

## **CHAPTER 3**

### **WHY NON-FORMAL EDUCATION IN FIJI?**

The timing of the emergence of NFE has not only been associated with 'educational' concerns but with the concern that education has not been 'instrumental' in achieving the goals of the system.

(Khawaja and Brennan, 1991:8)

#### **3.1 Introduction**

This chapter examines the emergence of NFE in Fiji, its current provision and the potential for school-based programmes. However, to provide an understanding to the establishment of various NFE programmes in Fiji requires an examination of the various learning systems and in particular the development of the formal education system, how it has acquired its high status and value in Fiji, and the inherent problems which have emerged. This chapter provides a background discussion of the pre-colonial to post-independence education and the limitations of the formal schooling system.

#### **3.2 Educational Development in Fiji**

In this section the learning systems in Fiji are examined. They include traditional, formal and non-formal education. While the focus of this study is school-based NFE it is important to examine the three systems in relation to their roles, status and relationship to each other and the communities.

### 3.2.1 Traditional Education

The statement by Khawaja and Brennan indicates a rationale for the emergence of NFE in contemporary Fiji. But according to Bock (1982: 166) broadly conceived, NFE is not a new concept but an educative phenomenon found integrally incorporated in even pre-literate societies. Increasing evidence exists to substantiate the claim that NFE is an old concept with a new name (Coombs, 1985; Coles, 1987; Baba 1992). In pre-colonial Fiji, there was a form of education called 'traditional education'. This traditional education was undertaken in the community.

Traditional education in the context of this study is for the purpose of maintaining social and cultural life in the community. But what is learned is confined within a particular cultural tradition. In Fiji traditional education was community-based and associated with the daily activities of the community. Parents and knowledgeable elders in the community shared their knowledge and skills for economic and social survival with children, to prepare them for adult life and their subsequent participation in community activities.

The skills learnt confined persons to their traditional roles, such as boys learning skills in hunting, fishing, farming and other manual tasks. Girls were expected and encouraged to learn only those activities characteristic of females. For example, the researcher learnt domestic and craft skills from her mother and female relatives when she was young. Children always followed their parents' occupations, and there was not much encouragement to learn the skills related to other occupations as it was traditionally unacceptable.

Learning was by observation, imitation or on-the-job-experience. When children reached puberty, they were exposed to organised learning. They were segregated from the community and experienced initiation rites and rituals with elders as their teachers. These activities were usually undertaken in a special building away from the village. This process enabled them to acquire the skills and knowledge for adulthood and their subsequent responsibility in the community.

Adults also continued to learn through participation and sharing in community activities and ceremonies. The teaching of traditional dance called the 'meke' by specialised teachers called 'daunivucu' was highly organised and ritualistic and a potent form of traditional education. Thus, in Fiji some forms of organised learning were practised well before the arrival of missionaries from the west (Kaye and Lewaravu, 1989; Baba, 1992).

It is important to note that in traditional education, the content, method and direction were very much controlled by tradition. What was learned, although limited and confined, was relevant to their way of life, the resources available and their ability to meet extended family and community needs. Learning was an important process as it ensured continuity and sustainability of life and because it was community-based.

In contemporary Fiji while traditional education has continued to influence the cultural and social life in the community, its value has been undermined with the advent of schooling and impact of overseas cultural ideas and practices.

### 3.2.2 Formal Schooling in Fiji

When the missionaries from the west came to Fiji about 160 years ago they did not recognise or accept the traditional education system and introduced new systems of learning in Fiji: formal education.

Formal education as used in this study refers to learning in specially built institutions called schools with trained teachers and a written curriculum. With a mission to change and convert the indigenous people to Christianity, the church and school facilitated the process of this new education.

As the main aim of the schools then was to convert people to Christianity, the curriculum was largely focussed on religion. But some schools taught other subjects like science, history, geography and practical subjects, such as carpentry and cooking (Kaye and Lewaravu, 1989).

Literacy both in indigenous language and English was seen as an important vehicle in bringing about conversion. Literature records that the high literacy rate achieved in Fiji in 1975 was the result of efforts of the missionaries and mission schools (Clammer, 1976; Sharma, 1990; Baba, 1992).

It was the intention of the missionaries that those converted would promulgate the Christian faith among their own people as teachers, pastors and social workers. Hence, for indigenous people, this was the beginning of taking up occupations outside their traditional roles. The school as an agent of change facilitated this process of acquiring the requisite skills and attitudes for these occupations and for a Christian way of living.

In the early days of Christianity, according to some oral evidence from the elders in my community the missionaries also organised other education for example skills training for males in agriculture, house building and for women discussions on home economics and elementary hygiene. The missionaries were not only concerned about conversion but also improving the living standard of the people.

Missionaries had made changes to the way of life and the system of learning in Fiji. These changes impacted on the everyday life, practices and values of the Indigenous Fijians such as the use of local dialects in literacy and improving their village health through teaching hygiene. Although there was participation by the indigenous people, the content and direction of formal and other education was controlled by missionaries. Hence, there was signalled the beginning of the community losing control of education.

### **3.2.3 Pre-Independence Schooling**

The colonial government was initially reluctant to be involved in schooling. The 1969 Fiji Education Commission Report just before independence acknowledged this by stating that: "the history of education in Fiji is largely one of private initiative and effort" (1969:6). However, the colonial government did provide funds for non-government schools and established a few schools for specific purposes.

The thirst for schooling amongst the communities in Fiji has outstripped the government's ability to satisfy it. Consequently, the various Christian missions, and more recently other religious and secular organisations, have stepped into the breach. Thus the proliferation of private schools had relieved the government of the obligation to provide

state-owned schools. However, it had caused it to evolve an elaborate system of government aid for these non-government schools. The management of all but a few primary and secondary schools remained in private hands in 1993.

Schools were seen by colonial administrators as an institution for producing a literate and numerate class of people to fill the middle managerial and professional positions in the colonial administration. The medium of instruction was English and the curriculum content was focussed on jobs. As a result the language and curriculum were generally irrelevant to the daily lives of both the Indigenous and the Indo-Fijian people (Sharma, 1990: 8). Clearly, this marked a divergence between education for occupations in the modern sector and that which was suited to traditional social role needs. This system of education, and particularly the examination system which was based on models taken from Britain and later New Zealand was used to screen a group of academically able students for higher education. However, the examination system also worked to the detriment of the majority who were labelled as 'educational failures' or 'dropouts' (Sharma, 1990: 10).

The perceived function of the school resulted in the proliferation of both primary and secondary schools. Between 1960 and 1970, primary school rolls increased from 76,000 to 121,000 while the secondary enrolments rose from 5,400 to 16,000. The reasons for the increase were twofold: the increase in the primary roll was due to population increases. The secondary enrolments were boosted by rising social aspirations and employment opportunities of students in the modern employment sector (Whitehead, 1986).

### 3.2.4 **Post-Independence Education**

When Fiji re-acquired its independence in 1970, the newly-elected government acted against the recommendation of the 1969 Fiji Education Commission to curb the expansion of schools to maintain quality. More schools were established. It should be recognised that, as a democratically elected government, the government of Fiji was accountable to its electorate. Furthermore, as a newly-independent state, Fiji needed a skilled labour force. Hence, the Minister of Education publicly stated that it was 'politically unacceptable to slow down the expansion of schools' (Whitehead, 1986). So schools continued to be established all over the country.

Since independence, each of Fiji's three national development plans has related educational growth to work-force needs. There has been a rapid growth of secondary education which has provided the recruitment pool for professional and semi-professional positions. Recruitment into such jobs is largely based on examination results. Consequently, schooling is largely academic and the curriculum is focussed on the requirements of external examinations. Preparations for examinations are the pre-occupations of both pupils and teachers (Kaye, 1980; Baba, 1980). Clearly, the 'diploma disease' and 'education inflation' persists and Indigenous and Indo-Fijian parents continue to invest in academic education in the belief that it is conducive to upward social and economic mobility (Sharma, 1990 : 5). Most schools provide few alternatives for those who will not attain the few white collar jobs available or entry to higher education.

A decade after independence, the Minister of Education claimed that the government had every reason to be proud of its educational achievements (Whitehead, 1986). Although education was not compulsory, it was recorded that, in 1987, 99.5 percent of 6 - 11 year olds were attending schools (National Economic Summit, 1991: 07). There is virtually universal access to primary and lower secondary schools education, and there is a long term commitment to provide twelve years of education for all those who seek it.

Indeed, progress and achievements have been attained, as measured quantitatively by high levels of enrolment, improved equity of access, and large number of academically qualified people. However, questions of the relevance and quality of schools for the majority of children and their parents have continuously been raised, as problems have emerged within the schooling system (Whitehead, 1986).

### **3.2.5 The Limitations of Schools**

While access to the schools has been enhanced, a number of interrelated issues of national concern for Fiji's socio-economic and political development have emerged.

The first issue is that of accessibility to certain schools. Schools have largely remained ethnic-based, and the colonial legacy of differentiation of one sort or another continues (Ali, 1978; Baba, 1979; Sharma, 1990). As a result, access to education by some ethnic groups especially the Indo- Fijians has become a source of contestation and political conflict. Boarding schools providing for the sons and daughters of local elites were similar to the British public schools; for example, Queen Victoria School founded in 1906 for the sons of Fijian chiefs. As



Kaye (1992:205) pointed out that these schools were seen as providing the academic-type education required to prepare Indigenous Fijians for middle management and senior management in the civil service. These schools have continued to recruit Indigenous Fijian children until the late 1980s, when children from other groups were first admitted. Indigenous Fijians tend to be given more educational support than are members of other groups. For example, the establishment of the Fijian Scholarship Unit within the Ministry of Fijian Affairs was not only to provide assistance to Indigenous Fijian schools but also to assist them for further academic studies (Sharma, 1990).

The second issue is that of curriculum. Although some measures have been instituted in secondary schools to provide an alternative vocationally oriented curriculum, the content remains largely academic. Students graduating from high schools are educated for white collar jobs and sometimes are reluctant to venture into other employment. As these white collar jobs predominantly exist in urban centres, urban migration of youth has resulted in overcrowding, unemployment, crime and other associated problems (Baba, 1986:187).

The third issue is that of economic waste. The schools use a lot of resources in terms of personnel, materials and finance. However, when the resources used are measured in terms of outcomes or productivity there is seen to be considerable wastage. Only a selected few of the products from the schooling system will either proceed to higher education or find employment in the limited sector of the civil service. The majority who are not skilled in any occupation will be unemployed or return to rural communities (Sharma, 1990; Kaye, 1992).

The fourth problem is that of unemployment, which is seen as arising from the inadequacy of the formal system to adequately train the students for various skills that will enable them to find employment in industry. The expansion of schooling has not always been accompanied by increased employment opportunities for those completing. Limited employment opportunities and high academic achievements have made employers highly selective. Hence, for those who have failed examinations and are 'pushouts' from the system, there is little prospect of a career in the civil service. Even in the private sector there is little prospects for school leavers as they lack the necessary skills.

In 1990 there were estimated to be approximately 19, 000 school leavers who did not re-enrol (Sharma (1990:6). Half of these returned home to local employment or were unemployed. Unemployment among youths with primary, secondary and recently tertiary education is a national concern. These groups make up 69 percent of Fiji's unemployment (Ministry of Youth, Employment Opportunities and Sports Report, 1992).

It is evident from the discussion above that problems have emerged within and as a result of the formal education system. Success in that system achieves a significant social status in the community. On the other hand, the traditional learning system, though continuing to influence the community life, has declined in importance and is not a recognised part of the formal system. But as the problems of the formal system and its outcomes become evident, the role of the traditional learning system becomes of renewed importance.

### **3.3 Non-Formal Education**

This section describes the emergence of non-formal education as an international phenomenon and its permeation to developing countries like Fiji. Its rationale, current provision and potential for school-based programme are discussed.

#### **3.3.1 Rationale for Non-Formal Education**

It was in the 1970s that disenchantment with formal schools became an international concern (Coombs, 1985). Developing nations like Fiji faced grave problems due to their irrelevant imported educational models. It was at this stage that global discussions, debate and searching for alternatives to schooling were occurring. Critics of schooling including the deschoolers like Illich (1971), argued against the monopoly held by formal education.

Amidst the criticism and search for alternatives, the Faure Commission Report of UNESCO (1972) stressed the importance of viewing education broadly (as learning) and of strengthening less formal modes of education. Thus, non-formal education, an old concept bearing a new name, received vigorous support. The international interest in non-formal education was prompted by the move to have an integrated community-based approach to rural development and to meeting the basic needs of the poor. Coombs and Ahmed (1976) emphasised the potential for NFE in meeting the needs of the poor through the provision of necessary skills.

The upsurge in interest in NFE occurring internationally, eventually permeated to Fiji in the late 1970s (Kaye and Lewaravu, 1987). There were two roles identified at that time for NFE in Fiji . First, it was perceived to respond to the problems with schooling and second were the concerns about the workforce for economic development. But the primary focus was the needs of school dropouts who were spilling out from the formal education system with inadequate skills for employment. In addition to the needs of school dropouts, the technological and rapid social change demand training and re-training in different knowledge and skills for those in modern employment as well as in the rural community. It was in the late 1980s and early 1990s that the realisation emerged that the economy would not be able to absorb everyone into the workforce. It was perceived that through non-formal education programmes and training people would develop self-employable skills to generate their own livelihood(Kaye, 1992). There was recognition that while educational resources have been concentrated on children, the demand for access to new skills and knowledge for those who are no longer at school has become more pronounced. NFE appears to offer greater potential as it would bring out the self-reliance and resourcefulness of the islanders (Baba, 1986:189).

The two perceived roles of NFE have continued to be supported in programmes offered by government and non-government agencies.

### 3.4 Non-Formal Education Provision in Fiji

This section examines the current NFE provision offered in Fiji by different agencies to determine some of the gaps and emerging needs.

#### 3.4.1 Definition of NFE

In Fiji, the term 'non-formal education' is used synonymously with the terms 'adult education' and 'community education'. According to Coombs (1985:23) and Brenadino and Ramos (1983:24) the term non-formal education means any systematically, organised educational activity carried on outside the framework of the formal system to provide selected types of learning to particular subgroups in the population, adults as well as children. In the context of this study non-formal education as used in Fiji is any organised educational activity which encourages and supports the participation and involvement of individuals and their community in identifying individual and community educational needs and then planning and implementing appropriate actions to solve them through community actions and co-operation. In this process the mobilisation of local resources and the co-operation of all concerned are considered important (Baba, 1993).

#### *Programme and Providers*

While there had been in the colonial and early independence periods strong emphasis on the formal education systems and schools there had been existing two streams of what could be termed NFE. These included traditional education and non-formal programmes offered by government and non-government agencies. In practice a number of non-formal education activities and agencies are offered by a diversity

of agencies: including a wide range of government, non-government and regional agencies. Government ministries and departments involved include Health, Agriculture, Fisheries, Forests, Co-operatives, Youth and Rural Development. Non-government organisations such as the churches are also involved. These agencies have diverse aims and objectives and target participants. Some communities also set up their own programmes for out-of-school youth.

Various government departments - as development agents seeking to assist the people address their individual and community needs - offer a wide range of non-formal education activities which are usually central in government goals and objectives. These latter may involve creating awareness on certain social issues or teaching practical skills to youth, women or members of the community in such areas as health, nutrition, improved farming methods, small business skills, craft skills, co-operative management and leadership.

Responsible government officials usually identify the target groups and, to a large extent, instigate the programmes. If individuals or community groups seek financial support for their programmes, the latter must comply with government policy. Unfortunately many programmes exist for the purpose of securing funds from the government or aid donors. When the money is utilised, the projects decline only to be revamped when more funds are injected. Moreover, when programmes are initiated by representatives of agencies without the full involvement of the community in planning, the community does not claim ownership to the programmes. For example in 1989 a government project was initiated by a government ministry in a rural community on Viti Levu. The author visited the community in September 1992. The project, which had declined was perceived by the community members

as belonging to that particular ministry which had initiated it, but failing to fully involve the community.

Non-government organisations(NGOs) such as the church missions, the YM and YWCA, the National Council of Women, Fiji Council of Social Services and the Fiji Association of Non-formal Educators also provide a wide range of non-formal educational activities such as projects for women, projects for out-of-school youth and community development.

The approach of non-government organisations to non-formal education is characterised by flexibility and expediency in relation to community needs. Such organisations are not as rigidly structured as are government agencies. However, their enthusiastic efforts are often hampered by lack of personnel and financial resources. To a large extent, most rely on government or outside agencies for financial support.

Regional organisations, such as the Asian-South Pacific Bureau of Adult Education and the University of the South Pacific, as well as international agencies such as the United Nations Development Programme and the International Labour Organisation, facilitate as well as offer funds for non-formal education programmes. These agencies support various developments in Fiji both in urban and rural communities. Some of the agencies have offices or representatives based in Suva.

The approach used by these agencies is different. While some may work in collaboration with government departments others directly with the community. For example the Asian-South Pacific Bureau of Adult

Education in co-operation with its representative in Fiji and the Fiji Association of Non-Formal Educators works directly with community groups in facilitating workshops or assists in other NFE activities identified by the community.

Generally there is relative independence of each agency in its operation because of lack of definite policy. As a result there is lack of co-ordination which results in most agencies operating in isolation. This has also created overlapping of programmes and duplication. Structures to perform co-ordination do not exist in the community. The need for co-ordination at the community level as well as the national level has received both support and scepticism from NFE educators. The autonomy that most agencies have, particularly the NGOs, has allowed them free-decision making on choice of learning materials, choice of external resources and choice of target groups. However, recent efforts by government and non-government organisations to establish co-ordinating bodies are indicative of the importance and need for such structures.

### **3.5 Describing NFE in Fiji**

This section describes the NFE Programmes in Fiji in terms of location with the aim of isolating the school as a base for NFE.

The diversity of NFE programmes in Fiji may be better understood when it is classified or categorised. Classifications of NFE programmes could be based on features such as the nature of provider or the locations of the programmes. Fijian NFE programmes have been categorised by Kaye and Lewaravu (1988:92) into four programme



locations. They are institution-based NFE, centre-based NFE, village or community-based NFE and school-based NFE. That categorisation is used in this study, to isolate the school as a base for NFE.

### **3.5.1 Institution-based non-formal education**

The first location is institution-based NFE. 'Institution' as used in this study refers to a building or buildings specifically built for educational purposes. Institution-based NFE is quite prevalent in Fiji and other Pacific nations, and is mainly offered by churches, but with substantial government support. In this classification the NFE programme is provided for full-time participants for a period between about three months and three years. The programmes are undertaken in the institution designed and built for the purpose. These institutions are residential and those who conduct the programme reside in the institution while the participants are drawn from communities in the many islands of the country. The content of programmes is determined by the officials of the concerned institution, whether it is income generation, agriculture, health, nutrition or rural development.

These programmes are targetted mainly for out-of school-youth. The three-year course at Montford Boys Town (Fig. 3.1) is an example. However, other providers like the Marist Training Centre in Tutu, also offer short programmes for adults, for example the three-month "Married Couples Course".



**THESE** boys from the Monfort Boys Town take a break from their classes and relax on the stairs leading to their quarters. The boys town is among a few institutions in the country that help develop the potential in our youth. From a humble beginning the boys town now has diversified into a host of economical ventures including fish, chicken and pig farming.

**Figure 3.1 : 'Institution-based NFE'- is residential and offers skill training programmes for out-of school-youth. May also offer short courses for adults.**

Such programmes may have limited value, as they remove the participants from their communities for long periods, and weaken their links with their rural environment (Kaye and Lewaravu, 1988). In some

cases participants do not identify with the programmes and may not be relevant to their learning needs because they are developed by people within the institution. In addition, the programmes tend to create an aspiration for waged employment, so that many are reluctant to return to their village (Kaye and Lewaravu, 1988).

An important consideration in institution based non-formal education is the support of parents and community when participants return home. Organised courses for parents or guardians of participants to discuss relationships and support in implementation of learnt knowledge and skills would ensure continued support. Such programmes have been successfully implemented at the Marist Training Centre, Tutu, in Fiji and Saint Martins in the Solomon Islands. The support of community extension workers of other agencies in follow up visits and in collaboration with the institution is also vital in this category.

### **3.5.2 Centre-based non-formal education**

The second category is centre-based non-formal education. According to Kaye and Lewaravu (1988) centre-based programmes are offered for part-time or full-time participants in a centre which is designed and built for the purpose or in other specialised centres, such as agricultural stations, where staff from the centre are used as resources. Such centres also offer a full-time courses but are often reduced to a shorter period. To attend the programme the participants have to travel away from their home.

A characteristic of centre-based non-formal education is the integration of practical experience into the programme, whereby participants spend some time implementing the skills they are learning in the

nearby communities. For example, at the Nacocolevu Agricultural station at Nadroga, whenever any agricultural skill training is undertaken the participants undertake practical experiences at the nearby farms.

Two specifically built national rural adult training centres are located in the two main islands of Fiji. The Adult Training Centre of Navuso on Viti Levu and Nasoso Adult Training Centre on Vanua Levu offer training facilities for government and non-government organisations which facilitate the courses. The centres are co-ordinated by the Methodist Church but subsidised by the government. These facilities are available to government, non-government and regional agencies which seek to conduct their training in the rural areas. The Fiji Association of Non-Formal Educators conducted its one week national workshop for its members in 1989 at the Adult Training Centre at Navuso. Other agencies have conducted various training programmes for different target groups at the two centres.

There are other centres which offer centre-based skills training programmes for youth, as well as training facilities for use by other agencies for short term courses for adults. An example of this approach is the Centre for Appropriate Technology at Nadave in Viti Levu (Figure 3.2). Centre-based NFE programmes, like institution-based programmes, have good facilities and equipment. The programmes are determined by facilitators of the agency organising the programmes. As pointed by Kaye and Lewaravu (1987), such programmes sometimes suffer from lack of relevancy in relation to needs of the participants. Financial and personnel problems of the executing agency and irregular or no support and follow up programmes for participants are also common in this approach. For example, a skill training programme in the making of smokeless stoves for rural communities was undertaken at one of the



centres. When participants returned to their communities they did not have any follow-up support from the centre staff to assist them implement their new knowledge and skills.



### **Centre for Appropriate Technology Nadave, Viti Levu**

**Figure 3.2 : Centre-based NFE offers short courses as well as full-time courses for both youth and adults. Mainly non-residential.**

#### **3.5.3 Village or community based non-formal education programmes.**

The third category is that of village or community-based NFE programmes. According to Kaye and Lewaravu (1988) the emphasis in recent years in Fiji has been to locate NFE programmes in the village or

community. Some communities have community centres which are increasingly being used as non-formal education centres. In this approach personnel from the various agencies travel to the village and community with their necessary material and equipment to facilitate programmes. An example is NFE programme for women facilitated in the community where the community hall is used (Figure 3.3). While this approach is convenient for the participants, as training and programmes are usually related to local needs and environment, the learning situation may be more interrupted, and attendances disrupted by family and community commitments. Visits by agencies are often irregular and unco-ordinated, resulting in duplication of efforts and overlapping of programmes. Lack of personnel, financial resources and follow-up are restraints to the executing agencies.



**Figure 3.3 : Village or Community-based NFE. Village hall is used for the women's health education course.**



### 3.5.4 School-Based Non-Formal Education

The fourth approach is that of school-based non-formal education programme. In Kaye and Lewaravus' (1988) categorisation, school-based NFE is a variant of other categories. When the school provides vocational programmes for full-time students, it is formal education in which the curriculum is practical and vocational. This is institution-based. But when a school which usually provides a general academic curriculum for children has an additional use either in the evening, or a parallel activity for short term courses or programmes for NFE programmes either for children or the community, it is school-based NFE.

To use the school as a base for non-formal education is a recent approach. But the use of the school as an agent of change started with the missionaries. They used it to promulgate their faith to the indigenous people. The British colonialists also utilised schools for the production of middle level management officials. Since independence various governments have perceived the school as an institution for educating students and screening them for the civil service.

NFE in primary schools - the concern of this study - includes programmes for children, youth or community either during or outside school hours. It is distinguished from NFE programmes in secondary schools: called "multicraft" which are offered as alternative programmes for school dropouts. Although NFE in secondary schools is not the concern of this study, it is discussed briefly to highlight how the formal education system has been responding to the changing educational needs in Fiji society.

(a) *Secondary-School-Based NFE*

In 1974, in response to the problem of school dropouts and unemployment, attempts were made in the formal system by the Ministry of Education to integrate both academic and vocationally oriented courses in a single school. This move was undertaken in secondary schools with the purpose of re-directing education to vocationally oriented curriculum. These programmes, called "multicraft", were a form of NFE, as they were organised and targeted to a particular group for the purpose of their acquiring self-employable skills. The rationale behind the multicraft programmes was seen as providing training for early school leavers so that they could generate self-employment opportunities in their home areas (Sharma, 1995 : 88). The multi-craft programmes were established in secondary schools, and they included courses in agriculture, building craft, light engineering for boys and home crafts for girls. The selection of programmes depended on the location of the school, the resources available and the needs of the students. For example, a school on the island of Moala would offer a programme in agriculture, light engineering for boys and home craft for girls.

The provision of NFE in secondary school may not have solved the problem of unemployment, but they offer some alternative programmes to parents and pupils. However, as substantiated by Sharma (1986), NFE in secondary schools was considered inferior or second class to the prestigious formal education. NFE programmes were mainly vocational courses and perceived by parents and students as relevant only to those branded as 'failures'. Undertaking NFE programmes did not lead to employment opportunities in the civil service.



While certainly there was a dilemma and conflict of perception by the parents, students and government, the fact of unemployment and the limitations of employment opportunities has increasingly become a reality in the 1990s. There was also the recognition by the Ministry of Education that parents needed to be educated to be aware of the socio-economic changes affecting the country and the affects of the change on the education system. Community members needed to gain new knowledge and skills to better respond to current changes.

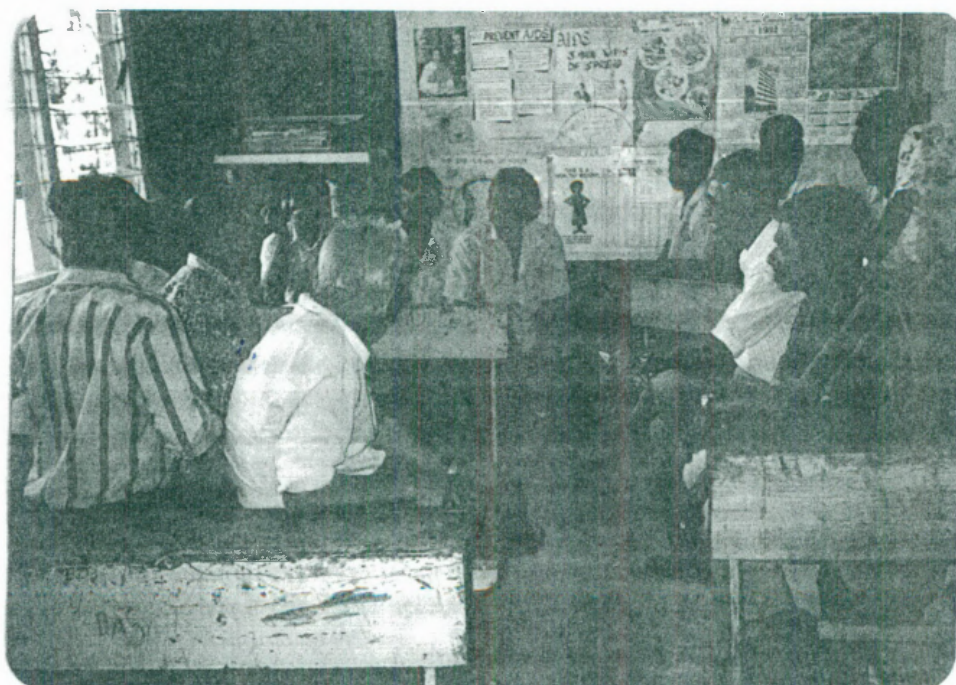
(b) *Primary-School-Based NFE*

The problems of unemployment and the need to educate the parents and the village community members in understanding the changes occurring in society has prompted some primary school headteachers to use the primary school for non-formal education. Apart from offering the academic curriculum to school children, non-formal education was also offered to youth, adults and in some schools to children in school. For example, Naitasiri Bhartiya Primary School (Figure 3.4) offers NFE programmes for community members at the school for about two hours once a week. Subjects covered in the programmes include health, nutrition, parents' education and home management. Specific skills taught for the women are sewing, cooking, craft and communication. Men learn some skills in carpentry and agriculture.

NFE programmes offered in primary schools range from providing basic skills for students in income-generation to educating parents and community members to understanding the limitations of formal education. They give consideration for the value of both academic and non-formal education (Ministry of Education, 1985 :25).

However, as substantiated in the Ministry of Education annual report (1985), in some primary schools, NFE programmes had started dramatically, but subsequently declined. The headteachers had initiated programmes out of their own interest. The programmes were ad hoc and short term. Although the headteachers were interested and keen, they lacked training and adequate understanding of the NFE concept and the long term organisation of NFE programmes.

The few reports available on primary-school-based NFE programmes are brief, descriptive and lack detailed analysis. To date primary school-based NFE has not been adequately conceptualised nor empirically validated.



#### **Adult Male Discussion Group in School-based Programme**

**Figure 3.4 : 'School-based NFE'. Primary school is used in the evening for NFE programmes. A group of fathers discussing parental role in the homes.**

Locality is an important consideration in NFE. In Fiji the primary school is located near or in a village. If it serves several villages, it is usually situated in a central location with easy access by community members. A primary school is also smaller in its establishment and its facilities are not as sophisticated as many secondary schools. This tends to provide less threatening learning environment for community members who are often intimidated by big buildings and modern technology. In the Fijian context, a primary school is considered to 'belong to the community' and it is managed by a local committee elected by the community members.

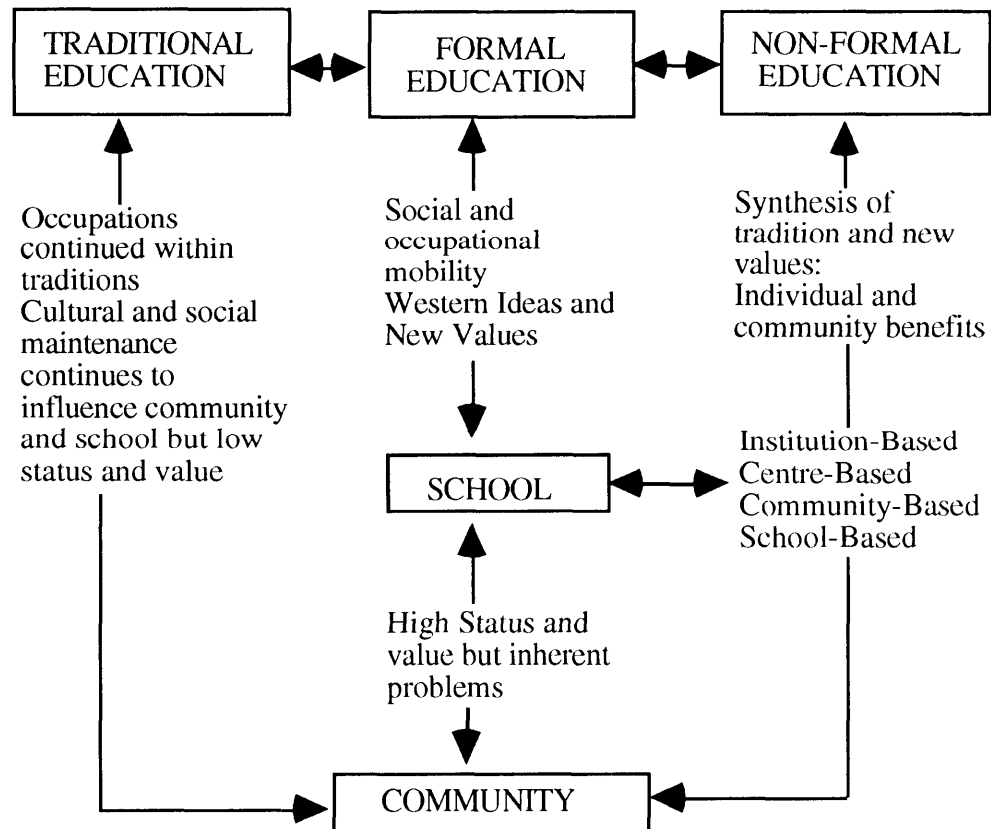
In this respect, the primary school as an institution for learning has a social and moral obligation to provide learning opportunities which are relevant not only for children but adults as well. Furthermore, it has the responsibility and capacity to make changes to accommodate the diverse and changing learning needs of both the children and adults in the community.

### **3.6 Summary**

This chapter has examined the emergence of NFE in Fiji in the context of the various learning systems. The three learning systems in Fiji (Figure 3.5) illustrates the links among them and their roles and emphasis.

Traditional education, which had been undertaken in pre-colonial Fiji for the purpose of preserving social and cultural life, was a form of NFE. But it declined in importance with the institutionalisation of formal education by the missionaries. While it continues to influence the life of the community, it is not a recognised part of the formal system.

Formal education with its emphasis on children and its focus on western ideas and new values has gained a high status in the community. While it may offer social and occupational mobility, inherent problems within the system became evident during post-independence.



**Figure 3.5 : Learning Systems in Fiji**

**Note:** The arrows indicate the connections among the learning systems and their roles and emphases.

The emergence of NFE in Fiji was in response to the problems created within the formal system and the concerns primarily for the school dropouts and also for the training and re-training in different skills - not only for those in the workforce but also for those in rural communities. Various NFE programmes have been established, some

were short term and others long standing. They were classified according to the location of their programmes. The categorisation was used to isolate the school as a base for NFE.

NFE has been evident in Fiji but generally it is not well understood as a concept and not well co-ordinated. If it is to be understood it requires a structure which is flexible and responsive to the social and cultural needs of the individuals and community. It seems to have potential in terms of individual, community and national needs but it needs to be sensitive to the existing cultural groups' values and way of life. NFE has multi-purposes and it has potential for changes or conservation of socio-economic and cultural values.

# **CHAPTER 4**

## **METHODOLOGY**

### **4.1 Introduction**

The research approach taken in the study may be seen as the research methodology and the specific methods which were used for collecting and analysing data. For the purpose of this study a distinction was made between 'method' and 'methodology' which are often used interchangeably in the literature. Blaikie (1990:7) refers to 'methods of research' as the actual techniques or procedures used to gather and analyse data related to some research questions or hypothesis. 'Methodology', on the other hand, is the analysis of how research should or does proceed.

This chapter, then, outlines and discusses the two major research approaches of the study and the sequence of steps taken.

### **4.2 The Two Major Research Approaches of the Study**

This section examines the research approaches selected for the study and justifies the choices.

#### **4.2.1 The Qualitative Approach**

The rationale for the choice of the qualitative approach to gathering data was based on the research framework and was influenced by Burgess's (1984) view that events must be studied in natural settings.

The research is field based and events cannot be understood unless one understands how they are perceived and interpreted by the people who participated in them.

The qualitative approach emphasises the cultural context, setting and the subjects' frame of reference as important. Cultural norms and values are here recognised as crucial for understanding change and effectiveness (Marshall and Rossman, 1989). This view supports the assumption that the study of school-based NFE programmes must recognise the cultural implications of the perceptions, experiences and values of the participants. Features of the programmes are seen not only influencing the cultural process, but also as being influenced by cultural values. One cannot understand human behaviour without understanding the framework within which the people interpret their thoughts, feelings, and actions (Marshall and Rossman p.49). This is an important assertion to support the choice of qualitative research for the present study. In supporting a qualitative approach to research Wilson (cited in Marshall and Rossman, 1989 p.48) states that the "objective" scientist, by coding and standardising, may destroy valuable data while imposing her world view on the subjects.

As this research was undertaken in a particular cultural context, careful consideration has been given by the researcher to structuring information that is sensitive to the variable cultural context within Fiji, as noted in Chapter 2. Given the variety of backgrounds of the people who are involved in primary-school-based NFE in this study, this was considered a crucial methodological reason for the choice of the qualitative approach.

A qualitative approach requires a thorough knowledge, understanding and sensitivity to the values and norms of the cultural context of the study. Therefore, in the gathering, selection and presentation of data (design of questions, planning of interviews and selection of records to be analysed), attempts were made to reflect the language, likely experiences, role and level of involvement of the individuals or the group from which they emanate. In practical terms this meant that the design of questions and interviews had to take into account the backgrounds, prior knowledge, language and the means of collecting information that were culturally acceptable to all those concerned.

In the methodological literature it is emphasised that all methods associated with qualitative research are characterised by their flexibility (Burgess, 1984; Lincoln and Guba, 1985; Marshall and Rossman, 1989; Dane, 1990). As a consequence of accepting that feature of qualitative research, the researcher allowed flexibility in the research design and also throughout the collection of the data. An example of the need for flexibility relates to the timing of the research. In the cultural context of this study, rigid timing structures cannot be imposed on the way of life of the people, as their planning and organisation of life in the community occurs according to their own customs and routines. The people have their own concept of time, and if not recognised, it can cause frustration to a researcher whose procedure is rigidly structured. Therefore, it is important that the research procedure has flexibility to accommodate unforeseen circumstances which may arise. For example, in this study, two community workshops had to be re-scheduled because of bad weather and bereavement.

The qualitative approach recognises the importance of personal observations. It was recognised that the researcher had to keep her eyes



'open' for any activities, behaviour or non-verbal communication observed in each site which may provide added dimension of data. In this study data gathered from observations was recorded in the field notes by the researcher and was analysed with the data collected from the semi-structured interviews and workshops.

In the qualitative approach the use of a tape recorder to record the views of interviewees is well documented. Kitwood (cited in Cohen and Manion, 1992, p. 248) gathered and analysed data based upon tape recorded interviews. According to Cohen and Manion (1992) the successful handling of the individual responses from interviews through the tape recorder should enable the researcher to work towards the gradual emergence of tentative interpretive schemata which he or she then modifies, confirms or falsifies as the research continues.

Another advantage of using a tape recorder is that data which may have been omitted in the field notes during the interviews are recorded in the tape. This ensured that useful and available data is recorded. In this study a tape recorder was used to record responses from the interviewees and workshop participants. However, it is important to note that recording of responses on tape was to be made only on the agreement of the interviewees. In this study, all those interviewed and also the workshop reporters consented to have their views recorded.

The disadvantage of using a tape recorder for the research is that it involves a lot of work and energy transcribing tapes and making a summary of the raw data. After recording interviews, immediate transcribing is required so that any emerging issues or data omitted may be followed up immediately. In this study because of the amount of work

that had to be undertaken, a research assistant was hired to transcribe the tapes.

The qualitative approach used here required a number of cautions on the part of the researcher. She had to guard against imposing her views on the data. There was also a potential problem in the field research that because the researcher had been a government officer, the government officials and village community members may have perceived the research as some sort of assessment of their activities. The researcher had also to be particularly aware of her previous involvement in the school-based programme and her professional role in the organisation ( she worked in the Ministry of Education and Ministry of Youth, Employment Opportunities and Sports prior her present post). Her prior knowledge and experience of the culture could have lead to bias as well as subjectivity in data collection and analysis.

To guard against these limitations, the following actions were take:

- (a) the research supervisors thoroughly scrutinised and indicated changes to the questions for interviews;
- (b) the traditional protocols in both cultures were followed closely so that the purpose of the research was understood in cultural terms;
- (c) schools for the study were chosen as those with which the author had not had contact in terms of her previous role as teacher and adult education adviser;
- (d) the views of those interviewed were collected and presented fully and objectively; and
- (e) the data were validated by the key persons involved in their generation.

#### 4.2.2 The Case Study Approach

The case study approach was chosen for the study. A 'technical' definition of case study given by Yin (1989):

A case study is an empirical inquiry that :

- investigates a contemporary phenomenon within its real-life context; when
- the boundaries between phenomenon and context are not clearly evident; and in which
- multiple sources of evidence are used. (p. 23)

The definition illuminates the use of a case study as a method to investigate a contemporary phenomenon in its real-life situation. In this study the use of case studies was appropriate because it enabled an investigation of how NFE is defined and operationalised in different cultural contexts. Several sources of evidence were used including document searches, interviews and community workshops.

The approach followed a sequence of three stages. The first stage was that of determining the present complexion of the entity being studied. The purpose of this step was to seek information; that is, prior information which may be derived from documentary evidence, literature, or from consultations with and interviews of those who have been involved with the entity (Ikin, 1989). In this study consultations with government officers concerned with NFE as well as gathering documentary and literature evidence was done to seek background information.

The next stage in the case study method was the gathering of information about the research problem and associated questions. This information was obtained from several sources, which included specific interviews, community workshops and documents. The case studies, to a large extent, relied on the impressions participants gained of the school-based NFE and their recall of the activities of the individuals or groups concerned in the study gained by interviews, workshops and documentary analyses.

As a result, conclusions may be drawn in the third and final stage by the researcher as to the nature, activities and performance of the entity and recommendations proposed regarding the future performances of the entity. Generalisations may also apply to similar organisations to those which have been under study.

### *Advantages and Disadvantages of Case Study Approach*

The main advantage of a case study is that it allows an intensive examination of an organisation and the interaction of the individuals within it. A case study enables a more interpretive analysis of organisational phenomena (Diesing, 1972). A case study provides concrete observation, potentially unhampered by theories or pre-determined conclusions (Stern 1979). Hence, the approach selected is paradigmatically interpretative in nature (Morgan, 1980), and provides a method of inductively developing ideas from grounded data (Strauss and Corbin, 1990) about an organisational phenomenon.

In relation to this study each case was examined separately and the data gathered was analysed in relation to the key features of the ideal model of NFE and its assumptions. The discrepancies provided the basis for interpretation of the NFE school-based concept.

Conversely, the case study may be subject to a considerable degree of bias, since the entity under study is one to which the researcher or researched may have obligations, responsibilities and attachments. Unless the danger of such bias is recognised, and allowances made, the case study may give rise to conclusions preconceived or intended by the researcher or researched. What is often overlooked is that bias can also enter into the conduct of experiments (Rosenthal, 1976) and in using other research strategies, such as designing questionnaires for surveys (Sudman and Bradburn, 1982), or in conducting historical research (Gottschalk, 1969). Accepting that the potential for bias needs to be recognised and steps taken to reduce its possible impact, triangulation was used. The use of triangulation is discussed below.

Another concern for those using case studies is that they provide little basis for scientific generalisation. The concern is about generalising from a single case study. The same can be said of a single experiment. However, in scientific research, scientific facts are rarely based on a single experiment; they are usually based on a multiple set of experiments, which have replicated the same phenomenon under different conditions. In this study several cases were examined and from these generalisations have been made.

Perceptions and memories can be unreliable and personal prejudices can affect a participant's interpretation of events. As in the context of this study where consensus is valued, the perceptions and views

of the individuals can be influenced by the group. Thus, much of the researcher's interpretations of data may be undermined by unreliable and subjective hindsight. In order to minimise the incidence of unreliable data triangulation was used.

#### 4.2.3 **Triangulation**

There is no single data collection method that can adequately cover all of the influences which interact within an entity. The adoption of a single method may distort the analysis. Data from different sources can be used to corroborate, elaborate or illuminate the research in question (Rossman and Wilson, 1985). This process is known as 'triangulation'. Triangulation is the act of bringing more than one source of data to bear on a single point (Marshall and Rossman, 1989). Triangulation in Robson's (1993 p.404) view is the use of evidence from different sources, of different methods of collecting data and of different investigators.

Derived from the navigation science, the concept has been fruitfully applied to social science inquiry (Denzin, 1978; Rossman and Wilson, 1985). The problems of bias, distortion and invalidity exist in any research and are especially prevalent in research which uses a single method of enquiry or single source of data. As the use of case study method in this research allowed for an in depth examination of the activities of several primary-school-based NFE programmes, it was felt that bias and distortion would be inherent but manageable.

The researcher was the only investigator and only some methods of collecting data were used. Data gathering procedures consisted of field research and key persons. The field research involved interviews, workshops and document searches. The key persons were academics and

those who had experience and had knowledge of non-formal education; they are not necessarily connected with the school-based NFE.

Triangulation in this study involved these processes. Those participants who were privately interviewed included the government officials, headteachers and assistant headteachers. Their interpretations of the questions raised were matched against official records as revealed by document searches. The views of the headteachers and assistant headteachers were matched against the collective views of the groups involved - the teachers, community members and government officials: those who were interviewed. The community views which were solicited from the community workshops were validated against the views of the government officials, assistant headteachers and teachers. Furthermore, the perceptions and interpretations of the government officials, head teachers, assistant headteachers and community members was validated against the perceptions and interpretations of the key persons. It was anticipated that the private views of some participants would vary from those expressed within the community as a group and by the teachers. In this way it was expected to minimise bias and distortion and to increase the validity of the findings.

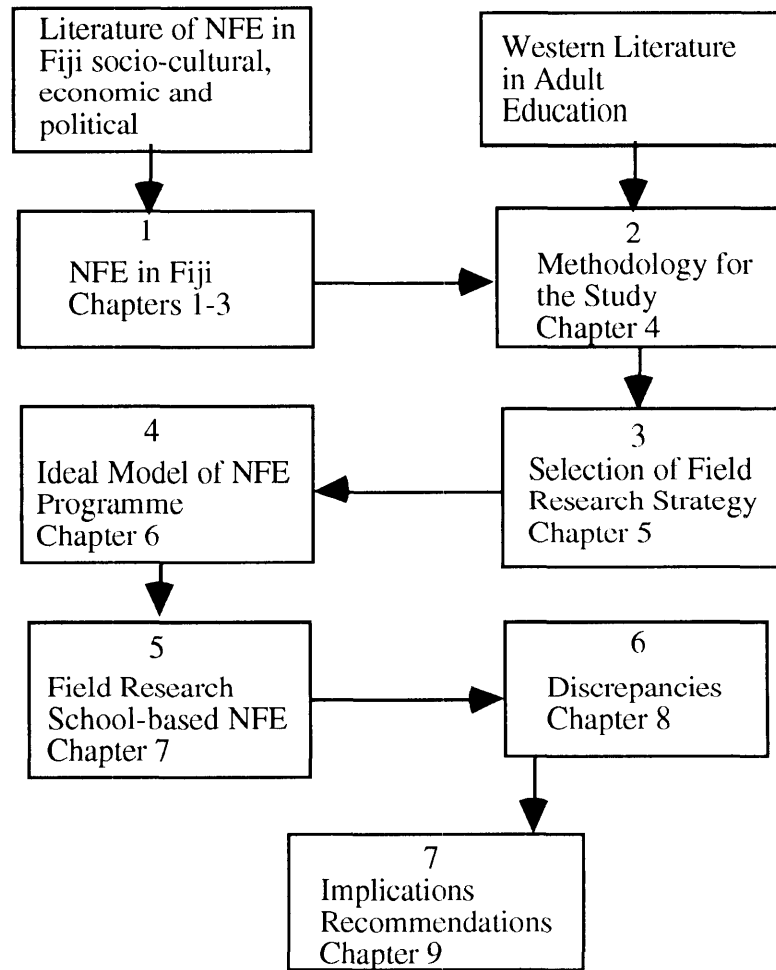
### **4.3 The Steps in Research Methodology**

The general strategies of qualitative research, the case study method and the triangulation of data informed the steps of the research methodology. This section examines the steps undertaken in the study.

The methodology applied in this study comprised six major steps as follows (Figure 4: 1) :

- (1) the examination of the NFE concept in Fiji within its geographical, socio-economic, cultural and political context and its relationship with other learning systems (Chapters 1 - 3);
- (2) the selection of the methodology of the study (Chapter 4);
- (3) the development of field research strategies (Chapter 5);
- (4) the formulation of the NFE ideal model with a number of key features and a series of eight assumptions. The model, key features and assumptions are based on western adult education literature and are designed to provide the basis for examining the case studies (Chapter 6);
- (5) the investigation of 5 examples of school-based NFE (Chapter 7);
- (6) the identification of discrepancies between the assumptions in the ideal model and practice as indicated in the 5 case studies (Chapter 8); and
- (7) the interpretation of the policy and programming discrepancies and the implications and recommendations for a primary-school-based NFE programme in Fiji (Chapter 9).





**Figure 4.1 : Steps in the Research Methodology Used in the Study and their reporting in the thesis.**

**Note :** The numbers indicate the sequence of steps followed. The arrows show the information flow. The chapter are those of the present thesis.

The first three of these steps (1-3) comprised the preliminary research design phase of the study. The fourth (4) is the formulation of the NFE ideal model with a number of key features and a series of assumptions. Step five (5) is data collection and analysis. The last two steps (6 & 7) are the interpretation of data and the findings in relation to

the purpose of the research. The sequence of the steps of the research are as follows:

#### **4.3.1 The examination of NFE concept in Fiji**

The purpose of this study was to determine the potential of primary-school-based NFE in Fiji in terms of developing a relevant concept of NFE, suggesting a possible structure of provision, exploring curriculum content and delivery strategies and examining relevant resources. To fulfil this purpose, first, Fiji's physical, socio-economic, cultural and political background was examined to provide the context of the study. The geography of Fiji, culture(s), industry and education systems were examined to determine how NFE has played and will play a role but that it will be influenced in the future as it has in the past by these other factors or features of the context.

#### **4.3.2 Selection of Research Methodology for the Study**

The selection of a methodology suitable to the cultural setting of the study was considered important. The researcher was influenced by the views of several authoritative sources (Dane, 1990; Marshall and Rossman, 1989; Burgess, 1984) who argued that events must be studied in natural settings. The above sources further contended that events cannot be understood unless one understands how they are perceived and interpreted by the people who participated in them. The qualitative approach was selected as appropriate to the cultural context, using the case study strategy.

### **4.3.3 Selection of Field Research Approach and Strategy**

The field research methods or techniques used were determined from the approaches noted in the methodology and were selected because of their appropriateness to the focus and the context of the study. Document analysis, interviews and workshops were used as methods to gather data. The purpose of the field research was to ascertain the people's perceptions, experiences and values in relation to the concept as well as the practice of primary-school-based NFE programme. The interviews and workshops enabled an understanding of the way people's views and perceptions are influenced by their cultural context. The techniques used were relevant to the two major cultural groups in Fiji, the Indigenous Fijians and the Indo-Fijians. They were sensitive and flexible in responding to cultural differences and contexts of these groups.

### **4.3.4 The formulation of an ideal model of Non-Formal Education**

As this was the first study that attempted to identify the potential of primary school-based NFE in Fiji, the decision was made to develop from the international literature on adult education an ideal model of NFE to provide a means of assessing current practice. The word 'ideal' refers in the study to a conception of a preferred state of affairs. As a model, the construct developed for the research was not developed to represent practice as it is found but as a means of analysing NFE practice. The ideal was seen as existing only in abstract. Its feasibility was seen as being determined when the ideal is judged against practice.

As has been argued here in Chapters One to Three, the stop-start, ad hoc and unco-ordinated nature of NFE and primary-school-based NFE in Fiji, did not permit the development of a concept of NFE from past or current practice or government documents.

Although the NFE concept has been shown to be nation-and culture-specific, it has also been established as an international phenomenon (Khawaja and Brennan, 1990:5). As a result, a generic concept of NFE was formulated as the first part of the ideal model. The other key features of the ideal model were formulated from models of programme planning. The key features were used for the assessment of field practice through the process of match/mismatch analysis. The identified discrepancies between the ideal and practice were the basis for interpretation and formulation for the development of primary-school-based NFE in Fiji.

Because of the function of the ideal model for the research in Fiji, the model was constructed to contain the key features of NFE in general. These key features were of two types. The first key feature is related to the conceptualisation of NFE while the remaining seven are concerned with programme planning at various levels of organisation. These eight key elements are identified by the following terms: conception; decision making; participants; educational need; content; instructional method; organisation and resources. They were the basis on which the assumptions of the ideal model were formulated. The assumptions were used to structure the analysis of the data from the case studies.

#### **4.3.5 Investigation of School-based programme**

Investigation of the practice of primary-school-based NFE in Fiji involved examining documents associated with specific primary-school-based programmes and collecting information from the five cases. The document search was to ascertain the policy framework for primary-school-based NFE and reports on NFE activities in schools. In the case studies, the perceptions and views of government officials, headteachers, assistant headteachers, community members and informed key persons were solicited.

The investigation of primary-school-based NFE involved an introductory consultation with the various groups concerned so that co-operation in relation to timing and co-ordination of field research was solicited.

The timing and co-ordination of the field research was determined in consultation with various people, including the government officials based in the headquarters of the various departments, the divisional education officers, the headteachers of the selected schools and the community leaders and members themselves.

#### **4.3.6 Identification of Discrepancies**

The data from documents associated with primary-school-based NFE, and the perceptions of government officials, the headteachers, the assistant headteachers and community members were validated against the perceptions of the key persons. They were then analysed in relation to the assumptions of the ideal, to determine any discrepancies. The identified discrepancies between the ideal and the actual programmes

were then analysed. In that analysis explanation of the identified discrepancies were sought through:

- (a) any incongruence between the ideal concept of NFE and the current concept as perceived by the government officials, headteachers, assistant headteachers and community members;
- (b) any inconsistencies between the planning process in use and the ideal process of planning;
- (c) any differences between the selection of participants and the ideal selection;
- (d) any inadequacies in terms of the formulation of curriculum content between the actual and the ideal;
- (e) any limitations in the instructional methods used, compared with those identified in the ideal;
- (f) any inadequacies in the management and organisation of the current programme compared to the ideal structure; and
- (g) any constraints in the resources used relative to the ideal resourcing of the programmes.

#### **4.3.7 Formulation of Key Findings, Implications and Recommendation**

From the discrepancies, implications for primary-school-based NFE were discussed. Recommendations for the organisation at various levels of policy-making and programming of primary-school-based NFE were drawn together.

## **CHAPTER 5**

### **THE SELECTION OF FIELD RESEARCH METHODS**

#### **5.1 Introduction**

This chapter examines the methods used for the field research. The methods were determined from the approaches noted in the methodology and selected because of their appropriateness to the focus and cultural context of the study. The selection of schools used as cases is also articulated.

The culture of the participants had been based mainly on oral rather than written communication. A major research method was the use of interviews. They were seen as appropriate because these interviews allowed for an indepth examination of the perceptions, experiences and values of officials and important persons.

The research also focused on several case analyses to identify major patterns (Herriot and Firestone, 1963). This approach recognises the importance of local variation (Corbett, Dawson, and Firestone, 1984) that cannot be explored unless the cases are examined individually. While preserving holistic data from cases where primary-school-based NFE was still in operation, the case studies enabled the researcher also to make a comparative analysis in determining the potential variables influencing primary-school-based programming. An indepth exploration of perceptions and experiences was undertaken of those interviewed - giving rich but highly qualitative (and necessarily less quantitative) information.

## **5.2 Data Collection and Analysis**

The field research was undertaken between May 1992 and January 1993, as follows:

### **5.2.1 Defining the Data Required**

The information that was required for the field research was defined by The Ideal Model of NFE. The standards of 'what should be' directed the collecting of data of 'what is' actually occurring in practice. The ideal features and assumptions were used to determine what kinds of evidence were to be solicited from the field research. Such evidence was determined in the categories of 'what people say', 'what actually occurs' and 'what people believe happens'. Thus, for this study the perceptions and experiences of the participants were the major source of evidence.

## **5.3 Selection of Schools to be Studied**

The researcher initially made contact with the Director of Youth and Sports (DYS), the Youth Officer responsible for NFE school-based programmes and the Chief Education Officer for Primary Schools (CEOP) in Fiji. These officers - both in their official capacity and as members of the Fiji Association of Non-Formal Educators (an NGO) - were knowledgeable about, and have had experience in, primary-school-based NFE programmes. The researcher explained to them the purpose of the study and the criteria by which it was intended to select a range of schools for the study. Their services were sought in terms of identifying schools in each division which might serve as case study sites.



A brief summary of the NFE programmes of each school was sought. While 24 schools were officially recorded as operating NFE programmes, only 10 schools were actually sustaining their programmes. As primary-school-based NFE programmes have been established voluntarily by interested and motivated headteachers in rural schools, it was considered important that any schools selected in the sample must have the willing co-operation of the headteachers concerned. The latter were also to be reassured that the research was to enhance practice.

### **Criteria For Selection of Schools**

The criteria that were considered appropriate were to select the sample schools in which programmes were still in operation and schools in which the programmes had declined. As discussed in Chapter 2 the cultural diversity is important in a study of Fiji. Therefore the sample selected sought a balance of Indo-Fijian and Indigenous Fijian schools. It was also considered appropriate to select a school from each of the four educational divisions, Eastern, Central, Northern and Western. However, the time frame for the research, financial resources and communication difficulties limited the study samples to three divisions. Of the five schools selected, three were Indigenous Fijian schools and two were Indo-Fijian.

#### **5.3.1 Ensuring Access to Schools**

As official approval for undertaking the research in the selected schools had to be obtained from the Ministry of Education in Fiji, a letter was written to the Permanent Secretary of Education seeking his approval and the Ministry's support.

A positive reply was received on 16 March, 1992 which stated:

I am pleased to advise that the Ministry has approved your request and as well as that, I can assure you of the Ministry's assistance in facilitating your research in the various schools and districts. The senior officers too, I am sure will be happy to be interviewed. Your research in the area of Non-formal education is an exciting and extremely important one in the development of Education here. I am sure that our field staff in the divisions and districts will be happy to assist, no doubt many of them have worked with you on Non-formal education programme in the last few years and they know you well.

(S.Koroi for Permanent Secretary for Education, Youth & Sport)

This was an important letter as it gave assurance to the researcher of accessibility to the schools and the support of the Ministry. The various sections of the Ministry concerned were notified, as were the Divisional and District Education Officers. The headteacher of each school was informed of the intended research and their willingness was solicited with the understanding that the researcher would make an initial visit to discuss the details of the study during the field research and also that confidentiality would be maintained.

#### **5.4 Selection of Data Gathering Methods Used**

Field data were obtained using semi-structured interviews, documentary investigation and workshops. The variety of measures was to overcome the inherent disadvantages of each. In-depth interviews with multiple informants at each site as well as the document searches and workshops allowed the researcher to triangulate findings across sources

and address issues of reliability and validity. These methods are outlined in the following section.

#### **5.4.1 Document Sources**

The document search was to access official and unofficial documents relating to primary-school-based NFE programmes. The information gave background to the programmes at the schools follow up to the interviews against which to check data from the community.

There were three types of documents examined: (1) Annual Report, (2) Adult Education File and (3) Individual School File.

##### **1. *Annual Reports***

The first document source is the Ministry of Education annual reports. The Ministry of Education which has the overall responsibility for schools produces annual reports.

The annual reports for six consecutive years (1980 to 1986) were perused for information on the establishment of primary-schools-based NFE programmes, the programmes and activities involved and the target groups. In some years the information was detailed whilst in others very brief. From 1987 onwards the report on NFE programmes in some schools was presented in the annual report of the Ministry of Youth, Employment Opportunities and Sports (MYEOS).

##### **2. *Adult Education File***

The second source of document information was the adult education file which contained the official report and correspondence on non-formal education and primary-school- based NFE programmes.

MYEOS official information on primary-school-based NFE programmes was contained in the adult education file. The content, range and nature of the documents filed were examined and analysed in relation to the study. The documents contain reports of the various NFE programmes and activities in the selected schools, the advisory visits, assistance, training workshops and inter-agency co-operation. Correspondence from schools requesting advisory or financial assistance, as well as problems faced by some schools in which programmes had ceased, is also included.

### 3. *School Files*

The third source was the individual school file which was supposed to contain some information on primary-school-based NFE programmes.

Each school was supposed to have a file containing official correspondence from the MYEOS and MWCST in relation to primary-school-based NFE programmes. However, only three of the selected schools of the sample schools had some form of record. As a result it was not possible to come to any firm conclusions as to what had been received from the Ministry or sent from the school, and therefore what consideration had been given at that level to primary-school-based NFE programmes in terms of organisation and management. As such the data from the school files allowed for only the partial addressing of key research questions. These limitations are addressed by MacCall-Simmons (cited in Ikin 1989 p. 132) who suggest that the chief disadvantage of document analysis is that frequently the documents contain only the bare essentials of events which have taken place and that this deficiency cannot be overcome. There is also the deceptive nature of 'official' documents,

in that they can fail to communicate the politics of the situation and the symbolism of the language used.

Conversely, documents can be a useful source for checking the accuracy of verbal information. But again neither the document nor the informant may be telling the whole truth; hence the need to check other informants and other sources. In this study, as the researcher contributed to the compilation of some of the official reports since the inception of primary-school-based NFE in 1980 to 1985, the limitations of the documents were appreciated. The adult education and school files offered some data but were inadequate in relation to the focus of the study and also did not always provide insights into the decisions and actions taken. The interviews enabled some expansion and clarification of information where the documents had proved to be inadequate.

#### **5.4.2 Semi-Structured Interviews**

Interviews in general are a kind of conversation; a conversation with a purpose. In the view of Marshall and Rossman (1989, p.82) an interview is a method of data collection that may be described as an interaction involving the interviewer and the interviewee, the purpose of which is to obtain valid and reliable information. Further to this, Cannell and Kahn, as cited by Cohen and Manion, assert that it is a conversation 'initiated by the interviewer for the specific purpose of obtaining research-relevant information and focused by him or her on content specified by research objectives of systematic description, prediction or explanation' (Cohen and Manion, 1989, p.307).

This definition encompasses a wide range of types of interview, ranging along one dimension, from totally structured to completely unstructured examples (Robson, 1993). Whatever type is undertaken, what is important are the intentions and actions of the enquirer.

In this study, a semi-structured interview was adopted. It involved the researcher contacting the interviewees, conversing with them using pre-prepared questions, and recording the responses in a tape recorder. Although the research purposes direct the questions asked in the interview, their content, wording and sequence are entirely in the hands of the researcher, who has the freedom in the sequencing of questions, modifying the wording, and explaining them or adding to them (Powney and Watt 1987). However, this does not mean that the interview is a casual affair, as it involves careful planning and skill. As the approach involves a face-to-face interaction, information is collected directly from the participants. As Tuckman describes it, as cited in Cohen and Manion, 'by providing access to what is inside a person's head, it is possible to measure what a person knows (knowledge or information), what a person likes or dislikes (values and preferences), and what a person thinks (attitudes and beliefs)' (Cohen and Manion, 1980, p.309). A semi-structured interview method was considered most appropriate in the context of this study: particularly because of its flexibility, in its allowing the researcher to probe with more depth and to clear any ambiguities and misunderstanding that may arise during the interview. This is important especially in the cultural context of this study, where consensus is always maintained, with the consequence that individuals with opposed views are often reluctant to say what they feel.

In the view of Smith and Glass (1987), when participants do not respond adequately in an interview, the researcher should prompt and probe, but only in a controlled and reasonably standardised way, thereby optimising the validity and reliability of the data gathered. Validity here refers to whether the interview is really gaining information on what it is supposed to be informing.

The issue of reliability is concerned with the consistency of the data collected and the degree to which data collection procedures generate similar responses over time and across situations (Lin, 1976; Cohen and Manion, 1980; Burns, 1990; Robson, 1993).

Another advantage of the semi-structured interview is that more people are more willing to talk and react verbally than to write responses to questions. This is particularly evident in the cultural context of this study where culture is based on oral communication. There tends to be higher response rates, making the data more representative than those solicited through questionnaires. In face-to-face interaction co-operation and rapport may be developed between the researcher and the participants, leading to higher motivation and facilitating a more open and honest dialogue (Robson, 1993). The researcher may thus be able to make a truer assessment of what the participants believe, through a more probing and sensitive study of experiences, opinions, attitudes and behaviours. The researcher is able to observe the respondent's non-verbal communication and other behaviour which may provide added dimensions of data. In a semi-structured interview individualised or group appreciation can also be expressed to the participants soon after the interview.

However, there are some difficulties with the semi-structured interview, most importantly, they are more expensive to administer than are questionnaires. For example, in this study the five schools were scattered throughout the country and to reach them was time consuming and expensive.

Support from the two ministries facilitated the availability of a senior officer to accompany the researcher to the sites as well as the provision of government vehicle. The presence of a government official from the headquarters could have affected some distortion of the responses whereby the headteachers and assistant headteachers may have sensed that they were under some official scrutiny and that whatever they said could reflect and affect their professional careers. The community members too may also have suspected that the study was an official exercise whereby their own efforts and actions would both be held accountable and would also reflect on the image of the community.

Accordingly, the researcher in the first visit and again during the actual interview, attempted to dispel suspicions and fears and whenever the opportunity presented itself assured the participants that confidentiality would be maintained throughout the study in the following ways:

- (a) that the individuals would not be identified in this study except by fictitious names and by categories;
- (b) that the views expressed by an individual within the study by way of interview would not be made known to any other;
- (c) that the schools would not be identified except by fictitious names; and



- (d) that the study had not been commissioned by the Ministry of Education or the Ministry of Youth Employment Opportunities and Sports nor would its findings be deliberately promulgated throughout the school system.

In summary the semi- structured interview is a useful and most appropriate method of collecting data for a case study and was used as a major source of data collection for government officials, headteachers, assistant headteachers and key persons.

### 5.4.3 Workshops

Workshops were used to solicit group data from selected community members whose schools were or had been involved in NFE programmes. It is a way of conducting a group interview and, according to Steward and Shamdasani (1990) workshops is widely used in market research for testing reactions to new products. The group interview is attractive in some research contexts when the research involves studying an established group (Watts and Ebbutt, 1987). The communities involved in this study were established groups with values and norms that influenced their interaction and communication.

The use of workshops was considered relevant as oral rather than written communication is more commonly used. Maintaining group consensus and values are important to these communities. The consensus model of decision making is pertinent to the cultural context as communal activities are based on co-operation and traditional obligations.

The use of small groups in the workshops optimised the opportunity for group members' participation and discussion of the research questions and the development of a group consensus. In small

groups the participants were able to share their experiences and reflect upon them; others in the group were able to provide feedback on community mode. The process of interaction with others provided the motivation to share and to seek some clarity on ideas and views. They were seen as acting as an arena for generating insights and analysing experiences.

A main drawback with workshops particularly in an established group is the power hierarchies which affect who speaks and what they say. A particular problem is when certain people dominate the discussions and therefore may not allow others to participate. In the cultural context of this study, it is usually the male or those who have status in the community who dominate the discussion.

Another limitation in a workshop or group interview is that group consensus may suppress an individuals' ideas, particularly if they have views different from the majority. The views of young people, which are often contrary to older adults' views, are often suppressed.

However, in this study small groups were used in the workshops to give the opportunity for everyone to participate and for individual ideas to be expressed in the group reports. These reports were viewed as significant to this study and were followed up by additional, individual interviews by the researcher. For example, in one of the communities where the programmes had ceased, two follow up interviews were made to clarify some of the views expressed in the workshops. Also in a community where the programme was still operating a follow up interview was made with a particularly perceptive member who had contrary views to the group. Thus, non consensual or individual views were included.

## 5.5 Community Entry

Although the Divisional Education Officers, District Education Officers, headteachers and the community members were aware of the research, the researcher had to visit all the selected schools, to make the traditional entry to the community, solicit each community's approval and then with the headteacher, school committee and community leader or chief discuss, plan and select the participants of the workshop. In these procedures traditional practices, appropriate to the culture of the community, were followed.

To gain entry into the three Indigenous Fijian communities, the researcher made her traditional offering to the chief. This is the presentation of 'yaqona' or 'kava' (a ground root of *Piper methysticum* which is dried and pounded - the powder is mixed with water to make the drink). The presentation was made to seek permission to enter the village and to solicit support from the chief in enabling the people to participate and be involved in the research. As Asesela (1987, p. 22) asserted, the traditional offering is a medium through which an expression of respect, loyalty, welcome or acceptance is conveyed publicly. In receiving and accepting these offerings, the recipient is obliged to accept or recognise the donors' wishes and to appreciate the feelings conveyed during the presentation.

In the two Indo-Fijian communities, entry was through the headteacher and the school committee, who were informed of the purpose of the research and the method of gathering information. They in turn notified the members of the community. The Indigenous Fijians live in villages, and thus it was easier to inform the community members. The

Indo-Fijians live in separate homesteads on individual farms which are usually scattered.

## 5.6 Participants of the Workshop

The selection of participants for each community workshop was made on the first visit. It varied according to the nature of the school's population. The selection was made in consultation with the headteachers and school committee.

It was decided to have a representative sample from each village or community. The two criteria used were gender mix and selection from three subgroups: those who were or had participated in primary-school-based NFE programmes, community leaders and those who had expressed views opposed to primary-school-based NFE programmes at school. While it was easier to identify those who fitted into the first two categories, it was difficult to determine those who had opposed views because of cultural perception of maintaining group consensus and portraying a positive image. For those schools which served several villages, the selection was on the above criteria but the overall participants included subgroups from each village. However, participation in the workshop was open to anyone who wanted to make a contribution.

It was planned to select group leaders and reporters during the planning period to ensure that capable people were selected for the tasks. However, it was decided that participants were to select their leaders and reporters during the workshops. During the planning meetings in various communities the venues for the workshops were determined. The requirements for a venue were that it was based on the location which

was central, it was spacious and conducive to learning. The community halls and schools were most desirable and were used for the workshops. The dates for the workshops were also finalised.

## 5.7 Interview Guides

There were three interview guides prepared - one for the government officials, one for the headteachers and assistant headteachers and the third for the key persons. For the communities there were four main questions formulated which were the basis for small group discussions during the workshops. However, the questions for the schools which were still operating were slightly different from those for which programmes had ceased. All the interview guides contained open ended questions. The procedure used in constructing the interview guides were as follows:

- (a) An introductory statement to precede each interview was prepared which briefly introduced the researcher, stated the aims of the study and its importance, emphasised the value and importance of the respondents' participation and indicated an assurance of confidentiality.
- (b) The draft schedules were printed in English and were revised in discussion with the researcher's supervisors. The final schedules were in English.
- (c) As English is the official language in Fiji, the majority of the interviews was conducted in English. However, for the community workshops the questions were translated into the Indigenous Fijian language ('Bauan') by the researcher and Indo-Fijian language ('Hindi') by the teachers of the two schools prior to the interviews and workshop.

- (d) There was flexibility allowed to accommodate the respondents' wishes in communicating in the language of their choice.

A semi-structured interview guide was used to obtain government officials' perceptions of the nature of NFE and in particular primary-school-based programmes. The interview guide which contained open-ended questions (Appendix B) in three main parts:

- (1) interviewee background and their experiences, responsibilities and interest in relation to NFE;
- (2) their understanding and experiences of the origin of primary-school-based NFE and their perception of an ideal concept of NFE in Fiji;
- (3) perceptions of the current features of primary-school-based NFE programmes in relation to the process(es) used, strengths and limitations and the ideal process(es) for the context.

A semi-structured interview was also used to solicit information from headteachers and assistant headteachers in relation their experiences and perceptions of primary-school-based programmes. The interview schedules (Appendices C and D) sought information on the following:

- (1) experiences and responsibility in relation to NFE;
- (2) understanding of the rationale for the development of primary-school-based NFE, perceptions of the factors which contribute to its sustainability or decline, and perceptions of an ideal concept of NFE for Fiji;

- (3) perceptions of some of the operational features of the NFE in terms of process(es) used, their strengths, limitations and the ideal process(es) to be used.

The key persons were those outside the education sector or those not directly connected with NFE or primary-school-based programmes. They included other government officers, academics and key personnel from non-government organisations. A semi-structured interview guide was used for them to obtain their perceptions of NFE and primary-school-based programmes.

The interview guide in this case (Appendix E) consisted of eight parts, seeking information on:

- (1) their conception of NFE in Fiji, the strengths and limitations of current programmes and some of the issues of concern and perceptions on how NFE should operate;
- (2) their perceptions of participants in terms of selection process (es) and those who participate;
- (3) their perceptions of education needs and the process(es) of determining needs;
- (4) their perceptions of programme content in terms of subjects and selection;
- (5) their perceptions of instructional methods to be used and their appropriateness;
- (6) their perceptions of organisational and management and the process(es) to be used;
- (7) their perceptions of resources and the process(es) for their use;

- (8) their perceptions of the role of primary-school-based NFE in Fiji.

The interview guide for the key persons was very flexible. It was refined to validate some of the issues that had emerged from the workshops and from the other respondents. The process involved modifying and reframing some topics to accommodate the new issues.

For the community workshops four main questions were the basis for discussions. For the schools with existing programmes the topics (Appendix F) covered:

- (1) perception of the group in terms of primary-school-based NFE programmes;
- (2) perceptions of factors which contribute to the strengths of the programmes;
- (3) perceptions of some of the limitations of the primary-school-based NFE programmes;
- (4) perceptions as to how the limitations could be addressed.

For schools where NFE programmes were no longer operating, the topics (Appendix G) covered were:

- (1) perceptions of the factors that had contributed to the decline of primary-school-based NFE programmes;
- (2) perceptions of the reasons for the decline;
- (3) perceptions of action to be undertaken to re-activate or develop primary-school-based NFE programmes at the school.



## 5.8 Conduct of Interviews and Workshops

The actual interviews and community workshops were conducted over the period from May, 1992 to January, 1993. It was originally planned to conduct the research within five months. However, the researcher was hospitalised for the whole month of September and hence, the extension till January. Details of the field research itinerary are recorded in Appendix A.

In this study many data were obtained through interviews. Whyte cited in Ikin (1989 p.135) claimed that effective qualitative research depends upon getting comparable data from a number of people. In this study the researcher compared the data from government officials including headteachers and assistant headteachers from community participants and from other key persons, in order to gain a composite picture.

However, it was essential to keep focussed on the research questions. Some participants regularly strayed from the topic under discussion, particularly those who perceived the interviews as the opportunity to tell their success story or disappointment in the innovation.

Government officials at the headquarters of the Ministry of Education and Ministry of Youth, Employment Opportunities who were involved with NFE were first interviewed. The first interviews discussed the purpose of the research and sought information on their background interest, experiences and perceptions of NFE and primary-school-based programmes. They were then requested to discuss the strengths and limitations of the current operation in terms of key features addressed in

the study. In the light of this first interviews questions were modified and some were re-framed.

Field notes describing the interviews were recorded and coded. For subsequent verification of recorded information, all interviews were tape-recorded. Additional follow up interviews were made for certain officers, for example the Director of Youth for further clarification and discussions of new issues which had emerged from the first interviews.

The government officers in the divisions and districts and also the headteachers and assistant headteachers were interviewed prior the community workshops. This enabled the researcher to follow up on specific issues that emerged from these interviews with community members. In each case the interviews were designed to elicit the background interests, experiences and involvement on NFE and school-based programmes. Exploratory questions were then raised which attempted to gain information on their perceptions of the current operational features of the programme in terms of the process(es) used and their strengths and limitations. Their perceptions on the ideal concept of NFE and the process(es) to be used for each operational feature were also determined. All interviews were tape recorded.

In schools where the researcher needed to follow up specific issues raised during the interviews with headteachers and assistant headteachers, informal discussions were held with the rest of the teachers. As with the interviews these informal discussions were recorded in the field notes and also tape-recorded for the subsequent verification of information.

The key persons were interviewed after the community workshops to compare and validate the data from the education officers in the division and districts, headteachers, assistant headteachers and community participants. Interviews with key persons who were based in Suva were conducted after the interviews and workshops in each school and community.

Each key person was asked of their perceptions on the current nature of NFE in Fiji, the issues of concern and how such programmes should operate. They were asked of their perceptions of some of the key features of NFE which were addressed in the study, particularly the process(es) and how best the programmes should be undertaken. Each was asked of his/her perception on primary-school-based NFE in Fiji in terms of its potential or limitations.

In conducting all interviews, the researcher was aware of the need to develop a warm, trusting relationship with the subjects whilst still keeping sufficient distance from them to adequately investigate their concepts and misconceptions.

## **5.9. Conducting Workshops**

Community workshops were held in each of the selected school to collect group data from the community. Each workshop session (Appendix F) consisted of four parts:

(a) *Plenary Session (30 - 40 minutes)*

This was an introductory session whereby the headteacher made a general introduction about the purpose of the workshop and introduced

the researcher to the participants. Following this was the input from the researcher who welcomed the participants and thanked them for their willingness to participate. The researcher gave a brief background to the study and discussed some of the community's past and present experiences in NFE, highlighting the strengths and limitations of programmes. Positive experiences of NFE in other schools were shared. Relating the experiences in other schools was to enable them to reflect on their own experiences and identify the positive and limitations of NFE in their own school.

Explaining to the participants the purposes of the study, its significance, what would be done with the information collected and the value of their participation was important as it enabled them to have a positive attitude towards the study.

When the participants realised that the information they contributed would assist in the development of future programmes, there was openness in the sharing of views in small groups. They were also assured of the confidentiality and anonymity of their views.

The time allowed for questions and clarification provided the opportunity for those who were unsure or not clear about the study and the workshop to voice their views.

**(b) *Formation of Small Groups (10 - 15 minutes).***

To ensure that everyone participated, those present were organised into small groups. The formation of small groups ensured that participants with similar views were all in the same group. This did not necessarily mean that they would all have the same views but since group consensus was important, this approach was considered appropriate. Also

the cultural context required that those who, according to their relationships do not communicate with such persons as example fathers-in-law and daughters-in-law were not placed in the same group. Each group selected its own leader and reporter.

The questions were discussed thoroughly with the participants and emphasis was placed on everyone participating and sharing views openly. While group consensus was considered desirable, individual views that did not agree with the group were also recorded. Each group report was recorded and shared with everyone in the plenary session.

(c) *Group Discussion*

Group consensus was used to determine time allocation for the small group discussion. The maximum number in each group was eight and the minimum four - allowing for closer interaction and optimum participation. The researcher moved around each group during the discussion, assisting, addressing any queries and ensuring that everyone was participating.

(d) *Plenary Session*

Each group reporter presented the group report on each question in order. This enabled the researcher and participants to view and clarify each group's information on the same question before progressing to the next question. Enough time was allowed for each group presentation and discussion.

After each group's presentation, exploratory questions were asked by the researcher on views that required further clarification and more information in relation to the focus of the research to ensure accurate

responses. This process was particularly pertinent in the cultural context of this study where the participants tended to report positively to please the authority; to be openly critical was not culturally accepted.

All group reports were recorded in the field notes as well as tape recorded to allow for subsequent verification of information. Follow-up interviews were made with individuals whose views provided new insights.

### **5.10 Cross-checking and Validating Data**

After each interview and each workshop the researcher compared field notes with the tape recorded information to ensure accuracy and completeness. The hiring of a research assistant whose role was solely to transcribe raw data from the tapes enabled the researcher to cross-check information from the field notes with those tape recorded to identify and eliminate incorrect and inconsistent data. It was also the basis for identifying missing data and also following up on important insights that emerged.

### **5.11 Control of Bias**

Even though triangulation was used in this study to offset possible bias in data gathering, there remained the difficulty of bias on the part of those interviewed and the participants in the workshop.

However, in this study it is asserted that a range of measures have been applied to ensure an acceptable measure of validity. Firstly, the

methods used enabled many participants to have been subject to data gathering in this study, be it interview or workshop.

Secondly, a wide range of individuals and groups contributed to the data in the study. Furthermore, because they, and the schools and community they represented, were assured the confidentiality and anonymity, it is believed that, in general, a frankness and openness ensued.

Another methodological concern is the question of the researcher as the key research instrument. The methodology was developed and discussed with the research supervisors prior the data gathering. Second, in the case of the documents analysed, none was compiled specifically for this study, they being for a much wider audience than the researcher alone. Nor was any of them compiled by the researcher herself but rather by other persons not necessarily directly involved in this study. Also the fact that the researcher was no longer an employee of the government and not directly associated with primary-school-based NFE programmes may have assisted with the validity of the data and reliability of data collection methods.

## 5.12 Data Processing

In qualitative research, the importance of an ongoing analysis during data collection is emphasised (Robson, 1993). There is a connection between data collection and data analysis whereby the raw data in the field are organised into categories so as to simplify and organise the data for subsequent analysis. Miles and Huberman (1984) have suggested techniques for data reduction or editing and categorising

so that data are manageable. However, techniques suggested are only suggested as instruments to assist with the task of data management. It is important that they are used flexibly or they may undermine the strengths of qualitative research by overly mechanistic data analysis. The data processing consisted of editing and categorising as follows.

(1) *Editing.*

Editing data is a process of identifying errors or missing elements made by the researcher or respondents (Cohen and Manion, 1989). Raw data collected in this study were in the form of words: notes made during the interviews, tapes of events and documents. These were converted into a summary written by the researcher with editorial comment. They were written up after each interview and workshop. A full transcription of each tape recording was made shortly after they had been made. This was a lengthy process but an assistant was hired to be solely responsible for the task. For each relevant document collected, a summary of the content was made. Prior to coding, all the raw data were checked and edited by the researcher.

(2) *Development of Coding Categories*

A code is a symbol applied to a group of words to classify or categorise them (Robson, 1993). According to Holsti as cited in Cohen and Manion (1989 p.277) categories of responses might be concerned with subject matter, direction, values, goals etc. The process of category generation involves noting irregularities in the setting or people chosen for the study. As categories of meaning emerge, the researcher searches for those that have internal convergence and external divergence, that is the categories should be internally consistent but distinct from one



another (Guba, 1978). In Robson's (1993) view categories should be exhaustive, which means that everything relevant to the study may be categorised and mutually exclusive, in that everything to be analysed can only be categorised in one way. However, these are not the exhaustive and mutually exclusive categories of the statistician, but the salient, grounded categories of meaning held by the participants and the settings.

In this study, coding is the process of transforming responses into categories for analysis. The researcher was guided by the assumptions developed from the ideal model. Categories were related to research questions, concepts and themes. Pre-coding or first level coding (Miles and Huberman, 1984, p. 385), was based on these and involved attaching labels to groups of words or classes of things, persons and events. Questions, both closed and open of whose categories were known in advance, were coded easily and were appropriate for pre-coding. However, for some open-ended questions, such as those relating to comments or suggestions on the programme, post-coding or second-level or pattern coding had to be devised after the research.

### 5.13 **Data Analysis**

Data analysis is the process of bringing order, structure and meaning to the mass of collected data. It does not proceed in linear fashion; it is not neat. It is a search for general statements about relationships among categories of data (Marshall and Rossman, 1989).

In this study the process of analysis involved the organisation of data; the generation of categories, themes, and patterns; the testing of assumptions through the data; the interpretation and searching for alternative explanations of data; and the writing of key findings. The

three sets of data from the field research - interview, workshop and documentary data - were organised into categories and patterns. The researcher then examined the assumptions of the study against the data. This involved an analysis of the data, challenging the assumptions, searching for negative instances of the categories or patterns and incorporating these into larger themes or issues.

The researcher also determined whether or not the data had illuminated the questions explored and also whether they were central to the identification of the potential of primary-school-based NFE.

The researcher critically analysed the categories and patterns that emerged in the data, providing plausible explanations for the data and the linkages among them. The categories of data from the interviews, workshops and documents were validated against the data from the key persons to determine the discrepancies in relation to the assumptions. The discrepancies were analysed and interpreted in relation to alternative explanations and the potential for primary-school-based NFE.

#### **5.14 Recommendations and Conclusions**

The key findings from the field research were drawn together. Recommendations for the potential of primary-school-based NFE were made on the basis of the key findings. Implications for further research were also drawn out of the experience of research engagement.

The summary of the main characteristics of the population interviewed in relation to location (schools and community, and urban areas) and also their gender, ethnic background and age range are presented in Table 5.1.

**Table 5.1 : Characteristics of the Interviewees**

| <b>Interviewees-<br/>Location -<br/>Schools &amp;<br/>Community</b> | <b>Damanu</b>         | <b>Vesi</b>    | <b>Yaka</b>      | <b>Dakua</b>              | <b>Kauvula</b> |
|---|-----------------------|----------------|------------------|---------------------------|----------------|
| <b>1. Teachers</b>  | 7                     | 6              | 7                | 3                         | 4              |
| Gender: Male  | 4                     | 3              | 4                | 2                         | 3              |
| Female  | 3                     | 3              | 3                | 1                         | 1              |
| Ethnic Background   | Indo F + In. F        | In. F          | Indo F + In. F   | In. F                     | Indo F         |
| Age Range   | 24 - 56               | 24 - 56        | 24 - 56          | 24 - 56                   | 23 - 57        |
| <b>2. Community<br/>Members<br/>Attended<br/>Workshops</b>          | 30                    | 25             | 35               | 25                        | 34             |
| Gender: Male  | 18                    | 10             | 14               | 18                        | 15             |
| Female  | 12                    | 15             | 21               | 12                        | 19             |
| Ethnic Background   | Indo F + In. F        | In. F          | Indo F + In. F   | In. F                     | Indo F         |
| Age Range   | 24 - 75               | 18 - 70        | 18 - 70          | 18 - 65                   | 20 - 60        |
| <b>3. Key Persons</b>   |                       |                |                  |                           |                |
| <b>(a) Leaders in<br/>Community</b>                                 | 6                     | 6              | 5                | 5                         | 5              |
| Gender: Male  | 4                     | 3              | 4                | 3                         | 3              |
| Female  | 2                     | 3              | 2                | 2                         | 2              |
| Ethnic Background   | Indo F + In. F        | In. F          | Indo F + In. F   | In. F                     | Indo F         |
| Age Range   | 24 - 50               | 23 - 60        | 24 - 60          | 23 - 65                   | 23 - 60        |
| <b>(b) Govt.<br/>Officers in<br/>Community</b>                      | 5                     | 4              | 6                | 3                         | 4              |
| Gender: Male  | 3                     | 2              | 3                | 2                         | 2              |
| Female  | 2                     | 2              | 3                | 1                         | 2              |
| Age Range   | 26 - 53               | 27 - 54        | 25 - 54          | 26 - 56                   | 26 - 50        |
| <b>Interviewees -<br/>Urban Areas</b>                               | <b>Gov't Officers</b> | <b>NGOs</b>    | <b>Academics</b> | <b>KEY:</b>               |                |
| Total Interviewed   | 24                    | 15             | 12               | Indo F = Indo-Fijian      |                |
| Gender: Male  | 10                    | 10             | 8                | In. F = Indigenous Fijian |                |
| Female  | 14                    | 5              | 4                | O = Other Races           |                |
| Ethnicity   | Indo F + In. F        | Indo F + In. F | In. F + O        |                           |                |
| Age Range   | 26 - 55               | 28 - 56        | 30 - 58          |                           |                |