College*	54	32	73	65	77	68
Queen Victoria School	99	97	100	100	100	97
Ratu Kadavulevu School	88	100	100	100	100	96
Rewa Secondary	47	62	62	65	68	72
Saraswati College*	40	31	46	35	48	56
Tailevu North High	39	54	79	79	76	83
Vunimono High*	46	38	66	54	70	68
Vunicibicibi Junior Secondary	52	30	88	95	82	90
Waidina Junior Secondary	50	83	84	100	94	100
Wainibuka Junior Secondary	61	54	90	84	85	72
Wainimala Junior Secondary	93	50	7	-	61	75
Nakauvadra Junior Secondary	42	36	86	72	100	100
Navesau Junior Secondary	39	61	100	94	95	79
Penang Sangam	63	64	84	83	86	77
Rakiraki Public High	60	53	73	78	73	65
Ra High	64	51	93	59	44	55
Assemblies of God High*	38	41	62	64	41	66
Ballantine Memorial*	61	49	77	80	81	74
Cathedral Secondary*	41	57	65	73	56	65
D.A.V.Boys College*	52	55	71	67	75	76
D.A.V.Girls College*	60	67	77	74	66	65
Dudley High*	86	84	98	92	95	96

Fiji L.D.S. Technical College*	47	47	69	54	82	65
Gospel High*	49	68	78	72	81	80
Indian College*	48	43	73	83	84	95
Lami High*	51	46	65	52	53	64
Laucala Bay Secondary*	58	66	70	83	83	66
Lomary Secondary*	48	47	91	92	91	76
Mahatma Ghandi Memorial High*	73	79	94	94	93	97
Marist Brothers High*	93	93	100	98	99	99
Nabua Secondary*	48	39	83	71	64	62
Namosi Secondary	28	35	74	57	79	82
Navua High	57	53	73	77	70	75
Rampur College	42	68	23	78	74	78
Ratu Latianara Junior Secondary	52	80	100	92	95	100
Ratu Sukuna Memorial School*	42	58	86	88	86	84
Rishikul High*	68	76	82	68	71	73
St. Joseph's Secondary*	85	96	97	92	97	91
Suva Grammar School*	88	85	87	90	90	91
Suva Muslim College*	93	95	100	100	100	100
Suva Sangam High*	41	51	56	71	64	86
Yat-Sen Secondary*					100	

N.B. National pass rates: 1983 - 59.7
 1984 - 61.9
 1985 - 80.1
 1986 - 79.5
 1987 - 80.1
 1988 - 80.03

* denotes schools in greater Suva-Nausori area.

Source: Ministry of Education statistics.

APPENDIX FIVE SUMMARIES OF SCHOOL DATA.

Appendix Five consists of brief notes containing some essential points about each of the eleven schools in the field study. These facts and observations were true at the time of the fieldwork in July and August 1988.

These are organized in a format loosely following Somerset's 'Model for Educational Quality' reproduced on the following page.

Notes on abbreviations used in Appendix Five.

SES - socio-economic status, normally based on father's occupation.

F.A.B. - Fijian Affairs Board.

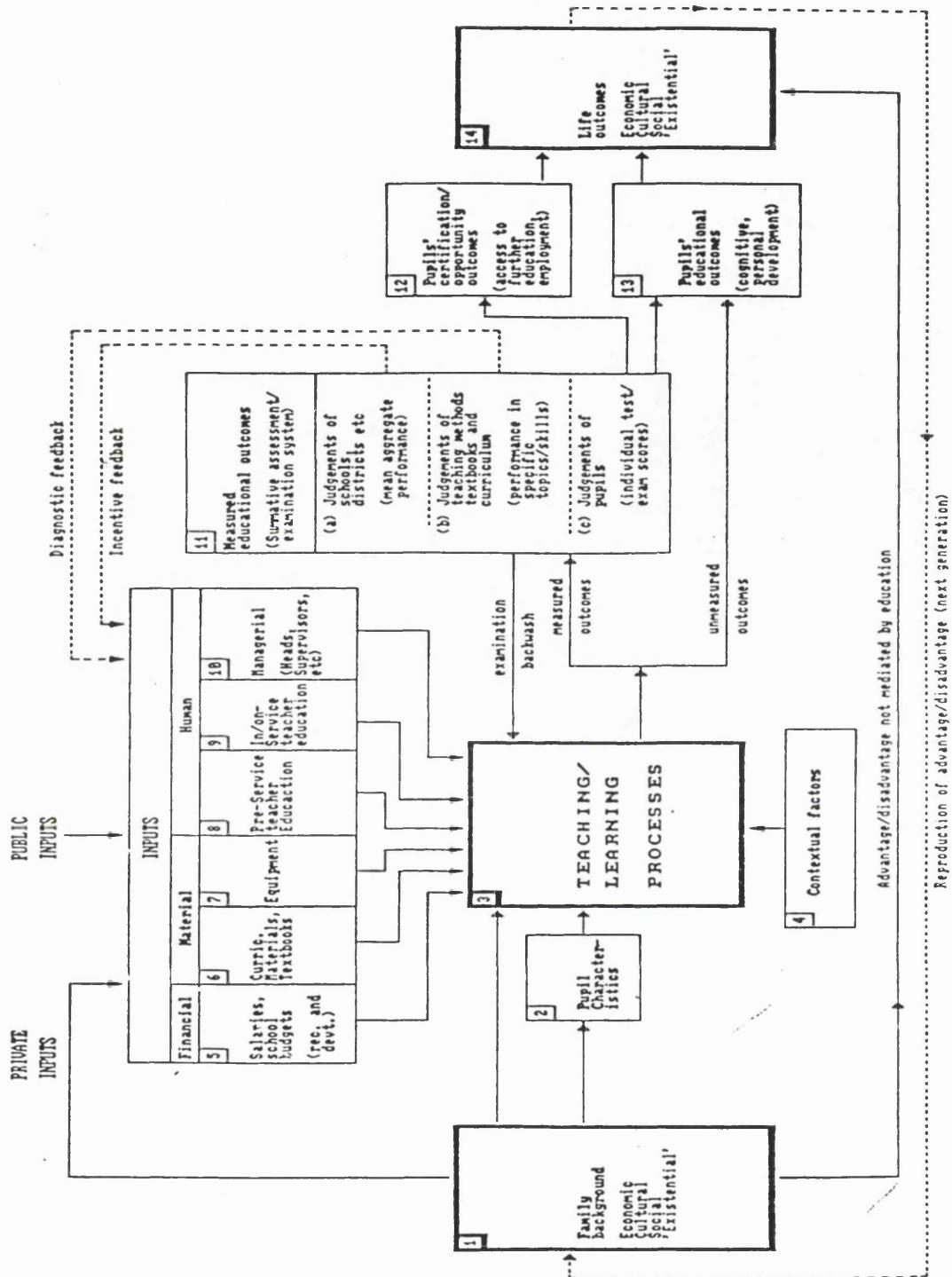
F.J.C. - Fiji Junior Certificate examination.

feeder school - a primary school with the same management as the secondary school referred to. Usually the two schools are located next to each other, and in many cases promotion from the primary school to the secondary school is automatic.

A MODEL FOR EDUCATIONAL QUALITY

HCSS
29-89

Somerset's Model for Educational Quality.



DUA SCHOOL

INPUTS

Contextual factors.

In Nadi, western Viti Levu. Close to large tourist hotels, international airport and cane-growing area.
Urban infrastructure; water, telephone, electricity, transport services.

Management. (Grant-aided)

School established by Fijian Community in 1970. Has had severe management problems, especially financial until 1987-88. Management committee consists of villagers, not very effective. Fundraising done by teachers and students. Committee has generally laissez-faire attitude. P.T.A. inactive.

Principal.

Has had frequent changes of principal in past 15 years - linked to management problems. New principal has been brought back from retirement.

Teachers.

Staff of 18 - 10 Fijians, 8 Indians. All qualified. High turnover of staff.

Students.

100% Fijian. Roll of 158. (Has fallen from about 400 in early 1970s)
Forms 1 - 5. Non-selective.
SES: fathers mostly cane farmers or hotel or airport workers.

Resources and Equipment.

Whole school in very poor physical condition. Chairs and desks inadequate and often broken. Not enough textbooks or other teaching resources. No duplicating machine, therefore examinations could not be set.

PROCESS

Generally didactic methods of teaching. Heavy reliance on past examination papers. Teaching hampered by severe lack of equipment and resources, especially textbooks. Students often lack basic equipment e.g. stationery, which teachers find irritating and disturbing. Vernacular widely used in and out of classrooms. Students restless and noisy in and out of lessons unless constantly occupied. Teachers had low expectations of students. Assembly three times daily to try and counter indiscipline and lateness. Infrequent visits from Ministry of Education. Generally unstimulating environment - dirty and in disrepair. Nothing on classroom walls. Absenteeism a problem, especially in harvesting season.

OUTPUTS

F.J.C. Means (1988)

English - 46.9%
Mathematics - 43.7%
Basic Science - 46.0%
Social Science - 33.3%
Total - 274.6

F.J.C. Pass Rates

1983 - 46%
1984 - 18%
1985 - 42%
1986 - 50%
1987 - 69%
1988 - 44%

Pass rates have fluctuated but have been consistently below the national average. Most passes are 'C' grade.
School involved in sports - has rugby and other sports teams.

Employment prospects

Reasonably easy to obtain employment in this area without high level of school certification, because of proximity of hotels, airport, sugar industry.

RUA SCHOOL.

INPUTS

Contextual Factors.

In canefarming area about 10 miles from Nadi. Good rural infrastructure; road access, bus service, electricity, water, telephone.

Management. (Grant-aided)

Committee of local people. Occasional conflicts, but generally runs smoothly. School is in debt and needs to do constant fundraising.

P.T.A. only involved in fundraising.

Principal.

Had been at the school a few years.

Teachers.

Staff of 19: 18 Indians and 1 Fijian. All qualified. Staff changes not generally a problem although 2 teachers had left to migrate during 1988.

Students.

Roll 277. (Forms 1 - 6). 235 Indians (84.8%) and 42 Fijians (15.2%).

Non-selective. Mostly children from local area, most from adjacent feeder school. SES: majority from canefarming families.

Some wage earners.

Resources and Equipment.

Basic school building in poor state due to hurricane damage in 1984. Due to lack of insurance, buildings have never been properly repaired. Much equipment was lost in hurricane and school operated in army tents for some time. School has not been able to recover financial position and has not been able to improve labs or library. Very few books in school library.

PROCESS

Generally didactic style of teaching. Very formal teacher-student relationships. Children not very responsive in English - more responsive in vernacular (Hindi). Students fairly quiet and submissive. Unstimulating environment for teaching and learning. No charts on walls.

Poor facilities may hamper teaching. Low teacher expectations. Student absenteeism is a problem at times as children are kept home to help with farm work.

OUTPUTS

F.J.C. Means (1988)

English	-	46.3%
Maths	-	55.0%
Basic Science	48.3%	
Social Science	56.2%	
Total	-	309.5

F.J.C. Pass Rates.

1983	-	41%
1984	-	39%
1985	-	69%
1986	-	56%
1987	-	62%
1988	-	55%

Pass rates have been consistently below national averages.

Employment prospects.

Many return to cane farms; or shop, hotel or airport jobs. Few go to technical institutes.

TOLU SCHOOL

INPUTS

Contextual Factors.

Set in cane fields approximately 3 miles from Nadi international airport. Perceives itself as rural, but well served with infrastructure - electricity, water, phone, roads etc. Several low-cost housing settlements nearby.

Principal.

Has been there since secondary school began in 1977.

Teachers.

Staff of 19. All Indian.
Very few staff changes.

Management. (Grant-aided)

Committee of parents and others from local community.
Same small group that has been involved for many years.
No P.T.A. Small canteen at school helps pay for running expenses but school has not had to have major fund-raising for some years.
Principal gets on well with committee, who give him a free hand and provide him with whatever he wants.

Students.

Roll of 290. (Forms 1 - 6). 250 Indians (86%) and 40 Fijians (14%).

Non-selective. Most children from nearby feeder school and other local schools.

SES: Indian cane-farmers, Fijian wage-earners.

Resources and Equipment.

Some textbooks provided by school but lower forms mostly buy their own. Well equipped - 4 computers, video, tape-recorder, photocopier, duplicator, etc.
All well used.

Well-equipped Home Economics and Technical facilities and science labs. Typing offered as subject.
Reasonable library - children able to borrow books, but apparently there is little enthusiasm for reading.

PROCESS

Evidence of well-organized classrooms: noticeboards in each classroom with evidence of teacher and student input.
School clean and tidy.
Teachers held in position of authority but some openness in student-teacher relationships.
Teachers still rather high-handed.
General atmosphere of stability.
School well-equipped and well-organized.
Students well behaved.
Hindi spoken widely between staff and students. Definitely Indian oriented ethos.

OUTPUT

F.J.C. Means (1988)

English	-	62.9%
Maths	-	61.9%
Basic Science	-	62.5%
Social Science	-	60.8%
Total	-	379.0

F.J.C. Pass Rates.

1983	-	41%
1984	-	52%
1985	-	76%
1986	-	76%
1987	-	82%
1988	-	80%

Nationally, pass rate has improved gradually over the years. Since 1985 has been roughly same as national average.

Employment Prospects.

Hotel, airport and other urban jobs; farming; some will aim to migrate.

VA SCHOOL

INPUTS

Contextual factors.

About 20 miles up the Sigatoka Valley from Sigatoka town. In midst of crop farming area: tobacco, maize, watermelon, vegetables, etc. Populated by both Indians and Fijians. Very dusty in dry season which makes school seem dirty.

Infrastructure: road close by (unsealed), no reticulated water, no electricity or telephone. (Water is major problem).

Management. (Grant-aided)

Committee of local people, all Fijians. Principal feels school has lacked community support.

Principal.

Has had 5 principals in 5 years. The longest time a principal has stayed is 2 years. Present principal new in 1988.

Teachers.

Staff of 6 (plus 1 on maternity leave). 4 Indians and 3 Fijians. (No substitute for teacher on maternity leave). High turnover of staff - most request transfers.

Students.

Roll of 88. (Form 1 - 4). 42 Indians and 46 Fijians. 18 Boarders in improvised facilities. Roll has been falling - was 145 some years ago. Non-selective - most from feeder school next door.

SES: mostly cash crop farmers.

Resources and Equipment:

School supplies all textbooks.

Fairly well-stocked library (mainly from F.A.B.) but principal feels they are too difficult for the students whose English is poor.

Home Economics room in poor condition: broken equipment, untidy and dirty. Manual duplicator.

Radio telephone. Major problem with water -none in dry season - affects teachers and students.

PROCESS

Rather slack and depressing atmosphere. Teachers plod on in pedestrian manner tolerating poor conditions. Principal appears to be trying to improve matters, but problems are almost overwhelming. All pervasive dust of the area makes the classrooms dirty and unattractive. No charts or pictures on walls - unstimulating environment.

OUTPUT

F.J.C. Means (1988)

English	-	48.2%
Maths	-	44.9%
Basic Science	-	41.1%
Social Science	-	49.4%
Total	-	251.5

F.J.C. Pass Rates

1983	-	57%
1984	-	26%
1985	-	57%
1986	-	59%
1987	-	30%
1988	-	42%

Has had low pass rates for several years. In 1988 was second lowest nationally.

Employment Prospects.

Most return to farms. Few to wage employment.

LIMA SCHOOL

INPUTS

Contextual factors.

Approximately 40 miles up Sigatoka Valley from Sigatoka town. Have to cross river on foot to reach school - impassable in rainy season.

Old Roman Catholic Mission. Large area owned by church for mission station, schools (primary and secondary), gardens and boarding facilities.

Infrastructure: school has own generator operating very limited hours, own water pumping system.

Management. (Grant-aided)

Committee school of local parish. Under overall umbrella of Catholic Education Office.

Principal has had problems with management - lack of communications and misunderstandings.

Financial problems meeting running costs of school.

Principal.

Been at school 3 years.

Teachers.

Staff of 7.5 Fijians and 2 Indians.

A lot of staff changes due to teachers requesting transfers. (Principal claimed Indian teachers dislike teaching in rural areas).

Students.

Roll of 60. (Form 1 - 4). 55 Fijians and 5 Indians. 35 boarders. (Multi-craft centre attached to school).

Non-selective: mainly from 2 feeder schools.

SES: villagers and cash-crop farmers.

Resources and equipment.

School supplies all textbooks.

Library reasonably well-equipped, with F.A.B. aid, but students not keen on reading. F.A.B. has also donated lab. equipment.

PROCESS

Class rooms bare and uninteresting. General air of slackness.

Infrequent Ministry visits. Multicraft room very untidy and disorganized.

Gardening compulsory - food for boarders.

Catholicism clearly important in creating ambience of school. A very established environment with old mission station etc. Absenteeism a problem in harvesting season.

OUTPUTS

F.J.C. Means (1988)

English	-	50.6%
Maths	-	56.3%
Basic Science	52.0%	
Social Science	62.5%	
Total	-	331.7

F.J.C. Pass Rates.

1983	-	30%
1984	-	36%
1985	-	50%
1986	-	71%
1987	-	81%
1988	-	69%

Pass rate has improved since 1983 but most years below national average.

Employment prospects.

Mostly farming or wage earning such as hotel work.

ONO SCHOOLINPUTSContextual factors.

On island of Kadavu, 6 - 8 hours by boat from Suva, or 30 minutes by plane.
 Located in government station adjacent to hospital and other government offices.
 Two Fijian villages close by.
 Infrastructure: water, electricity, telephone.
 The only stretch of road on the island runs by the school.

Management.

Government school. Decision making in hands of principal. No need for fundraising.
 Very little parental involvement.

Principal.

Had been at school 6 years. His wife also a teacher at the school.

Teachers.

Staff of 22. 18 Fijians and 4 Indians. Fully staffed, although has at times been short-staffed. School gets a lot of new graduates who are forced to do service in rural areas. Ministry tries to encourage them to stay, but most only stay a few years.

Students.

Roll of 365. (Forms 1 - 6). All Fijian. 220 boarders. Takes most children from nearby school although it is not strictly a feeder school (i.e. having same management). Basically non-selective.
 SES: village background, few children of civil servants.

Resources and Equipment.

School provides all textbooks.
 Well-equipped because government provides everything, but not enough equipment or chemicals for students to do own experiments. Duplicating machine. Video (kept in principal's house). Well-stocked library, clearly well used.

PROCESS

Totally Fijian cultural context. Buildings generally in good condition. Students bright and alert and healthy looking. Some charts on walls, especially for science. Some overcrowding in school because of increasing roll. Dining room had to be used as a classroom. Children rather reserved speaking English, but seemed to have good relationships with teachers. Fijian spoken widely in and out of classroom. Cadets introduced in 1988 - compulsory for boys from Form Four upwards. Gardening compulsory - to provide food for boarding establishment. Very little absenteeism.

OUTPUTF.J.C. Means (1988)

English	-	51.4%
Mathematics	-	64.6%
Basic Science	54.2%	
Social Science	63.6%	
Total	356.9	

F.J.C. Pass Rates

1983	-	60%
1984	-	62%
1985	-	98%
1986	-	85%
1987	-	88%
1988	-	79%

Pass rate has improved since 1983, generally above or close to national average.

Boarders tend to achieve better results than day students because of supervised homework (according to principal).

Employment Prospects.

Some go to tertiary education or jobs in Suva; many return to villages.

VITU SCHOOL

INPUTS

Contextual factors.

On island of Kadavu, one hour from Vunisea by boat. (No road link). No direct regular transport to Suva. Isolated, although several villages nearby. Infrastructure: electricity from own generator for 3 hours in evenings, own water supply in hills (often gives problems), radio-telephone. Oldest school in Fiji - established in 1838 as primary school.

Management. (Grant-aided)

Local management by committee of local people including Methodist minister, but under overall umbrella of Methodist Church of Fiji. Severe financial problems caused by past committees which have left present committee deeply in debt. P.T.A. not functioning. Teachers and students now do fund-raising.

Principal.

Been at school 6 years. School has been in debt all that time and his main task has been to reduce the debt.

Teachers.

Staff of 14. 12 Fijians and 2 Indians. Staff transfers not a problem.

Students.

Roll of 152. (Forms 1 - 5). 11 students from Tuvalu, rest Fijian. 86 boarders. SES: village background.

Resources and Equipment.

School provides all textbooks, but needs more. Has received science equipment from F.A.B. Fairly well-stocked library, mostly from F.A.B., but no evidence of wide use. Students not keen on reading. Lab. facilities adequate to Form Four but could be improved.

PROCESS

School has long tradition, which lends stability.

Financial problems have meant there have been no physical improvements for years - some buildings run-down. Classrooms dull and uninspiring - bare walls, no evidence of creative work.

Appeared to be well-organized school. Harsh punishments for wrong-doers. School has extensive well-maintained gardens - mainly food for boarders' consumption. Compulsory church and Sunday School attendance. Reflects strong Fijian Methodist ethos of school. Absenteeism is a problem at times.

OUTPUT

F.J.C. Means (1988)

English	-	44.6%
Mathematics	-	51.1%
Basic Science	-	47.6%
Social Science	-	47.6%
Total	-	328.3

F.J.C. Pass Rates.

1983	-	57%
1984	-	49%
1985	-	84%
1986	-	85%
1987	-	78%
1988	-	75%

Fluctuating pass rate, slightly below national average for 1987 and 1988.

Employment Prospects.

Most return to villages, some go to Suva for jobs or study.

WALU SCHOOL

INPUTS

Contextual factors.

At northern end of island of Kadavu. Not immediately next to villages, but a number of villages accessible by walking or small boat. No road connections. No electricity or telephone. Boat from Suva calls weekly - about 7-8 hours from Suva by boat.

Management. (Grant-aided)

Management committee consists of local people from surrounding area. Committee meets monthly or more often. Good relationship between principal and committee - a lot of freedom given to principal and teachers. Kadavu Provincial Council contributes about F\$10,000 annually to school, but not involved in management decisions. No financial problems.

Principal.

Had been at school 5 years, Principal for past year. (Deputy before that).

Teachers.

Staff of 7. All Fijians. Fully staffed. Staff movements not a major problem.

Students.

Roll of 81. (Form 1 - 4). 100% Fijian. 61 boarders. Non-selective. Most children from adjoining primary school.

Resources and Equipment.

School provides all textbooks. No laboratory at time of visit, but had equipment donated by F.A.B. to install. Reasonably well-stocked library - many books donated by F.A.B. and N.Z. aid.

Ministry of Education donated equipment for Home Economics and Technical subjects. Video deck and screen with own small generator. One classroom lit by solar power.

PROCESS

A general air of optimism in the school which is recovering from a decline in roll and in morale. Classrooms brightly decorated with pictures and posters. Bright, airy classrooms with new desks and chairs. School run on 'traditional Fijian lines' - totally Fijian context and cultural ethos. Strict discipline. Students do gardening daily for school food supply. Extensive use of Fijian language both in and out of classrooms. Compulsory church attendance and choir practice. School appears to be innovative and progressive despite its extreme isolation.

OUTPUT

F.J.C. Means (1988)

English	-	67.7%
Mathematics	-	61.1%
Basic Science	-	70.1%
Social Science	-	69.9%
Total	-	410.3

F.J.C. Pass Rates.

1983	-	93%
1984	-	50%
1985	-	89%
1986	-	93%
1987	-	90%
1988	-	100%

Apart from 1984, pass rates have been well above national averages.

Employment prospects.

Many go to Suva for Form Five, or to try to find employment. Many return to villages after some time in Suva. Some go to Ono School for Form Five.

CIWA SCHOOL

INPUTS

Contextual factors.

In Suva suburb about 4 miles from Central Business District. Close to army camp and large low-cost housing area with mainly Fijian population. Good urban infrastructure. Close to bus routes.

Management. (Grant-aided)

Run by Suva branch of Fiji Muslim League. Principal has good working relationship with committee, which gives him a free rein.

Teachers.

Staff of 26. 25 Indians and 1 Fijian. Stable staff but some planning to migrate.

Students.

Roll of 519. (Form 1 - 6). 350 Indians, 160 Fijians, 9 Others. Most students from feeder school, on fairly non-selective basis. Can afford to be a little selective now school is known as a 'good' school due to high pass rates in external examinations. SES: wide range from very poor to middle class.

Resources and Equipment.

Fully equipped with video, photocopier, duplicator, 4 computers. Well-stocked library. Obviously well used. School is becoming overcrowded. Science lab is doubling up as classroom and classes are large. Students buy own textbooks, except for expensive Form 5 and 6 texts.

PROCESS

School buildings quite modern, clean and in good condition. Teachers have easy, open relationships with pupils - less formal and authoritative than in rural areas. Children more open in terms of questioning teachers, etc.

Large classes - often over 40. Some charts on classroom walls. Evidence of creative work on library walls. Boys and girls sat together, as did children of different races. Generally a pleasant atmosphere in the school - lively and noisy but not unruly. Muslim influence important but not dominating. Lessons in Muslim religion and Arabic are taught and there is a holy room where boys go to pray at lunchtime. Strong emphasis on sports, art, debating etc.

OUTPUT

F.J.C. Means (1988)

English	-	69.9%
Mathematics	-	82.6%
Basic Science		68.4%
Social Science		78.5%
Total	-	465.1

F.J.C. Pass Rates

1983	-	93%
1984	-	95%
1985	-	100%
1986	-	100%
1987	-	100%
1988	-	100%

Pass rates in F.J.C. have made it one of the most consistently successful schools in Fiji.

Employment Prospects.

Most students seek tertiary education. Indians especially aspire to go abroad.

TINI SCHOOL

INPUTS

Contextual factors.

Located in affluent residential area of Suva, 5-6 miles from Central Business District. Two large peri-urban Fijian settlements nearby. Good urban infrastructure.

Management.

Basically in principal's hands. There is an administrative council consisting mainly of senior school staff. Totally funded by Church of Jesus Christ of the Latter Day Saints from both local and overseas funds. No financial help from Fiji Government.

Principal.

An American educated New Zealand Maori. Was sent to school 2-3 years ago to 'put things right.'

Teachers.

Staff of 26. About 80% church members. Not many staff changes, although some Indian teachers left after coups of 1987.

Students.

Roll of 472. (Forms 1 - 6). 80% Fijian, 10% Indian, 10% Others. Give priority to own feeder school, but take others if space. Non-selective. SES: mostly from lower SES groups, with some diversity - farmers, wage earners etc, few middle class children.

Resources and Equipment.

Fully equipped for wide range of academic, technical and vocational subjects; also for sports and music. School buildings modern, architect-designed fully carpeted. School provides all textbooks.

PROCESS

Strong emphasis on Mormon orientation of school. Explicit ethos 'character higher than intellect'. All students take compulsory religion lesson daily - 'seminary' - regarded by principal as most important lesson. Active conversion to Mormonism. (Mormon students pay lower school fees). American orientation to organization of school, although Fiji curriculum followed. A lot of emphasis on non-academic subjects, e.g. sports and music. Very modern classrooms, well-equipped, often decorated with charts etc. Despite pseudo-American style, discipline tends to be on traditional Fijian lines. Fijian language spoken widely between teachers and students.

OUTPUT

F.J.C. Means (1988)

English	-	62.1%
Mathematics	-	50.8%
Basic Science	-	56.9%
Social Science	-	60.5%
Total	-	336.3

F.J.C. Pass Rates

1983	-	47%
1984	-	47%
1985	-	69%
1986	-	54%
1987	-	82%
1988	-	64%

Fluctuating performance, above national average for first time in 1987. Academic achievement not a priority of school.

Employment Prospects.

Varies greatly. Scholarships available for capable students to attend Mormon universities in U.S.A.

TINIKADUA SCHOOL

<u>INPUTS</u>	<u>PROCESS</u>	<u>OUTPUT</u>
<u>Contextual factors.</u> In Suva suburb about 4 miles from Central Business District. Low-cost housing areas and army camp nearby, both with mainly Fijian population (Almost next-door to Ciwa School). Good urban infrastructure.	Declared ethos of school - based on combination of Christianity and traditional Fijian values. 'Fijian manners' especially respect, judged very important. Values of uniformity, obedience and cooperation stressed.	<u>F.J.C. Means (1988)</u>
<u>Management. (Grant-aided)</u> Run by committee of local people. Committee is fairly inactive and meetings held infrequently. Committee not energetic or innovative (according to principal). Has had some very bad management in the past and some bad financial problems. School was started in 1950s by a paramount chief to cater for rural/urban drift. Has been run by committees since then.	School has cadet training one afternoon a week, alternating with Fijian culture. Aggressive assertion of Fijian culture is dominant ethos of school. Classrooms in fairly poor physical condition - dirty and in ill-repair. Nothing on walls. Unstimulating environment for learning and teaching. Absenteeism is a problem. Children are often kept home by parents to do work or to do errands.	English - 56.2% Mathematics - 51.6% Basic Science- 48.7% Social Science 44.2% Total - 312.4
<u>Principal.</u> Present principal had been at school 6 months. Has had changes of principal every two or three years for some time.		<u>F.J.C. Pass Rates</u> 1983 - 48% 1984 - 39% 1985 - 83% 1986 - 71% 1987 - 64% 1988 - 62%
<u>Teachers.</u> Staff of 26. 18 Fijians and 8 Indians. Staff changes can be a problem.		Except for 1985, results have generally been well below national averages. Passes tend to be low grades.
<u>Students.</u> Roll of 453. (Forms 1 - 6). 100% Fijian. Most children from feeder school. SES: mixed, but mainly lower income - wage earners, unemployed, casual workers, army. Many children from nearby low-cost housing estates and many from single parent families.		<u>Employment Prospects.</u> Few go to tertiary education or training. Most become wage-earners in Suva.
<u>Resources and Equipment.</u> School provides most textbooks when available. Library - reasonably stocked, but no evidence of regular use. Science labs adequate but could be better. 2 computers given by govt. but nowhere to put them.		

APPENDIX SIX CORRELATIONS OF FIJI JUNIOR CERTIFICATE
EXAMINATION SUBJECTS MARKS WITH EACH OTHER (FOR FOUR
COMPULSORY SUBJECTS) FOR SCHOOLS IN FIELD STUDY.

SCHOOL: DUA

	English	Maths	Basic Science	Social Science	Total
English	1.00	.6018	.6523	.8061	.8357
Maths	.6013	1.00	.7099	.5533	.8249
B.Science	.6523	.7099	1.00	.7752	.8643
S.Science	.8061	.5533	.7752	1.00	.8254
Total	.8357	.8249	.8643	.8254	1.00

SCHOOL: RUA

	English	Maths	Basic Science	Social Science	Total
English	1.00	.6670	.7833	.8011	.8818
Maths	.6670	1.00	.7779	.6612	.8399
B.Science	.7833	.7779	1.00	.7417	.8988
S.Science	.8011	.6612	.7417	1.00	.8701
Total	.8818	.8399	.8988	.8701	1.00

SCHOOL: TOLU

	English	Maths	Basic Science	Social Science	Total
English	1.00	.6342	.6880	.8249	.8356
Maths	.6342	1.00	.7958	.7414	.8752
B.Science	.6880	.7958	1.00	.7613	.9187
S.Science	.8249	.7414	.7613	1.00	.9010
Total	.8356	.8752	.9187	.9010	1.00

SCHOOL: VA

	English	Maths	Basic Science	Social Science	Total
English	1.00	.5397	.5272	.7777	.7648
Maths	.5397	1.00	.7371	.6201	.8884
B.Science	.5272	.7371	1.00	.6130	.7842
S.Science	.7777	.6201	.6130	1.00	.7985
Total	.7648	.8884	.7842	.7985	1.00

SCHOOL: LIMA

	English	Maths	Basic Science	Social Science	Total
English	1.00	.7286	.9091	.7503	.9084
Maths	.7286	1.00	.7630	.6236	.7849
B.Science	.9091	.7630	1.00	.8837	.9745
S.Science	.7503	.6236	.8837	1.00	.9066
Total	.9084	.7849	.9745	.9066	1.00

SCHOOL: ONO

	English	Maths	Basic Science	Social Science	Total
English	1.00	.4486	.6142	.7474	.7680
Maths	.4486	1.00	.7120	.5693	.7970
B.Science	.6142	.7120	1.00	.6167	.8333
S.Science	.7474	.5693	.6167	1.00	.8230
Total	.7680	.7970	.8333	.8230	1.00

SCHOOL: VITU

	English	Maths	Basic Science	Social Science	Total
English	1.00	.5878	.6058	.8264	.8449
Maths	.5878	1.00	.5537	.7333	.6974
B.Science	.6058	.5537	1.00	.6100	.7041
S.Science	.8264	.7333	.6100	1.00	.8006
Total	.8449	.6974	.7041	.8006	1.00

SCHOOL: WALU

	English	Maths	Basic Science	Social Science	Total
English	1.00	.3628	.4632	.6791	.6720
Maths	.3628	1.00	.7876	.5821	.8137
B.Science	.4632	.7876	1.00	.7380	.9014
S.Science	.6791	.5821	.7380	1.00	.8532
Total	.6720	.8137	.9014	.8532	1.00

SCHOOL: CIWA

	English	Maths	Basic Science	Social Science	Total
English	1.00	.4546	.5474	.6180	.6990
Maths	.4546	1.00	.7246	.7274	.8677
B.Science	.5474	.7246	1.00	.7744	.8273
S.Science	.6180	.7274	.7744	1.00	.8947
Total	.6990	.8677	.8273	.8947	1.00

SCHOOL: TINI

	English	Maths	Basic Science	Social Science	Total
English	1.00	.6466	.6953	.8265	.7796
Maths	.6466	1.00	.8244	.7386	.8533
B.Science	.6953	.8244	1.00	.7453	.8284
S.Science	.8265	.7386	.7453	1.00	.8055
Total	.7796	.8533	.8284	.8055	1.00

SCHOOL: TINIKADUA

	English	Maths	Basic Science	Social Science	Total
English	1.00	.6436	.7071	.7787	.8016
Maths	.6436	.1.00	.7020	.6614	.8439
B.Science	.7071	.7020	1.00	.8182	.8656
S.Science	.7787	.6614	.8182	1.00	.8766
Total	.8016	.8439	.8656	.8766	1.00

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