JAPAN INTERNATIONAL COOPERATION AGENCY

MINISTRY OF EDUCATION, SPORTS AND CULTURE, INDEPENDENT STATE OF SAMOA

# SURVEY OF THE IMPROVEMENT OF EDUCATION SECTOR IN SAMOA

# FINAL REPORT

MARCH 2004 JICA SAMOA OFFICE

#### LIST OF ACRONYMS

AUA Apia Urban Area

CEO Chief Executive Officer

CMAD Curriculum, Material and Assessment Division

ECE Early Childhood Education

FOE Faculty of Education at NUS

MESC Ministry of Education Sports and Culture

NCECES National Council of Early Childhood Education in Samoa

NGO Non Government Organisation

NUS National University of Samoa

PSC Public Service Commission

PSSC Pacific Senior Secondary Certificate

RoU Rest of Upolu

SNE Special Needs Education

SP Samoa Polytechnic

SROs School Review Officers

SSC Samoa Secondary Certificate

TOR Terms of Reference

VC Vice Chancellor



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# Chapter 1. SUMMARY OF MAJOR FINDINGS

What follows is the summary of the findings through the whole period of the study, which is relatively unknown. It is ordered based on the list of survey data. Please refer to Appendix 6: List of Survey Data for the detail of the list.

#### 1.1 General Findings

A. Equity

# A-1 Community Support

1. The community support for primary school is more active than for secondary schools.

Active support from School Committee is strongly reflected in the state of facilities as well as the morale of teachers and students.

Generally people feel ownership of primary schools more than that of secondary schools. One of the reasons is that each village has basically its own primary school, and that School Management is conducted by School Committees consisted of Matais of the village and a principal. Therefore primary schools receive more support from parents and communities than secondary schools do.

- 2. The community support in Savai'i is more active than in Apia Urban and RoU. It has been observed that villages in Savai'i have more feeling of ownership than those in Apia and RoU. This tendency seems to be related to the extent of migration between Savai'i and RoU to Apia Urban; there are lot more students in RoU migrating into Apia looking for better schools than students in Savai'i.
- 3. Gender disparity can not be observed in Samoa.

  Enrolment by gender type is consistent with population distribution between males and females. There are more girl students than boy students at secondary level. There is also a

females. There are more girl students than boy students at secondary level. There is also a trend with female students enjoying a higher success rate especially at secondary schools and tertiary education.

4. School Fees as major reasons of dropouts?

It is not correct to state simply that high school fees are the major reason of dropouts. It has been observed that school fees at primary level range from 10 to 30 tala/year. This is not expensive in an absolute term. But for those family who put education as lower priority, the amount seems to be relatively expensive. Another reason is that at village level, the cash contribution is conducted as first priority to their church, for their matais (for village management). This suggests that parents have to spend money for their churches and matais, then after that it becomes difficult for them to pay even 10 tala to schools.

5. The village standing of Teachers ranks behind that of the village preacher and high chiefs
This fact affects seriously priority of education among community and payment of school
fees among parents in the form of reluctant school fees payment, dropouts as well as
continuation/transition to higher level of education.

B. Quality

**B-2 School Environment** 

- 6. There is general shortage of fund to maintain/improve school facilities and materials.

  Most schools regardless of sub-sectors suffer from shortage of fund available to improve the school environment. This seriously affects morale as well as quality education among both teachers and students.
- 7. There is a chronic shortage of teachers, especially among primary education. But there is more supply of secondary than primary teachers.

There were 23 graduates of Diploma in Education (primary) and 33 graduates of Diploma in Education (secondary) at FOE, NUS last year (year 2003).

As the figure above suggests there are much more students who become secondary teachers (33) than primary teachers (23), while MESC identifies the critical shortage of teachers in primary level. There is still a gap between the demand and supply of the teachers in both primary and secondary level.

#### **B-3 Teaching methodology**

8. Most headteachers and students both identify that interactive teaching methodology/approach is applied to a large extent at school.

#### B-7 Teachers' Quality

9. Capacity of mathematics among teachers are doubtful; most head teachers have had difficulty to complete questionnaire on basic percentage.

#### **B-10** Student Satisfaction

10. Most students reported have shown a keen interest in their schooling and studying.

# C. Relevancy

#### C-1 Curriculum

11. Common curriculum is not proliferated.

During the school visits, the study team has observed that several schools are using different textbooks; a secondary school was using a mathematics textbook made and used in New Zealand.

12. Language of Instruction (English) is a major constraint to be overcome first by pupils before they can excel in other subjects.

Please refer to 13. Bilingual Education below for detail.

#### C-3 Subject Issue

13. Bilingual Education

The most important problems seems to be that English is not used both at home and at day-to-day life, and is only use at English language class especially in rural areas. Therefore most students/pupils do not get used to English.

On the other side, Samoa is promoting Bilingual Education, which can be observed in current education system; English is introduced at year 2 and all the class is conducted in English from year 7, and the SSC exam is written all in English.

Here is the big gap between the extent of daily use of English and the current education system. Therefore it is observed that there exists lots of students/pupils who identifies difficulty to follow this education system because of their English capacity. It becomes clear that if a student is not good at English, he/she will have difficulty in the other subjects, as the class is conducted in English and examinations are written in English; that suggests that before trying to understand the new concepts of the other subjects, low level of English capability is a barrier to tackle them. This can be applied especially to such subjects as Science and Mathematics.

### 14. Regardless of sub-sectors, students are generally weak in Mathematics.

As suggested earlier, the reasons of the weakness in Mathematics includes the weak English capacity; as Mathematics textbooks are written in English, students can not reach the understanding of the concepts in front of the English barrier.

Related to this problem is the vocabulary (use of the term) of the concept of mathematics in English, which seems to be difficult for Samoan to understand and there is a need of more consideration in translation of the mathematics term into English.

Another possible reason is the low level of quality of mathematics teachers in terms of both subject knowledge and teaching methodology. Due largely to a critical shortage of mathematics teachers, teachers with different background (such as geography) are teaching mathematics in some secondary schools, which is observed through interview survey.

### D. Efficiency

#### **D-1 Student Performance**

# 15. <u>High Dropouts and Repetition rate and low Transition rate at Secondary level: This is not a very urgent issue as suggested in the statistics</u>

Regarding the so-called high rate of dropout and repetition at secondary level, it has been found through interview with head teachers that those who want to stop schooling and go to labor market do not continue from year 12 to year 13. Only those who wish to continue studying at tertiary level (such as NUS and SP or schools overseas) need to sit the exam (SSC). Especially in rural areas there are limited secondary schools which has year 13 class, therefore those who wish to go to tertiary level need to transfer to a college which has year 13.

As a result, the transition rates from year 12 to year 13 become not high. It is a usual practice that those who get not enough score at SSC repeat year 12 to sit the exam next year to get higher mark enough to transfer to a college. Those who do not wish to continue might stop schooling after year 12. As year 12 is not a final year under the current secondary system, they are regarded to be dropped out; When the 2 streams were practiced, they were regarded the graduates of junior secondary schools.

Therefore the statistics which suggests the high level of dropout and repetition rate as well as low level of transition rate is currently not surprising issue, especially because the institutional change from 2 streaming to 1 streaming has just occurred and it can be said that now is a transitional period.

#### 16. Major Reasons of Dropouts

The study team has identified the major 4 reasons of dropout, which are; 1) School Fees; 2) Bad Discipline of students; 3) Migration; and 4) Moving to better schools.

Regarding 1) School Fee, it has been observed that the amount of average school fee ranges from 10-30 tala per term, which is not expensive in absolute term. However, it is depending on priority of parents towards education for their children; if it is low even 10 tala is costly for them, if it is positioned as high priority, 10 tala is not expensive.

#### 17. Major reasons of Repetition

The following reasons have come to the top according to the study; 1) Classroom Efforts (low level of achievement at the subjects learned); 2) Low level of attendance; 3) Lack of parental support; and 4) To get the better results of examination.

As suggested earlier, to repeat especially at yr 12 is a common practice to go to better college as the reason 4) suggests.

18. <u>Basic numeracy and literacy continue to be the number 1 problem among students of both primary and secondary schools.</u>

# D-5 School Management and Planning (School Committee)

19. Composition of School Committee: represented by village/community people

It has been observed that the School Committee, which is a managing body for school management, is composed of a principal and Matais of the villages and sometimes pastors from churches. There are following major position in School Committee; President, Secretary and Treasurer. All the positions are taken by them. This suggests that School Committee is not composed of the representatives of parents but those of the villages. Along this line, there can be some possibility that the directions by School Committee can not reflect the voices of parents who are major stakeholders of schools. There are associations such as PTA along with School Committee. However PTA seems to follow the School Committee directions.

20. Few schools particularly village-based ones carry out formal school management and planning.

At school level, many principals regardless of sub-sector do not keep appropriate school records. MESC is now trying to improve school management under ISP. The principals are now under the process of developing management skills at school level.

#### 1.2 Key challenges facing education sector

Based on the whole study, the following 7 issues have been identified as a critical challenge for Samoan Education Sector to tackle for enhance quality education.

# 1. Fragile numeracy and literacy

Low level of numeracy and literacy has been identified through both questionnaire survey and interview survey at both schools and MESC.

#### 2. Relatively lower social standing of teachers

It has been observed that social standing of teachers along with nurses is relatively low compared to other occupations in Samoa. Although it is very difficult to evaluate the salary scale of teachers government schools compared to other occupations, however, it is regarded by lots of Samoan people that teachers' salary is very low. Teachers at preschools is much lower than those at government primary and secondary schools. On the other hand, at some private schools and mission schools teachers are paid very good, which causes sudden leave of government school teachers to the private or mission school half way during the school year.

#### 3. Language of instruction

Although this topic is an controversial issue, it has been identified through this comprehensive education study that:

- i) To be good at English is a huge advantage to continue higher level of education
- ii) English has become a barrier for students to learn the other subjects, especially for those who are not good at English, which therefore can contribute a general weakness in mathematics and science education.

#### 4. Shortage of teachers (esp. primary schools)

There is a chronic shortage of teachers especially at primary schools.

### 5. Teachers' Quality

The study has observed the weakness of teachers in subject matter, especially among English, science and mathematics teachers.

#### 6. Shortage of teaching and learning materials

Due largely to the financial problems, most schools suffers from the bad conditions in school facilities as well as teaching and learning materials, which seriously affects the quality learning at Samoa.

# 7. School Management (planning, data management)

The study has observed through school visits that few principals conduct appropriate data management. Although ISP project conducts a series of training for school management, there are still lots of schools where school management is appropriately conducted, which includes appropriate textbook management.

#### 8. SNE and ECE

The supports of the Samoan Government towards SNE and ECE have just been commenced. There is a serious needs of further support from MESC in terms of development of program, teacher training and enhancement of school facilities and materials.

# Chapter 2. BACKGROUND OF THE STUDY

# 2.1 Background

In collaboration with the Government of Samoa and Ministry of Education, Sports and Culture (MESC), the Japan International Cooperation Agency (JICA) is undertaking a review of its development assistance programmes to the education sector as a whole. To facilitate this review, JICA has sought approval/support of Government, through MESC, for JICA to undertake a comprehensive study of the Samoa education sector.

#### 2.2 Purpose of the Study

The purpose of the study/survey is to establish current and relevant baseline/background data and information on the education sector. An important component of this study involves conducting a survey focusing on all levels of education in Samoa, including pre-schools, special needs schools, primary and secondary schools, higher level education and selected key stakeholders. This data and background information form the basis for recommendations to JICA on possible assistance programmes for the Samoa educations sector.

#### 2.3 Objectives and Terms of Reference (TOR)

The specific objectives and TOR of the study are:

- (i) To overview/study the current situation of the Samoan education sector, in particular, from pre-schools through primary and secondary, to higher education sub-sectors;
- (ii) To identify existing problems which are bottlenecks for further development of education in Samoa;
- (iii) To review existing donor and development partner programmes in the education sector;
- (iv) To assist in the identification of possible options for intervention by JICA in the sector over the medium term and to improve efficiency of development assistance by JICA to the education sector of Samoa.

In putting together recommendations to JICA on possible areas of interventions, the study has accounted of existing government policy on education reforms and programmes, the priority areas for the medium term as indicated through discussions with government officials, as well as the existing and on-going assistance provided through donor and other development partners. The recommendations also reflect the comparative advantages of traditional JICA interventions.

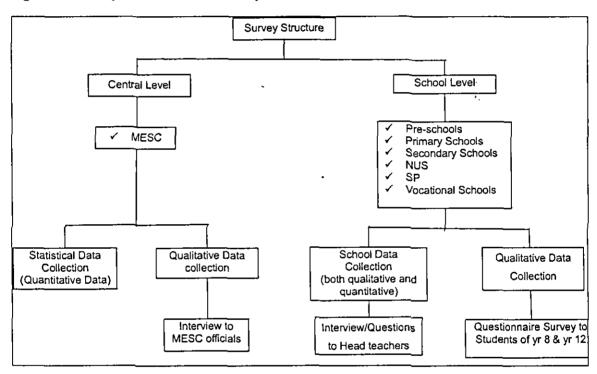
# Chapter 3. METHODOLOGY

### 3.1 Framework of the study

The approach to this study involves a combination of desk research, interviews and a field survey. The reporting process for the study required the submission of an Interim Report<sup>1</sup> to JICA providing an overview of work progress and details of agreed approach. In conducting this study, KVA Consult was contracted by JICA to undertake the study and survey in collaboration with JICA education sector consultants. It should be noted that the recommended interventions provided in this draft Final Report have been compiled principally by JICA consultants.

The following figure depicts the study framework:

Figure 3.1: Survey Framework of the Study



### 3.2 Target Groups

The table in the next page summarizes the target sectors and target groups for each sector.

Regarding the study on vocational education, as there is a precedent study focusing on vocational training, the lessons learned, major problems and project proposals will be referred to and deduced from the final report of the study.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Interim Report, Samoan Education Sector Study February 2004

<sup>&</sup>lt;sup>2</sup> JICA Final Report 'Effective Method of Technical Assistance for Vocational Training' March 2004

Table 3-1: Target Sectors and Target Groups

| Target Sectors          | Target Groups   |
|-------------------------|---|
| Central Level           |   |
| MESC                    | 1. Ministry Officials (Statistical Data Collection & Interview) |
| School Level            |   |
| Pre-schools             | 1. Headteachers (School Records & Interview)                    |
| Deiman Calcala          | 1. Head teachers (School Records & Interview)                   |
| Primary Schools         | 2. Pupils of year 8 (Questionnaire)                             |
| Canadami Cahaala        | 1. Headteachers (School Records & Interview)                    |
| Secondary Schools       | 2. Students of year 12 (Questionnaire)                          |
| SP                      | 1. Head teacher (School Records & Interview)                    |
| 5P                      | 2. Graduates (Questions): Only SP graduates of year 2003        |
| NUS                     |   |
| Special Needs Education | 1. Head teachers (School Records & Interview)                   |
|                         | 1. Headteachers   |
| Vocational Schools      | 2. Students   |
|                         | 3. Industries   |

#### 3.3 Information Collected

The study compiled both qualitative and quantitative data from the target groups (described in detail at the next section). The arrangement of general and specific data and indicators collected have been grouped/allocated and analysed<sup>3</sup> under the relevant guiding *principles* in accordance with education policy and strategic development of the sector as set down/agreed by the Samoa Government, through the Ministry of Education, Sports and Culture. These principles and policy objectives include the desire to promote the four (4) key values, namely equity, quality, relevancy and efficiency of education services in Samoa.

Statistical data, for both central and school levels, were collected in the form of either Reports or School Records. In addition, interviews were conducted with officials from the Ministry of Education Sports and Culture (MESC), head teachers and executive management of the National University of Samoa and Samoa Polytechnic. A Questionnaire survey was conducted targeting both head teachers and students of year 8 (primary schools) and year 12 (secondary schools). Case studies were carried out for special needs schools and pre-schools based on interviews with head teachers of selected schools.

The following matrix provides a summary of key issues on education identified based on the four key values, as well as the target groups surveyed.

<sup>&</sup>lt;sup>3</sup> See Interim Report for details on approach to analysis of Survey results

Table 3-2: Matrix of the List of Survey Data Collected and Target Groups

| Target group for the survey                    | <del></del> | Ţ <del></del> - | Students  | Heads of |
|--|-------------|-----------------|-----------|----------|
|  | MESC        | Head            | of year 8 | SP       |
|  | officials   | Teachers        | , .       | ]        |
|  | Officials   | leachers        | and year  | &        |
| Key Values and Issues                          |             |                 | 12        | NUS      |
| □A. equity□                                    |             |                 |           |          |
| A-1 Community Support                          |             | X               | X         |          |
| (eagerness of parental and community support)  |             | l^_             | ^_        |          |
| A-2 Regional Gap                               | X           | X_              |           |          |
| A-3 Gender Gap                                 | X           | X               |           | L        |
| □B. quality□                                   |             | ļ               |           |          |
| B-I Teaching and Learning Materials            | X           | X               | X_        |          |
| B-2 School Environment                         | X           | X               | ×         | X        |
| B-3 Teaching Methodology                       | X           | ,               | X         | X        |
| B-4 Teacher Training                           | X           | X               |           |          |
| B-5 Evaluation and Assessment                  | X           | X               |           | ~        |
| (Use of Continuous Assessment)                 | ^           | _ ^ _           | X_        | X        |
| B-6 Teachers' Status                           | X           | T               |           |          |
| B-7 Teachers' Quality                          | X           | X               |           | X        |
| B-8 Minimum Standards of Education             | X           | 1               |           |          |
| B-9 Examination                                | X           | X               | X         |          |
| B-10 Student/Teacher Satisfaction              |             | <u> </u>        | X         |          |
| □C. Relevancy□                                 |             | <del></del>     |           |          |
| C-1 Curriculum                                 | ×           | <del></del>     |           |          |
| C-2 Relation to Labour Market                  |             |                 |           | X        |
| C-3 Subject Issue                              | · x         | X               | X         |          |
| (Bilingual and Math Education)                 |             |                 | ^         | <u> </u> |
| □D. Efficiency□                                |             | <del></del>     |           |          |
| D-1 Student and Teacher Attitudes/ Performance | X           | X               |           |          |
| D-2 Central Administration Management          | ×           |                 |           | X        |
| D-3 Education Finance                          | X           |                 |           | ×        |
| D-4 Donor Coordination                         | X           |                 | 1         | X        |
| D-5 School Management and Planning             |             | X               | ]         |          |
| (School Committee)                             |             | _ ^ _           | l         | <u> </u> |

#### 3.4 Survey Sampling

The sampling approach for the conduct of the survey reflects considerations on the need to ensure statistical significance (data to be representative), the logistical arrangements and overall costs for conducting the survey. The framework for sampling has been adopted to align with the national/official demarcation of school regions and schools districts. For primary and secondary schools, sixty percent (60%) of all government schools in each district and the majority of private and Mission primary were covered in the field survey. For each school the Principal and at least thirty percent (30%) of pupils in Year 8 and Year 12 were surveyed.

Year 8 and year 12 have been selected as sampled grades due to the following reasons:

- 1) Each year corresponds to an education sub-sector (primary and secondary).
- 2) These years (year 8 & 12) are the key critical years to decide the transition to higher level of education to secondary and tertiary education respectively.
- 3) By taking these years as sample, it becomes easy to trace the education efficiency in Samoa (especially dropouts and transition rate).

For pre-schools and special needs schools case studies are presented based on an interview with the Principals. As part of the study and survey, a tracer survey of recent Samoa Polytechnic graduates was also conducted. The objective is to obtain a general overview of industry demand for SP graduates.

The tables below present a summary of the survey sample. The details of the regions, districts, schools types and visiting schedule are provided are provided in the Interim Report.

Table 3-3: Sampling number of Institutions

| Sub-Sectors             | Government  | Mission                                  | Private                                  | Sample                      |
|-------------------------|---|--|--|-----------------------------|
| Pre-Schools             | 0   | ı  | 1  | 2 schools                   |
| Primary Schools         | 60% of all government primary schools in each region and district | Majority of Mission primary schools      | Majority of Private primary schools      | 97 schools                  |
| Secondary Schools       | Majority of govt.<br>secondary schools                            | Majority Mission<br>secondary<br>schools | Majority Private<br>secondary<br>schools | 39 schools                  |
| Samoa Polytechnic       | 1:CEO<br>Graduates of 2003  | N/A                                      | N/A                                      | 60%<br>of 2003<br>graduates |
| NUS                     | 1 Vice Chancellor   | N/A                                      | N/A                                      | 1 school                    |
| Special Needs Education | 0   | 1  | 1  | 2 schools                   |

The following table provides the number of final survey sample of questionnaire and interview survey for principals and students of primary and secondary schools.

Table 3-4: Number of Questionnaire Samples. •

| Principals of the above Institutions | All principals of the selected schools       | 136 headteachers |
|--------------------------------------|--|------------------|
| Pupils of Year 8 and Year 12         | At least 30% of pupils in Year 8 and Year 12 | 3,200 students   |

# 3.5 Key Outputs of the Study

The main outputs and activities of study included the following:

Table 3-6: Summary of Main Outputs

| Main Outputs   | Activities   |
|----------------|--|
| Interim Report | <ul> <li>✓ Development of Study Framework</li> <li>✓ Development of Survey Tools</li> <li>✓ Conduct of Primary and Secondary School Survey throughout Upolu and Savai'i, desk research, interviews, Tracer Survey of SP graduates, conduct of case studies.</li> <li>✓ Submission of Interim Report based on initial findings</li> </ul> |
| Final Report   | <ul> <li>Analysis of Survey Data</li> <li>Drafting of Final Report</li> <li>Consultation with JICA and MESC on draft Report</li> <li>Submission of Final Report which includes recommendations for JICA interventions fo the Samoa education sector over the medium-term.</li> </ul>   |

# Chapter 4. SUMMARY OF EDUCATION SECTOR ANALYSIS: MAJOR CHALLENGES

#### 4.1 Introduction

The following section provides a quick summary of the main findings focussing on the key challenges at different levels of education sector institutions. These findings form the background information against which the recommendations for possible medium term interventions by JICA are framed. The study acknowledges the significant achievements made, especially over recent years of education sector reforms in the areas of institutional reforms particularly at government central administrative level, infrastructure developments to reduce the concentration of students in the Apia urban area and curriculum development. Currently, the government is in the process of disseminating/decentralising key elements of these reforms to school levels which will be critical in sustaining long-term outcomes sought through these reforms. The findings from the study however, indicates that some of the central and most pressing challenges, particularly for primary and secondary schools remains, and these are well understood by stakeholders. Improving basic literacy and numeracy at primary and secondary level remains a top priority for the education sector of Samoa. The success of past and current reforms will ultimately be judged on progress to be made in this area. Clearly, sustaining the current efforts will be the focus of government, donors and development partners over the medium term.

#### 4.2 Analysis of Central Level: MESC Administration

The matrix in the next page summarizes the current problems identified through interviews to MESC officials, including CEO, assistant CEOs.

Table 4-1: Summary of Problems Identified through MESC interview

| Key Issues                               | Problems identified through MESC Interview  |
|--|---|
| □B. quality□                             |   |
| B-1 Teaching and<br>Learning Materials   | ✓ Shortage of textbooks as well as poor textbook management by schools  |
| B-2 School                               | ✓ There is a chronic shortage of teachers.  |
| Environment                              | ✓ There seems to be a more serious shortage of primary teachers than of secondary teachers.   |
|  | ✓ Shortage of Mathematics and Science Teachers  |
| B-7 Teachers' Quality                    | ✓ Low level of Teacher Quality  |
| B-8 Minimum<br>Standards of<br>Education | ✓ Corresponding Low Level of Students' Achievement especially in Numeracy and Literacy Issues   |
| □C. Relevancy□                           |   |
| C-1 Curriculum                           | <ul> <li>Special Needs Education; there is still very limited access to handicapped students;<br/>problem of transport, materials, teachers, etc.</li> </ul>        |
|  | <ul> <li>Early Childhood Education; there needs more support from MESC in both technical<br/>and financial terms.</li> </ul>  |
|  | ✓ New primary curriculum has not yet been started by AusAID, though textbooks based on old curriculum (prepared about 30 years ago) was re-printed and distributed. |
| C-3 Subject Issue<br>(Bilingual and Math | There is a fundamental argument on bilingual education policy, reflected in the current education system (curriculum as well as examination)                        |
| Education)                               | ✓ Low Level of Students' Achievement especially in Numeracy and Literacy Issues   |

| □D. Efficiency □                                      |  |
|---|--|
| D-2 Central<br>Administration<br>Management           | ✓ There is a serious need of assessment of capacity building for both MESC officials for management and principals/teachers for school management and teaching capacity as well as subject knowledge/teaching methodology conducted under the ISP project. |
|   | i) A series of training under the ISP project assisted by AusAID   |
|   | ii) Introduction of new curriculum at secondary level (year 9-12) under Secondary Education Curriculum/Material Project assisted by NZAID  |
|   | ✓ There is a shortage of staffs within MESC (ex. 14 SROs instead of 21, exp. Savai'i is serious).  |
|   | ✓ There needs much closer monitoring by SROs or by any other means in terms of school management/textbook management.  |
| D-5 School Management and Planning (School Committee) | ✓ Mismanagement of textbooks at school level: thief and lost. Textbooks are basically property of government and schools not students therefore need more appropriate textbook management.   |

# 4.3 Early Childhood Education

The following matrix is the summary of the problems identified through interviewing major personnel involved in ECE development including CMAD manager and ECE unit director at MESC as well as principals of pre-schools and director of 1-year teacher training centre.

Table 4-2: Summary of Problems Identified among ECE sub-sector

| Key Issues  | Problems identified through MESC Interview  |  |
|---|---|--|
| □B. quality□  |   |  |
| B-1 Teaching and<br>Learning Materials                | ✓ There is a general shortage of teaching materials/stationeries:   |  |
| B-2 School  | School Infrastructure has not been developed to secure Children's Security  |  |
| Environment   | ✓ There is a shortage of teaching staffs at 1-year training center  |  |
|   | ✓ School facilities are very poor at 1-year training center   |  |
| B-6 Teachers' Status                                  | ✓ Salary of Pre-school Teachers is very small.  |  |
| □C. Relevancy□  |   |  |
| C-1 Curriculum  | Language of Instruction: There is a gap between the bilingual policy and actual learning outputs under the current education system/curriculum. |  |
|   | ✓ Common pre-school curriculum is not proliferated:   |  |
| □D. Efficiency□                                       |   |  |
| D-5 School Management and Planning (School Committee) | ✓ There is a general shortage of fund for school Management.  |  |

### 4.4 Primary Schools (schools survey)

Some of the major/key problems identified for Primary education are provided below. These observations have been gathered through data and information obtained through discussions, available documents and survey conducted as part of the study.

Table 4-2: Summary of problems identified through questionnaire survey at primary sub-sector

| Key Value & Key Issues                          | Problems Identified   |
|---|---|
| (A. Equity)<br>Fees                             | <ul> <li>Fees vary significantly between villages, government, mission and private schools;</li> <li>Fees are often sighted as an important variable for school drop-outs or not attending schools;</li> </ul>  |
| Access  | <ul> <li>✓ Most districts have several schools;</li> <li>✓ Relations between villages and districts do affect decision on need and location for schools;</li> </ul>   |
| (B. Quality) Teacher Training                   | <ul> <li>Teacher training development programme developed under Institutional Strengthening Programme has yet to reach all schools, especially those in rural areas;</li> <li>The majority of schools do not practice some form of school management planning;</li> <li>Shortage of teachers (and part-time replacements) constrain the numbers of teachers permitted to undertake full-time teacher training;</li> <li>A full programme of teacher training focusing on both content knowledge and pedagogy is needed, especially as many primary teachers are expected to teach all (core) subjects;</li> </ul> |
| Student Performance                             | <ul> <li>✓ In most primary schools, the results of SPELL Test (Yr4 and 6) are not available;</li> <li>✓ Basic literacy and numeracy is still a major challenge for primary and secondary schools;</li> <li>✓ On average, urban based schools report better student performance; however, some village schools also report very competitive results. Teacher and student enthusiasm is a key factor in performance of the latter group.</li> </ul>   |
| Support for Students outside of School compound | <ul> <li>✓ The majority of families do not have additional learning materials for pupils (except the Bible and cultural practices);</li> <li>✓ Bible Schools have an important contribution to early education in reading and basic mathematics; however, content of subjects have tended to move away from formal school subjects and more towards bible teaching;</li> <li>✓ TV and Radio Programmes: Fewer radio programmes and virtually no TV programmes are available for early education.</li> </ul>   |
| Teachers Quality                                | ✓ Most teachers need further training; ✓ Even more teachers need motivation;  |
| Infrastructures                                 | <ul> <li>Infrastructures vary with the wealth and support of communities, whether owned by government, mission or private;</li> <li>Most schools need assistance with maintenance of infrastructures;</li> </ul>  |
| Perceptions About Quality                       | ✓ There are strong perceptions and associations between the relative qualities of attending village or urban schools;   |
| Teacher placement practices of MESC             | ✓ Better qualified teachers are often appointed to the better performing government schools;  |
| (C. Relevancy) Curriculum Materials             | ✓ Most school report different degree of access to curriculum materials including<br>text books and teaching aids (Although the MESC suggest that all schools are<br>provided with equal access to these);  |
| Student Aspirations                             | ✓ Most pupils desire to advance to higher education and value lifetime skills;  |
| Cultural Aspects                                | <ul> <li>✓ Cultural practices including obligations to families do influence aspirations for advancing to higher level educations;</li> <li>✓ Cultural and church obligations can relegate commitments to schooling of children;</li> </ul>   |
| (D. Efficiency) Transition Rates                | <ul> <li>✓ The transition rates reported at the national level vary significantly with those reported from the schools;</li> <li>✓ Most schools do not have readily accessible records on student performance, transition rates and even enrolment;</li> </ul>  |

| School Management                               | <ul> <li>✓ There are no standard policies/practices for school management amongst Head Teachers, School Committees and SRO's;</li> <li>✓ Support of village communities is an important factor for school management;</li> </ul>  |
|---|---|
| Teacher Remuneration                            | <ul> <li>✓ It has been observed that teachers salaries are said to be low relative to other occupations;</li> <li>✓ Village government schools are supported by village communities through lunch and dinner for teachers. Also teachers do get allotment from distributions (food, money etc) by the village council of chiefs;</li> <li>✓ Most urban based schools do not have this benefit;</li> </ul> |
| Awareness and Participation in National Reforms | Few schools indicate full awareness (nor practice) of current efforts at the national level to reform education, despite the efforts of MESC to publicize and conduct radio programmes aimed at disseminating these reforms throughout Samoa;   |

For further details on discussion of the above issues, please see Section IV on Detailed Analysis of Problems at Key Institutions.

#### 4.5 Secondary Schools (schools survey)

Some of the major/key problems identified for Secondary education are provided below. These observations have been gathered through data and information obtained through discussions, available documents and survey conducted as part of the study. In general, most of the observations are common amongst primary and secondary schools. For the purpose of this summary, therefore, the reports highlight specific observations relevant mostly to secondary schools.

- Mission and Private schools play an important contribution in the provision of secondary schools in Samoa;
- Government secondary school teachers tend to be younger relative to those at primary schools;
- The above observation is linked to the fact that recent FOE graduates are mostly allocated or prefer to teach at secondary schools;
- There is a perception that salaries and wages for secondary school teachers are higher than for primary schools (but, in fact they are the same scale);
- Student teacher ratios appear higher at primary relative to secondary schools;
- Pupil habit/culture to undertake homework is more a characteristic of urban schools than in villages;
- Generally, community/village support is stronger for primary than secondary schools. This is related to location and ownership of schools with most primary owned and run by village committees while secondary school located in villages within districts are run by selected representatives from villages within the district;
- Whilst access is secured through the establishment of secondary schools in remote areas
  (for instance the Masina Fagaloa Secondary School) the relative costs of staffing and
  maintaining such schools would appear excessive relative to the staffing resources
  available to other more populated schools. Generally, the efforts to improve and secure
  access to schools in as many villages has resulted in cross-subsidization in terms of cost of
  staff and teaching materials;
- Community support through old pupils associations are much more active and effective for mission schools compared to government and private school;

Table 4-4: Summary of problems identified through questionnaire survey at secondary sub-sector

| Key Value                                       | Problems Identified  |
|---|--|
| (A. Equity) Fees                                | <ul> <li>Fees vary significantly between villages, government, mission and private schools;</li> <li>Fees are often sighted as an important variable for school drop-outs or not attending schools;</li> </ul>   |
| Access  | <ul> <li>Mission schools sometimes restrict entrance to own members;</li> <li>Private schools have significant waiting list for pupil vacancies;</li> <li>Due to higher fees, pupils with relatively wealthier parents are most likely to attend private schools;</li> <li>Few rural and village students attend private schools;</li> <li>Most districts have a secondary school with some districts having more than one secondary;</li> <li>Relations between villages and districts do affect decision on need and location for schools;</li> </ul>  |
| Awareness and Participation in National Reforms | <ul> <li>✓ Fewer government schools indicate full awareness (nor practice) of current efforts at the national level to reform education, despite the efforts of MESC to publicize and conduct radio programmes aimed at disseminating these reforms throughout Samoa;</li> <li>✓ Awareness and involvement of Mission schools and private schools in reform programmes is minimal;</li> <li>✓ Private school has adopted best practices through own management planning initiatives;</li> </ul>  |
| (B. Quality) Teacher Training                   | <ul> <li>✓ Teacher training development programme developed under Institutional Strengthening Programme has yet to reach all schools, especially those in rural areas;</li> <li>✓ The majority of schools do not practice some form of school management planning;</li> <li>✓ Shortage of teachers (and part-time replacements) constrain the numbers of teachers permitted to undertake full-time teacher training;</li> <li>✓ A full programme of teacher training focusing on both content knowledge and pedagogy is needed, especially as many primary teachers are expected to teach all (core) subjects;</li> </ul>  |
| Student Performance                             | <ul> <li>✓ In most secondary schools, the results of national exams are not available;</li> <li>✓ Basic literacy and numeracy is still a major challenge for primary and secondary schools;</li> <li>✓ On average, urban based schools report better student performance; however, some village schools also report very competitive results. Teacher and student enthusiasm is a key factor in performance of the latter group;</li> <li>✓ Private schools achieve higher pass rates than government and mission schools;</li> <li>✓ Mission schools provide close to 50% of secondary school enrollment. Student results are also competitive with those of government owned/run schools;</li> <li>✓ There is a strong culture associated with school identity (including uniforms) apparent amongst the top secondary schools;</li> <li>✓ Samoa College is regarded as the top government owned secondary school;</li> <li>✓ Catholic Senior College (combine St Josephs and St Mary's Year 13) is regarded as top Mission secondary school.</li> <li>✓ Robert Louis Stevenson College is regarded as the top private secondary school;</li> <li>✓ Vaipoluli is regarded as top government school in Savaii;</li> <li>✓ Uesiliana College and Tuasivi College are regarded as top mission schools in Savaii;</li> </ul> |

| Support for Students outside of School compound | <ul> <li>The majority of families do not have additional learning materials for pupils (except the Bible and cultural practices);</li> <li>Bible Schools have an important contribution to early education in reading and basic mathematics; however, content of subjects have tended to move away from formal school subjects and more towards bible teaching;</li> <li>TV and Radio Programmes: Fewer radio programmes and virtually no TV programmes are available for early education.</li> <li>Private schools have elaborate programmes to involve parents in after school tasks such as homework and feedback on student participation and performance;</li> </ul> |
|---|---|
| Teachers Quality                                | <ul> <li>Most teachers need further training;</li> <li>Even more teachers need motivation;</li> <li>Teacher salaries at private and some mission schools are significantly higher for private schools; these schools attract 'good' teachers by offering interesting salary scale.</li> <li>Many government trained teachers migrate to Mission and private schools, partly due to higher salaries and better administrative organizations;</li> </ul>  |
| Infrastructures                                 | <ul> <li>✓ Infrastructures vary with the wealth and support of communities, whether owned by government, mission or private;</li> <li>✓ Most schools need assistance with maintenance of infrastructures;</li> <li>✓ Private schools have better infrastructures, including school libraries compared to government and mission schools;</li> </ul>   |
| Perceptions About<br>Quality                    | There are strong perceptions and associations between the relative qualities of attending government/village or urban schools, mission and private schools;   |
| Teacher placement practices of MESC             | Better qualified teachers are often appointed to the better performing government schools;  |
| (C. Relevancy)  Curriculum Materials            | <ul> <li>✓ Most government school report different degree of access to curriculum materials including text books and teaching aids (Although the MESC suggest that all schools are provided with equal access to these);</li> <li>✓ Pupils in Private schools have better access to learning materials such as text book, computers and sports facilities;</li> </ul>   |
| Student Aspirations                             | ✓ Most pupils desire to advance to higher education and value lifetime skills;  |
| Cultural Aspects                                | <ul> <li>✓ Cultural practices including obligations to families do influence aspirations for advancing to higher level educations;</li> <li>✓ Cultural and church obligations can relegate commitments to schooling of children;</li> <li>✓ The majority of parents would like to send their children to quality schools if they could afford to do so;</li> </ul>  |
| (D. Efficiency) Transition Rates                | <ul> <li>✓ The transition rates reported at the national level vary significantly with those reported from the schools;</li> <li>✓ Most government schools do not have readily accessible records on student performance, transition rates and even enrolment;</li> </ul>   |
| School Management                               | <ul> <li>There are no standard policies/practices for government school management amongst Head Teachers, School Committees and SRO's;</li> <li>Networking of government schools although addressed under current ISP remain a significant problem;</li> <li>Support of village communities is an important factor for school management;</li> <li>Leaner more efficient management structures of mission and private schools permit efficiencies in implementation of school planning and programmes;</li> </ul>   |

| Teacher Remuneration                                      | ~ | Government Teachers salaries are low relative to other occupations; it is difficult to evaluate the teachers' salary scale, but at least it is regarded that teachers salaries are low.                      |
|---|---|--|
| dinner for teachers. Also teachers do                     |   | Village government schools are supported by village communities through lunch and dinner for teachers. Also teachers do get allotment from distributions (food, money etc) by the village council of chiefs; |
|   | ✓ | Most urban based schools do not have this benefit;   |
| ✓ Private and some Mission schools of government schools; |   | Private and some Mission schools command much higher salaries relative to government schools;  |

For further details on discussion of the above issues, please see Section IV on Detailed Analysis of Problems at Key Institutions.

#### 4.6 Samoa Polytechnic

The following matrix summarizes the problems identified through interviewing major actors of SP including CEO, Academic Director and Head of Schools.

Table 4-5: Summary of major problems identified by SP executives

| Key Issues   | Major Problems identified by SP  |  |  |
|--|--|--|--|
| □B. quality□   |  |  |  |
| B-1 Teaching and Learning Materials                    | ✓ There is a shortage of Teaching and Learning Materials.  |  |  |
| B-2 School Environment                                 | <ul> <li>✓ There is a shortage of classrooms and a lecture room.</li> <li>✓ There is a shortage of technical training facilities/educational equipment.</li> <li>✓ There is a shortage of trainers.</li> </ul> |  |  |
| □D. Efficiency □ D-2 Central Administration Management | ✓ Data Management is not developed yet.  |  |  |

#### 4.7 Samoa Polytechnic Tracer Survey

Some of the major problems identified during the Tracer Survey of recent SP graduates include the following:

Table 4-6: Summary of major problems identified through SP tracer survey

| Key Value & Key<br>Issues               | Although the survey did not focus specifically on this aspect, the following observations were made:  SP is seen as the premiere vocational training school in Samoa in terms of school resources, training offered and graduate qualification standards;  The majority of new enrolments comprise of secondary school students unable to achieve the required minimum scores for qualification and selection for scholarships in Universities;  An increasing number of students now include those already in employment;  Minimum qualifications to entrance has been raised gradually leading to improved student quality; however, the same efforts have also tended to exclude average students from attending vocational training |  |
|---|---|--|
| (B. Quality) SP students and Graduates  |   |  |
| (C. Relevancy) Relation to Labor Market | <ul> <li>✓ The majority of those surveyed are already engaging in paid employment;</li> <li>✓ About 40% of 2003 graduates could not be identified by HOS, Teachers and Administrative staff of SP;</li> <li>✓ About 12% are continuing with further education at SP, NUS or overseas;</li> <li>✓ The majority of those employed graduated from the School of Technology, followed by School of Commerce and Marine Training;</li> <li>✓ The majority of those employed have found jobs that are consistent with their area of training;</li> </ul>  |  |

| (D. Efficiency)   | 7        | Although SP provided a list of all 2003 graduates including those already employed, Heads and School and Teachers were unable to confirm and provide any further details  |
|---|----------|---|
| SP Record Keeping and<br>Maintenance of Student<br>Data | <b>~</b> | on student careers/employment; SP do not seem to have adequate records on student employment once they leave the SP; indeed some of the data regarding student status for 2003 graduates conflict with actual findings through the Tracer Survey; |

For further details on discussion of the above issues, please see Analysis of SP graduates Tracer Survey in Section IV.

### 4.8 National University of Samoa

Some of the major problems identified for the NUS include the following:

Table 4-7: Summary of major problems identified through interview with VC

| Key Value & Key Issues                    | Problems Identified   |  |
|---|---|--|
| (B. Quality) B-4 Teacher quality          | <ul> <li>NUS identifies the difficulty to recruit qualified teachers.</li> <li>There is not no international rating system for NUS</li> </ul> |  |
| B-6 Teachers' Status                      | Few students want to choose FOE, which is for those who are not good.   |  |
| (C. Relevancy)<br>C-1 Curriculum          | Fragile state of quality of Curriculum at NUS has been observed.  |  |
| (D. Efficiency) D-1 Studetns' Performance | The fundamental weakness among new entrants especially in FOE   |  |

For further details on discussion of the above issues, please see Interview with Vice Chancellor and Advisor to Vice Chancellor on ICT Policy in Section IV.

# 4.9 Special Needs Education

The following matrix summarizes problems identified through interview survey. The interviewees include the Managers of CMAD and Policy, Planning and Research Division, as well as SNE unit director of MESC as well as principals of schools with SNE unit and SROs.

Table 4-8: Summary of problems identified among SNE

| Key Issues                             | Problems Identified Among SNE   |  |
|--|---|--|
| □B. quality□                           |   |  |
| B-1 Teaching and<br>Learning Materials | General Shortage of teaching aides/materials for SNE at both SNE units as well as SNE program at FOE.                           |  |
| B-2 School Environment                 | There is a limited Physical Access (Lack of Transport) of SNE pupils to go<br>to school   |  |
|  | ✓ Inappropriate School Infrastructure   |  |
|  | ✓ There is a general shortage of SNE Teachers   |  |
| B-7 Teachers' Quality                  | <ul> <li>There is a general limited Technical Access (Shortage of Knowledge for<br/>SNE Teaching among SNE teachers)</li> </ul> |  |
| □C. Relevancy□                         | V   |  |
| C-1 Curriculum                         | ✓ SNE Curriculum/Program at FOE has not developed yet.  |  |
| □D. Efficiency□                        |   |  |
| D-2 Central Administration Management  | ✓ There need more close cooperation between MESC and NGOs (such as Blind Society)   |  |

# Chapter 5. DEATIL ANALYSIS OF CHALLENGES IN KEY INSTITUTIONS

This chapter tries to conduct a detail analysis of the current problems identified through various surveys (such as interview and questionnaire survey as well as data analysis) concerning key stakeholders; MESC officials at central level and all the key institutions of education sub-sectors of all the Samoan education sector.

#### 5.1 Central level; Administration at MESC

The study at Central Level has been conducted largely through interview survey to major personnel within MESC, including CEO and assistant CEOs.

What follows are the problems identified by the study.

B. Quality

# B-1 Teaching and Learning Materials

# 1. Shortage of textbooks as well as poor textbook management by schools

There seems to be problems of cost of re-printing textbooks as well as textbook management at school level.

In Samoa, textbooks are property of schools (government). Therefore students are not permitted to bring the textbooks home. However depending on school policy, some schools seems to permit them to do it. On the other hand, schools have responsibility to store properly the textbooks provided by MESC against loss and thief of them. But in reality according to the study's visit to schools, it seems that this textbook management by school does not done appropriately.

Due to these situations, many schools are in short of textbooks and request additional textbooks provision. CMAD recognizes this, and encourage the control checking one by one the request from schools whether each is appropriate; CMAD emphasize the importance of accountability of principals. If request is not appropriate, that is if it is the mismanagement of textbook by schools, CMAD would not approve the request and asks the principal to buy textbooks by school.

CMAD has also emphasized the importance of the training of school management by the principals, including textbook management.

#### **B-2** School Environment

#### 2. There is a chronic shortage of teachers.

According to MESC, if the number of teachers increases, the MESC has capacity to cover their salaries. The problem is that there are not many students who want to be a teacher.

MESC is conducting a campaign, which is called 'Teacher Marketing', through the radio and through visiting secondary schools to raise motivation of secondary school students to be a teacher. However there are still very few graduates of NUS who become a teacher, one reason because secondary students who want to be a teacher are not accepted by NUS due to low exam score and the other because graduates of NUS prefer other occupations than a teacher.

This year (2004), 125 students were accepted by NUS through teacher marketing efforts. They are expected to obtain Diploma of Education (DOE) and become teachers. Currently there are 75 students at the 3rd year taking DOE who are going to be teachers (either primary or secondary) next school year (1 year foundation and 2 years of specific education). There exists a kind of promise among MESC, Attorney general and the students. This is to confirm that they will surely become teachers instead of other occupations.

As one of the reasons of teacher shortage, MESC as well as other people admit that teacher is not a respected job as an occupation along with nurse. This perception would be a big barrier to produce good teachers with responsibility and good knowledge of teaching methodology and subject knowledge. To solve this fundamental problem, there might be a need to conduct a large scale campaign to make teacher a respected occupation.

#### 3. More serious shortage of primary teachers than of secondary teachers.

There seems to be a trend among students to be a secondary teacher rather than to be a primary teacher, in spite of the fact that the salary is the same. This might pose another problem in the near future. Since the establishment of NUS, there is only 1 institutions, which is FOE, to produce both primary and secondary teachers; before there were 2 institutions, primary teacher college and secondary teacher college. Since NUS establishment, there is a tendency that FOE students want to be secondary rather than primary teachers.

#### 4. Shortage of Mathematics and Science Teachers

Although there is a shortage of teachers in general as earlier suggested, there is a critical need of mathematics and science teachers. According to MESC, those who are specialized in science and mathematics have more tendency to choose occupations other than teachers. Therefore MESC admits a more serious shortage of teachers in these subjects.

The study team has found that there are quite a few mathematics and science teachers who do not have appropriate background through visiting schools; At a secondary school, there is a teacher who have geography background teaches science as there is a shortage of science teachers.

# B-7 Teachers' Quality

#### 5. Low level of Teacher Quality

MESC and NUS Vice Chancellor admit that top students in terms of examination results will go to universities abroad or choose departments at NUS other than Faculty of Education (FOE). As a result, at the entry point of NUS, students of relatively low score will be in FOE. This is a fundamental cause of the problems of low quality of teachers.

#### **B-8** Minimum Standards of Education

6. <u>Corresponding Low Level of Students' Achievement especially in Numeracy and Literacy Issues</u>

# C. Relevancy

#### C-1 Curriculum

7. Special Needs Education; there is still very limited access to handicapped students; problem of transport, materials, teachers, etc.

MESC has launched activities to promote Special Needs Education (SNE), which was supported by UNDP as a component of AIGA project. There are currently 6 SNE unit at 6 primary schools. The study team visited one of the units and observed that there are still much more things yet to be done; for example there is still very limited access to handicapped students, in both physical and technical terms.

Physically there are not enough transports for handicapped pupils (parents do not want to use public transport for their handicapped children to use it) especially in Savai'i which is a scattered area. In technical terms, there is no teachers who can teach blind pupils and no materials for them either, for example.

As there will be 5 graduates of FOE this year who have studies SNE, the number of SNE unit is supposed to increase form 6 to 11, which is a very slow improvement, but gradual improvement. That suggests the increase of the unit depends on the no. of graduates.

Although UNDP has been the only actor in terms of financial and technical assistance (for conducting needs survey as well as teacher training), the AIGA project ended in December 2003, and there is currently no assistance from donors. Therefore there can be a concern of sustainability of the process of SNE development in Samoa.

It can be said that SNE in Samoa is in a process of development in both technical and financial terms. Refer to b) School level, vii) Special Needs Education for detail.

8. Early Childhood Education; there needs more support from MESC in both technical and financial terms.

MESC has just started the support to ECE in Samoa; before MESC's commitment, NGOs have played a major role for ECE development and support.

Refer to b) School level, i) Early Childhood Education.

9. New primary curriculum has not yet been started by AusAID, though textbooks based on old curriculum (prepared about 30 years ago) was re-printed and distributed.

#### C-3 Subject Issue (Bilingual and Mathematics Education)

10. There is a fundamental argument on bilingual education policy, reflected in the current education system (curriculum as well as examination)

Before trying to understand the concept of the subjects (ex. science and mathematics), there is a barrier of English. Those who have difficulty in English have lots of disadvantage to be able to learn the other subjects. Those who are good at English have much more advantage under the education system to get higher qualifications than those who are not.

# D. Efficiency

# **D-2 Central Administration Management**

11. There is a serious need of assessment of capacity building for both MESC officials for management and principals/teachers.

Especially for school management and teaching capacity as well as subject knowledge/teaching methodology conducted under the ISP project.

There is a serious need of assessment especially for the following activities.

### i) A series of training under the ISP project assisted by AusAID

- a) management training for MESC officials and school principals: especially for school principals, ISP has introduced SIP (School Improvement Plan) and School Annual Plan which are based on the micro-planning concept (Planning and Budgeting). Currently about 140 schools are trying to follow this. However there is a critical needs of appropriate monitoring to check whether they are appropriately adopting and using this methodology.
- b) in-service training for primary and secondary school teachers (teaching methodology and subject knowledge)

For both types, there is an observation among the study team that there are lots of training, and it seems to be more than trainees capacity, in a sense that lots of information and lots of new things to accept.

There needs assessment whether they are grasping and adopting these new knowledge and new methodology.

# ii) Introduction of new curriculum at secondary level (year 9-12) under Secondary Education Curriculum/Material Project assisted by NZAID

both teacher training as well as actual situation of implementation MESC has conducted, with the technical and financial support of AusAID, under the ISP project, lots of training targeting MESC officials and school staffs (teachers and principals) to improve management skills. For teachers trainings for enhancing teaching skills and subject knowledge have been conducted.

ISP is a fundamental effort to bottom up of staff capacity at both central and school level. Therefore there is a need to evaluate the impact of this project. To bottom up the capacity there is a series of process of i) learning, ii) grasping and iii) application. The learning has been conducted by the leadership of ISP members. Now the important steps are ii) grasping and iii) application to really bottom up the staffs' capacity and improve the quality of education on the spot.

Therefore the study has identified a crucial need of assessing/evaluating this series of trainings. This process will identify any needs of additional input to secure the long-term or mid-term impact of building staffs' capacity and enhanced quality learning at school level. Along with the assessment, regular monitoring by MESC staffs (SROs) is also essential to check to what extent principals and teachers have grasped the skills and applied these skills to either school management or actual teaching.

Especially under the ISP, School Improvement Plan has been introduced, which are now at pilot stage. As there are lots of new skills to learn for principals, without this monitoring activities, it would be difficult to really make principals to grasp the concepts and applies them to their own school, which is a critical issue for enhanced school management.

12. There is a shortage of staffs within MESC (ex. 14 SROs instead of 21, exp. Savai'i is serious).

Corporate Plan suggests personnel structure of each division. However as of March 2004, some of the posts are not occupied yet. As a result, the divisions of MESC have to conduct

their task with fewer personnel. For example, School Operations Division covers a wide range of tasks, such as i) Teaching Services (School Staffing, Teacher Recruitment, Promotion, Transfer and Posting, Teachers' Assessment), ii) Teacher Training Services (Coordinate INSET Training) and iii) School Management Services (School Reviews, Promotion of Partnership between Government and Communities, Training for Principals and School Committee Members, School Review Officers' Management). However, the corresponding personnel are not posted or recruited. There can be a concern of fragility of the management of this division and it would be difficult to achieve the expected tasks. Currently there are only 14 SROs while there should be 21 SROs (1 per district), who are the critical personnel to monitor the schools and communication hub between schools and MESC. This shortage might lead to for example, inappropriate grasp of actual school situation. This might be due to the budget limitation. However one personnel has quite a lot of responsibility/tasks.

Another example is management of lots of trainings to teachers and principals. The trainings are conducted under the initiative of ISP. As there are lots of training for the target stakeholders, it seems that the ISP team can not grasp the progress or management of the series of training.

13. There needs more close monitoring by SROs or by any other means in terms of school management/textbook management.

There is a need to assess/evaluate teachers and principals. Need more serious supervision (school management assessment data management, etc.)

# D-5 School Management and Planning (School Committee)

14. <u>Mismanagement of textbooks at school level: thief and lost. Textbooks are basically property of government and schools not students therefore need more appropriate textbook management.</u>

#### 5.2 Early Childhood Education

What follows is the detailed analysis of the problems identified through interview survey. Along with this analysis case study is also available. Please refer to Appendix 4 for the detail.

#### Major problems identified at ECE sub-sector

Following are major problems identified through interviewing major personnel involved in ECE development including CMAD manager and ECE unit director at MESC as well as principals of pre-schools and director of 1-year teacher training center.

# B. Quality

### **B-1 Teaching and Learning Materials**

1. There is a general shortage of teaching materials/stationeries:

Due to shortage of fund available, teaching and learning materials, stationery are very poor at both pre-schools as well as 1-year pre-service training center.

#### **B-2 School Environment**

School Infrastructure has not been developed to secure Children's Security.

pupils' security. As the fund to maintain the school facilities is always in shortage, the school infrastructure is in general in poor conditions.

The poor condition of school infrastructure is the most serious problem, in terms especially of

Also the same issue is applied to the 1-year pre-service training center; the school facilities are very poor and old.

#### 3. There is a shortage of teaching staffs at 1-year pre-service training center.

The center is looking for trainers from NUS (health department), Red Cross and MESC staff such as Mrs. Minime. Red Cross support pre-schools by providing teachers but the pre-school have to pay, which is costly.

#### **B-6 Teachers' Status**

#### 4. Salary of Pre-school Teachers is very small.

As the salary is poor, it seems that there are not many incentives to be a pre-school teacher. Teacher salary at pre-school level is generally lower than that at primary level. At the same time the salaries are often fundraised by PTAs or villages.

# C. Relevancy

#### C-1 Curriculum

#### 5. Language of Instruction:

There is a gap between the bilingual policy and actual learning outputs under the current education system/curriculum. (This is a general problem throughout the education system and government policy.)

There seems to be a gap between English proficiency expected and actual English proficiency among students. The Samoan Government promotes bilingual education. However there seems to be 2 extreme types of family: those families who speak to children in English, and those families who speak to children in Samoan. Children in the former are very good at English and those in the latter not very good. In reality, however, the children in the former have no language to speak like native speaker; they can speak both Samoan and English very well, but they do not master any language perfectly.

Under the current education system, those who are good at English have much advantage in progressing the stage up to tertiary education (examination are written in English at SSC and PSSC) as well as in obtaining scholarships.

It is true that Samoans to speak English well have comparative advantage (for example compared with Japanese) at world stage, which is one of the reasons why Samoan government promotes bilingual education. But in reality it seems that only a limited can catch up with this policy; most of them identify difficulty in learning English, and before understanding the concepts of the other subjects such as mathematics and science, there is a high barrier of English before them, under the current education curriculum.

If the Government really wants to promote bilingual education, the curriculum system as well as teaching methodology of English has to be enhanced and developed. Otherwise only a few students get the higher marks and go to further education while most of the other students results in stopping their education ladder half way.

# 6. Common pre-school curriculum is not proliferated:

Although there is a curriculum prepared by NCECES, which is expected to be used, this school follows the curriculum prepared by USP.

# D. Efficiency

#### D-5 School Management and Planning (School Committee)

# 7. There is a general shortage of fund in both pre-schools and 1-year pre-service training

Pre-schools are in general in short of fund for school management in terms of maintaining school facilities, paying teachers salaries and provision of teaching & learning materials including stationery.

The same problem is applied to the 1-year pre-service training center. The school facilities are generally very old and very poor due largely to the lack of resources.

# 5.3 Primary and Secondary Schools (schools survey)

What follows is the summary of analysis of questionnaire surveys which target headteachers and students of both primary and secondary sub-sector. Please refer to Appendix 11, 12 for Sample Questionnaire and Appendix 13 for the summary of raw data on the Questionnaires (CD-ROM).

Case Study is available. Please refer to Appendix 3 for detailed study.

Table 5-1: Summary of results of questionnaire surveys

| Key Values and Key<br>Issues   | National Level Analysis  | Regional Level Analysis (Apia urban, RoU and Savai'i)   | . School Type Analysis  |
|--|--|---|---|
| □A. equity□  |  |   |   |
| A-1 Community Support<br>(eagerness of<br>parental and<br>community support) | Primary level Community support among primary schools is in general more active than among secondary schools. From the pupils' responses, there is strong evidence of community and parent support for pupils to attend primary schools in general. Head Teachers on the other hand reported viewed and actual parent and community support for schools to be relatively weak.  Secondary level There is strong evidence of community and parent support for pupils to attend secondary schools from pupils' responses.  Community support among secondary schools is in general less active than among primary schools. | In general community contribution is much more active in rural areas than in urban areas. Especially Savai'i is the most active area in community contribution to schools in both primary and secondary level.  In cash contribution, there is not much difference among regions at primary level (2,5: between seldom and sometimes).  There is a quite difference at secondary level in cash contribution; Savai'i is much more active than Apia urban, and RoU stays in between; 'Seldom' in Apia urban, between 'Seldom' and 'Sometimes' in RoU, and 'Sometimes' in Savai'i.  In also in-kind coptribution (such as food),  construction and maintenance of school facilities, Savai'i and RoU are more active than in Apia. This tendency is much more apparent in secondary than in primary.  Students in Savai'i identify more active participation of parents in school activities than in Apia and RoU.  Students in Savai'i identify more active support from their own village or community to school than in Apia and RoU.  The study team observes that the results reflect to some extent the ownership patterns/structure of rural and urban based schools as well as private, mission and government schools; | There is not much difference in community eagern and parents' support among school types at both primary and secondary level. But slightly parents o private schools are less supportive than those of government and mission schools.  The pattern of parents and community support by school types reflect relatively lower participation by parents and communities with primary private schools and mission schools relative to government schools. However, at secondary level, greater community support (cash and in-kind) is provided private and government schools. |

| Key Values and Key<br>Issues           | National Level Analysis  | Regional Level Analysis (Apia urban, RoU and<br>Savai'i)   | School Type Analysis   |
|--|--|--|--|
| A-3 Gender Gap                         | Primary level  No gender disparity has been observed; enrolment by gender type is consistent with national population statistics, with about 50% distribution between males and females.  Secondary level  No gender disparity has been observed; enrolment by gender type is consistent with national population statistics, with about 50% distribution between males and females. There is recent trend with female pupils enjoying a higher success rate, especially at secondary schools and higher/tertiary education (There are more girls than boys).  | No gender disparity has been observed at regional level; enrolment by gender type by region is consistent with national population statistics, with about 50% distribution between males and females;  | No gender disparity has been observed by school type; enrolment by gender type is consistent with national population statistics, with about 50% distribution between males and females.   |
| □B. quality□                           | <u> </u>   | <u> </u>   |  |
| B-1 Teaching and<br>Learning Materials | Primary level  Most schools regardless of sub-sector do not allow students to bring back textbooks home: only 30 % of schools allow students to do so.  On use of teaching aids, primary pupils reported that basic teaching aides, specifically, blackboards and textbooks/teaching materials are used more often than other types/more advanced teaching aids such as TV/Video, radio/tape and photos/picture.  Secondary level  Most secondary schools do not allow students to bring back textbooks home: only 30 % of schools allow students to do so; the majority of primary schools and secondary school teachers reported that only some textbooks are available for students to take home. The survey indicates the same pattern within the three regions as well as amongst the three school types. | At primary level, more schools in Savai'i allows pupils to bring back the textbook home, but at secondary level, more schools in Apia and RoU than in Savai'i.  In general, the textbook availability is much more affluent in Apia than in RoU and Savai'i at both primary and secondary level.  In terms of textbook/student ratio, at both primary and secondary level, it is identified that schools in Savai'i identify more serious shortage of textbook more than Apia and RoU.  Students generally identify that the use of basic teaching aides is an actual practice by teachers regardless of regions.  At regional level, the survey indicates various degree of the use of different types of teaching aids with Apia Urban showing more frequent use of TV/Video teaching aids other than blackboards and textbooks; | <ul> <li>There is not much difference in the use of various kinds of teaching aides among school types. Just slightly government and mission schools are more active in using basic teaching aides such as blackboards and pictures/charts and rulers than private schools.</li> <li>As for sophisticated materials such as TV/video, private schools use them slightly more actively than mission and government schools.</li> <li>Radio is used slightly more actively at government schools than at mission and private schools.</li> <li>More private school allow students to bring the textbook home than mission and government schools. This surely affects students' learning.</li> </ul> |

| Key Values and Key<br>Issues | National Level Analysis   | Regional Level Analysis (Apia urban, RoU and<br>Savai'i)   | School Type Analysis   |
|------------------------------|---|--|--|
|                              | Primary level  The overall assessment of primary school facilities has been reported as in "bad/poor condition";  Most primary schools do not possess laboratories, dormitory, IT rooms and computers, and photocopy machines.  Average for Classroom condition in Primary schools are 3.48 (between bad condition and satisfactory). However there are differences among schools from the high standard deviation (1.06), that suggests that there are some schools suffering serious classroom conditions.  20% of primary school do not have a library, and 70% of schools which have one indicate that it is in bad or very bad conditions.  4 % of primary school do not have laboratory.  More than 60 % of primary school suggests that toilet is in bad or very bad conditions.  7.8 % of primary schools do not have drinkable water supply system. 54 % of schools which have a water supply identify bad or very bad conditions of the system.  About 30 % of primary school do not have school fence.  About 70 % of primary school do not have copy machine.  Most of the primary schools (96 % of primary school) identify that chairs for students are in bad or very bad condition.  The classroom-to-student ratio ranges from 17-33.  There are more female teachers than male teachers, with same pattern shown in the three regions;  Average student-teacher ratios are around 27. | The Apia Urban schools reported relatively large size of schools and enrolment in Year 8 and Year 12; Generally Apia Urban schools report better overall conditions in school facilities relative to those in Savai'i and Rest of Upolu; Student-teacher ratios are higher in Apia urban than in RoU and Savai'i.  At secondary level, number of English teachers are much less in Savai'i(3.0) and RoU (3.5) than in Apia (4.5). This must affect the capability of English among students in the 3 regions.  At secondary level, the number of mathematics teachers is much less in RoU (2.5) than in Savai'i (3.8) and Apia (4.8). This also might affect the achievement of students among the 3 regions.  School Infrastructure and facilities in Apia is generally better than in RoU and Savai'i at both primary and secondary level.  Savai'i comes next to Apia in terms of school facilities in general, and schools in RoU have in general worst conditions among the 3 regions.  Classroom conditions at primary level in Apia (in average more than satisfactory) is much better than in RoU (in average bad conditions), and Savai'i comes in the middle (between bad conditions and satisfactory).  Classroom conditions at secondary level in Apia (almost satisfactory in average) are much better than in Savai'i and RoU (in average bad conditions). | <ul> <li>✓ At the primary level, there are more teachers (both male and female) in Mission Schools than for government and private schools.</li> <li>✓ Mission schools report higher enrolments for girls particularly at secondary level.</li> <li>✓ Private school report better condition for school facilities overall.</li> </ul> |

| Key Values and Key<br>Issues | National Level Analysis   | Regional Level Analysis (Apia urban, RoU and<br>Savai'i)   | School Type Analysis   |
|------------------------------|---|--|--|
|                              | Secondary level  The overall assessment of secondary school facilities has been reported as in "bad condition".  Most secondary schools do not have dormitories, IT rooms and computers.  Compared with primary, classroom condition average is worse (3.17), and standard deviation is low, that suggests that generally the classroom condition is bad.  13 % of secondary schools do not have a library. 70 % of schools which have a library report it is in bad or very bad condition.  As for laboratory, 8.7 % of secondary school do not have laboratory. And 78 % of secondary school do not have say that it is in bad or very bad conditions.  17.4 % of secondary school do not have sports ground.  39 % of secondary school do not have school fence.  30.4 % of secondary school do not have copy machine.  70 % of secondary school identify the chair for students are in bad or very bad condition.  The survey reported similar classroom-to-student ratio (17-33) to primary schools.  There are more female teachers (for the three core as well as other subjects) than male teachers, with same pattern shown in the three regions;  For secondary schools, the average number of male teachers is higher compared to primary schools but still lower than the number of female teachers;  Student-Teacher ratio is around 17. | There is quite a big discrepancy between regions in library and laboratory conditions; both primary and secondary schools in Apia is better than in RoU and Savai'i. But generally they are low level competition. Apia (bad condition) and RoU and Savai'i (very bad condition).  Big difference in toilet conditions at both primary and secondary level; Apia has better equipped toilet than in RoU and Savai'i. Apia (in average between bad and satisfactory), and RoU and Savai'i (in average between very bad and bad conditions).  School Fence in Apia at both primary and secondary is much more developed than in RoU and Savai'i. In the latter 2 regions, there are lots of school which do not have school fences.  In most schools, photocopier is not available except for some schools in Apia (secondary schools).  Conditions of desks and chairs in Apia at both primary and secondary level are much better than in RoU and Savai'i.  Teachers' guides are rather in short in RoU and Savai'i than in Apia.  Student teacher ratio is higher in schools in Apia than in RoU and Savai'i at both primary and secondary levels.  The survey reported similar classroom-to-student ratio (17-33) and desk -to-student ratio at the national and regional level;  The availability of relatively more reliable electricity and water supply in Apia Urban has been identified compared to RoU and Savai'i. |  |
| B-3 Teaching<br>Methodology  | Primary level On average student responses indicate a tendency for interactive teaching approach adopted by teachers.  Secondary level  | Students identify, regardless of regions and sub-sector, high level of interactive teaching conducted by teachers. That suggests that teachers are trying to teach students effectively and fairly.  Regardless of regions and sub-sector, taking textbooks home is not generally practiced at many schools, according to students.  | Regardless of school type, tendency of interactive teaching is observed against the prevision that one-way teaching and lecture style is prevalent.  Interactive teaching approach is reported to be more prominent in private schools compared to Mission and Government schools; |
| B-4 Teacher Training         | On average student responses indicate a tendency for interactive teaching approach adopted by teachers.  Primary level Almost all the teachers have attended in-service training and have teaching qualification, according to the headteachers' response.  |  | Mission and government schools reported relatively higher numbers of teachers who have attended some form of in-service training.  |

| Key Values and Key<br>Issues  | National Level Analysis   | Regional Level Analysis (Apia urban, RoU and<br>Savai'i)   | School Type Analysis   |
|---|---|--|--|
|   | Secondary level  ✓ Almost all the teachers have attended in-service training and have teaching qualification according to the headteachers' response.  Primary level ✓ For both primary and secondary schools, the pupils' survey reported that the majority of teachers/schools  | ✓ In all the regions, visiting parents' house in not a usual practice among teachers. ✓ The use of mini-test is reported more often in Savai'i   | As headteachers suggested major assessment tools such as register and school reports are actually used at most of the schools regardless of primary or   |
| B-5 Evaluation and<br>Assessment<br>(Use of Continuous<br>Assessment) | conduct Continuous Assessments in the form of morning register, mini-test, school reports/evaluation cards. However, teachers seldom visit pupil's homes to consult with parents. This situation is more so for secondary schools than at primary schools. Similar response was reported by Head Teachers.  85 % of primary school conduct mini-test after each chapter of subject.  At most primary schools, register to check attendance is used.  At most schools School Reports are available.  There are 14 % of primary schools which never see SROs. 80 % of the school which had SRO visit experience visit of SROs 1-3 times per month.  Secondary level  For both primary and secondary schools, the pupils survey reported that the majority of teachers/schools conduct Continuous Assessments in the form of morning register, mini-test, school reports/evaluation cards. However, teachers seldom visit pupil's homes to consult with parents. This situation is more so for secondary schools than at primary schools.  Almost 100 % of secondary school conduct regular test for students.  Register to check attendance is used by all the secondary schools.  At most secondary schools school report is available.  There are 17.4 % of secondary schools which never had SROs visit. Most secondary schools which had SROs visit has 1-3 times per week. | schools, while evaluation cards/school reports at end of each trimester are available more in Apia urban schools.  School Report distribution is a usual practice among teachers regardless of regions.  In terms of frequency of SROs' visit, RoU areas are most active compared with Apia and Savai'i at both primary and secondary level. But still they are all low level. At primary level, RoU (av. 3-4 times per month) and Apia and Savai'i (av. 1-2 times per month). That suggests that in general SROs' activity is not very active especially in Apia and Savai'i. In Savai'i SROs have to cover a scattered area, which might be one of the reasons.  According to students, regardless of regions and subsectors, basic assessment tools (such as mini-test and register) are actually used and visit by teachers to students' parents is not practiced generally. | secondary and among school types.  On the basis of school type, the survey results of both teachers and pupils indicate that the practice of continuous assessments is relatively more common in mission schools than in government and private schools.  Teachers' visit to parents' house seems not to be a usual practice among teachers regardless of school types and sub-sector. |
| B-6 Teachers' Status  | Primary level Secondary level   |  |  |

| Key Values and Key<br>Issues          | National Level Analysis  | Regional Level Analysis (Apia urban, RoU and<br>Savai'i)   | School Type Analysis  |
|---------------------------------------|--|--|---|
| B-7 Teachers' Quality                 | Primary level  Secondary level   |  |   |
| B-8 Minimum Standards<br>of Education | Primary level  Secondary level   |  | ,   |
| B-9 Examination                       | Primary level  ✓ At most schools, the results of SPELL test are not available; the results is available only at central level.  ✓ About 70% of pupils (with equal proportion of boys and girls) sat the 2003 national exam in Samoan, English and Mathematics. (Note that survey responses were not comprehensive for this data).  ✓ The average pupil scores reported varied around 52-57 for the three subjects.  Secondary level  ✓ Between 50-80 % of pupils sat the 2003 national exam in Samoan, English and Mathematics. (Note that survey responses were not comprehensive for this data). | In general, more percentage of pupils/students sit the exam of either National Exam or SSC in Apia than in RoU and Savai'i.  ✓ Average English exam result is higher among students in Apia than RoU and Savai'i at primary level.  ✓ At secondary level, Apia marks the highest scores. Savai'i follows the Apia and RoU is lowest.  ✓ Regarding Math exam, Apia always marks the highest scores followed by RoU at primary | Private schools reported the highest proportions of pupils who sat the 2003 National Exams.  Except for Samoan, private schools reported higher average scores than government and Mission schools.   |
| B-10 Student Satisfaction             | Primary level  The majority of school pupils reported a keen interest in their schools; that schooling is useful to satisfy academic curiosity; in obtaining vocational skills and future career. Similarly most pupils indicate a keen interest to study both in school and at home.  Secondary level  The majority of school students reported a keen interest in their schools; that schooling is useful to satisfy academic curiosity; in obtaining vocational skills and future career. Similarly most pupils indicate a keen interest to study both in school and at home.                   | Regardless of regions and sub-sectors, students tend to be satisfied with going to schools and study at schools and at home, according to the students.  | <ul> <li>Private school pupils at both primary and secondary schools show stronger appreciation for the value of school.</li> <li>Mission school pupils like their school more than government and private school.</li> <li>Eagerness to study at home is significantly stronger with Mission primary school pupils.</li> </ul> |

| Key Values and Key Issues     | National Level Analysis   | Regional Level Analysis (Apia urban, RoU and<br>Savai'i)   | School Type Analysis   |
|-------------------------------|---|--|--|
| C. Relevancy   C-1 Curriculum | Primary level  ✓ Most pupils like to attend Samoan and consider that teachers do a good job to allow pupils to understand the subject. The majority however, consider they need to study harder than now if they are to pass the National Examinations.  ✓ Whilst most pupils like to attend Mathematics class and most felt the teachers do a good job teaching Mathematics, however, they also felt strongly they need to study the subject harder than now in order to pass National Examinations. Most felt Mathematics is important to future careers.  Secondary level  ✓ Most pupils like to attend Samoan and consider that teachers do a good job to allow students to understand the subject. The majorities however, consider they need to study harder than now if they are to pass the National Examinations.  ✓ For English as well, most considers that they need to study harder in order to pass National Exams. There is strong recognition of the importance of English in future careers.  ✓ Whilst most pupils like to attend Mathematics class, however, on a verage, pupils have difficulty in following the class. Most felt the teachers do a good job teaching Mathematics, however, they also felt strongly they need to study harder than now in order to pass National Examinations. Most felt Mathematics is important to future careers. | At primary level, Apia urban primary school pupils appear to have more difficulty in understanding Samoan than pupils in Savai'i and RoU.  At primary level, Apia urban pupils do not consider Samoan to be useful in future career relative to Savai'i and Rest of Upolu pupils.  For English, Apia urban pupils rank the performance of teachers higher than Rest of Upolu and Savai'i pupils, at both primary and secondary school level.  More Apia Urban pupils report they need to study harder to pass National Examinations.  More Apia Urban pupils report that English is useful for future career.  More Apia Urban secondary pupils study English at home.  Fewer Apia urban pupils have difficulty following Mathematics.  Generally Apia urban pupils felt the teachers do a better job in teaching mathematics. | At secondary school level, private school pupils indicate greater difficulty in following the Samoan class.  Government and Mission school pupils need to study harder to pass National Exams than private school pupils.  Private school pupils have the least difficulty following Mathematics; felt their Mathematics teachers do a good job; study more at home; and need least effort in order to pass National examination. This result is more evident at secondary school level. |

| Key Values and Key<br>Issues                     | National Level Analysis | Regional Level Analysis (Apia urban, RoU and<br>Savai'i)  | School Type Analysis   |
|--|-------------------------|---|--|
| C-3 Subject Issue (Bilingual and Math Education) | Secondary Level         | Students in Apia identify slightly more difficulty in studying Samoan language than those in RoU and Savai'i at secondary level.  Students at Savai'i have tendency to study Samoan slightly more than those in Apia and RoU at both primary and secondary level.  Students in Apia tend to like English class slightly more than those in RoU and Savai'i. But in general regardless of region, they like English class in general. Students in Savai'i feel slightly more difficulty in English class than those in Apia and RoU at both primary and secondary level.  Students identify that English teachers try to let them understand English at class regardless of regions and sub-sector at high level.  Regardless of regions and sub-sector, students identify that they tend to study English at home at high level score.  However, regardless of regions and sub-sectors, many students identify that they need to study English more to pass the examination.  Regardless of regions and sub-sectors, most students identify that English is very important for their future life and career.  Regardless of regions and sub-sectors. Most students identify that they like to attend Mathematics class with quite a high score.  Students in Savai'i identify slightly more difficulty in Mathematics than those in Apia and RoU regardless of sub-sectors.  Students identify that regardless of regions and sub-sectors, teachers in mathematics try to let them understand the subject with high score.  Regardless of regions and sub-sectors, most students identify that they need to study more to pass the math exam, whose tendency is observed more clearly among primary students than secondary students.  Regardless of regions and sub-sectors, most students identify that mathematics is very important for their future life and career. | Those in private school have much more negative image in Samoa class than those in government and mission schools; there are more students in private school who do not like Samoan class and do not like to study Samoan than those in government and mission schools at secondary level.  As for English class, there are more students at mission and government schools who identify difficulty to follow English class than those at private schools.  Regardless of school type, most students identify that English is an important subject for their future life.  As for mathematics subject, more students at mission and government schools identify difficulty in following the class than those at private schools.  But regardless of school type, most students identify the importance of the subject for their academic career and future life. |

| Key Values and Key<br>Issues             | National Level Analysis  | Regional Level Analysis (Apia urban, RoU and<br>Savai'i)   | School Type Analysis  |
|--|--|--|---|
| □D. Efficiency□                          |  |  |   |
| D-1 Student Attitudes<br>and Performance | Primary level  ✓ Primary and secondary school pupils report an average of 1-2 hours of home study.  ✓ The majority of primary school pupils aspire to reach at least college level.  ✓ The head teachers reported transition rates from Y8-Y9 at around 70 percent with a higher rate for girls than for boys.  ✓ About 2-3 pupils repeated on average in 2003, with slightly more boys repeating than girls.  Secondary level  ✓ Primary and secondary school pupils report an average of 1-2 hours of home study.  ✓ Most of secondary school pupils aspire to reach university study level.  ✓ The transition rates for Y11-Y12 reported are very low | Regarding transition rate, in both primary and secondary level, school in Apia marks the highest score compare to the other regions.  The number of repeaters can be found in general more often in schools in Apia than in RoU and Savai'i. Savai'i marks the lowest score.  Students suggest that regardless of regions, the number of hours of study per week is almost the same.  Regardless of regions, most students at secondary schools generally want to continue their study up to tertiary level.  Savai'i primary school pupils reported slightly higher average home study hours, with Apia urban pupils reporting the lowest.  For secondary school pupils, Rest of Upolu pupils reported more home study hours, Apia urban pupils reporting the least home study hours. | <ul> <li>✓ At both primary and secondary level, students at government schools seem to study slightly more than those at mission and private schools. In general, averagely regardless of school sub-sector and school type they study 1-2 hours per week.</li> <li>✓ Regardless of school type, most of students at secondary level want to go to tertiary education level. Students at private schools have slightly more</li> <li>tendency wanting to go to university than those of mission and government.</li> <li>✓ Regardless of school type, students like their school in general. That might suggest they are satisfied with the school/education/friends.</li> <li>✓ Regardless of school type, most students regard education at school interesting and useful for their future life.</li> <li>✓ Private schools reported the highest transition rates.</li> </ul> |
| D-5 School Management                    | compared to national statistics, however, most head teachers were unable to provide complete data on this indicator.  On average, about 11 pupils on average repeated in 2003 with slightly more boys than girls.  Primary level  School records, annual school plans, maintenance plan of school facilities and school committee are available in most schools.  84.4 % of primary schools identify that annual school plan is available.   | School committee are available more in rural schools (RoU and Apia urban).  There is almost no difference in the prevalence of and actual use of school management tools among the regions. However, relatively school records, annual school plans and maintenance plans are available  | ✓ Private and Mission schools have higher fees than government schools.   |
| and Planning<br>(School Committee)       | <ul> <li>66 % of schools say that school maintenance plan is available.</li> <li>90 % of primary schools have school committees.</li> <li>School fees range roughly from 10 to 30 per year at year 8 in most schools.</li> <li>Major members of School Committee are principal, Parents' representative and Community Representatives.</li> <li>The head teachers are primarily responsible for preparation of school plans.</li> </ul>  | more in Apia urban schools.  Regarding the role of School Committee, there is no difference among the 3 regions.  Regarding the amount of school fee, it is observed that at both primary and secondary level, schools in Apia marks the highest score than RoU and Savai'i, which marks almost the same amount.   |   |

| Key Values and Key<br>Issues | National Level Analysis  | Regional Level Analysis (Apia urban, RoU and<br>Savai'i) | School Type Analysis |
|------------------------------|--|--|----------------------|
| Issues                       | Secondary level     School records, annual school plans, maintenance plan of school facilities and school committee are available in most schools.     95.7 % of secondary schools identify that annual school plan is available.     70 % of schools say that school maintenance plan is available.     22 % of secondary schools do not have school committees.     Major members of School Committee are principal, Parents' representative and Community Representatives.     Average school fees are higher for secondary schools | Savai'i)   |                      |
|                              | than primary schools.  The head teachers are primarily responsible for preparation of school plans.  |  |                      |

### 5.4 Samoa Polytechnic

The interview was held with the CEO and senior management (academic director, administrative manager and head of maritime school) of the Samoa Polytechnic. Through this interview, the outline of issues and problems of Samoa Polytechnic has been identified as below.

### **General Description**

SP seems to have established a stable school management structure in both academic and managerial terms. In academic side, SP has appointed an Academic Director, and under her supervision academic structure is organized by each head of 3 schools (Commerce, Technology and Maritime) who are promoting enhanced programs or curriculum structure. At the same time, the CEO and the other executives are preparing introduction of new programs, which suggests the increased number of students, as well as an urgent need of more classrooms and a big lecture room.

### School Infrastructure/Teaching & Learning Materials

However, due to the limited budget constraints, they are suffering from shortage in school infrastructure as well as teaching and learning materials. As for teaching and learning materials, as SP is a vocational training institution, they are in critical need of consumable material and technical facilities for demonstration as well as actual practice by the students. This is to be explained later as major problems.

### Teacher Training/Teaching Methodology

### (For teachers)

As suggested in general description, internal training programs for teachers within SP seems to be well developed; full staff development modules are available for all the SP staffs with such provision as certificate of adult teaching to enhance teaching methodology.

#### (For students)

As textbooks are very expensive, teachers often provide students with handouts, prepared and copied by teachers, which reduces the burden of students to buy textbooks.

Downloading the texts from internet are also in practice; there are 3 computers. Using the computers, some texts are downloaded through internet, and are used as textbook/handouts for students. This also contributes to reducing financial burden on students.

Internship system is incorporated into the curriculum of each program; there are 4 weeks every year for students to conduct intern training in companies, to acquire practical skills.

# Relevancy Issue

There is an institution called IAP (Industry and Advisory Panel), which is made up of executives/managers of private companies. SP regularly holds meetings with this panel (4 times a year), and asks for advice on relevancy of its current curriculum and syllabus so that they can be relevant to the needs of the labor market.

### School Administration/School Planning Issue

# (School Plan)

There is a 10-year Master Plan (1995-2004), Corporate Plan (3 year plan), as well as annual plan (at school level). Apart from that, Academic Policy has been prepared. (Data management)

They are conducting data management manually. Actually there are no full time personnel to conduct the data management. Therefore if some specific kind of data is needed, SP has to prepare manually one by one, which takes times and which might be inaccurate. However, examination data and library data are stored and managed properly, according to the Academic Director.

# (Education Finance)

Out of total annual budget of SP, 80 % comes from Government as a subsidy, and 20 % is raised as school fees. According to the Academic Director, fundraising for higher education is not common to people and not realistic in Samoan society. That infers that it would be difficult to conduct fundraising activities in Samoa for tertiary education level.

In terms of budget execution and auditing system, SP is following the same system as MESC, and the board (Council) prepares a financial report every 2 months, along with quarter and final report. It seems that SP is proud of its financial transparency and accountability. Not only at SP but also in MESC in general, a strict auditing and budget execution structure is adopted.

### **Donor Assistance**

The summary of donor assistance is suggested below.

Table 5-2: Summary of Donor Inputs

| Donors                               |   | Major Inputs  |  |  |  |
|--------------------------------------|---|---|--|--|--|
| JICA                                 | 1 | Staff training (S/V), infrastructure  |  |  |  |
| NZAID                                | 1 | Development of certificate of adult teaching, horticulture, materials procurement |  |  |  |
| AusAID                               | 1 | curriculum development  |  |  |  |
| SPC (Secretary of Pacific Community) | 1 | Upgrading of Maritime School  |  |  |  |
| COL (Community of Learning)          | 1 | Distance education  |  |  |  |

### Major Problems identified

The below suggests the problems identified through the interview survey as well as information/data prepared by SP based on our questionnaire.

# B. Quality

### **B-1** Teaching and Learning Materials

1. There is a shortage of Teaching and Learning Materials.

As SP is a vocational institution, it is essential for the students to actually learn practical skills. Practical Materials for demonstration and practice (esp. consumables) are in critical need; in day-to-day teaching, actually only a teacher demonstrates, and a student can practice it, while the others watch him/her practice it at a classroom. To actually acquire the skills, students need to practice by themselves. However at current situation, SP can not afford to prepare these materials for the students to actually practice due to the limited budget.

### **B-2 School Environment**

2. There is a shortage of classrooms and a lecture room.

Year by year the number of students are increasing. This year there are about 500 intakes, while there were about 200 or 300 before. SP is furthermore preparing to introduce new programs; each school intends to increase number of program. Therefore SP has an urgent need of extra classrooms and a large lecture room; SP is currently renting this year 6 hours/week a lecture room from NUS, while last year 2 hours/week.

# 3. There is a shortage of technical training facilities/educational equipment.

Shortage of educational equipment is also a critical problem as discussed earlier in the shortage of materials (for example, especially school of Maritime have to follow the International Maritime Organization Requirement, therefore needs appropriate equipments to follow this requirement, which is expensive. Without the required equipment, it would be difficult to stick to this organization for qualification.)

# 4. There is a shortage of trainers.

The head of maritime school has identified the needs of personnel (S/V) in Maritime school (Nautical engineer) to produce a captain of a ship.

# D. Efficiency

# **D-2** Central Administration Management

### 5. Data Management is not developed yet.

As in most primary and secondary schools, SP is very poor in school data management. Most of its management is manual and not organized. There seems to be no data management policy and no idea on what information should be stored. For example, the information now the study team is collecting regarding, which is what the graduates are doing, are not stored, and only lecturers and heads of schools know some of the information; the study team had to interview one by one the lecturers and heads of schools to summarize the data. But it is quite difficult under this system to prepare a complete data on this.

# 6.5 Samoa Polytechnic Tracer Survey

The main objective for the Tracer Survey is to obtain a general overview of industry demand for SP graduates. The process for undertaking the survey includes interview meetings with SP executive management, Heads of three schools, teachers and industry site visits and/or telephone calls to graduates. Although, SP submitted a full list of the 2003 graduates including the number of those already employed, the HOS and Teachers were unable to confirm employment or identify the whereabouts of close to 30 percent of the graduates. Generally, the respective schools do not have systems instituted for recording graduate employment and other information.

### **Tracer Survey Overall Findings**

Of the 258 SP graduates reported by SP for 2003, 60 percent (156) were able to be identified through the survey. The majority of those surveyed, an average of 73%, are reported to be employed with the balance continuing with education either locally or overseas. For 2003, industry demand for graduates allowed a sound rate of employment for graduates for the three schools. For the School of Technology and Maritime Training, 73 percent has been reported to be employed with 71 percent reported for the School of Commerce. In general, the 2003 SP graduates were able to obtain employment opportunities within occupations in-line with their field of studies. In particular, this is noted with graduates from the School of Technology and Maritime Training School given the specialized nature of their training.

The majority of graduates from the Maritime Training School find work as seamen, most of whom are employed by Government owned enterprise, Samoa Shipping Services. For 2003, the majority of graduates from the School of Technology and School of Commerce found employment in private sector industries. For those graduates in business and computer operating, from the School of Commerce, the survey showed that 60% of graduates were able to find employment mainly in private sector finance, retailing, manufacturing, tourism and hospitality with the balance employed by the public sector.

The following sections details the survey results for each of the three schools.

### a) School of Commerce and General Studies

The following provide survey details of the survey of the School of Commerce and General Studies.

Total number of graduates for 2003 reported by Samoa Polytechnic is 107.

### Sample

Table 5-3: Sample size of the study

|                                   | Number | Percent | Total Surveyed | Percent |
|-----------------------------------|--------|---------|----------------|---------|
| Overseas (and continuing studies) | 5      | 5%      | 5              | 8%      |
| Continuing Studies locally        | 12     | 11%     | 12             | 20%     |
| Unknown                           | 48     | . 45%   | •              |         |
| Employed                          | 42     | 39%     | 42             | 71%     |
| Total Survey                      | 107    | 100%    | 59             | 100%    |

Total sampled (59) is 55% of reported list of graduates provided by Samoa Polytechnic. The majority of those continuing studies locally are attending NUS.

# Analysis of Those Employed.

Table 5-4: summary of Analysis of those employed

| Course                                    | Number | Percent of total | Percent of SP graduates | Percent of those reported employed by SP |
|---|--------|------------------|-------------------------|--|
| Diploma of Secretariat                    | 6      | 14               | 67                      | 75                                       |
| Certificate in Tourism and<br>Hospitality | 19     | 45               | 58                      | 90                                       |
| Certificate in Journalism                 | 3      | 7                | 23                      | 38                                       |
| Diploma in Business                       | 9      | 21               | 36                      | 47                                       |
| Certificate in Computer<br>Operating      | 5      | 12               | 18                      | 19                                       |
| Totals                                    | 42     | 100              | 39                      | 51                                       |

# **Industry and Occupations**

Table 5-5: Summary of programs and comments

| Graduates                              | Comment  |  |  |  |  |
|--|--|--|--|--|--|
| Diploma of Secretariat                 | Majority as office assistants mainly in private sector employment.   |  |  |  |  |
| Certificate in Tourism and Hospitality | Majority in the Tourism Industry as kitchen and bar assistants.  |  |  |  |  |
| Certificate in Journalism              | Majority in the media employment   |  |  |  |  |
| Diploma in Business                    | Spread through the following industries, retailing, manufacturing, finance, tourism, construction, government. |  |  |  |  |
| Certificate in Computer<br>Operating   | Government departments and some private sector employment.   |  |  |  |  |

Overall, employment opportunities and occupations are consistent with the courses of study, with a few graduates finding employment in complementary industries.

# b) School of Maritime Training

Total number of graduates for 2003 reported by Samoa Polytechnic is 45.

# Sample

Table 5-6: Summary of job availability

|                          | Number | Percent | Total Surveyed | Percent |
|--------------------------|--------|---------|----------------|---------|
| Continuing studies at SP | 6      | 13%     | 6              | 27%     |
| Unknown                  | 23     | 51%     | -              | -       |
| Employed                 | 16     | 36%     | 16             | 73%     |
| Total Survey             | 45     | 100%    | 22             | 100%    |

Total sampled (22) is 49% of reported list of graduates provided by Samoa Polytechnic. Those continuing studies at SMT (6) have qualified with Certificates of Achievement in Qualified Fishing Deckhand and are pursuing higher certificates.

# Analysis of Those Employed.

Table 5-7: Summary of job availability by program

| Course   | Number | Percent<br>of total | Percent of SP graduates | ercent of those reported<br>employed by SP |
|--|--------|---------------------|-------------------------|--|
| Certificate of Achievement in Qualified Fishing Deckhand | 1      | 6%                  | 14%                     | .14%                                       |
| Certificate of Achievement Maritime<br>Training Rating 2 | 1      | 6%                  | 4%                      | 4%   |
| Certificate of Achievement in Navigational Watchkeeping  | 7      | 44%                 | 100%                    | 100%                                       |
| Certificate of Achievement in Master<br>Class 5          | 5      | 31                  | 100%                    | 100%                                       |
| Certificate of Achievement in Engineering Class 5        | 2      | 13%                 | 100%                    | 100%                                       |
| Totals   | 16     | 100%                | 36%                     | 36%  |

# **Industry and Occupations**

Table 5-8: summary of comments by program

| Graduates  | Comment  |
|--|--|
| Certificate of Achievement in Qualified Fishing Deckhand   | Most are continuing to study for higher qualifications. Only one reported employed.  |
| Certificate of Achievement Maritime Training<br>Rating 2   | The majority could not be identified by SMT and teachers. Two are reported employed. |
| Certificate of Achievement in Navigational<br>Watchkeeping | All are employed as seamen   |
| Certificate of Achievement in Master Class 5               | All are employed as seamen.  |
| Certificate of Achievement in Engineering<br>Class 5       | All are employed as seamen,  |

Overall, employment opportunities and occupations are consistent with the courses/fields of study.

# c) School of Technology

Total number of graduates for 2003 reported by Samoa Polytechnic is 106.

# Sample

Table 5-9: Summary of job availability

| •                               | Number | Percent | Total Surveyed | Percent |
|---------------------------------|--------|---------|----------------|---------|
| Overseas and continuing studies | 18     | 17%     | 18             | 24%     |
| Unknown                         | 31     | 29%     | -              | -       |
| Employed                        | 57     | 54%     | 57             | 76%     |
| Total Survey                    | 106    | 100%    | 75             | 100%    |

Total sampled (75) is 71% of reported list of graduates provided by Samoa Polytechnic. Of those who have migrated overseas or continuing studies, 39%, have migrated to NA and Australia, with most of those continuing training locally attending SP courses with the reminder attending courses at NUS.

# Analysis of Those Employed.

Table 5-10: Summary of job availability by program

| Course   | Number | Percent of total | 'ercent of SP graduates | Percent of those<br>eported employed<br>by SP |
|--|--------|------------------|-------------------------|---|
| Diploma of Radio and Electronics   | 8      | 14%              | 67%                     | 67%   |
| Certificate of Competency in Trade<br>Technology - Plumbing and Sheet<br>Metal | 6      | 11%              | 55%                     | 75%   |
| Intermediate Certificate in Plumbing and Sheet Metal                           | 0      | 0%               | 0%                      | 0%  |
| Intermediate Certificate in Refrigeration and Air Conditioning                 | 6      | 11%              | 67%                     | 75%   |
| Intermediate Certificate in Carpentry and Joinery                              | 7      | 12%              | 58%                     | 70%_  |

| Intermediate Certificate in Electrical Engineering        | 2  | 4%   | 22%  | 25%  |
|---|----|------|------|------|
| Intermediate Certificate in Welding and Metal Fabrication | 8  | 14%  | 62%  | 62%  |
| Intermediate Certificate in Fitting and Machining         | 4  | 7%   | 44%  | 44%  |
| Intermediate Certificate in Automotive Engineering        | 7  | 12%  | 47%  | 88%  |
| Certificate in Tropical Horticulture                      | 9  | 16%  | 100% | 113% |
| Totals  | 57 | 100% | 54%  | 127% |

# **Industry and Occupations**

Table 5-11: Summary of comments by program

| Graduates  | Comment   |
|--|---|
| Diploma of Radio and Electronics   | The majority are reported to have found employment in the field of electronic but also in other complementary industries    |
| Certificate of Competency in Trade<br>Technology - Plumbing and Sheet<br>Metal | The majority surveyed have found employment in plumbing jobs either with the Samoa Water Authority or private contractors.  |
| Intermediate Certificate in Plumbing and Sheet Metal                           | Almost all are continuing to final year of course.  |
| Intermediate Certificate in Refrigeration and Air Conditioning                 | All those surveyed have found employment in their filed (refrigeration and air-conditioning) of study                       |
| Intermediate Certificate in Carpentry and Joinery                              | All those surveyed have found employment in their filed of study  |
| Intermediate Certificate in Electrical Engineering                             | All those surveyed have found employment in their filed of study either for Electric Power Authority or private contractors |
| Intermediate Certificate in Welding and Metal Fabrication                      | The majority have found employment in private sector manufacturing, construction and shipping industries.                   |
| Intermediate Certificate in Fitting and Machining                              | Those survey have found employment as machine operators in shipping and manufacturing industries                            |
| Intermediate Certificate in Automotive Engineering                             | The majority of 2003 graduates have found employment as mechanical engineering mainly in the private sector.                |
| Certificate in Tropical Horticulture   | Graduates from this school formed the majority of those employed with all finding employment in agriculture                 |

Overall, employment opportunities and occupations are consistent with the courses/fields of study with the private sector absorbing the majority of graduates.

# 5.6 National University of Samoa

The consulting team met with the Vice Chancellor and Advisor to the Vice Chancellor for ICT Policy to conduct interview survey and to follow-up on data and information sought from the University. The interview discussion focused on the areas of Teachers Quality and Relations to Labor Market. Please refer to Appendix 7 for the List of Questions to Vice Chancellor, National University of Samoa for guidelines on data and information sought from the University.

Through the interview survey the following problems have been identified.

#### **Problems Identified**

# B. Quality

# 1. NUS identifies the difficulty to recruit qualified teachers.

Although NUS is active in recruiting more teachers with appropriate qualifications, it is difficult for NUS to employ such teachers due largely to the high level of remuneration which continue to be tied to the public service human resources policy (administered through the PSC)

### 2. There is not no international rating system for NUS

Although NUS is a member of a number of international higher level organizations such as Commonwealth, NUS is not rated internationally. That suggests the relatively low incentive among staffs at NUS to improve the quality of education at NUS. The NUS seems to follow New Zealand and Australian system where no specific international rating has been adopted.

### **B-6 Teachers' Status**

# 3. Few students want to choose FOE

As a profession, the demand for teacher training is still very low. The cream of secondary or UPY graduates often opt for advanced training in courses other than teaching. Generally teaching and nursing has a relatively low social standing in the Samoa society. As a result, not only the problem of shortage of teachers' supply but also the problem of relatively lower potential of students who study at FOE seems to arise.

# C. Relevancy

### C-1 Curriculum

# 4. Fragile state of quality of Curriculum at NUS has been observed.

### Formulation of Curriculum at NUS

Since the foundation of NUS, curriculum of all the programs (all the degree programs) has been prepared by the teachers serving at NUS. Every time new program is introduced to the NUS, a meeting is held at Senate, where the appropriateness of curriculum and syllabus is evaluated. After the approval of Senate, another meeting is held at Management Committee, where the appropriateness and availability of room is discussed. After its approval, the Board gives a final approval for the introduction of new program. Therefore, it can be said that the curriculum is prepared on the bottom-up processes, however the quality of the program is an important issue.

# The Quality of the Curriculum at NUS

The study has investigated not all the programs but some programs (SNE and science programs). The result is that the contents of each program are very basic and sometimes some syllabuses are missing. Taking example of SNE program, there is only one teacher and she can teach basic sign language but not Braille; teachers who graduated from the SNE program have difficulty on the spot about the shortage of knowledge in sign language and can not teach blind pupils as they were not taught enough how to teach blind pupils. To teach Braille, Blind society is invited to NUS as a lecturer to teach skills how to teach blind pupils, and borrow some specific materials. This also suggests shortage of materials and teaching staffs.

This actual situation suggests some syllabus and materials necessary are missing in SNE program. This can be applied to science program based on the study conducted by USP.

# D. Efficiency

# **D-1 Students' Performance**

### 5. The fundamental weakness among new entrants especially in FOE

NUS has had to lower the standards for instance for mathematics to standard below that for UPY, essentially to provide a bridging course for teachers. This issue is related to low level of teachers' social standing.

### 5.7 Special Needs Education

What follows is the detailed analysis of the problems identified through interview survey. Along with this analysis case study is also available. Please refer to Appendix 5 for the detail.

### Problems Identified of SNE

Problems have been identified through interview survey. The interviewees include the Managers of CMAD and Policy, Planning and Research Division, as well as SNE unit director of MESC as well as principals of schools with SNE unit and SROs.

# B. Quality

# **B-1 Teaching and Learning Materials**

# 1. Shortage of teaching aides/materials for SNE at both SNE units as well as SNE program at FOE.

Pupils of SNE unit are using the same materials as the normal pupils. There exists a need to prepare teaching and learning materials or at least some teaching aides for the SNE pupils. For example, there are no teaching and learning materials for blind children; NGOs such as blind society tries to provide them with the Braille materials. But it is very much costly to prepare them; that also suggests additional budget or money needed to prepare the materials.

When the study team conducted interview survey to a special unit teacher, she identified especially a serious need of special reading materials (sub reader) for special needs children, for example. There also seems to be a need to develop materials for blind for blind pupils to have access to schools.

The same issue is applied to SNE program at FOE, NUS. The program is borrowing some materials from NGOs such as Blind Society. Not only the development of program contents but also there is therefore a need to enhance quality in terms of materials procurement as well as teachers knowledge at the program.

### **B-2 School Environment**

# 2. There is a limited Physical Access (Lack of Transport) of SNE pupils to go to school

The provision of transport for SNE pupils (school bus for example) is a critical problem to increase physical access to school for them. Especially in scattered areas in Savai'i, pupils need to use some transport to go to school. However parents with handicapped pupils do not want to use public transport. There might be lots of cases that due to lack of transport,

handicapped pupils are denied access to schools and enclosed at home. For example, according to a SRO and a principals, potentially there are lots of handicapped people in Sataua areas, however due to transport problems, most of them are still enclosed in their home; Sataua primary school accept only 8 pupils who are all yr 3 pupils.

# 3. Limited Technical Access to handicapped pupils

It is true that this is now a pilot period, however there is still a very limited access to handicapped pupils in both quantitative terms as well as technical terms. In technical terms, it has been observed that there is no teachers who can teach blind pupils and no teaching aides/teaching and learning materials for blind pupils. This suggests that there is no access to blind pupils technically. It seems that currently SNE units can accept only limited handicapped pupils and can not accept pupils of other handicaps than deaf and slow learners. There are lots of sorts of disabilities: learning impairment, physical impairment, intellectual impairment, hearing impairment, epileptic, visual impairment, multi-impaired, etc (according to UNDP SNE Survey Project 2000).

### 4. Inappropriate School Infrastructure

Inappropriate school infrastructure for SNE pupils must limit the access to school for many pupils with disabilities such as blind children. Any special school equipment or infrastructure can not be observed according to the visiting survey by the study team. There should be some special facilities in order to facilitate their school life.

# 5. There is a general shortage of SNE Teachers (especially for blind children)

There is a serious need to increase the number of teachers who can teach SNE pupils. There can be largely two possibilities; one is to increase SNE-specialized teachers, and the other is to make SNE unit a compulsory unit to take as a condition of graduation from FOE of NUS. It seems that the latter is effective in increasing the number of teachers of SNE with much higher speed than actual one. But it is doubtful whether to take just 1 unit of SNE can make teachers who can cover variety of handicap such as deaf, blind and mentally and physically handicapped pupils. In reality according to the visit by the study team, a teacher who is actually teaching to deaf pupils does not know completely sign language and she is not trained to teach blind pupils.

That suggests that there need to encourage the curriculum at FOE for SNE at NUS to be able to cover a wide range of handicapped pupils such as deaf, blind, physically and mentally handicapped pupils. At the same time, it is ideal to increase the number of students who specialize in SNE. To do this there should be cooperation between NUS and MESC in teacher development policy, for example, campaigning or any incentive giving.

# B-7 Teachers' Quality

6. <u>Limited Technical Access; there is a general shortage of knowledge for SNE Teaching among SNE teachers: Need to enforce the knowledge of Teachers as well as Students at FOE.</u>

Teachers have to teach pupils with various kinds of disabilities actually at schools, however the teachers in reality only have a very basic knowledge for each disability. So they often feel difficulty to teach pupils with various disabilities at school.

The point is that SNE program at FOE can not teach enough skills to the students who have to teach in their future pupils with various disabilities; for example not enough teaching of both sign language and how to use Braille. Therefore there is a critical need to support the teachers actually working at schools in giving further knowledge on teaching methodology to deal with

various disabilities (Need of further in-service training). At the same time, at SNE program of FOE, programs as well as teaching staffs and materials should be further enhanced to give students more knowledge and more practical skills than before (Need of further developed pre-service training).

# C. Relevance

### C-1 Curriculum

# 7. SNE Curriculum/Program at FOE has not developed yet.

As suggested previously, a serious need has been identified to review the SNE program as well as teachers skills/knowledge whether they are enough for students. For this program is the only institution in Samoa to produce teachers for SNE.

Based on the study, it seems that the program can not cover all the necessary knowledge and skills to students.

### 8. There need much closer cooperation between MESC and NGOs (such as Blind Society).

To develop SNE at Samoa effectively and efficiently there seems to be more close cooperation between MESC and Blind Society as the latter has the expertise for teaching blind people and for preparing materials for them, while the former has a responsibility to achieve equal access to pupils to school regardless of disabilities.

# Chapter 6. DONOR ASSISTANCE

### 6.1 Donor resources

Donor funding continue to concentrates heavily on education. Over the period, 1999-2003, the data indicates around 40 percent of all Australian assistance, 68 percent of all New Zealand assistance and 58 percent of all EU micro-project assistance was dedicated to education. About 50% of all expatriate personnel serving in Samoa under aid programs are in the education sector (mainly as teachers in the fields for which local expertise remains inadequate). The tertiary sector includes around 430 students on scholarships in Australia, New Zealand, Fiji and Samoa.

Closer examination of total donor funding show that for most of period up to 2000, the proportions are heavily weighted to the post-secondary/tertiary level. The Japanese funding of the new campus for the National University of Samoa, is included in this period. More recently, the data show an increasing share donor and development partner funding to primary and secondary level reflecting the funding of education sector reform, other ongoing programmes including micro-project and grass-root donor support to the construction and maintenance of primary and secondary school facilities. Australia, New Zealand and Asian Development Bank are the key partners contributing to the funding of education sector reforms. The institutional strengthening component (funded principally by AusAID) will come to end in November 2004. The government and AusAID are in the process of establishment of financing facility (Governance Facility) through which specific project proposals for sustaining reform initiatives could be considered for funding. The financial facility however, is designed to be made available to all government Ministries that have undertaken institutional strengthening project funded by AusAID.

There are two mainstreams of donor funding. One is direct donor funding through the Ministry of Education Sports and Culture and the other is through the Public Service Commission allocation for human resource development (scholarships at the tertiary level). This represents a major donor boost to tertiary education. For 1998/99 total overseas assistance was valued at some SAT\$25 million. Since 1998/99 similar amounts of funds applied. Thus, a large amount of education resources are directed to the post-secondary/tertiary sector of education relative to primary education.

A formidable array of international assistance has been set in place to meet the challenges presented to education, and most recently, those raised in the *Strategy 1995-2005*. International assistance has targeted: early childhood education, primary education, secondary education, special needs education, tertiary education, teacher education, Ministry management, school management and further institutional strengthening. Considerable project work has been completed since the start of the 1990s.

### 6.2 Significant Donor Project 1990-1999

The Table below provides only a sample of the many projects undertaken during the decade 1990-1999. It does cover those that are most significant in meeting some of the aims of the present strategic framework. It also signals that some of the past responses (including Government own initiatives) have possibly not achieved the long term outputs desired given the present situation.

Table 6-1: Significant Education Projects Completed, 1990-1999

| Project Title  | Brief Description   |  |  |
|--|---|--|--|
| Teacher Education<br>Improvement Project<br>NZAID, 1991-19996                              | Commencing at the start of the decade (1991-1996), the Teacher Education Improvement Project funded by the New Zealand government engaged in a major overhaul and consolidation of in-service and pre-service teacher training to include improvement to curriculum and resources.  |  |  |
| National University of<br>Samoa Le Papaigalagala<br>Campus<br>Japan Government 1995-<br>97 | Through Japanese funding (approximately US\$30 million) the new University was completed and opened in September 1997. The Samoa Teachers College became the Education Faculty of the university and a committee was set in place to foster cooperation between the University of the South Pacific and the National University of Samoa. |  |  |

| Vaitele-uta school<br>building<br>China                            | Chinese government funding provided for the construction and completion of the 12 room Vaitele-uta school building at the Malifa compound. The objective is to relieve some of the overcrowding.   |
|--|--|
| Early Primary Literacy<br>Development Project<br>Canada, 1996-1997 | A two year Early Primary Literacy Development Project was funded by the Government of Canada. The project supplied 20 readers in Samoan (and other materials to include posters) to all primary schools in 1996-1997. It also provided in-service training for some 30 percent of all primary teachers.  |
| Basic Education for Life<br>Skills Programme                       | The Basic Education for Life Skills Programme is regional and multi-laterally funded. It has progressed through three stages (1) 1993-1995; (2) 1995-1997 and (3) on-going. Implementation has focused on strengthening primary education and literacy; education systems planning and management; and curriculum for life skills (the focus of the latter being agriculture). |
| Post Secondary<br>Education Planning<br>AusAID, 1997-1999          | An Australian Government sponsored project targeting post secondary education was implemented in 1997-1999.  |
| Teachers Professional<br>Development<br>1992-1994                  | The Western Samoa Secondary Teachers Professional Development Project (1992-1994) focused on junior secondary school teacher training.   |
| EU Microprojects<br>EU<br>Ongoing                                  | As examples only, for 1998-99 financial year, there were 16 EU microprojects directed to preschool improvements, 16 EU microprojects directed to primary school improvements, and 4 EU microprojects for secondary schools.  |
| Other small grants   | Canada, Australia, New Zealand, China, Japan and Germany all provide small grant assistance to individual schools: however, the EU is the leader in this field.  |
| Scholarships   | Scholarships are coordinated through The Ministry Foreign Affairs with some 430 students studying in 1998/99.  |

Source: Ministry of Education Sports and Culture 2004

# 6.3 Recent and Ongoing Donor Projects

The Table below lists projects undertaken over the period 2000-2003. The great majority are principally directed to implementing the education sector strategic/reform framework. Note that Scholarships funding and some small grants are not shown in this table.

Table 6-2: Education Projects 2000-2004

| Project Title   | Brief Description   | Strategic Principles and<br>Values   |
|---|---|--|
| Early Childhood Education<br>Development<br>UNDP<br>1998-2002 | Early Childhood Education Development is being supported through a sub-project of the UNDP Augmenting Institutions for General Attainment (AIGA) 1998-2002, with complementary Government of Samoa activities, and Basic Education for Life Skills teacher training.    | Relevancy and Efficiency<br>(through development of early<br>childhood education materials)                  |
| Infant Materials<br>AusAID                                    | Design for the project is now commencing through Australian government support.   | Relevancy (to improve education materials at infant levels)  |
| Primary Education Materials Project 1996-2003                 | Commenced in 1996 and should complete in July 2000 (but extended to November 2003). The focus has been on year's 4-8 primary schools. Major achievements include the production of texts (7,500 per subject) in all major subject areas and other materials production. | Relevancy, Efficiency and<br>Equity (through the provision of<br>teaching material to all primary<br>school) |
| Basic Education for Life<br>Phase III<br>1997-2000            | Focus on teaching and learning, literacy education and community support training especially early childhood education. A regional program for 1997-2000.   | Relevancy and Efficiency (by addressing key weakness in primary and secondary school pupils.                 |

| Secondary Education Single-<br>Stream Curriculum &<br>Materials Development<br>NZAID, 1988-2000/2004                       | Commenced in 1998 for four years to 2002 and funded by New Zealand with a focus on developing curriculum and teaching materials; and to provide teacher in-service training for years 9-12 with possible expansion to year 13. (Note complementary with the Canadian funded project for primary years 1-3; and the Australian project covering years 4-8). The project is expected to end in June 2004. | Relevancy, Efficiency and Equity (by ensuring all pupils are taught with the same curriculum) |
|--|---|---|
| Library Facilities<br>Japan<br>Since 1995  | The Provision of Libraries and Laboratories Facilities in Junior Secondary Schools Project is funded through Japanese grants administered by the World Bank funding with procurement of equipment in progress. The project has been ongoing since 1995.   | Relevancy and Efficiency<br>(through improvement of<br>learning materials and facilities)     |
| Special Needs Education<br>UNDP<br>1998-2002   | Special needs education is a sub-project of the UNDP Augmenting Institutions for General Attainment 1998-2002.  | Relevancy (through curriculum development)  |
| National Training Authority<br>UNDP, 1998-2002.  | Activities to develop a National Training Authority form a sub-project of the UNDP Augmenting Institutions for General Attainment 1998-2002.  | Relevancy (through links to labor market needs)   |
| Language research<br>UNDP<br>1998-2002   | Activities concerning problems of bilingual education and testing in English are a UNDP Augmenting Institutions for General Attainment 1998-2002 subproject.  | Efficiency and Relevancy  |
| Literacy and Numeracy<br>UNDP<br>1998-2002   | Consolidating Basic Education for Life Skills literacy and numeracy is a UNDP Augmenting Institutions for General Attainment 1998-2002 subproject.  | Relevancy and Efficiency  |
| School-based assessment<br>SPBEA<br>1996 onwards.  | Regional initiative developed by the South Pacific Board for Educational Assessment commencing in 1996 with continuing support with exam alternatives.  | Efficiency  |
| Associated Schools Project<br>UNESCO and NZAID   | A regional initiative of UNESCO with New Zealand funding started in 1996 to twin schools and focus on UN themes towards peace.  | Relevancy and Quality (through curriculum extensions)   |
| School-based teacher training:<br>Supporting Teacher Education<br>in the Pacific (STEPS)<br>UNESCO and NZAID<br>Since 1996 | A model schools project through UNESCO with New Zealand funding started 1996 and extended to 2001.  | Efficiency ad Quality (through teacher training)  |
| Distance Education and<br>Teacher Support<br>NZAID Since 1999  | New Zealand funded and started in 1999.   | Efficiency and Quality (through teacher training)   |
| Peace Corp Science and Commerce Peace Corp   | Peace Corp volunteers replace junior secondary school science and commerce teachers so the latter may attend the National University of Samoa for the qualification up grading of some 54 teachers. (1998-2001)   | Efficiency and Quality (through teacher training)   |

| Yantikatia al Cinamathania                       | The Department of Education Institutional  | Decision (dispersion)                                   |
|--|--|---|
| Institutional Strengthening AusAID               | The Department of Education Institutional Strengthening Project is Australian funded for 5   | Efficiency (through the development of corporate        |
| 1999-2004  | years commencing 1999 to strengthen capacities to  | management culture in the                               |
| 1333 200 .                                       | develop and implement corporate and management   | Ministry as well as developing                          |
|  | plans. The project end in November 2004.   | school management manuals to                            |
|  |  | be used at school level)                                |
| Infrastructure Strengthening                     | ADB education sector loan for improvement to the   | Equity and Quality (through the                         |
| ADB 2000-2004                                    | educational physical infrastructure (complements   | construction of better quality                          |
|  | Institutional Strengthening above). Project ends in  | schools in Malifa and selected                          |
|  | August 2004.   | key locations throughout Samoa                          |
| Science Education in Pacific                     | A proposed regional project through UNDP and   | to minimize urban migration) Relevancy and Quality (to  |
| Schools  | UNESCO with regional government partnership  | improve science education)                              |
| UNDP and UNESCO                                  | oraboo wan regional government partnership   | )   |
|  |  |   |
| Polytechnic Staff and Course                     | Commenced in 1997 for staff development and  | Relevancy and Quality                                   |
| Development                                      | quality control, with Phase II now developing  | (to meet standards to be needed                         |
|  | courses in horticulture and hospitality management.  | by industry)  |
| Consul Consultation 4 Province                   | Intraco de la constitución de la | F 10 10   |
| Coastal Small Island Project<br>UNESCO 2000-2003 | UNESCO pilot project on education for sustainable village living (2000-2003)   | Equity and Quality                                      |
| UNESCO 2000-2003                                 | Vinage fiving (2000-2003)  |   |
| Health   | Health Dept. led with WHO and AusAID funding to  | Quality (through having access                          |
| WHO and AusAID                                   | provide first aid kits to schools and health   | to basic health kits at schools)                        |
|  | instruction for staff.   | ,   |
|  |  |   |
| UNESCO, Education For All                        | Expanding and improving comprehensive early  | All principles of the Strategic                         |
| (EFA)  | childhood care and education especially for the most   | Framework.  |
| 2000-2015  | vulnerable ad disadvantaged children. Donors are to be identified to carry-out specific parts of each  |   |
|  | country's EFA Plan. 2000-2015  |   |
|  | Country of Elife Final 2000 2015   |   |
| UNESCO, Focusing                                 | Improve children's health by adopting four point   | Efficiency and Equity.                                  |
| Resources on Effective School                    | health programme. Promoting safer Schools, access  | 1   |
| Health (FRESH)                                   | to water, health education, health and nutritional   | <u> </u>  |
|  | services.  |   |
| JICA   | Grassroots projects aimed at assisting village based   | Equity and Quality (through the                         |
| On-going   | schools in the construction and maintenance of   | construction of quality school                          |
| On-going   | school buildings.  | facilities in the rural areas)                          |
|  | Solitor, Sullanings.   | ladining in the later the pay                           |
| Asian Development Bank                           | Technical Assistance to review progress over last 5  | Efficiency (to provide ongoing                          |
| 2004   | years and to design a second phase for ongoing   | support to the reform via                               |
|  | support to the education.  | identification of priority needs                        |
|  |  | over the medium term)                                   |
| AusAlD   | Covernance Facility is financial facility to be set up   | Efficiency (through the                                 |
| 2004 to commence                                 | Governance Facility is financial facility to be set up<br>by AusAID to provide specific support to target  | Efficiency (through the provision of ongoing support to |
| · ·  | areas within all government ministries which have  | Ministries who have undertaken                          |
| i  | been supported by AusAID with institutional  | institutional strengthening                             |
|  | strengthening project.   |   |
| <del></del>                                      |  | projects under AusAID)                                  |

Notes: Some Small grants and scholarships are not recorded on this table.

Sources: Ministry of Education Sports and Culture (2004); New Zealand High Commission Official

Development Assistance (1998/99); AusAID.

# 6.4 Donor and Development Partner Assistance

The donor programmes are presented hereunder to highlight contribution of donors to the key values and principles sought under education sector strategic development framework and in which education level/sector the assistance is provided.

Table 6-3: Summary of Donor Coordination

| Key Value  | Early<br>Childhood<br>Education | Primary<br>Education | Secondary<br>Education | Tertiary Education including Vocational | Special Needs<br>Education |
|------------|---------------------------------|----------------------|------------------------|---|----------------------------|
| Equity     |                                 | ADB                  | ADB                    |   |                            |
|            |                                 | AusAID               | AusAID                 | AusAID                                  |                            |
|            |                                 | NZAID                | NZAID                  | NZAID                                   |                            |
| Quality    |                                 | NZAID                | NZAID                  | NZAID                                   |                            |
|            |                                 | ЛСА                  | ЛСА                    | ЛСА                                     |                            |
|            |                                 | UNESCO               | UNESCO                 |   |                            |
|            |                                 | ADB                  | ADB                    |   |                            |
| Relevancy  | UNDP                            | UNDP                 | UNDP                   | UNDP                                    | UNDP                       |
|            | AusAID                          | AusAID               | AusAID                 | AusAID                                  |                            |
|            |                                 | NZAID                | NZAID                  | NZAID                                   |                            |
|            |                                 | UNESCO               | UNESCO                 |   |                            |
| Efficiency | UNDP                            | AusAID               | AusAID                 | AusAID                                  | AusAID                     |
|            | AusAID                          | ЛСА                  | JICA                   | ЛСА                                     |                            |
|            |                                 | NZAID                | NZAID                  |   |                            |
|            |                                 | UNESCO               | UNESCO                 |   |                            |
|            |                                 | Peace Corp           | Peace Corp             | 1.                                      |                            |

# Chapter 7. RECOMMENDATIONS FOR EDUCATION SECTOR PROGRAMMES

#### **General Observations**

There have been lots of donor assistances during the 1990s through to 2003. Currently most of them have come to an end, including large scale programs such as Institutional Strengthening Project and Primary Education Material Project by AusAID and Secondary Education Curriculum and Material Project by NZAID.

On the other hand, MESC is now preparing a new strategy in education sector, which is called, 'Sector Development Plan'.

Other donors are currently waiting for the plan to be published.

Under this circumstances, the study team has identified that it is necessary to assess the proposals are in line with the new sector development plan in education sector. It is also essential to evaluate the programs/projects conducted so far.

# Actual Program Proposal based on the Results of the Study

The Study team would like to propose 4 different programs in 3 different education sub-sectors; namely i) Early Childhood Education; ii) Special Needs Education, iii) Primary Education (Mathematics and Science Education) and iv) Vocational Training, which are in line with current 10-year strategic plan and new sector development plan to be published next year.

### Basic Principles in deciding the program proposals

There are primarily 3 principles/study processes to decide the program proposals.

- 1. To identify the major problems at each education sub-sector
- 2. To identify the donor coordination in Samoan Education Sector
- 3. To identify the comparative advantage of JICA expertise

Based on the above principles/study processes, the study team has identified the below 4 programs.

- I Mathematics Education Improvement Program
- II Special Needs Education Improvement Program
- III Early Childhood Education Improvement Program
- IV Technical Assistance in Vocational Training

# 7.1 Mathematics Education Improvement Program at Primary Schools

### Background

General weak capacity in Mathematics education has been identified through interview and questionnaire survey at MESC as well as individual school study both among teachers and pupils/students. What is the most serious problem is that the weak arithmetic capacity (4 operations) has been observed not only among primary pupils but also among secondary students.

The study team therefore identifies an urgent need to improve numeracy at early stage for Samoan human resource development and to enhance human security.

### **Donor Coordination**

As suggested earlier most of donor programs in education sector will soon end by the end of this year.

Considering the donor coordination, teacher training on subject issue as well as teaching methodology has been conducted by the financial and technical assistance of AusAID under ISP project. The project will soon come to an end this December 2004.

Here the study team observes the need to first evaluate the previous trainings on mathematics education training conducted largely under ISP project by MESC.

At the same time MESC would need assistance for sustainability of teacher training to make sure that the subject knowledge and teaching methodology among mathematics teachers will continue to be improved among teachers.

It has been also identified by the study team that there is a need to evaluate the FOE pre-service program and to develop further teaching methodology and subject knowlodge among teaching staffs at FOE, if identified necessary to enhance the quality of future mathematics teachers.

### **Primary Education Curriculum**

The program targets primary education sub-sector; it has to be born in mind the followings.

- The current primary education curriculum is very old; it was made about 30 years ago, and the current primary textbook is in line with the old curriculum. On the other hand, the new secondary curriculum and corresponding textbooks have just been prepared with technical and financial assistance of NZaid.
- ✓ The government intends to revise the primary curriculum. This is supposed to be assisted by AusAID technically as well as financially. However the government and AusAID have not started launching this project.
- ✓ However it is regarded that in a few years time the new primary curriculum and corresponding textbooks will be prepared.

### Comparative Advantages

JICA has comparative advantage in enhancing mathematics education and has actually conducted lots of project to improve the quality education of the subjects in many Asian and African countries.

### Quality of Curriculum and Program of mathematics education at FOE, NUS

During the study, it is observed as suggested earlier in this chapter, the pre-service curriculum and program at FOE, NUS seems not to be well organized and developed. They should be evaluated and as the level of mathematics education is generally low in Samoa, there is a need to encourage both pre-service and in-service training to ensure the enhanced quality of mathematics education, which in the long-term will improve numeracy among Samoan pupils and human security in general.

### Overall Goals:

The overall goals are identified as follows:

- ✓ To improve Numeracy among children/Enhance Human Security
- ✓ To improve Quality of Mathematics Education among Teachers and Students.
- ✓ To enhance Examination Results in Mathematics and Science among students and pupils
- ✓ To reduce dropout and repetition rate among primary and secondary students

### Target Sub-sector: Primary Education (year 1-4)

The program concentrates the inputs on primary sub-sector, and tackles the problem of weak arithmetic capacity among children from their early stage (yr 1-4).

The improvement of mathematics education at secondary level will be covered simultaneously by another JICA project 'Improvement of Methodology in Math and Science in Secondary level Project'.

With this project, the introduction of new secondary curriculum is to be monitored and mathematics teachers will be given advice and supported by JOCV volunteers at selected secondary schools in both Upolu and Savai'i. The major purpose of the project is to increase the capacity of mathematics teachers at secondary level in both teaching methodology and subject knowledge as well.

What follows is the rough summary of the structure of the proposed program:

# Structure of Mathematics Education Improvement Program

This program is supposed to last for 5 years. This period is divided into 3 phases; phase 1 (2004-2006), phase 2 (2006-2008) and phase 3 (2008-2009). Each phase is composed of 1 project. The contents of the Program are summarized below.

# The Summary of the Program

# Phase I (2004-2006)

✓ Project 1: Improving quality of pre-service program and teachers, and development of materials for mathematics education at Faculty of Education, NUS

# Phase II (2006-2008)

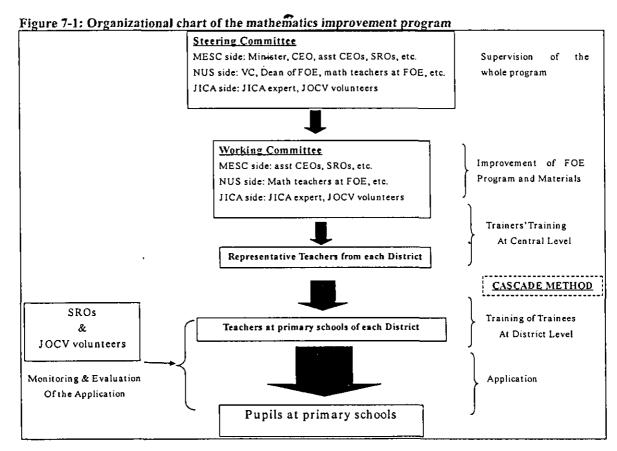
 Project 2: In-service training of mathematics teachers and development of Teaching and Learning Aides

### Phase III (2008-2009)

✓ Project 3: Follow up (Monitoring and Evaluation)

It is necessary, when the program is launched, to form a core team as a steering committee, including a long-term JICA expert, major staffs from NUS side (FOE teaching staffs, Dean of FOE as well as VC) and major staffs from MESC side (CEO, assistant CEOs and SROs).

The organizational chart for the program implementation is suggested in the next page.



The following explains the details of each project.

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Phase 1

# Project 1: Improving quality of pre-service program and teachers, and development of materials for mathematics education at FOE, NUS (2004-2006)

### Purpose of the Project 1:

- ✓ To improve the quality of the FOE program in mathematics education (targeting primary education program from year 1 to year 4)
- ✓ To improve the quality of teachers at FOE program in mathematics education

### **Major Outputs**

- ✓ Current situation of Mathematics Education in Samoa evaluated
- ✓ Current program of Mathematics Education Program at NUS evaluated
- ✓ Teaching Methodology and Subject knowledge for Mathematics Education developed or upgraded
- ✓ Study Aides (Practice Notebooks/Books) developed
- ✓ Mathematics Teaching Staffs at FOE, NUS trained
- ✓ Impact of the Training evaluated

To achieve the outputs above, the following 6 activities will be conducted;

# <u>Activity 1-1</u>: Baseline Study (Evaluation of current situation of mathematics education)

The whole program should start with the situation analysis study regarding the teachers' knowledge level on the subjects, as well as their teaching methodology along with pupils' numeracy level. There is also a need to analyze the curriculum/program actually used whether they are appropriate or any syllabuses are missing. Primary curriculum prepared 30 years ago is still used: AusAID is supposed to assist in preparing the new primary curriculum statement.

The study should also review the current situation of mathematics education at primary school level.

The numeracy level of primary pupils should be addressed. The information collected through the series of study is to be the basic data for developing/upgrading the teaching methodology at FOE program as well as producing pre-service and in-service training materials.

# Activity 1-2: Evaluation of current programs of the FOE (only Math Education)

The core team reviews and conducts the analysis on the current programs of the FOE; it is necessary to identify the problems on whether the programs is comprehensive or not in terms of both contents as well as teaching methodology. And at the same time it is critical to evaluate the quality level of teaching as well as teaching staffs at the program. Based on the evaluation the current program should be upgraded.

# Activity 1-3: Development of Teaching Methodology of Mathematics

Based on the findings of the activity 1-2, the core team develops teaching methodology in line with the syllabus revised and upgrades the program.

# Activity 1-4: Development of Pre-service and In-service Training Materials as well as Submaterials (for practice of mathematics and science)

It is necessary to develop materials for in-service and pre-service training as well as sub-materials with which pupils can practice calculation as a repetitive training. This is important especially for them to acquire basic numeracy; to develop the series of materials plays an important part to make sure the numeracy learning among pupils/students effective and efficient.

In preparing the sub-materials, the process of 'samoanizing' the sub-materials is necessary, by transferring the expertise of the materials and transform it into user-friendly ones so that Samoan pupils can use it easily, effectively and efficiently.

It should be considered to involve some Japanese company such as Shinken Zemi, Kumon and HyakumasuKeisan, etc., using the technical cooperation project scheme.

To print the materials, the printing machine at MESC which has been procured by JICA will be used.

# Activity 1-5: Implementation of Training for Teachers of FOE

The JICA expert conducts the comprehensive training of the teachers of FOE. This should be assisted by JOCVs volunteers.

The volunteers are to teach mathematics at primary schools or secondary schools, and at the same time they will have a task to monitor the mathematics teachers who will have received in-service training at phase 2 whether they are actually using the knowledge and methodology.

After the training the JICA expert has a role to monitor whether the trained new methodology is grasped by the teachers and actually used when they teach to the FOE students.

# Activity 1-6: Evaluation of the Training

The core team needs to conduct the evaluation survey to find out whether the new methodology and subject knowledge are transferred to the students at FOE or whether any problems have been posed during the transfer of new knowledge and methodology.

### Input needed

- From JICA side: 1 JICA expert, 6 JOCV volunteers (2 volunteers per region: Apia Urban, Rest of Upolu and Savai'i)
- ✓ From Samoa: MESC officials including all the SROs as well as NUS teaching staffs including VC.

# Phase 2

# Project 2: In-service training of mathematics teachers and Development of Teaching and Learning Aides (2006-2008)

It is assumed that the new primary curriculum program will have been introduced by the launching of the project 2.

In conducting the project 2, the training materials and sub-materials (practice workbooks) and enhanced program/syllabus which will have been prepared as the outputs of project 1 should be used.

It is expected that the same JICA expert as the phase I is to be in charge of this project.

### Purpose of the Project 2:

- ✓ To evaluate the actual situation of pupils' capacity in mathematics
- ✓ To develop a series of effective audio-visual teaching and learning aides which is in line with the new primary curriculum
- ✓ To evaluate the impact of the introduction of the audio-visual teaching and learning aides
- ✓ To increase the capacity of all the mathematics teachers at primary schools in terms of subject issues and teaching methodology
- ✓ To evaluate the interim impact of the training to pupils

### **Major Outputs**

- ✓ The current situation on mathematics education at primary education evaluated
- ✓ All the Mathematic teachers at primary schools (all the primary teachers) trained in terms of both subject knowledge and teaching methodology
- ✓ Mathematics study group formed at regional level
- ✓ Study conducted regularly by the regional study group
- ✓ A series of Audio-visual Teaching and Learning Aides developed
- ✓ And Impact of the introduction of Audio-visual Teaching and Leaning Aides evaluated
- ✓ The interim impact of the training among pupils evaluated

To achieve the outputs above, the following 2 activities will be conducted;

# Activity 2-1: Baseline Study

It will be necessary to reconfirm the current situation of mathematic education at teachers' level as well as pupils' level. The information collected at this study will be used for evaluation conducted as mid-term and post project evaluation study.

<u>Activity 2-2</u>: Development Study on the Impact of Introduction of Audio-visual Teaching and Learning Aides in line with new curriculum

It is assumed that the new primary curriculum and textbooks will have been prepared and actually in use at all the primary schools.

It is also assumed that this activity 2-2 should be conducted under a 'regional level development study (Zaigai Kaihatsu Chosa)' scheme.

This activity will last more than 1 year. Based on the new primary curriculum, audio-isual teaching and leaning aides will be developed, which facilitates the day-to-day mathematics studying for pupils at school.

During the process, pilot areas and the corresponding primary schools will be selected (especially in rural areas) and the audio-visual teaching and learning aides developed by the study team will be piloted.

The baseline, mid-term and post-pilot studies should be conducted, and the impact of the introduction of the aides should be monitored and evaluated.

Activity 2-3: Implementation of in-service training

### A Core Team formed at central level

In implementing this activity 2-3, a cascade method is to be taken; it is necessary to select representatives of teachers from each district.

The representatives of teachers from each district who are going to be the trainers at district level. SROs and JOCV volunteers will play the role in monitoring and evaluation of the impact of the inservice training among teachers at school level.

### Trainers' Training conducted at central level

The training will be conducted by the JICA expert towards the representatives of primary teachers. This should be conducted regularly at the end of each term, that is during the holidays.

Each training session should last about 1-2 weeks. After each session; the representatives of teachers go back to each district and hold in-service trainings, which are supported by the SROs and JOCV volunteers.

# In-service training at district level conducted

In-service training at regional level will be held after the trainers' training at central level is conducted. A series of the in-service training (workshop) should last for a whole school year and should be conducted making the most of the vacation period, such as summer vacation and winter vacation, spring vacation in Japan's context.

The actual in-service training is expected to be conducted using the long vacation period 3 times separately. (for example 2-3 weeks/training x 3 times)

### **Mathematics Study Group formed**

At the same time, a mathematics subject study group will be formed on a regional or district basis. The member of the group includes all the mathematics teachers who will have participated in the training, as well as JOCV volunteer and SROs. The teachers who will have participated in the training at central level will be a leader who leads the group. JOCV and SROs will support the group study operation as well as management. The group meeting should be held regularly if possible once a week, if it's not possible once a fortnight.

The purpose of the study group is to discuss the progress of application of the methodology and subject knowledge to pupils, and to share good practices among the participants. This activity will contributes to the sustainability of improvement of teaching methodology and good teaching of mathematics subject.

A JICA expert as well as FOE teachers (who will have been trained), under the cascade method, will first conduct the in-service training targeting all the members of the core team at Apia. Then the representatives of primary teachers go back to their region and hold the same training to teacher at regional level. SROs and JOCV volunteers will support the teachers during the training workshop.

Once the in-service training at regional level end, SROs and JOCV as well as the representatives of mathematics teachers go and visit schools regularly and monitor whether the teachers actually grasp what they learn and apply the method and subject knowledge to their own students. Then the core team members evaluate them. If some additional support is considered to be needed, the core team members will support them on the spot or hold a sort of meeting or additional workshop at regional or district level and give some additional explanations.

### Activity 2-4: Mid-term Study

At mid-term of the training, the information necessary will be collected using the same indicators as baseline survey.

### Input needed

From JICA side: 1 JICA expert, 6 JOCV volunteers (2 volunteers per region)

From Samoa side: MESC officials and all the SROs and all the mathematics teachers (all the primary teachers).



### Project 3: Follow up

### Purpose of the Project 3

- ✓ To evaluate to what extent the mathematics teachers have acquired the knowledge and teaching methodology
- ✓ To evaluate to what extent the mathematics teachers have applied what they learn to the actual teaching at mathematics classroom.
- ✓ To evaluate to what extent pupils have improved knowledge on mathematics especially enhanced numeracy and four operations.
- ✓ To evaluate to what extent this program have impacted education sector in general

# **Major Outputs**

- ✓ The extent of acquisition of knowledge and teaching methodology among all the mathematics teachers evaluated
- ✓ The extent of application of knowledge and methodology of all the mathematics teachers to actual teaching evaluated
- ✓ The extent of improvement of knowledge on mathematics among pupils evaluated
- ✓ The extent of the impact of the program towards Samoan education sector in general evaluated

Activity 3-1: Monitoring and Evaluation of Mathematics Teachers at primary schools

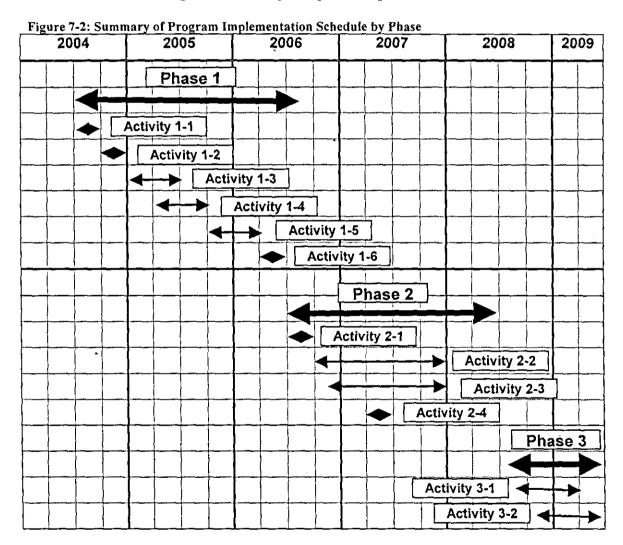
Activity 3-2: Evaluation of the impact of training among pupils

### Input needed

From JICA side: 1 JICA expert, 6 JOCV volunteers (2 volunteers per region)

From Samoa side: MESC officials including all the SROs

# Rough Schedule of Program Implementation



# 7.2 Special Needs Education Improvement Program

### Background

The priority to develop Special Needs Education is high in terms of achieving equal access of pupils to school, according to achieving EFA's goal as well as Samoa's 10-year education development strategy (1995-2005).

The only aid from UNDP under AIGA project ended December 2003 and nothing continued. Need sustainability of support in this sub-sector.

As UNDP had conducted the needs survey as well as the teacher training for SNE, JICA can contribute to the sustainability of SNE development; JICA can actually implement a development plan for SNE improvement based on the database UNDP had prepared.

Cooperation with Japanese NGOs can be possible and expected for technical assistance in terms of materials and personnel. Along this line, it is possible to incorporate Japanese people such as local municipality, Civil Society and NGOs, which will be a cooperation through the Japanese citizens.

### **Overall Goals**

- ✓ To achieve equal access to school for pupils regardless of disabilities
- ✓ People regardless of disabilities are able to participate in social activities.

### Target Sub-sector: Primary Education (year 1-8)

The program focuses on primary education sub-sector to increase physical and technical access of schools for pupils with various disabilities.

What follows is the rough summary of the structure of the proposed program.

### Methodology in implementing this program

The program is consisted of 3 phases made up of 3 projects as suggested below:

Phase 1 (2005-2006)

Project 1: Project 1: Baseline Survey

Phase 2 (2006-2008)

Project 2: Upgrading of SNE program and Training of teachers

Phase 3 (2008-2009)

Project 3: Evaluation and Monitoring Survey

The following explains the details of each project.

### Phase 1

# Project 1: Baseline Survey (2005-2006)

In launching the project, it is essential to include the following personnel and form a core team which is responsible for the entire project implementation.

The members include: CMAD Division Manager (Doreen), SNE unit director (Mr. Mailo), and Policy Planning and Research Division Manager (Marie) as well as School Operations Division Manager (Lufi) and all the SROs from MESC officials, and a JICA expert and JOCVs from Japan side.

### Purpose of the Project 1;

- ✓ To evaluate the current needs regarding the SNE
- ✓ To evaluate the scope of the program for SNE improvement

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### **Major Outputs**

- ✓ Needs for SNE identified
- ✓ Scope of the Program identified

To achieve the outputs above, the following activities will be conducted;

### Activities

Referring to the basic information prepared by UNDP, further study will be conducted to collect the latest information on the needs assessment. Based on the study, more detailed format of the whole program will be decided, also considering the volume of input as well as target areas.

# Phase 2

### Project 2: Upgrading SNE program at FOE and Training of teachers (2006-2008)

The general shortage of teachers as well as generally low level of quality/capacity of teachers have been identified through the current study. Therefore it is a critical need to evaluate the SNE program itself at FOE and upgrade them if necessary. At the same time the quality of both teachers at FOE as well as currently serving teachers should also be upgraded to bottom up the quality of teaching for pupils with disabilities.

It is important to form a core team. This team should include at least the following people; JICA expert, Academic director of NUS, Dean of DOE, SNE Program Director, Representatives of NGOs (such as Blind Society) and SROs as well as assistant CEOs and SNE unit director (Mr. Mailo) of MESC. JOCV members with SNE skills will be part of the members and they will play part in monitoring and evaluation of the workshop conducted for actually serving teachers. SROs are also taking the role of monitoring and evaluation.

# Purpose of the Project 3:

- ✓ To evaluate the current SNE program at FOE
- ✓ To develop and procure teaching and learning materials for SNE education
- ✓ To train teachers of SNE program at FOE, NUS
- ✓ To train students taking SNE program at FOE
- ✓ To train currently serving SNE teachers

### **Major Outputs**

- ✓ The current SNE program at FOE evaluated
- ✓ SNE teaching and learning material developed and procured
- ✓ Teachers at SNE program trained as SNE trainers
- ✓ Students at SNE program trained
- ✓ Currently serving SNE teachers trained

To achieve the outputs above, the following sub-projects will be conducted;

### Activity 2-1: Evaluation/Improvement of SNE Program at FOE, NUS

Evaluation study will be conducted. Based on the results of the study, the program for SNE at FOE will be improved/upgraded.

Activity 2-2: Development of teaching and learning equipment/materials for SNE program at FOE, NUS

This sub-project 3-2 should be conducted with close cooperation with local NGOs (such as Blind Society) which has accumulated knowledge as well as material development. For example Blind Society send their members as a lecturer of SNE program at FOE, NUS and borrows some materials for Braille.

The minimum teaching and learning facilities (for teaching deaf and blind pupils) will be procured to SNE program at FOE as well as 6-11 SNE units all over the Samoa.

# Activity 2-3: Training of Teacher (Training of Teachers at FOE)

Based on the upgraded program, JICA expert conducts workshops on both subject issues knowledge and technical skills (sign language and Braille, etc.). The workshop should be held periodically and monitoring should also be conducted to check whether they are grasping the new knowledge and methodology. Especially it should be checked whether they have grasped the skills for sign language and Braille using the equipment and materials procured by the sub-project 3-2.

### Activity 2-4: Pre-service Training

Based on the cascade methodology, teachers of the SNE program at FOE will teach the student at FOE, in line with the workshops conducted.

# Activity 2-5: In-service Training

There are actually 6 teachers (as of March 2004). It is expected that from this year there will be additional 5 teachers who have just graduated from NUS and who will start working. That makes the number of SNE unit from 6 to 11. There is a critical need to upgrade their skills so that they can teacher pupils with various kind of disabilities and with more knowledge.

SNE program teachers will hold workshops for the actually serving teachers periodically so that they can upgrade their skills so that they can teacher pupils with various kind of disabilities and with more knowledge. Monitoring and Evaluation will be also conducted regularly by SROs as well as JICA expert and JOCV members.



# Project 3: Evaluation and Monitoring Survey

The same core team should be formulated which is responsible for the project implementation.

### Purpose of the Project 3:

✓ To incorporate monitoring evaluation activities into the current SNE institution

### Major Outputs:

✓ Evaluation and Monitoring activities become a regular task of SROs as well as responsibilities of MESC.

#### Activities;

The study team will conduct the survey to evaluate the impact of the training conducted so far.

# 7.3 Early Childhood Education Improvement Program

### Background

MESC has put priority to development of ECE; 10-year Samoan Education Strategy stipulates the importance of developing ECE and the new sector development plan which is to be published in 2005 continues to promote ECE. The government starts to give subsidy to registered pre-schools.

NGOs have played an important role, but the basis for the further development of ECE is still weak.

UNDP has conducted some study on this sub-sector under the AIGA project. This ended however December 2004. There needs the sustainability on the ECE development.

The base of day-to-day ECE is very weak in terms of lack of finance and lack of teacher.

On the other side strong need of ECE from parents can be seen from the rapid increase of the number of pre-school.

#### Overall Goals

- ✓ To confirm the basis of basic numeracy and literacy (human security)
- ✓ To make the road of future human capacity building
- ✓ To achieve bilingual education (Samoan and English)

Target Sub-sector: Pre-school level (Early Childhood Education)

What follows is the rough summary of the structure of the proposed program

# Structure for implementing this program

This program is consisted of the following 4 projects:

### Phase 1

Project 1: Baseline Study (2005-2006)

### Phase 2

Project 2: Evaluation and Improvement of current ECE program at FOE as well as 1-year program at Sogi (2006-2007)

Project 3: Development of Teaching and Learning Materials and Corresponding Training (2007-2009)

The following explains the details of each project.

# Phase 1

### Project 1: Baseline Study (2005-2006)

### Purpose of the Project 1:

- ✓ To identify the current situation (to identify the needs)
- ✓ To identify the scope of the program

### Major Outputs:

- ✓ The current situation evaluated
- ✓ The scope of the program identified

<u>Activities</u>: The study on latest needs assessment as well as school environments (facility/material conditions and teacher situation) will be further conducted along with the reference to the basic study conducted by UNDP. The basic idea on the target areas as well as the input volumes will be decided, which formulate the detail of the program.

# Phase 2

# Project 2: Evaluation and Improvement of current ECE program at FOE as well as 1-year program at Sogi

# Purpose of the Project 3:

✓ To evaluate and improve/upgrade current program used at both ECE program at FOE and 1-year program at Sogi

### Major Outputs:

✓ Current program used at both ECE program at FOE and 1-year program at Sogi evaluated and upgraded

Activities: At first, it is necessary to form a working team composed of major stakeholders. The possible major members are; JICA expert, JOCV, SROs, CMAD ECE units (Ms. Merime) and representatives of major NGOs.

There is a need to evaluate the 2 current curriculum prepared by FOE, NUS and by NCECE. JICA expert take the lead in evaluating them, cooperating with the core team. Actually along with them, a curriculum prepared by USP (University of South Pacific) is also actually used in some pre-schools (ex. Anglican Church Pre-school).

And if necessary the team will discuss and try to upgrade the curriculum/program. It is then necessary to acquire an approval from MESC that this is the authentic program and this should be used at all the registered pre-schools.

It should be noted that the program should take care about the basic numeracy and language (Samoan and English) teaching.

# Project 3: Development of Teaching and Learning Materials and Corresponding Training (2007-2009)

This project aims at developing teaching and learning materials as well as further teacher training to facilitate smooth introduction of these materials at pre-schools. The projects 3 may have identified the T & L materials necessary to conduct the new (upgraded) program. Therefore it is necessary to refer to the program in developing the materials.

Various trainings which will be conducted as other sub-projects have to follow the guideline decided by the new program as well as the materials developed.

### Purpose of the Project 3:

- ✓ To develop and upgrade the quality of teaching and learning materials to teach or play with pupils more effectively in order to enhance the ECE quality teaching.
- To train teachers at both FOE and 1-year training center to upgrade the quality of the ECE education
- To train all the currently serving teachers at all the registered pre-schools to bottom up the quality of education at ECE level

### Major Outputs:

- Upgraded teaching and learning materials developed and procured
- All the teachers at both FOE and 1-year training center at Sogi trained
- All the currently serving teachers at pre-schools trained

To achieve the outputs above, the following sub-projects will be conducted;

### Activity 3-1: Development and Procurement of Teaching and Learning Materials for ECE

<u>Activity 3-2</u>: Training for Teachers at both FOE and 1-year training center
Teachers at FOE and 1-year training will learn the new program and how to introduce the materials developed. This training will be conducted by JICA expert. The trainees include not only the teachers but also JOCV and SROs as well as representatives of pre-school from each region (Apia-Urban, Rest of Upolu and Savai'i), who are going to be the trainers at regional level.

# Activity 3-3: Pre-service Training

JICA expert as well as the teachers at both FOE and 1-year training center conducts the training at their working place respectively.

Students of both ECE program at FOE and 1-year training center will be trained based on the new program and using the materials developed.

# Activity 3-4: In-service Training

Pre-school teachers at registered pre-schools will be trained. The in-service training will be conducted by the representative of pre-school teachers of each region, who received the training at central level. The training will be supported by SROs and JOCV members. They have a role to monitor and evaluate to what extent the teachers grasp the concept and apply this to day-to-day pre-school teaching.

# 7.4 Technical Assistance in Vocational Training

### Background

The JICA study on 'Effective Method of Technical Assistance for Vocational Training' has identified the inconsistency between labour market supply and demand, based on the findings below. Please refer to the Final Report for the detailed findings (P. 28).

### The demand side of labour

- 1. The industries offering the most jobs are in wholesale/retail, transport and manufacturing sector.
- 2. Employers want more trained and competent people in mechanical/automotive engineering, tourism related business skills, administration/secretarial skills, plumbing and sheet metal skills, business management and electrical engineering.
- 3. Employers prefer Samoa Polytechnic and secondary school trained graduates instead of university graduates.
- 4. Samoa Polytechnic graduates could meet the needs of local industries if more opportunities for advanced training such as overseas scholarships were readily available to them.
- 5. Pot secondary school vocational education should improve the quality of the teachers and enhance the curriculum currently offered to provide more variety.

### The supply side of labour

- 1. Most of the labour force is employed in manufacturing, wholesale/retail and public administration jobs.
- 2. Most of the employees work in jobs requiring a medium level skill category, where technical/vocational skills are required or the equivalent in experience.
- 3. The types of training most preferred by employees and potential employees to prepare themselves for employment is computer training, commerce/accounting/economics, carpentry and joinery and administrative or secretarial jobs.
- 4. Samoa Polytechnic was the most preferred institute for further training in order to look for a job and if there was a further opportunity to do so.
- 5. Most of the labour supply has completed secondary school level so the emphasis for further assistance to continue should be to support studies in post secondary education.

As a result of the analysis, the study has had the conclusions as follows;

- ✓ It is necessary to increase practical component rather than theoretical one.
- ✓ The advanced levels of skills are required.

✓ There is a need to prepare new courses such as Fashion Design course and Basic counselling course given the growing demand in the local community.

Following the analysis of the needs from both demand side and supply side of labour, the study has proposed the 'Technical Assistance in Vocational Training', targeting the following overall goals;

### Overall Goals:

- ✓ To reinforce Samoa's need for a Vocational Education Institute to produce a sufficiently large pool of highly qualified and competent trade professional to meet the increasing and changing demands of the country's labour market and to meet international standards
- ✓ To produce a sufficiently large pool of qualified and technically competent people to meet the future developmental needs of Samoa and to be able to perform the increasingly complex needs of the labour market in the context of greater emphasis on improved efficiency and competitiveness.
- ✓ To strengthen vocational training in order to ensure the large number of students dropping out at the end of primary level education and throughout the secondary education years are given the opportunity to learn a technical or vocational skill that will improve their chances of securing productive employment

### Target Groups:

- ✓ Samoa Polytechnic
- ✓ Vocational schools at secondary level

What follows is the rough summary of the structure of the proposed program.

# Purpose of the Project

- ✓ To strengthen advanced technical and vocational education in Samoa through support to Samoa Polytechnic to
  - a) Develop and deliver diploma level courses in ICT hardware and software engineering to meet the needs of the fast growing and complex ICT industry;
  - b) Develop and deliver diploma level course or programs in the following discipline;
     Automotive engineering
     Mechanical engineering
     Electrical engineering
     Civil Engineering
  - c) To enhance the standard of training in the area of management to meet the needs of this growing industry.
- ✓ To support the setting up, on a pilot basis, of vocational training centers or model schools in secondary schools through the provision of teaching staff (volunteers, counterpart staff training), provision of facilities and supply of equipment and resources.

# Methodology in implementing this Technical Assistance in Vocational Training

This program is composed of 2 phases: 1st phase (2004-2006) and 2nd phase (2006-2008).

# Phase 1 (2004-2006): Preparation and Transition Task Force, Survey, Planning and Procurement

### Phase 2 (2006-2008): Implementation of Technology Transfer

Implementation, Trainers' Training, Workshop and International Seminar

# Outputs of Phase I: Preparation and Transition

- 1. Samoa Polytechnic
  - ✓ Situation Analysis conducted
  - ✓ Review of Curricula
  - ✓ Identification of resources needed
  - ✓ Facilities and Equipment Plan developed
  - ✓ Procurement of Equipment and facilities upgraded
  - ✓ Workshop Seminar conducted
- 2. Vocational Trainings in Secondary Schools (model schools)
  - ✓ Guidelines for operation of pilot model schools developed and finalized
  - ✓ Pilot schools set up

# Outputs of Phase II: Implementation of technology transfer

- 1. Samoa Polytechnic
  - ✓ Staffs recruited and training provided
  - ✓ Technology transfer of new courses implemented
  - ✓ ITC course developed
  - ✓ Management course development
  - ✓ Counterpart training in Japan
  - ✓ Regional seminar implemented
  - ✓ Mid-term evaluation conducted
  - ✓ Wrap up workshop conducted
  - ✓ Project evaluated
- 2. Vocational training in Secondary schools
  - ✓ Model schools monitored and reviewed
  - ✓ Achievement evaluated
  - ✓ Selected model schools opened

# Input needed:

Inputs from JICA: Dispatch of experts and volunteers, counterpart training in Japan, Equipment necessary for successful implementation of training courses

Inputs from Samoa: CEO of SP and VC of NUS, CEO of MESC, Principals of selected secondary schools, support and counterpart staff, counterpart costs, operational and maintenance funding, office space.