Strategic Plan
for
Improvement of Education
in the
Federated States of Micronesia

Education: Underpinning Economic Growth
and Social Development

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FSM Strategic Plan for Improvement of Education

Forward

The FSM Strategic Plan for Improvement of Education has grown out of a need for the education system to provide for the economic growth and social development of the Nation and its States. It has grown out of the need to answer the question: Why has education not significantly improved over the past 15 - 20 years? What have been the barriers to improvement? Where have successes occurred - and why?

The development process has been complex. Any broad scale plan in the FSM must reflect State concerns. With the high cost of travel in the FSM, immense distances between islands, and still emerging telecommunications systems, getting extensive involvement of all stakeholders is both a time consuming and expensive process. The development process has employed site visits to each State for data collection and discussions and review of draft documents. Numerous Nation wide conferences have been held for discussions on the status of education and to draft the Plan and Language Policy and extensive research. A timeline of major events is included in the appendix.

Much of the initial framework for understanding the needs of the education system was detailed in the Asian Development Bank Study: Human Resource Development in Micronesia. An extensive series of site visits for data collection were followed up with two National Conference in Pohnpei to discuss the findings and recommendations. However, the findings of this study would have had little impact without the National and State Economic Summits that set the vision of where the Nation and States are to go for economic growth and social development. It was in the Summits that Education’s theme was introduced: Education - Underpinning Economic Growth and Social Development. Education initial followed up to the Summits was to hold a MegaConference that was designed to begin the discussion of education’s specific roles in implementation of the policy directives from the Summits. Site visits were then made to each State for information collection and discussion of issues. From November 1996 - January 1997, three workshops were held in Palikir, Pohnpei at the Main Campus of the College of Micronesia - FSM. First in November was the Human Resource Development (Strategic Plan) Writing Session. Second in December was training on School-to-Work and more detailed discussions on the role of education in economic development. In January 1997 a workshop was held to draft out the FSM Language Policy. The drafts of the Strategic Plan and Language Policy were the basis for a series of State visits to review and receive comments.

Special effort has been made to include all segments of the Micronesian community. From educators, parents and the community, traditional and business leaders, to the political leadership of the States and Nation. This Strategic Plan and Language Policy are the results of this time consuming process. For more information contact:

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August 1997
# FSM Strategic Plan for Improvement of Education

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Executive Summary

The FSM Strategic Plan for Improvement of Education and its companion FSM Language Policy are designed to provide overall guidance for improvement of the education system in the FSM. The Plan recommends major changes to bring the education systems in line with the needs for economic growth and social development of the Nation and its States. Recognition is given that the FSM is a developing Nation with an economy heavily dependent on foreign assistance. Primary areas for potential growth in agriculture, marine & fisheries, tourism areas have not been adequately supported by the education system from both a career standpoint and from the developing of values and attitudes to support development of these FSM productive sectors.

A second major issue addressed is the need for an education system which supported a developing small island economy - not a developed industrial or information based economy. To this end, major changes are recommended in language policy and use, improvement of professional development activities, expansion of materials development activities to enhance local languages, development of English materials which promote local values and enhance the productive sectors, and development of and use of local expertise.

The plan also addresses the need for improvement efforts to be systematic, based on informed decision making systems, and inline with policy directives of the National/State leadership for economic growth and social development.

This plan often addresses improvement from a series of “Principles” or “Guides” which set the general direction for improvement, provides assistance in ensuring that the improvement design is in line with the needs of the FSM for economic growth and social development, and promotes systematic reform and improvement without prescribing the precise nature and content of programs and activities. This approach is in line with both the organization of the FSM where most authority and responsibility is reserved to the States and also in line with sound planning practices where a plan provides the vision and direction and sets, but does not inhibit programs and activities from accommodating to local needs and conditions.

All reform is implemented locally. We have attempted to keep this in mind in all recommendations and recommended strategies. In the end, what has been the impact of our planning, programs and projects on improving teaching and learning in the classroom? What has been the impact of making the content of that teaching and learning more appropriate to our needs for economic growth and social development? How will standards, curriculum, support systems, materials development, and professional development actually impact on improving teaching? Have we been able to raise the expectations of teachers and the community for student learning and achievement? Have we moved forward in developing our economy while preserving and expanding our languages and building upon our sound base of the extended family and traditional governance and decision making systems? These are the kind of questions which should drive our educational improvement efforts and be the basis of allocation of human and financial resources and be the basis of our evaluation of progress towards meeting our goals.
Introduction to the FSM and its School System

Location and Geographical Features

The Federated States of Micronesia is composed of the States of Chuuk, Kosrae, Pohnpei, and Yap. From Yap in the west to Kosrae in the east, the FSM is spread over 2,500,000 square kilometers of the Northern West Pacific. This immense expanse of ocean is dotted by the 607 different islands of the FSM. Seventy one of the islands are inhabited. From the lush, green high islands of Pohnpei and Kosrae to the outer island atolls of Pohnpei, Chuuk, and Yap, the islands of the FSM are dots on the immense expanse of the Pacific Ocean. The State capitals are connected by Continental/Air Micronesia 727 service which also allows access to international destinations. Normally service is provided only once a day either east bound or west bound. While a few of the outer islands are connected by small commuter planes, most of these islands are connected only by ocean going field trip ships. Normally it will be a month or more between visits to the islands with only a few hours stop at each island.

The size of the FSM can be seen in the map which superimposes the continental United States onto Micronesia. This map gives an indication of the distances involved in moving about the FSM. The map on the next page also provides a picture of the location of the FSM in the Pacific and the extent of its sea boundaries.
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Languages in the FSM

The FSM has over 13 major languages or dialects. No two States share the same major language, however, many of the FSM citizens are able to converse in more than one FSM language. The distribution of FSM languages is given in Appendix C which also provides information on 2nd and 3rd languages and the distribution of languages across the municipalities of the FSM.

English is the unofficial, official language of the FSM and the primary means of communication among the citizens of the different states in the FSM and the language of government and business. However, **English is the first language of less than perhaps two per cent of FSM students.** Virtually all of FSM students are of Limited English Proficiency (LEP). While English is the glue that binds, each FSM State must deal with development of instructional materials in both English and one or more local languages. Community education and awareness programs of necessity, must be in both the individual communities language(s) and in English.

The following table gives States of the FSM and each of the languages which it must deal with in its instructional program. A note should be made of the Pohnpei situation. Due to its status as the site of the FSM National Government Offices, substantial percentages of all the languages are present in the school system and the work force.

The FSM languages while part of the general Proto-Austronesian language structures are spoken nowhere else in the world. Each of the FSM States is faced with the tasks of developing curriculum and materials which are culturally relevant in local languages and in English. Not only must they develop instructional materials in the local languages, but there is still major work to do in development of grammars and dictionaries for all of the languages.

To preserve the culture and traditions for its people and to prepare them for communication with the world at large, the FSM must develop a bilingual society. For the FSM, bilingualism is a must and not just a desired goal.

<table>
<thead>
<tr>
<th>Major Native Languages of the FSM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State</strong></td>
</tr>
</tbody>
</table>
| Yap | Yapese  
Ulithian¹  
Woleian¹ |
| Chuuk | Chuukese  
Satalwalese  
Mortlockese  
Western |
Pohnpei
Pohnpeian
Pinglapese
Mwoakilese (Mokilese)
Sapwuafikese (Ngatikese)
Nukuoroan
Kapingamarangian

Kosraean
Kosraean

1 While the areas where Ulithian & Woleian are spoken are politically part of Yap, they actually have a basis in Chuukese.
2 Nukoroan and Kapingamarangian are descended from the Polynesian language group.

In addition to the local FSM languages, there are also a number of other Micronesian and international languages.

Many of the languages in Micronesia do not have fully developed grammars and dictionary, much less curriculum and instructional materials for use in the schools. For FSM languages, the Pacific Asian Language Institute (PALI) developed grammars and dictionaries in Yapese, Woleian, Chuukese, Mortlockese, Pohnpeian, Mokilese, Nukuoroan, Kapingamarangian, and Kosraean. Since the grammars and dictionaries were developed, all of the languages, except Pohnpeian, have been the object of new orthographies. Significant effort will have to be expended on the grammars and dictionaries before they can be used as the basis for curriculum and instructional materials development.

It should be noted that local languages have been used as medium of instruction in the school systems in the FSM, but little or no instruction of the local language itself.

The FSM and its native languages are in a transition period from oral to a partially written format. This transition period means that a much greater degree of direct contact is needed for program development problem discussion than is experienced in a society based on the written word.

**Education System**

The FSM runs an American style education system with free public education through age 15 or completion of the 8th grade. High School attendance is not assured. All States administer high school entrance tests to 8th graders. Instruction is strictly a responsibility of the States with the National Government providing support and assistance. Funding for education is primarily provided through State Compact funds with some local revenue. The FSM is eligible for selected U.S. Federal Education Programs which contribute a significant amount to the overall education budget.

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1 PALI was based at the East-West Center, but is no longer in operation.
For the purposes of U.S. Federal Education programs, each of the FSM State Departments of Education (Chuuk, Pohnpei, Yap, and Kosrae - SDOE) is considered a Local Educational Agency (LEA) with the FSM National Department of Education (FSM NDOE) functioning as the State Education Agency (SEA). The FSM NDOE is located in Palikir, Pohnpei State.

The FSM’s only Institute of Higher Education is the College of Micronesia-FSM (COM-FSM) located in Pohnpei. COM-FSM offers associated degrees and also conducts a third year program in education. The University of Guam (UOG) is the Micronesian areas IHE for BA and advanced degrees. Each LEA in the FSM also has a Individual Degree Plan (IDP) program with UOG for teacher education.

Student enrollment has seen a significant increase in the past decade. Since 1984 the FSM Education System has increased over 50% in elementary and secondary enrollment. The increase in enrollment has put a major strain on facilities and financial resource for education in the FSM. The following table shows enrollment (an expanded listing of enrollment by State, region and school is included in the appendix) by State for the 1995-1996 School year.

<table>
<thead>
<tr>
<th>State/Nation</th>
<th>No. of Schools</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chuuk Total</td>
<td>109</td>
<td>9001</td>
<td>8629</td>
<td>17630</td>
</tr>
<tr>
<td>Chuuk Private</td>
<td>8</td>
<td>1021</td>
<td>1234</td>
<td>2255</td>
</tr>
<tr>
<td>Chuuk Public</td>
<td>101</td>
<td>7980</td>
<td>7395</td>
<td>15375</td>
</tr>
<tr>
<td>Kosrae Total</td>
<td>10</td>
<td>1437</td>
<td>1282</td>
<td>2719</td>
</tr>
<tr>
<td>Kosrae Private</td>
<td>2</td>
<td>49</td>
<td>47</td>
<td>96</td>
</tr>
<tr>
<td>Kosrae Public</td>
<td>8</td>
<td>1388</td>
<td>1235</td>
<td>2638</td>
</tr>
<tr>
<td>Pohnpei Total</td>
<td>40</td>
<td>5493</td>
<td>5110</td>
<td>10603</td>
</tr>
<tr>
<td>Pohnpei Private</td>
<td>5</td>
<td>626</td>
<td>505</td>
<td>1131</td>
</tr>
<tr>
<td>Pohnpei Public</td>
<td>35</td>
<td>4867</td>
<td>4605</td>
<td>9472</td>
</tr>
<tr>
<td>Yap Total</td>
<td>36</td>
<td>1725</td>
<td>1502</td>
<td>3227</td>
</tr>
<tr>
<td>Yap Private</td>
<td>2</td>
<td>194</td>
<td>165</td>
<td>3549</td>
</tr>
<tr>
<td>Yap Public</td>
<td>34</td>
<td>1531</td>
<td>1337</td>
<td>2868</td>
</tr>
<tr>
<td>FSM Total</td>
<td>195</td>
<td>17656</td>
<td>16523</td>
<td>34179</td>
</tr>
<tr>
<td>FSM Private</td>
<td>15</td>
<td>1782</td>
<td>1738</td>
<td>3520</td>
</tr>
<tr>
<td>FSM Public</td>
<td>180</td>
<td>15874</td>
<td>14785</td>
<td>30659</td>
</tr>
</tbody>
</table>

An important note is that 74 of the schools in the FSM have less than 100 students and 43 schools have less than 50 students. These small enrollments generally results from Outer Island Schools and schools in remote locations.

**Schools - power and accessibility**

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Schools in the FSM do not uniformly have electrical power and the question of accessibility from State centers also becomes a major improvement issue relating to professional development, support services, communications and ability to provide technical assistance and support at the school and classroom level. The situation varies greatly from State to State. The following tables provides information by States on where schools have electricity and accessibility issues [From the State center are schools assessable by automobile, small boats, ocean going vehicles or small (4 - 8 sealers) planes].

<table>
<thead>
<tr>
<th>Schools in the FSM - Power &amp; Accessibility Issues</th>
<th>Accessibility from State DOE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has power</td>
<td>Auto</td>
</tr>
<tr>
<td>Kosrae</td>
<td>87.5%</td>
</tr>
<tr>
<td>Pohnpei</td>
<td>75.0%</td>
</tr>
<tr>
<td>Chuuk</td>
<td>17.3%</td>
</tr>
<tr>
<td>Yap</td>
<td>40.0%</td>
</tr>
<tr>
<td>Total</td>
<td>37.6%</td>
</tr>
</tbody>
</table>

Note: For Yap 31% of schools accessible by Ocean going ship are also accessible by small plane.

**Performance of the Educational System**

The FSM is lacking in comprehensive and multi-source data on the performance of the educational system. The FSM National Standardized Tests (NST) are being administered for the third time in the Spring of 1997 and are beginning to show trends and academic levels of students. The FSM NST was developed due to concern that test were not culturally relevant and did not test what was being taught in the classroom. Also, the item analysis of the NST can provide significant data on student strengths and weaknesses. However, currently, the NST accesses only English and mathematics at 4th, 6th, 10th and 12th grade levels. Current plans call for moving into local language assessment and including science in the NST assessment. Of major importance is to include assessment instruments for the productive sectors.

Details of student achievement data from the NST is included in the appendix. In general, we are seeing data which indicates that students are performing below their international peer group. A basis for determining Nation wide achievement levels of students and trends in student achievement is now available.

However, all indicators, from the NST to entrance test data from the College of Micronesia - FSM, to stories from businessmen and from colleges and universities where Micronesians are in attendance provide a picture of student who are, on average, significantly behind their age peer group. However, most importantly, the education
system is not meeting the manpower needs of the Nation and States in development of the agriculture, marine & fisheries, and tourism sectors of the economy.

**Teacher Background and Competence**

The normal FSM teacher has only an AA/AS degree, with a substantial per cent having no degree. The AA/AS degree is often not in education related fields and beginning teachers often lack educational backgrounds. The same is true for content knowledge, teachers are often teaching subject areas without a sound understanding of their content.

In terms of language competence a section of the FSM Human Resource Development Study is important:

> "**Lack of English Competence:**  As noted several items before, the issue of language is the most pressing issue affecting education in the FSM. Lack of a proper approach to language training in the school system leads to a lack of language competence among local teachers. Teacher in the higher grades in the elementary schools and those in the secondary schools are required to teach in English. But they do not have the level of competence in reading and writing English to be effective. As a result, teachers lack confidence in all areas of teaching and the phenomenon of the inability to write effectively and to properly comprehend written English continues in succeeding generations. Lack of literacy in English has a ripple effect that is self-sustaining and significantly undermines the success of students."

Competence of teachers in local languages is undocumented. As will be discussed later in this plan, there are few or no assessment instruments for student or teacher performance in local languages.

Content knowledge of teachers is also largely undocumented. Teachers need only process an AA/AS degree to be certified to teach in the FSM. No provisions or requirements are made regarding either knowledge of basic educational knowledge such as appropriate teaching strategies, classroom management, or in the content knowledge of the courses they are teaching.

The low level of teacher educational background together with the general lack of English and local language competence places a great burden on designing appropriate professional development strategies and development plans. Greater resources must be directed to this area than might be expected.

**FSM Teacher Degree Status 1994/95**

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Communication Systems

The FSM Telecommunications Corporation became an Internet Service Provider in December 1996. This was the first simple and low cost Internet connection for the FSM and will greatly expand the capacity of the FSM for contact within the FSM States and with the external world. The research capacity and capability for joint working activities has also greatly expanded with the Internet access.

However, contact with remote schools and with Outer Islands is less favorable. Most outer islands can be contacted only through short wave radio. The radios are generally located at central sites on the islands (municipal office, schools, etc.). Operation varies from paid operated from 8:00 AM to 4:00 PM to volunteer service. Primary use is for passing of messages (private and public). Little use has been made for training or content information dissemination.

Political System and Compact of Free Association

The Federated States of Micronesia has entered into a Compact of Free Association (U.S. Public Law 99-239) with the United States of America. The Compact sets forth a unique relationship between the FSM and the United States where financial and other assistance is made in exchange for certain defense related concerns. Under the Compact, certain U.S. Programs such as the inclusion in the U.S. Postal System, various health programs, and other programs continued to be provided to the FSM. Additionally, provisions provide that the U.S. may extend U.S. Federal Education programs eligibility to the FSM.

Other major provision of the Compact calls for free access to the United States by FSM citizens for education or employment purposes and for economic support. The current economic provisions of the Compact of Free Association will expire in 2001. Provisions allow for a renegotiation on the economic provisions of the Compact be occur during the last two years of the first 15 year Compact period.

Economic and Social Factors

The FSM economy is extremely weak and dependent upon external funding, especially Compact funding. Compact funds accounted for 50% of the FSM economy in 1996. The 15% step down in basic Compact funding in FY 1997 resulted in massive reductions in the

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Yap</th>
<th>Chuuk</th>
<th>Pohnpei</th>
<th>Kosrae</th>
<th>FSM Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Degree</td>
<td>94</td>
<td>498</td>
<td>91</td>
<td>23</td>
<td>706</td>
<td>33.5%</td>
</tr>
<tr>
<td>AA/AS</td>
<td>139</td>
<td>477</td>
<td>349</td>
<td>114</td>
<td>1079</td>
<td>51.2%</td>
</tr>
<tr>
<td>BA/BS</td>
<td>27</td>
<td>153</td>
<td>86</td>
<td>30</td>
<td>296</td>
<td>14.0%</td>
</tr>
<tr>
<td>MA/MS</td>
<td>6</td>
<td>18</td>
<td>4</td>
<td>0</td>
<td>28</td>
<td>1.3%</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td>266</td>
<td>1146</td>
<td>530</td>
<td>167</td>
<td>2109</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

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governmental structure. Chuuk and Pohnpei States instituted four day work week for employees with a 20% decrease in compensation.

The FSM looks at income in a different matter than more economically developed Nations. Given the still strong (although rapidly changing to nuclear families in many cases) extended family structure, special emphasis is given to household income. The table below (from the 1994 FSM Census - prior to Compact Step down in FY 1997) provides information on income in the FSM.

<table>
<thead>
<tr>
<th>Type of Income</th>
<th>FSM</th>
<th>Yap</th>
<th>Chuuk</th>
<th>Pohnpei</th>
<th>Kosrae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>11233</td>
<td>1426</td>
<td>4875</td>
<td>4025</td>
<td>907</td>
</tr>
<tr>
<td>Median ($)</td>
<td>4694</td>
<td>5998</td>
<td>2444</td>
<td>7503</td>
<td>6739</td>
</tr>
<tr>
<td>Mean ($)</td>
<td>8645</td>
<td>8298</td>
<td>5443</td>
<td>12412</td>
<td>9686</td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>10649</td>
<td>1285</td>
<td>4696</td>
<td>3793</td>
<td>875</td>
</tr>
<tr>
<td>Median ($)</td>
<td>4473</td>
<td>5810</td>
<td>2268</td>
<td>7084</td>
<td>6574</td>
</tr>
<tr>
<td>Mean ($)</td>
<td>8133</td>
<td>7924</td>
<td>5140</td>
<td>11671</td>
<td>9167</td>
</tr>
<tr>
<td>Individual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>20924</td>
<td>2557</td>
<td>9283</td>
<td>7032</td>
<td>2052</td>
</tr>
<tr>
<td>Median ($)</td>
<td>2637</td>
<td>3509</td>
<td>987</td>
<td>4312</td>
<td>3253</td>
</tr>
<tr>
<td>Mean ($)</td>
<td>4740</td>
<td>4809</td>
<td>2875</td>
<td>7174</td>
<td>4753</td>
</tr>
</tbody>
</table>

Subsistence currently provides approximately 1/5 of the FSM economy. It should be noted that this a decrease from 1/3 of the FSM economy is just a few years.

The FSM Nation Wide Economic Summit in 1995 and the individual State Summits in 1996 identified the need to prioritize development of the private productive sectors. The primary economic growth areas for the FSM are agriculture, marine and fisheries, and tourism. The communiqué from FSM Nation Wide Economic Summit is included in the appendix. The education system is working to provide the needed educational foundation for economic growth and social development. The educational system also sees the economic and social visions provided by the Summits as the policy directives to guide improvement of the education system.

A major element of the Economic Summits is a call for reductions in the size of the public sector. In most cases, this will mean a 20%-40% reduction in the size of government employees. These reductions are coming on top of cut backs in three States to four day work week with a corresponding reduction in salary. Education will have to make major improvements with significantly reduced human resources and will be severely impacted by the reduced school week.
Human Resource Development Indicators

The social condition of the FSM can be provided through a series of Human Resource Indicators which compare the FSM and other selected Pacific Island Nations. Basic indicators for human resource development are seen below (additional detailed tables from the FSM 1994 Census are included in the appendix):

<table>
<thead>
<tr>
<th>Basic HRD Indicators: Selected Pacific Nations</th>
<th>Adult Lit (%)</th>
<th>Prim Enrollment Ratio</th>
<th>IMR</th>
<th>Access to Safe Water (%)</th>
<th>Cash Work Force (%)</th>
<th>Fertility Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooks Is</td>
<td>99</td>
<td>98</td>
<td>26</td>
<td>99</td>
<td>36</td>
<td>3.5</td>
</tr>
<tr>
<td>Fiji</td>
<td>87</td>
<td>94</td>
<td>17</td>
<td>92</td>
<td>33</td>
<td>3.2</td>
</tr>
<tr>
<td>FSM</td>
<td>81</td>
<td>95</td>
<td>51</td>
<td>30</td>
<td>26</td>
<td>6.5</td>
</tr>
<tr>
<td>Kiribati</td>
<td>93</td>
<td>00</td>
<td>65</td>
<td>65</td>
<td>47</td>
<td>3.8</td>
</tr>
<tr>
<td>Solomon Is</td>
<td>22</td>
<td>75</td>
<td>38</td>
<td>61</td>
<td>12</td>
<td>5.8</td>
</tr>
<tr>
<td>Tonga</td>
<td>99</td>
<td>133</td>
<td>9</td>
<td>100</td>
<td>24</td>
<td>5.2</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>&gt;90</td>
<td>105</td>
<td>38</td>
<td>85</td>
<td>15</td>
<td>3.7</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>64</td>
<td>94</td>
<td>45</td>
<td>97</td>
<td>44</td>
<td>5.3</td>
</tr>
<tr>
<td>W. Samoa</td>
<td>98</td>
<td>100</td>
<td>28</td>
<td>70</td>
<td>27</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Gross Development Product Per Capita information is provided below.

<table>
<thead>
<tr>
<th>Pacific Human Development Index</th>
<th>GDP Per Capita ($US)</th>
<th>HDI</th>
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<tbody>
<tr>
<td>Cook Islands</td>
<td>$3,416</td>
<td>0.985</td>
</tr>
<tr>
<td>FSM</td>
<td>$1,474</td>
<td>0.604</td>
</tr>
<tr>
<td>Kiribati</td>
<td>$461</td>
<td>0.439</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>$1,576</td>
<td>0.611</td>
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<tr>
<td>Niue</td>
<td>$3,051</td>
<td>0.879</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>$1,068</td>
<td>0.652</td>
</tr>
</tbody>
</table>

Source: UNDP, 1994

The percentage of rural population is shown in the chart below:

---

The majority of the FSM population still lives in rural areas, however, as indicated above the subsistence portion of the FSM economy has dropped from 1/3 to 1/5 in the past few years. Substantial portions of the FSM population still are active in the agriculture sector. However, most of the activity is subsistence related and not for income production. A major goal of the educational improvement is to address subsistence economy and attitudes and values which will allow students to begin to see the economic potential of the subsistence portion of the FSM economy as employment and to approach the subsistence or partial subsistence of their life as a business and a source for generating income.

**Vision for the 21st Century**

The FSM held its first Economic Summit in November 1995. The communiqué from that summit provides the direction which the FSM must take to promote its economic growth and social development. Key portions of that communiqué call for the FSM as a Nation to strengthen the economy and make it more resilient to changes in the world economy. In accomplishing this primary goal account must be taken to increase the size of the private
sector and improving efficiency of land use and human resources to meet the needs for the private productive sectors. It was also agreed that the Nation should aim for sustainable development through strengthening of environmental planning, introduce the concept of accounting for non-renewable resources depletion, strengthening of participatory community planning in resource management, and the preservation, development and revitalization of the unique and diverse cultures of the FSM.

The FSM Education System has focused its reform planning on changes needed in the education system to meet the economic and social development needs of the FSM. Its basic strategy is to develop the basic skills, thinking skills and personal qualities needed for individual and group economic and social development and to promote the languages, values, attitudes and beliefs which make each of us unique as a people.

**Organizational Structure and Administrative System**

The Federated States of Micronesia Education System is composed of the State and National Departments of Education. The FSM National Department of Education provides coordination for development of standards and assessment, reports on the status of education, provides technical assistance, coordinates external funding aid for education, and is responsibility for the post secondary development of the Nation. Instruction is the responsibility of the State Departments of Education.

Under provisions of the Compact of Free Association with the United States of America, the FSM Education System is eligible for selected U.S. Federal Education Programs. For U.S. Federal Education programs the FSM National Department of Education is considered the State Education Agency (SEA) and the individual FSM State Departments are Local Education Agencies (LEA). The FSM is the only entity in the Pacific where this distinction occurs. Guam, CNMI, Palau, Marshalls, etc. are considered both SEA and LEAs. The FSM is also the only SEA not included on the Board of Directors of the Pacific Resources for Education and Learning (PREL). Additionally, some of the U.S. Federal Education Programs which are normally coordinated through the SEA have bypassed the FSM NDOE.
Overview of the Strategic Plan

What is the Strategic Plan to Accomplish?

The FSM Strategic Plan for Educational Improvement is directed at developing a comprehensive framework for educational improvement across the FSM. As a strategic plan, it paints in broad strokes the major changes and directions the education system must take for significant change to take place. It concentrates on developing guiding principles for shaping effective program development and system improvement. It actively seeks out areas where collaboration and cooperation can maximize human and financial resources for educational improvement. The plan also addresses the issue of why past planning has had little impact on improving education and provides specific recommendations to ensure implementation of this plan and future planning.

The FSM Economic Summits provide the context for development of the Strategic Plan. Education provides the underpinning for economic growth and social development. To ensure that economic growth and social development occurs, the education system must develop student’s basic skills, thinking skills and personal qualities. These skills and qualities must be built upon a solid foundation of first language skills and understanding of and appreciation for our cultures and traditions.

Philosophy

The education system of the FSM must prepare students for potential careers from subsistence living, partial subsistence and money economy, and full monetary work in both within the FSM and outside the FSM borders. The range of careers must span subsistence farming and fishing to modern day technical and information system employment. The site for employment in the FSM ranges from remote Outer Islands to modern day information based societies. In many cases, citizens of the FSM will have to strive in all of these different conditions and employment during their lives.

For the FSM to succeed in its development goals, major changes will have to occur in the education system. The FSM education system must accomplish this activity in face of greatly diminishing resources with the reduction in Compact funding and the dramatic reductions in education staff and instruction time. Three FSM States (Kosrae, Pohnpei and Chuuk) are on four day school weeks. The FSM Education System has been described as: Elementary School prepares children for High School, High School prepares children to attend the College of Micronesia - FSM, the College of Micronesia - FSM prepares students to attend four year Institutes of Higher Education, the IHE prepares students for government jobs. Policy development is needed to bring the education system in line with realities of the economic, social and political status of the FSM. To met these diverse needs the philosophy of the FSM Education Systems is:
The FSM Education System will provide its students with the basic skills, thinking skills and personal qualities which will allow them to make informed decisions as they chart their path in the future. With the cooperation of parents, the community, and the traditional and political governance and leadership structures, these skills and qualities will be built upon a foundation of language and cultural understanding and appreciation which will allow them to approach the future with a solid foundation of their own, and their communities, self worth and appreciation of their own abilities.

The needed changes in the education system will occur in a climate where impact on student learning and achievement will be the guiding force behind decision making and priority setting.

Priorities and Overall Guiding Principles of the FSM Education System

Priorities for the education system and overall guiding principles to guide program design and decision making are provided on the next two pages. The priorities and overall guiding principles grew out of the FSM Strategic Plan Writing Session held at the Palikir Campus of COM-FSM in the late fall of 1996. The priorities were heavily influenced by the SCANS\textsuperscript{5} reports. SCANS looks at education from the standpoint of business and labor. Its standpoint is what skills and personal qualities are needed to succeed not only in the workplace but also in the community.

A second major impact on the planning is the TIMSS\textsuperscript{6} Study. TIMSS indicates the need for a tightly focused education system with clear goals and concentration on core knowledge. Analysis indicates the need for developing a solid education foundation. The foundation which will increase the ability to face the changes we are seeing today in all segments of life and work due to new and improved technologies.

The overall guiding principles are intended to used as a planning and evaluation guide. As programs are designed and decisions are made on allocation of human and financial resources, the 15 areas listed in the guiding principals need to be considered in the decision and design process. The intention is not to say what should the decision be or how the program should be designed, but rather that the guiding principles need to addressed during the decision and design process.

\textsuperscript{5} Secretaries Commission on Achieving Necessary Skills, U.S. Department of Labor.

\textsuperscript{6} Third International Mathematics and Science Study and accompanying reports and analysis.
Federated States of Micronesia
Mission, Priorities & Guiding Principles
of the Educational System

Mission

The Federated States of Micronesia educational system recognizes its shared participation with parents, extended family, and broader social structures in the intellectual, emotional, physical and social development of children. It will deliver a quality, sustainable basic education system which provides all students with basic skills, thinking skills, and personal qualities; provides for the manpower needs of the Nation; develops a literate population based on the revitalization of local languages and cultures while ensuring high competence in English and other international languages; and collaborates with all sectors of the government and community to fully utilize available human and financial resources in developing the educational foundation required for sustainable economic growth and social development.

Priorities

♦ Implement comprehensive language and culture programs to promote the acquisition of primary language skills in local languages and the understanding and appreciation of the values and customs which make us unique as a people. Develop literacy in English and other international languages using the cognitive skills learned in primary language acquisition.

♦ Provide students with a sound basic education which will:
  ◊ by the end of the eighth grade provide students with: basic skills [reading, writing, arithmetic and mathematics, speaking and listening]; thinking skills [thinking creatively, making decisions, solving problems, seeing things in the mind’s eye, knowing how to learn, and reasoning]; and personal qualities [individual and group responsibilities, self-esteem, sociability, self-management, and integrity].
  ◊ by the end of the twelfth grade provide students with substantial progress in acquiring increased competencies to productively use: resources [allocating time, money, materials, space, and staff]; interpersonal skills [working on teams, teaching others, serving customers, leading negotiating, and working well with other people from culturally diverse backgrounds]; information [acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information]; systems [understanding social, organization, and technological systems, monitoring and correcting performance, and design or improving systems]; technology [selecting equipment and tools applying technology to specific tasks and maintaining and troubleshooting technologies].

♦ Redirect resources and emphasis of education to promote the development of the private productive sectors.

♦ Develop shared authority, responsibility and accountability with the community in operation, improvement and maintenance of schools.

♦ Provide for an adequately trained teaching and support staff with emphasis on competency in delivery of basic Foundational skills and instruction in the private productive sectors.

♦ Collaborate and coordinate the use of financial and human resources with all segments of government and community to maximize resource usage and develop the local expertise needed for development of a sustainable education system.
### Guiding Principles

**for Education Program Design and Decision Making in the Federated States of Micronesia**

To provide guidance in design of programs, projects and in the education decision making process a set of guiding principles have been developed. The principles are critical considerations which can increase the likelihood of programs and decisions having a positive and major impact on improving the educational system. The guiding principles for educational improvement in the FSM are:

1. A collective vision and mission.
2. Encouraging wide participation in planning, implementation and evaluation.
3. Planning for continuity in educational development which supports the economic growth and social development of the Nation.
4. Maximizing multiplier effects.
5. Establishing networks and building strong communities.
6. Catering to community based development of education.
7. Establishing and nurturing cells or centers of excellence.
8. Nurturing a spirit of commitment.
9. Ensuring accountability and efficiency in resource development and management.
10. Developing enabling policies and organizational systems.
11. Developing a climate for information-based decisions.
12. Creating an environment of flexibility for responsiveness and adaptation.
13. Creating a structure for personnel development where technical assistance is always within reach.
14. Priority on leadership and leadership development.
15. Language and Culture as an integral part of the reform process.
Past Planning and Implementation Issues

Planning does not have a particularly good name in the FSM in general and in the FSM Education System in particular. In the past there has been a lack of implementation of plans. In development of this Strategic Plan, emphasis has been given to understanding the reasons for the lack of implementation of past planning and the lack of impact of education’s efforts for improvement. A number of issues need to be addressed in all aspects of the planning and implementation process.

External planning versus local planning - Often plans have been prepared by external consultants and/or prepared for external agencies. Plans have not been seen as having linkage to the actual education system.

**Recommended corrective action** - Develop local capacity for planning and implementation. Develop methods for inclusion of all stakeholders in the planning process. Recognition that planning and implementation occurs at all levels of the education system: large scale planning with broad direction setting at the National and State levels with specific implementation planning at the program, school and classroom level. Recognition must be given by the education system to the policy directives of State/National Leadership Conferences and the Economic Summits in setting the general direction for education in the FSM.

Lack of mechanisms for plan implementation - Often plans call for changes seemingly without understanding of what is happening in the current system and without mapping out how to transition from the current status into new models. Often there are no mechanisms for re-prioritization of human and financial resources within the departments of education. However, perhaps the most important area is the lack of adequate assessment and evaluation mechanisms and the willingness to use assessment and evaluation in decision making and resources allocation. There is a tendency to hold onto old programs and attempt to layer new reform and improvement activities on top of existing programs. Content of programs and training is often not relevant to Micronesia or the needs for economic and social development.

**Recommended corrective action** - Develop policies and procedures for budgeting, application development, and assignment of human and financial resources based on priorities of the education system and implementation planning. Establish an Information Management System and quality assessment and evaluation systems for informed decision making. Be willing to modify or discontinue programs and activities which are not improving teaching and learning and concentrate human and financial resources on priority areas and areas which will allow a multiplier effect to maximize resources. Develop review methods to ensure that programs, training, and content focus on Micronesia and developing country needs.
Lack of understanding of the change process and need for comprehensive systems of improvement - Areas of special importance have been the need to understand the nature of resistance to controlled change and the ability to see problems not as barriers but as assistance in identifying areas where changes are needed in plans and implementation. Of major importance is the need to focus on second order changes - improving the interaction between students and teachers, higher teacher and community expectations for student learning and achievement.

Recommended corrective action - Provide training to all education staff on the change process with special emphasis on how to develop response to resistance based on understanding of local culture and traditions. Incorporate elements of the change process into public education programs. Design programs, goals, and assessments which focus on second order changes which address changes in the classroom and in expectations of parents, extended family, and the community for student learning and achievement.

Focus of plans have not been on the teachers, classrooms and students - Planning has primarily addressed department of education concerns and not focused on how the plans and improvement efforts would assist teachers to teach better and students to increase learning. Plans need to provide the support, training, standards, curriculum, materials and assessment instruments needed to support improved teaching and student learning and achievement and provide mechanism to ensure this support is provided to and supported at the classroom level. Assessment of plans and implementation has not been based on student learning and achievement but rather on process issues such as curriculum produced or trainings given or attended.

Recommended corrective action - Evaluate all plans and programs for impact on learning and achievement and how they support teachers and improvement of instruction in the classroom. Develop performance expectations which will allow assessment and evaluation of programs and impact on improving teaching and learning. Make effective use of assessment and evaluation in redirection of programs and allocation of human and financial resources.

Conflict between the education system and local culture, tradition and styles of learning - A U.S. model of education with emphasis on individual student learning and achievement is in place while community and traditional structures are based on the extended family, consensus building, and the concept of knowledge as a private thing for oneself or clan. Teaching models and training is often at odds with traditional means of learning and decision making. Community involvement models often do not take into account the extended family or traditional decision making structures in the local communities.

Recommend corrective action - Develop criteria for review of programs, trainings, and activities to ensure that appropriate content and methods are included which reflect local cultures and values and emphasize the productive sectors (agriculture, marine & fisheries, and tourism). Ensure that community
involvement is based on the extended family and take into account cultural and decision making patterns in the local community.

Plans and implementation activities are often fragmented and do not address the need for systematic improvement. Programs and projects tend to be planned and implemented in isolation. Curriculum is not tied into materials developed. Curriculum and materials development are not tied into professional development. Assessment and evaluation is not used in decision making.

Recommended corrective action - Programs and activities need to be based on comprehensive planning at all levels of the education system.

Policy Development

Learning is hampered in the FSM by lack of enabling policies which focus the education system on learning and support of the instructional staff. Throughout this planning document, policy development is recommended. Policies regarding standards, curriculum, instructional time, and professional development are vital in setting a framework for improvement. These policies are recommended to be similar to the FSM Language Policy in that they focus on learning and development of the support mechanisms which help learning to occur. However, policies should not be developed in isolation, but should be coordinated to develop an interlocking series of policies which support learning and improvement of the education systems and are not contradictory or fragmented. A system for policy review and revision needs to be established to ensure that the education systems is focused on learning and is in touch with the realities of economic, political and social development of the FSM.

Policy development should recognize the need to develop second order changes in the system. These are issues such as creating higher expectations by teachers and the community for student learning and achievement, development of a sense of accountability at all levels of the education system and community for the level of student learning and achievement, and improving the interaction between the education system and issues of economic and social development. Policies should be designed to provide guidance and set standards of quality, and support not inhibit the creative implementation of programs in the classroom and with the community. It is also be noted that why the terms value, culture and personal qualities are raised in this plan, they in part refer to the concepts of emotional intelligence as developed by Goleman. The traditional education systems in Micronesia, in general, promoted strong emotional and social development. High levels of tolerance, consensus building, and respect systems were developed in the complete community.

The FSM Language Policy is attached as an appendix to this plan and is considered an integral part of this plan. It also represents an example of the comprehensive approach to educational improvement needed in the FSM.
Because of the political nature of the FSM, policy development at the National level is directed at providing the overall direction for the education system to take and looks at means to maximize the human and financial resources of the Nation.

It should be understood, that given the fact that the FSM is a new Nation with a developing economy, there must be a very close relationship between the education system and the economic development of the Nation. Constant reference is made in this plan to supporting the development of the FSM productive sectors of agriculture, marine & fisheries, and tourism. These sectors are where employment is expected to be created and where economic growth potential resides. The FSM Education Systems have only recently begun to address these areas. Major policy focus needs to be on how the Nation, States and individual communities need to recreate the education system to support the economic and social growth of the Nation.

**Principles of Educational Improvement and Guides for Planning & Evaluation**

Often this plan takes the route of developing “PRINCIPLES” for various key areas in the improvement process: a) Overall Principles for design and planning, b) Principles of Language Use, c) Principles for Materials Development, d) Principles for Professional Development, and e) Principles for Assessment and Evaluation. These “PRINCIPLES” are developed with the following in mind: needs of a developing Nation and its education system; local culture, values and traditions; analysis of problems and barriers to past planning and implementation of educational improvement efforts in Micronesia; need for systematic improvement efforts; and latest research on education improvement.

The “Principles” may be used by themselves for planning, design and/or evaluation process. However, a series of “Guides” have been developed to ease use of the “Principles”. The “Guides” are included in the appendix and are designed in a question answer format. The “Guides” may be used for initial design and/or for program evaluation purposes.

**Developing a National Identity**

The FSM is composed of four (Chuuk, Kosrae, Pohnpei & Yap) of the seven (Palau, Marshall & CNMI) entities which formally composed the United States administered Trust Territory of the Pacific Islands. The issues faced by many developing countries throughout the world are present in the FSM: a population with many different languages and cultures, traditional systems with different governance and decision making systems. The FSM also faces the problems of a poorly developed economic, small islands and populations separated by vast ocean distances, telecommunication system primarily directed mainly at State centers. In the course of the Nations development, the education system can play an important role in the following areas:
teaching of FSM languages in the school systems,
programs such as FSM Close-Up which brings high school students to the National Capital each year,
debate programs,
expansion/development of FSM wide history and cultural materials for use throughout in the different school systems,
exchange of instructional and reading materials among the States on history, culture and traditions,
expansion/development of educational decision making systems which take into account the diverse cultures and traditions in the FSM,
promotion of the College of Micronesia - FSM as a pathway institution for FSM students seeking postsecondary education, and
help students see the commonalties across our islands before we look at our differences.

This plan does not recommend a specific program for development of a National Identity, but rather recommends that the issues pertaining to development of a National Identity be considered and incorporated into all planning, materials development, professional development, and implementation activities in the education system.

Standards, Curriculum, Instruction & Materials Development

Overview

The FSM Education system is composed of National and State segments. The National role includes coordination with State support of standards development and technical assistance to the States in development of curriculum frameworks and instructional materials. The States are in charge of developing curriculum and delivering instruction in line with standards. Assessment programs are built upon standards and are of concern to both National and States departments of education.

The similarities in the economic, social development, political status and potential futures of the States makes it realistic to develop FSM wide standards. The differences among the States in terms of geography, traditions and cultures, and teacher status require in some cases different curriculum, instructional materials, and instructional strategies.

An important area where improvement is needed is to determine the common areas in curriculum, instructional materials and instructional strategies across the Nation and to development mechanisms to exchange and share information, developmental strategies and instructional materials.

An additional areas is to better understand the definition of standards and how they can be best applied in the FSM. Who and how standards are to be developed and at what levels are questions which need to be addressed. Depending on type and nature of a particular
set of standards they might be best seen as Regional, National, State, and /or School based.

A major problem facing implementation of standards is the lack of enabling policies to: a) support standards and curriculum development, b) review and revision of existing standards and curriculum, c) focusing the education system on learning, d) developing basic and thinking skills and personal qualities, e) defining the academic day, and f) providing mechanisms to ensure core learning time is not infringed upon

The FSM has a solid foundation of student ability upon which to build. A review of the current neuroscience findings on early (0 - 3 years) child development are congruent with childhood rearing techniques in the traditional societies in Micronesia. The extended family structure and constant attention given to young children assists in the neural development of speech and other ability centers in the brain. The need is to develop an education system which takes this raw ability and develops it to its full potential.

It is recommended that development of standards, curriculum and instruction should be based in part on the Guiding Principles for Language Use from the FSM Language Policy. The application of these principles in program design and implementation will provide the language foundation to make progress in other content areas:

**Guiding Principles for FSM Language Policy**

The following are general guidelines for design and implementation of the FSM Language Policy.

1. Micronesia will become a multilingual society with high competence (read, write and the ability to converse) in local languages, English, and other international languages.

2. Our languages convey our values, cultures and traditions.

3. Our languages areas still strong [however there are trends which indicate language shift and loss], but they must expand and grow if they are to remain strong.

   a) Students should have an opportunity to study and improve upon their local language at elementary, secondary, and postsecondary levels of education in the FSM.
   b) All local languages need reference grammars and dictionaries.
   c) Student grammars and dictionaries must be developed at appropriate grade levels.
   d) Local languages must expand to allow new concepts and thoughts to be expressed.
   e) Baseline indicators must be established to measure language competence and improvement.
f) Assessment instruments and evaluation processes must be established for local languages.

g) Instructional materials, general reading and content specific information should be available in local languages and convey information important to economic and social development of the Nation.

4. Local language should be the foundation for developing thinking and learning skills. Acquisition of English and other languages should build upon the basic (reading, writing, arithmetic & mathematics) and thinking skills learning in the primary language of the student. Note that research shows that a solid foundation in the primary language improves academic achievement in a second language.

5. Competence in the primary State language should be an entry requirement into high school and should be incorporated into high school entrance tests. Major FSM languages should be offered for study at the College of Micronesia - Federated States of Micronesia.

6. Students should be introduced to English through materials which are relevant to Micronesia students and convey content information important to the economic and social development of the Nation. The materials might be locally developed, adapted from newspapers and magazines, South Pacific materials, government or private pamphlets and reports, or other materials which are relevant to the economic, political, and social development of the FSM.

7. Valid assessment instruments and evaluation processes for English and other international languages must be developed or adopted and the results be the basis for instructional program design, implementation and planning activities.

8. English and other international languages are used as international languages, second languages, and foreign languages in the FSM. Instructional strategies and materials should be appropriate to the language needs and usage of students. Note: while English is the official language of the Federated States of Micronesia it is the first language of less than 1% of FSM citizens.

9. The primary language of the community should be both the medium and object of instruction in the elementary school. If the local language is not the primary state language, the primary State language should be taught in the school as a second language. Transition into English should be based on cognitive skills developed in students primary and/or State language.

10. Instruction in first, second, third and other languages should be based on standards and curriculum frameworks which follow sound research on language acquisition and set a basis for assessments and reporting.
11. Language maintenance and expansion cannot be addressed only by the school system. The school system must work in partnership with the community, other government departments and sectors, and traditional systems in the maintenance and expansion of local languages and developing high competence in English and other international languages. Public education must address the issues of language acquisition and the link between language and economic growth and language, culture and traditions and social problems and development.

12. Other governmental agencies, community organizations, and businesses should be encouraged to help build a body of knowledge in print, video, & oral medium in local languages and in English appropriate for the FSM.

13. Teaching staff should be provided training in and demonstrate competence in the language being taught [local languages, English, Japanese, Chinese, etc.] and be provided with training in appropriate teaching strategies and methods for first and second language acquisition.

**Standards**

In light of the National and State Economic Summits Policy directives, State/National Leadership Conferences, HRD Studies, MegaConference and individual State education reform activities, the FSM is charged with the need to review the existing National Minimum Standards (NMS) to bring them in line with current education research on learning and with the needs for economic and social development of the FSM.

**Goal:** By year 2000, review/revise/development National Minimum Standards in curriculum instruction, and assessment that reflect the repressed developmental needs of the FSM will have been developed and implemented.

**Objectives 1:** To review and revise the existing National Minimum Standards.

**Strategy 1.** The National Government initiate a process to review and revise the NMS. Participants such as curriculum specialists, teachers, parents, community sectors, and service providers in the region. Initial emphasis is on language arts standards which provide guidance for acquisition of students first language and develop sequence and performance expectations for acquisition of second languages (English, Japanese, etc.). The second major area is on the productive sectors of agriculture, marine, and tourism. The FSM will initiate action on review/revision/development of this activity in June 1997.

**Strategy 2.** Revise, develop assessment and evaluation instruments to support the NMS.

**Strategy 3.** Make effective use of information technologies and the Internet to speed up the process of standards and assessment and evaluation development.

Develop capacity at the National and State levels
FSM Strategic Plan for Improvement of Education

Strategy 4. Make effective use of SCANS, TIMSS and other key research data in the design process.
Strategy 5. Make effective use the Suva Declaration for Sustainable Human Development in the Pacific (see appendix) as a guide for setting the appropriate emphasis and resource allocations.

Objective 2: To include teaching and assessment standards in the existing National Minimum Standards.

Strategy 1. Develop teaching standards to include: the use of variety of strategies to accommodate all children’s different learning styles, the use of local resources (human, environment and facilities), cultural and traditional technological expertise.
Strategy 2. Develop assessment standards to include: multiple forms, periodic and continuous assessment.
Strategy 3. Mandate annual administration of the NST for program evaluation with consideration of the State’s situation.

Objective 3. To establish a National Advisory Council for the purpose of reviewing, assessing, and providing technical assistance.

Strategy 1. Secretary of Education’s National Advisory Council to be formulated. Nominees to be submitted by State Directors of Education.
Strategy 2. The advisory council will establish meeting schedules and also conduct meetings via video conferencing and other information systems.

Objective 4. To develop a timeline for National Minimum Standards awareness sessions in the States.

Strategy 1. State DOEs will determine the timeline for teacher and community awareness sessions within state. Initial activities should begin within four months from establishment of standards. NDOE staff can be requested to provide assistance to States.
Strategy 2. National Government is responsible for printing and distribution of the NMS to State Department of Education and to the political leadership of the Nation. States should be responsible for distribution within State boundaries.
Strategy 3. State DOE reports back to NDOE upon completion of awareness sessions and implementation, which will determine timeline of NST administration.

Curriculum

Development of curriculum is the responsibility of the States. However, the curriculum should be in line with agreed upon Nation wide standards and assessment and evaluation instruments.
Objective 1. Develop policies for development, implementation and evaluation of curriculum and its impact on student learning and achievement.

Strategy 1. Expand/develop policies for review/revision/development of curriculum which includes parents, teachers and community involvement.
Strategy 2. Base review/revision/development of curriculum and findings of assessment and evaluation and on the current knowledge of how children learn.
Strategy 3. Expand/develop policies on training of teachers in new curriculum and its implementation in the classroom.
Strategy 4. Expand/develop policies for professional development of new teachers in curriculum and special support mechanisms during their introduction to the classroom.
Strategy 5. Expand/develop mechanisms for evaluation of education’s impact on meeting the human development needs of students to be productive citizens and meeting manpower development needs.

Objective 2. Expand/develop support mechanisms to ensure curriculum is implemented in instruction activities.

Strategy 1. Expand/develop school and in class based support mechanisms to support instruction through effective use of principals, specialists, master teachers, and other mechanisms.
Strategy 2. Conduct periodic reviews on the implementation of curriculum to ensure it is in line with standards and priorities of the State and Nation.

Objective 3. Reassess all curriculum in light of the need to support economic growth - especially in the productive sectors.

Strategy 1. Ensure that the curriculum provides for instruction on local values and traditions which show the strong linkage between people, the land and the sea.
Strategy 2. Encourage multidisciplinary approaches to developing and supporting values and attitudes in line with the needs for economic growth and social development.
Strategy 3. Expand/develop mechanisms for community involvement in addresses conflict between traditional values and culture and the needs for economic growth.

Instruction

Instruction time is taking a beating in the FSM. Time for learning is impacted by family and community social activities such as funerals, sports and recreation, and other activities. **Of equal magnitude is the reduction in the majority of States to a four day school week.** In the class room, tests and quizzes and follow up on those tests and quizzes can take 25% or more percent of time which could be used for instruction. Another problem of note is the lack of funding for substitutes and the lack of well defined systems for addressing teacher absence from the classroom. A more basic structural
FSM Strategic Plan for Improvement of Education

Problem is the rigid schedules and time requirements present in our schools. Rigid schedules often make it difficult for cooperative learning, field trips, thematic units, and other proven teaching strategies and delivery systems to be used. Following the lead of “Prisoners in Time” the following recommendations are made:

**Goal.** Focus instructional time around learning.

**Objective 1.** Define the school year in such a way as to ensure that learning time for core academic and emotional development activities is not impacted upon.

  **Strategy 1.** Each State develop definitions of the school year, academic day, and supplemental learning in ways preserve time for core learning activities.
  **Strategy 2.** Provide parental and community education on the need to secure core leaning time both within the school and in the home setting.
  **Strategy 3.** Provide for recreation and sport activities in such as manner as not to intrude upon core learning time.

**Objective 2.** Ensure that in class time is devoted to learning.

  **Strategy 1.** Redesign in class assessments to support and not replace core learning time.
  **Strategy 2.** Develop professional development strands which assist teachers in focusing on learning activities.
  **Strategy 3.** Develop effective principal and specialist support programs to promote learning and maximize instructional time.

**Objective 3.** Review and revise existing school time schedules to promote learning.

  **Strategy 1.** Develop flexible models of instruction for core learning activities.
  **Strategy 2.** Strongly consider the concept of block schedules and cooperative learning in revision of school time schedules.
  **Strategy 3.** Provide training to teachers, principals, parents and the community on innovative means to developer instruction including block schedules, cooperative learning (note extensive training in cooperative learning has be delivered to teachers and other staff in the FSM, but no institutional framework has been put in place to enable teachers to use these methods), and effective assessment strategies.
  **Strategy 4.** Develop school policies and procedures which ensure effective learning when teachers are absent and preserve time for core learning activities.
  **Strategy 5.** Promote thematic units of study which focus on real problems and issues in the Nation, State and community.

**Materials Development**
Lack of materials - instructional, general reading and grammars, etc. - has severely hampered instruction in local languages. Additionally, many of our English materials are not appropriate for our island setting.

One principle we feel is valid is that the content of materials can greatly influence the attitudes and values of our youth. Materials content can be a positive or negative influence on development of values and attitudes, decisions on appropriate careers [even what should be considered a career], and conveying the worth of items and ideas. Today, our children are faced with instructional materials which do not emphasize our cultural heritage, do not promote the development of role models from our local communities, and do not emphasize the productive sectors [agriculture, marine, tourism and commerce and industry] as seen in the policy directives of the Economic Summits.

Massive materials development needs to take place in local languages and in English. Particularly at the early grades, students should be exposed to quality English materials which convey the values, attitudes and content which is important to our development.

The primary work of materials development will occur at the State level. However, there are a number of areas where coordination and assistance can be beneficial. One is development and training in the process of materials development. There is a need to greatly expand the concept of who is a materials developer. Processes can be used in which our teachers and students both become developers of materials. An additional resource can be the local language instructional courses to be developed for COM-FSM. The student developed papers and documents can be a valuable resource. Curriculum writers in the State could devote a portion of their time editing of external documents for use in the school system. Research and coordination of research efforts can also play a major role in speeding up the process of materials development. Using technology, research efforts at the National or State level can shared across the Nation. Additionally, the sharing of materials developed in local languages and in English among the FSM States would provide a mechanism for getting more materials available for instruction.

The FSM NDOE in cooperation with the States and the National Language and Cultural Institute (NLCI)\(^7\) will compile a listing of quality but inexpensive printing agencies both within and outside of the U.S.

The following are recommended as Principles for Materials Development and usage in the FSM:

Principles for Materials Development

\(^7\) The National Language and Cultural Institute (NLCI) is proposed by the FSM Language Policy to be established at the College of Micronesia - FSM. It role would be to be to provide technical assistance in linguistics (development of reference grammars and dictionaries and school grammars and dictionaries), materials development processes, and training in appropriate instructional strategies for Micronesia.
1. Reference grammars and dictionaries should be available in local languages.

2. Instructional dictionaries and grammars should be available in local languages for use at appropriate grade levels. Initial emphasis is recommended to be placed on development of dictionaries.

3. Children should have materials in their local languages for study in school.

4. Children’s introduction to English and other international languages should be through materials which are appropriate for students age, cultural setting, and in line with economic and social realities in the FSM.

5. Materials should be developed in local languages and English to:
   a) promote Micronesian customs, beliefs, and values,
   b) promote the development of community role models,
   c) provide content information on the productive sectors (agriculture, marine, and tourism), and,
   d) promote development of National and State identifies.
   e) give age appropriate materials for students instructional use.
   f) ensure provision of quality teaching instructions and training for use of materials be considered part of the materials development process.
   g) provide content related materials (science, social studies, mathematics) and thematic materials related to agriculture, marine & fisheries, and tourism.

6. Materials should be developed in high quality, attractive formats. Innovative use of information technology might also allow use of “Print on Demand” whereby materials could be printed at the school or classroom level as needed. This approach could also allow adaptation of materials to fit local community conditions or to use local pictures and examples in a State or Nation based text.

7. Materials should be based on appropriate curriculum and scope and sequenced for maximum impact. The curriculum and materials should be based on and follow high quality content standards.

8. Materials can be print media, audio/visual, computer based or other means of transferring information.

9. Innovative processes should be used for materials development. Students, teachers, other government agencies, and COM-FSM Students should all be considered as potential writers and materials developers. The FSM NDOE, NLCI and State DOE’s should develop processes for rapid development of high qualities material appropriate to local conditions.
10. Support systems and materials such as teachers texts and teaching strategies should be developed in coordination with materials development. Materials should be field or pilot tested with valid assessment and evaluation processes. Additional follow up and follow through mechanisms should be in place to compile new teaching strategies and support materials over time.

11. Professional development in use of instructional materials should be provided to staff on initial presentation of materials and at periodic intervals as new and innovative use of the materials become known.

12. Exchange of locally developed materials should be the norm. This would include local language materials for use in other States and English materials developed in any State as use throughout the FSM.

13. Materials should be copyrighted by the organization developing the materials, but for acknowledgment purposes only, not for restricted use.

14. Materials developed by other government agencies, such as R&D, the private sector, religious organizations, etc. should be considered for use in the school system with editing and development of teacher materials as needed. Maximum use should be made of newspaper and magazine articles, government and business pamphlets and reports, and other “real world” reading materials as the basis of instructional materials.

15. Textbooks and other materials used in schools should be reviewed for their appropriateness not only in skills development, but for values and content information.

The National Language and Cultural Institute in cooperation with the Pacific Collection of the Learning Resource Center (LRC) at COM-FSM Palikir Campus, will become a depository for locally developed materials and for materials used in the classrooms of the FSM. It mandate will be to actively seek out local materials, local languages and English, not only from the education sectors, but other public and private organizations as well.

**Goal.** Implement a comprehensive system of materials development in each State and across the FSM through development of systems based on the Guiding Principles for Materials Development.

**Objective 1.** States are recommended to set up materials development programs based on the Guiding Principles for Materials Development.

**Strategy 1.** States should consider a model where department based staff are seen as curriculum developers - not writers. Materials could be developed by students, teachers, community, businesses or from published materials such as articles on tourism, brochures on fisheries or the banking system, etc.
FSM Strategic Plan for Improvement of Education

Strategy 2. Consider effective use of technology in materials development to allow activities such as: a) customizing base materials with photos from the local community, using the best of writing from an age group as the reading program for the upcoming year, printing materials as needed at the school or classroom level as needed, etc.  

Strategy 3. Expand/develop programs such as the Writing Process Training developed by MERC at the University of Guam to a broad base of teachers, principals, and the community to provide the technical capability needed for materials development.

Objective 2. The FSM NDOE in cooperation with the COM-FSM and the States will set up a materials exchange program for both local language materials and English.

Strategy 1. Make effective use of the proposed National Language and Cultural Institution and the existing Pacific Collection at COM-FSM as a focal point for exchange and storage of materials.  

Strategy 2. Convert all existing materials and developing all new materials in an electronic format to facilitate exchange of materials across the FSM.  

Strategy 3. Explore/expand efforts to obtain and exchange materials with South Pacific countries and organizations which are appropriate for: a) developing nations and b) small island settings.

Assessment & Evaluation

Assessment and evaluation are pivotal pieces around which effective educational improvement effort moves. Without quality data on the effective of programs and instruction on student learning, decisions become ad hoc without a sound foundation. Programs and financial and human resources are allocated based on perceptions of need and not necessarily on need.

A number of problems are faced in development of the assessment and evaluation systems. First is the lack of relevant assessment tools. Developing culturally relevant assessment instruments is time consuming and requires a high level of technical ability. Of special importance is the lack of assessment tools and procedures for local languages. However, the FSM should use the best available assessment and evaluation tools as it develops it own tools. As new and better assessment and evaluation tools become available, they can replace the existing tools. Second is resistance to evaluation and comparison by teachers, principals, and other education staff. Third is the lack of trained staff for development and analysis of assessment tools.

From a structural standpoint, assessment and evaluation has been hampered by a lack of clear purpose and expectations for the education system. On one hand the FSM Education is very academically oriented with great emphasis on English competence. On the other hand, economic growth calls for orientations toward agriculture, marine & fisheries, and tourism. There are also objections to many assessment instruments as not
being culturally appropriate. For effective assessment and evaluation to take place, there will need to be a major redirection in our planning, program design and instructional programs. The FSM is approaching this issue from the standards orientation. The overall goal of the FSM Education System is to promote the sustainable economic growth and social development of the Nation. To implement this overall goal, the education system has seen its role to:

1. develop high competence in both local language and English with instruction being based on acquisition of Micronesian values and beliefs,
2. develop basic skills, thinking skills and personal qualities of students needed for both economic growth and social development,
3. redirect education programs such as career education to promote the FSM productive sectors (agriculture, marine & fisheries, & tourism), and,
4. provide a highly literate population which can face future and current change with a solid sense of its own worth and values.

How the education system meets these overall needs will be defined in our standards, curriculum and instructional program. Each of these areas need to ensure that clear expectations for learning need to be established. Our assessment and evaluation systems will never be adequate without clear directions and expectations.

Assessment and evaluation has not been effectively used in Micronesia for improving program delivery and impact on student learning. Often evaluation has been seen as a means of assessing blame. This plan recommends that assessment and evaluation fulfill the following purposes: 1) provide input for improving program and instructional delivery systems to enhance learning and 2) provide overall system data to ensure that the education system is meeting its improvement goals.

In March 1996 the Education MegaConference on means to implement the policy directives of the Economic Summits, agreed that the FSM must move to a results based education system. The focus of this agreement is to evaluate the FSM Education System on its ability to improve the academic and social abilities of students. The desire is to move away from seeing success as the number of trainings which have been completed, the number of materials which have been produced, the number of meetings conducted with the community, etc. Success would be determined by the extent to which training is implemented in the classroom and impacts on student achievement, the actual involvement in the community in the school and its gradual assumption of key decision making responsibility. To move the FSM Education System to a resulted based system requires a concentrated effort. There needs to be clear goals and performance expectations for the various levels and groups within the education system. Effective assessment and evaluation tools need to be available which are appropriate to the local setting while allowing comparison against international norms. Extensive assessment tools development is called for in FSM Language Policy for local languages - oral, written and alternate assessments. A major problem is the lack of long term assessment and evaluation
tools which can show the trends toward improvement in the system. The following is a summary of major assessment taking place in the FSM.

Assessment and evaluation can play a much greater role in the improvement of education in the FSM. The following tables shows some current assessment and evaluation activities, uses, and audience. The biggest concern at the present time is that most assessment and evaluation are seen as separate actions or activities and are not part of comprehensives systems which feed information into education, community and family decision making systems.

<table>
<thead>
<tr>
<th>Assessment and Evaluation Activity</th>
<th>Uses</th>
<th>Level</th>
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</thead>
<tbody>
<tr>
<td>National Standardized Test (NST)</td>
<td>• Report to Congress and the Nation on the status of Education and ability of students to meet content standards</td>
<td>National</td>
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<td></td>
<td>• Basis for decision making and planning in the Nation on educational issues</td>
<td>State</td>
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<td></td>
<td>• Basis for seeking additional funding for education</td>
<td>School</td>
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<td></td>
<td>• Possible basis for distribution of FSM Funds for education improvement</td>
<td>Community</td>
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<tr>
<td></td>
<td>• Provides basis for comparison of FSM students against international norms</td>
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<tr>
<td>Overall status of education system</td>
<td>• Report to State Legislature, parents and the community on the status of education</td>
<td>State</td>
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<td></td>
<td>• Assist in design of curriculum and instructional programs and setting of priority areas for instructional improvement</td>
<td>School</td>
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<tr>
<td></td>
<td>• Determine educational achievement of schools</td>
<td>Community</td>
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<tr>
<td>State composite results</td>
<td>• Report to the community on the status of their children’s education</td>
<td></td>
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<tr>
<td></td>
<td>• Assist in design of school and community based improvement programs</td>
<td></td>
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<tr>
<td>Individual School Data</td>
<td>• Determine educational achievement of students</td>
<td>School</td>
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<tr>
<td></td>
<td>• Report to the community on the status of their children</td>
<td>Community</td>
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<tr>
<td>Individual Student Data</td>
<td>• Determine educational achievement of students</td>
<td>Classroom</td>
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<tr>
<td></td>
<td>• Report to parents on educational progress of their children</td>
<td>Parents</td>
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</tbody>
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Role of Assessment and Evaluation in the FSM
<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Users and Benefits</th>
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</thead>
<tbody>
<tr>
<td>High School Entrance Tests</td>
<td>• Determine who goes to high school</td>
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<tr>
<td></td>
<td>• Provides input into quality of schools</td>
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<tr>
<td></td>
<td>• Provides information of curriculum and instructional improvement</td>
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<td></td>
<td>• Students</td>
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<td></td>
<td>• Parents</td>
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<td></td>
<td>• Community</td>
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<tr>
<td></td>
<td>• Parents</td>
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<tr>
<td>College of Micronesia - FSM</td>
<td>• Determines who goes to COM - FSM</td>
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<tr>
<td></td>
<td>• Provides input on the quality of State educational programs</td>
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<tr>
<td></td>
<td>• Determines ability of students in English and mathematics</td>
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<td></td>
<td>• Nation</td>
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<td></td>
<td>• State</td>
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<td></td>
<td>• Schools</td>
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<td></td>
<td>• Students</td>
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<td></td>
<td>• Parents</td>
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<tr>
<td>State Curriculum Referenced Tests</td>
<td>• Determine progress in implementation of curriculum</td>
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<td></td>
<td>• Assist in establish student achievement levels</td>
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<td></td>
<td>• Provides input for improvement of curriculum and instruction</td>
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<td></td>
<td>• State</td>
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<td>• Schools</td>
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<td></td>
<td>• Students</td>
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<td>• Parents</td>
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<tr>
<td>TOFEL, SAT, ACT and other measures</td>
<td>• Provides data on student ability on standardized tests</td>
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<td></td>
<td>• Provides comparison data against U.S. and International norms</td>
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<td>• Nation</td>
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<td></td>
<td>• State</td>
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<td></td>
<td>• Students</td>
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<td></td>
<td>• Parents</td>
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<tr>
<td>In class Assessment and Evaluation</td>
<td>• Provides teacher’s data for determining student learning</td>
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<td></td>
<td>• Provides input for improving teaching strategies</td>
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<td></td>
<td>• Students</td>
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<td></td>
<td>• Parents</td>
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<tr>
<td>Training and professional development</td>
<td>• Provides input on impact of training and professional development on improving learning</td>
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<tr>
<td></td>
<td>• Provides input for improving program design and delivery for professional development programs</td>
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<tr>
<td></td>
<td>• Provides input for decision making on allocation of resources for professional development</td>
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<td>• Nation</td>
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<td>• School</td>
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<td></td>
<td>• Community</td>
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<tr>
<td>Program Evaluation</td>
<td>• Provides data on impact of program implementation</td>
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<td></td>
<td>• Provides data for improvement of program design and implementation</td>
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<tr>
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<td>• Provides data for justification of program funding</td>
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<td>• Nation</td>
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<td></td>
<td>• State</td>
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<td></td>
<td>• Funding agencies</td>
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**Principles for Assessment and Evaluation**

1. Plans, program design, standards, curriculum, professional development, and instructional activities should have clear visions, goals, and performance expectations which support the development of the Nation, State and individual communities and allow for quality assessment and evaluation to occur.
2. Assessment and evaluations activities need to ensure that they are assessing and evaluating the actual goals, objectives and expectations of education system and of individual programs and projects.

3. The impact of programs on improving learning and student achievement should be the primary focus of all assessment and evaluation activities.

4. Assessment and evaluation should use a broad set of instruments and/or processes and procedures from standardized tests to portfolios and alternate assessment procedures or instruments.

5. Improved means of assessing student achievement should be developed, but existing data and assessment tools should be used until better instruments are in place.

6. Assessment of teaching and learning should be continuous with accountability established at all levels.

7. Programs (in the broader sense: U.S. Federal Education Programs, 221 (b) Programs, but also regular curriculum activities such as Language Arts, Mathematics, Vocational Education) should be formally evaluated on a regular basis (at least once each 3 years) for their impact on improving student achievement and learning and meeting the educational needs of the FSM.

8. Emphasis in assessment and evaluation should be for improvement of learning, not for attachment of blame. Assess and evaluate the system for improvement purposes, not for attaching blame to individuals or groups.

9. Evaluation systems for teachers, principals and education support staff need to be improved and actively supported. Certification systems should focus on improving teaching and learning.

10. Assessment and evaluation data is public information to be shared with the community while respecting the individual rights of students.

11. Assessment and evaluation should show quantifiable “before and after” data on the impact of programs and improvement efforts.

12. Assessment and evaluation in the FSM needs to be looked at as a series of interlocking systems at the National, State, School and Classroom levels.

With these principles in mind, the following goals and objectives are set:

**Goal.** The FSM Education System will have appropriate assessment and evaluation systems for all levels of education and will use those systems as the basis for decision making, resource allocation, and planning and development.
Objective 1. Expand/develop a National Assessment System based on the National Standardized Tests (NST), College of Micronesia - FSM Entrance Exams, and other assessment tools as agreed upon by the States.

**Strategy 1.** Within three years, fully implement and expand the local language portions of the NST. Provide training to States on assessment of oral and written proficiency in local languages. Expand the NST to include usage of local language questions for better assessment of young children.

**Strategy 2.** Expand the NST to include science and history and culture assessment instruments.

**Strategy 3.** Develop capacity for local scoring and analysis of NST data.

**Strategy 4.** With State assistance, expand the reporting procedures for the NST to ensure that parents and all segments of the community and government structure are informed on the take of education achievement by students.

**Strategy 5.** Actively seek out external information such as TOEFL scores for Micronesians, assessment and evaluation data from colleges and universities and other sources to provide a clearer picture of student achievement levels in the FSM.

**Strategy 6.** Expand/develop mechanisms for assessing the quality of programs in agriculture, marine & fisheries, and tourism and the support for values and attitudes which promote he fields are quality careers.

**Strategy 7.** Develop National and State collections of the best writings, projects and other examples of high quality student performance.

Objective 2. Formalize State Assessment and Evaluations System for all levels of the State Education System.

**Strategy 1.** Include local language assessments on high school entrance tests.

**Strategy 2.** Expand/develop assessment instruments which assess interaction and values and attitudes toward the productive sectors.

**Strategy 3.** Formalize teacher, principal, and support staff evaluation.

**Strategy 4.** Develop decision making mechanisms which take into account assessment and evaluation data from individual State efforts, NST data, COM-FSM entrance tests, and other assessment and evaluation data in allocation of human and financial resources.

Objective 3. Develop a formal system for program evaluation on a periodic basis.

**Strategy 1.** Conduct program evaluations at least once each three years. For the purpose of this section programs include: academic programs such a language arts, vocational education etc.; U.S. Federal Education Programs; Compact Section 221 (b) programs, support programs such as public education and parental involvement programs; and assistance from Technical Assistance Service Providers.
Strategy 2. Develop reporting mechanism for internal education use and also for reporting to Congress, State Legislators, parents and the community.

Strategy 3. Make all performance reports for local and externally funded programs part of the public record.

Strategy 4. Use program evaluation for making changes in program delivery to improve impact of programs on learning and support of learning.

Objective 4. Provide training in analysis of assessment and evaluation data and procedures for development of new assessment tools and evaluation procedures.

Strategy 1. Make use of Technical Assistance Service providers to move forward training of key education staff in analysis of assessment and evaluation data and procedures for development of new assessment tools and evaluation procedures.

Strategy 2. Enhance electronic means of communication for sharing of data and results of assessment.

Strategy 3. Expand/develop a research program on the most effective assessment evaluation instruments and procedures in Micronesia.

**Accountability, Governance & Finance**

**Accountability**

Perhaps more than any other area, the first step to take in reform of the education system is to develop accountability systems at all levels of the education system. To long have we concentrated on having the authority for education decision making without accepting the responsibility and accountability for the results of the education system. The general response has been to push responsibility out of our immediate sphere while retaining authority and decision making power.

Accountability systems have been seen to address only financial issues. The concept of accountability needs to be expanded to include: student achievement and improvement, program and project performance and impact, and budget, finance and management issues. Accountability systems also have to be tied into newly emerging assessment and evaluation programs.

A number of barriers will have to be overcome to make progress. One is that the lack of culturally relevant assessment and evaluation tools for students has resulted in downplaying of the academic level of students. Second, the parents, teachers, principals, the community and the general education system are all accountable in some ways for improving student achievement. However, the accountability role of each group is not well understood nor recognized. Third is the role of institutional barriers such as rigid financial and budgeting systems which are not under the control of the education system. A related area is the lack of performance based budgeting systems throughout the FSM. Fourth is the trend where human and financial resources in the FSM are not directed
towards priority areas for improvement. Related is the tendency to disregard planning and priorities when financial resources are actually expended.

Goals. Develop accountability systems which encompass the classroom, school, community, state and nation direct towards the assumption of responsibility for continuous student academic and emotional development.

Objective 1. Agree upon base line data for current levels of student performance for each: school, State, and the Nation.

- **Strategy 1.** Develop historical data on school and State based on the National Standardized Tests (NST).
- **Strategy 2.** Develop historical data based on individual State High School Entrance Tests and locally developed curriculum referenced tests.
- **Strategy 3.** Develop historical data based on College of Micronesia - FSM Entrance Exams.
- **Strategy 4.** Obtain other data such as TOFEL, SAT, and ACT Test Scores, levels of remedial courses taken by Micronesian Students on entering college, and other information which will provide a profile of the current levels of Micronesian students academic and emotional competence.
- **Strategy 5.** Combine the data into a general summary report to be used as the base line data to determine future levels of student improvement.
- **Strategy 6.** Expand/establish reporting systems for parents, community, States and the Nation on the status and progress of the education system.

Objective 2. Obtain agreement on the role of various groups and individuals regarding levels of authority, accountability and responsibility for education improvement.

- **Strategy 1.** Compete the survey started in the FSM HRD Study on levels of authority in the FSM education system.
- **Strategy 2.** Conduct workshops in each State and at the National level to explore roles and responsibilities of all segments of the Micronesian society in improving the academic and emotional life of its children.
- **Strategy 3.** Ensure that authority follows responsibility and accountability. Where SBM programs are set in place ensure that transfer of authority follows transfer of responsibility.

Objective 3. Improve financial, budget and management systems which impact on improving education.

- **Strategy 1.** Survey existing National and State financial and budget systems for their impact on: allotting funds as needed for program activities, expending funds in a timely manner, acquisition and accountability for materials, supplies and equipment in a timely manner, and existing policies and procedures (both written and/or in general practice).
Strategy 2. Prepare a report with recommendations on needed changes in institutional systems which impact on the timely delivery of educational programs and projects for consideration by State and National Policy makers.

Strategy 3. Revise/develop policy and procedures in cooperation with State and National Budget and Finance Office on use of U.S. Federal Education Funds to ensure timely use and availability of funds for program purposes.

Strategy 4. Review and recommend changes on existing mechanism for funds distribution, allotment and draw down to ensure that funds are available when needed for delivery of education programs and projects.

Strategy 5. Provide structured training to program and project managers to ensure accountability for financial manners consistent with authorizing legislation.

Strategy 6. Develop internal procedures for reporting on funds and development and implementation of expenditure plans.

Strategy 7. Provide training in performance based budgeting for use at the National and State levels.

Strategy 8. Expand/develop which track human resources allocation and their relation to priorities of education.

Governance

The FSM Educational System is structured in the same manner as the political system. Schools and learning are the direct responsibility of the State Governments. The FSM National Government plays a coordinating role in development and assessment of standards, coordinating external funding, and promoting educational improvement by assisting the States.

Each State has a different governance structure. Chuuk and Yap have school boards with substantial powers. Pohnpei has an advisory School Board. Kosrae does not have a School Board. School finances are primarily from Compact funds with a substantial per cent from U.S. Federal Education Programs.

In line with general governmental operations, Chuuk, Pohnpei and Kosrae operate on a four day school week. Salary structure and finances are in all States controlled by Departments or Offices of Personnel and Finance.

The FSM National Government responsibilities are governed by Title 40 of the FSM Code which specifies its roles and responsibilities.

Most States have indicated a desire to move to a more School Based Management System with greater involvement and participation by the community.

A number of major issues need to be addressed to improve governance.

- Governance needs to be restructured around learning. Policies need to be reviewed and developed which actively promote and enable learning to take place. To date
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policy development in the FSM deals more with items such as time and attendance, drug use, etc. but not with issues related to learning, professional development, accountability, and assessment and evaluation.

- Move to School Based Management Systems (SMB) must be based on transfer of authority and accountability. Additionally, SMB systems must address educational reform issues at the school. Research shows that simply moving the existing decision making to the school and community level will have little impact on improving student achievement. Local decision making coupled with major changes in the education system are needed for improvement to take place.

- The role of all levels must be understood in improving education. The school, the community, the State, and the Nation - must be viewed as interlocking systems which are vital to the development of the FSM education system. Each segment must be both responsible and accountability for improving education.

**Goal.** Develop governance systems which focus on setting enabling policies and frameworks for improving learning.

**Objective 1.** Develop comprehensive systems of enabling policies revolving around learning.

**Strategy 1.** The FSM NDOE will develop an action plan which lays out its implementation plans for Title 40 of the FSM Code. One key area will be revision of the Teacher Certification Standards and development of Standards for Principals and Support Staff.

**Strategy 2.** Implementation of the FSM Language Policy.

**Strategy 3.** Development of additional enabling policies based on the FSM Language Policy model.

**Strategy 4.** State DOE’s are recommended to review existing policies and procedures and review/revise/develop policies which focus on learning and provide the needed support structure for reform to take place. Policies and procedures are needed in at least: prioritization of learning as the key to education reform, professional development guidelines, evaluation of staff with special emphasis on in class evaluation and support for teachers, and curriculum and instructional materials development. The General Principles for Materials Development included in this plan are recommended as the basis for instructional materials development, purchase, and evaluation.

**Objective 2.** Enforce existing laws, policies, regulations, and codes.

**Strategy 1.** Monitoring and reporting plans need to be established at all levels of the school system for the impact of existing laws, policies, regulations and codes.

**Strategy 2.** Existing laws, policies, regulations, and codes should be reviewed to ensure alignment with existing resources.
Strategy 3. The FSM Association of Chief State School Officers (FACSSO) should be fully operational with regular meetings and follow up and follow through on all recommendations and decisions.

Strategy 4. Special effort should be taken to ensure that all children attend school as required by law in each of the States.

Finance

The financial condition of education is currently grim. With the step down in Compact funding in FY 1997, the education system has seen States going to four day work weeks, reduction in the salary of teachers and other education staff, and reduction in the size of the education departments. These Compact step-down problems are made worse by an inefficient financial system which does not emphasize the need for program activities to be completed in a timely fashion.

A sample of problems faced:

- External purchase requisitions can routinely take six months to a year to be completed and materials and equipment arrives,
- Internal National/State requisitions can take months before vendors are paid,
  The net result is that materials and equipment are not available in a timely fashion for implementation of program activities
- Both external and local vendors often will not accept FSM purchase orders, but require cash advance payments for release of goods,
- Education often do not receive copies of financial reports,
- Funds are often not reconciled with finance department records causing return of funds to external funding sources at the end of the fiscal year,
- Education staff often do not have expenditure plans for funds,
- External funds in a number of States and at the National government have to go through a re-appropriation process through the legislature which can delay release of funds for program activities,
- There are often disagreements between education and finance or budget on the allowable use of funds from external funding sources, and
- Education and finance department either do not have or do not follow policies and procedures (including timelines for handling of documents) for processing financial documents, and
- Purchasing procedures are not making use of credit cards, the Internet, and other means for improving the acquisition of needed materials and equipment for program and project implement.

Given the above issues, the following goal and objectives are established.

Goal. By year 2001 The education system in the FSM will be less dependent on external resources, utilize more local resources, and make more effective use of all human and financial resources available.
Objective 1. Short term - Increase and redirect distribution and allocation of funds to the priority areas in Education.

Strategy 1. Each State DOE and the FSM NDOE will establish clear priorities for funding needs.
Strategy 2. Review and analysis existing funding expenditures from all sources and compare against established priorities areas.
Strategy 3. Provide information and priorities to the FSM Congress, State Legislators, Technical Assistance Service Providers, and other who provide funding or technical assistance to the FSM Educational System.
Strategy 4. Review existing procedures and establish guidelines for distribution of external funding for education within the FSM.

Objective 2. Improve process for acquisition and expenditure of funds.

Strategy 1. Expand/develop in cooperation with Finance and Budget Offices at the National and State levels “Memorandum of Understanding” which:
- Focus finance and budget issues on delivery of program for improvement of education in a timely manner,
- Procedures for periodic reconciliation of accounts between the department and finance,
- Standards for periodic receipt of financial reports,
- Procedures for completion of requisitions, contracts, travel authorizations, etc. which indicate what information has to be included and what supporting documentation is necessary,
- Standards for processing of financial documents,
- Procedures for reconciliation of differences on financial documents in a timely fashion,
- Agreement on roles of education, finance, and budget (in some cases personnel) in the approval process for financial documents, and
- Procedures for timely review and resolution of problems and concerns over financial issues.
Strategy 2. Expand/develop internal education department policies and procedures to comply with the MOU including:
- Training in management and accounting,
- Procedures for development and management of expenditure plans,
- Set up of a computer based financial management tracking system,
- Internal procedures for initiating, processing and approving financial documents,
- Reconciliation procedures and responsibilities, and
- Reporting procedures.
Strategy 3. Develop mechanisms to improve the ability to seek additional funding support for the FSM educational system.
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- Develop agreed upon procedures and guidelines for State input for developing applications and funding requests,
- Develop communication systems to improve shared application development and review, and,
- Actively seek additional sources of funds for education in the FSM.
- Expand/develop agreements with the FSM Department of External Affairs to improve communications and information dissemination on government to government training offerings.

Objective 3. Long term - Establish a Secretaries Temporary Committee (2 year maximum) to study and report to the Nation on the financial situation of education with recommendations on improving financing of the FSM Educational System.

Strategy 1. The Secretary would establish a Temporary Committee on Financing the FSM Education System to review the funding structure for education, patterns of funding use, obstacles to use of existing funds, dependency on external funding, and alternate and innovative means of funding education. The committee is also recommended to review possible contributions from the private sector and community and the issue of free education for secondary students.

Strategy 2. Members of the Temporary Committee on Financing the FSM Education System would be composed of stakeholders from education, business, community and government agencies.

Strategy 3. The report of the Temporary Committee on Financing the FSM Education System would be distributed to policy makers and the community.

Parental and Community Support & Involvement

All education improvement schemes in the FSM call for increased parental and community support and involvement. However, each State is taking somewhat different approaches to community involvement. The basic concern is that whatever method is used that recognition be given to the need for sharing of authority and responsibility with parents and the community and respect for an inclusion of the extended family and local traditional structures and decision making systems. Expecting parents and the community to be partners in education with responsibility but no authority is a recipe for failure. A second major area is to ensure that parent and community involvement concentrated on actual reform of the education system. Shifting current decision making to the school level will have little impact on improving education unless that shift of authority and responsibility is accompanied by reforms in the instructional system. Refocusing the school on learning coupled with increased parent and community support and involvement will likely lead to increased student achievement and performance. An additional area is the need to couple parent and community involvement with training and information sharing. If the community is to be actively involved in decisions affecting the instructional program, they need to be up to date on how children learn best in the Micronesian context.
A number of western concepts are playing an important part in our community education programs. Often the U.S. model is followed with heavy emphasis on parents. The concern is that Micronesian community involvement should address not only parents but the extended family and its role in raising of children. The second area is the role of traditional governance and decision making systems. Traditional systems of governance and decision making are still strong in the FSM. The traditional systems of governance vary from State to State in the FSM and often even within a State more than one traditional system of governance is in operation. Decision making systems also vary greatly. Some communities major decisions are made by the tradition chiefs, while other emphasize development of consensus on all issues. Community involvement must take into account these systems of governance and decision making.

**Goal.** Increase parental and community support and involvement in the school system.

**Objective 1.** Provide structured training for parents and community to understand the basics of a quality education system.

**Strategy 1.** Provide community education in line with information called for in the FSM Language Policy:

a) Provide information on the levels of language competence of FSM students in local languages and English,

b) Provide information on the role of language(s) in economic growth and social development,

c) Provide research information on the how languages are learned.

d) Provide information on different methodologies for language instruction.

e) Provide information on current programs and trends in the school system and community.

f) Explain the concept of a National Language Policy as a Framework for State language policies.

g) Explain the need for high competence in local languages and English and need not to place one above the other.

**Strategy 2.** Provide career information and associated economic data and projections.

**Strategy 3.** Provide assessment and evaluation data to the community on the state of the education system and the level of student learning and achievement.

**Strategy 4.** Provide comprehensive training and review of overall goals and objectives of the education system.

**Strategy 5.** Provide training and information collection activities on means of improving community’s role in improving instruction and learning.

**Objective 2.** Develop State and school level plans for increased parent and community involvement in education which take into account the need for a gradual assumption of responsibility and authority, focuses on making changes in the schools which focus on learning, and develops accountability systems which take into account extended family issues and traditional systems of governance and decision making.
Strategy 1. Review existing community involvement models in terms of there relationship and interaction with the local community traditional systems of governance and decision making and how they treat the role of the extended family.

Strategy 2. Develop school based management plans which incorporate traditional systems of governance and decision making.

Strategy 3. Ensure that school based management programs focus not only on increased local decision making but on mechanisms for the improvement of instruction and learning.

Strategy 4. Evaluate school based management programs not only on increased involvement of the community, but primarily on the impact of programs on learning and student achievement.

Accreditation

Public elementary and secondary schools in the FSM are not accredited. Private schools are required to go through a chartering process. The College of Micronesia - FSM is U.S. accredited by the Western Association of Schools and Colleges. Ultimately, FSM schools should be accredited. However, at this time (up to three years period), emphasis needs to be placed on development of standards for curriculum and instruction, facilities and the accreditation of teachers, principals and support staff. Additionally emphasis needs to be placed on mechanisms to get school libraries (or online libraries) accessible for students, professional libraries accessible to staff and other basic components which would be included in accreditation schemes. What is recommended in the short term is to research accreditation schemes to ensure component development is comprehensive in nature and coordinated.

Goal. By the year 2001, the FSM will develop an accreditation scheme for secondary schools.

Objective 1. Research accreditation schemes and make the information available to all stakeholders in educational improvement.

   Strategy 1. Provide information on accreditation research to planning and improvement groups.
   Strategy 2. Provide information on key areas where accreditation requires high standards and delivery systems.

Objective 2. In the year 2000, establish standards for accreditation of schools.

   Strategy 1. During calendar year 1999 establish a broad based accreditation development group to draft or adapt accreditation standards for secondary schools.
Strategy 2. Sample FSM secondary schools in their ability to meet the proposed accreditation standards.

Objective 3. In the year 2001, implement accreditation of secondary schools in the FSM.

Professional Development and Certification

The development of a highly trained and motivated instructional and support staff is the foundation for a sustainable education system in the Federated States of Micronesia. However, the current situation is that approximately 85% of our teaching staff have only an AA/AS degree with over 30% having only a high school degree. Additionally, large segments of our teacher staff do not have the content background and knowledge of instructional strategies to effectively improve student learning. There is general agreement that our teacher certification system which is based on acquisition of an AA/AS degree (in any field) is not supporting the development of a qualified teaching staff. Our principals and specialists need assistance before they can become effective providers for professional development. But this leads to a number of questions. Why are our teachers, principals and support staff not adequately trained? Have there not been numerous training activities (training is provided by State and National government personnel, COM-FSM Pre-service and third year programs, Pacific Region Educational Laboratory (PREL), Guam & Hawaii University Affiliated Programs (UAP), Western Region Resource Center (WRRC), United Nations Programs, and other technical assistance service providers) provided to education staff both within and outside of the FSM in the past 20 years.

A major problem with professional development in the FSM is that while numerous training opportunities have been conducted, they are individual, self-contained training sessions. Training has not part of a comprehensive system of professional development, nor are they sequential in nature and build upon previous training. Training has not been focused on long term State education goals nor on State or National economic and social developmental goals. Training activities are not set in the midst of the support mechanisms and planning aides to make them effective. We need to see professional development as a system where all the elements are place: adequate needs identification, development of performance indicators on the impact of training on workplace performance, effective and innovative means of training delivery, and impact assessments on the application of training which are ultimately based on student achievement.

Professional Development systems must emphasize both the pre and inservice needs of teachers. Policies and procedures need to be put in place to provide for the immediate needs of the existing teaching staff while ensuring that highly qualified and motivated teachers and support staff are being supplied by the College of Micronesia - FSM and other Institutes of Higher Education (IHE).

To move forward the development of a professional teaching and support staff in the FSM we are looking at a set of guiding principles for professional development. The following are suggested principles for professional development in the FSM.
Principles of Professional Development

1. **Linked to Overall Planning and Priorities Through a Comprehensive State Plan for Professional Development (CSPPD)** Training should not be ad hoc, but should be based on an overall - comprehensive plan for professional development which reflects the **priorities** of the State and Nation for economic and social development. The CSPPD should be based on the need for a system wide approach to staff development. Incorporated into each State’s CSPPD should be: (1) policies on how and when training occurs, decision making processes to determine training priorities, and procedures for selection of training participants; (2) mechanisms for establishment of individual, school or state performance expectations for each training activity or component; (3) mechanisms to provide support for implementation of training including materials, and follow up and follow through at the classroom, school, or work-site by principles, specialists, consultants or other support staff; (4) directed at developing teacher competencies rather than teacher degrees; and (5) assessment and evaluation procedures based on the performance expectations for the training activity or training component.

2. **Relevant** Professional development needs to be needs based and relevant to improving job performance. There also needs to be a clear understanding of the impact the training will have on future job performance. Performance indicators should be used to evaluate the impact of the training on actual job performance. Consideration also needs to be given to the relevance of the content of the training. Content and examples should be appropriate for our Pacific Island - developing Nation setting and to the knowledge level of the audience. External offers for training assistance should be reviewed to determine if they fit the needs for improvement of work performance.

3. **Methods of training** Training should also be relevant to the needs of FSM education staff and appropriate for implementation in FSM classrooms and work sites. It is recommended that for short term (and for portions of long term training) that case studies become a preferred methods for conducting training and staff upgrading. Case studies would assist in critical analysis of programs and their impact on learning. Case studies can also allow comprehensive reviews of programs and activities and the need for supporting systems.

4. **Developmental in Structure** In general, training should be focused, developmental and sequenced. Training taken has a whole should move staff to a desired degree of competence as set forth in performance indicators. The performance indicators should be related to actual improvement of staff work performance. To be most effective, training needs to be concentrated on a small number of major strands and not a large number of unrelated training activities.
5. **Local Expertise**  If professional development is to be long term and developmental in nature, we must have local capability for delivery of training. The role of our National College needs to be emphasized and the concept of Training of Trainers needs to be actively set in place and in practice. Local expertise needs to cross State boundaries. When training needs are set we need to look first within our local educational agencies, to COM-FSM and the FSM NDOE, and finally to external technical assistance service providers. We would also recommend that when external technical assistance service providers are used that the training efforts be shared with local staff.

6. **Practice based**  Training is not effective unless it can be successfully incorporated in work and job delivery. Training should be designed to emphasize how it will affect job performance.

7. **Assessment and Evaluation**  Professional Development must be linked to assessment and evaluation tools. The primary mechanisms for assessment and evaluation should be the performance expectations developed for all training activities or training components. Assessment and evaluation should be based on what occurs in the classroom or workplace. Improved **Student Achievement** should be the final evaluation tool for professional development and all segments of the education system. Assessment and evaluation data should also be used to determine additional training needs and for modifications in the CSPPD.

8. **Follow through and follow up**  Professional development must have mechanisms for follow through and follow up at the school and classroom level. We cannot expect staff, especially teachers and principals, to implement training without an adequate support structure at the school and in the classroom. Training activities should be followed up and followed through with materials support, morale support and critical observations by qualified staff.

9. **Preferred Sites and Times for Training**  Training should be considered a year round activity - not just a summer program. Mechanisms and systems (see especially the section on technology below) should be developed to provided training and support to teachers through out the school year - at the school site. During the school year, efforts should be made to provide training to teachers prior to or after normal school instruction time. Training should also be scheduled as close as possible to when it will be used in the classroom or work situation.

10. **Role of Technology and What We can Learn from Industry**  Technology is not the answer to all problems, but it can be a mechanism for improving the delivery of training and provide mechanisms for follow through and follow up to training at the school site. Concepts from industry such as “training on demand” and “just-in-time learning” should be viewed as models which can have a major impact on improving professional development. “Training on demand” and “just-in-time learning” would provide training at the school site, on topics needed immediately for improving work performance. The concepts also emphasize that technology allows individualization of
training programs. With the move to four school days in many of our States and the budgetary reductions we need to look for ways to provide training in a cost effective manner which concentrates on the information and skills needed now to improve job performance right now. Technology can also provide assistance in ensuring training equity. We should not allow distance and remoteness of our local islands and distance schools to restrict training opportunities. We need to actively explore information technology solutions to improving communications and training of all staff. COM-FSM should be especially encouraged to explore distance education systems which would allow delivery of training at the school or even the home site of teachers and staff.

11. Rewards and Incentives  Innovative means should be provided for a rewards and incentive support system. Research has shown that this is a key component necessary for implementation of change. Program design should seriously consider non monetary rewards and incentives to support professional development.

12. Self Directed Improvement  Programs and support systems which allow teachers to grow on their own or in small groups should be set in place and recognized as valid professional development activities. These might include greater access to information through a computer network or library system, self directed or small group directed content upgrading through in school seminars, accessing distance education programs over the Internet or through correspondence courses or a combination of the two, or by other means.

13. Equity in Accessing Needed Training  All teachers and staff should have access to training as needed to improve student achievement and support services. Access should not be limited by remote island settings (technology solutions may be possible) or by source of program funding (applications have great flexibility in meeting locally determined priority areas in education).

The Suggested Principles for Professional Development in the FSM are recommended to be used in design, implementation and assessment of professional development systems and programs in the FSM.

Objective 1. Develop comprehensive plans for staff and personnel development.

Strategy 1. Each State DOE and the National DOE should development comprehensive professional development plans which include:

1. policies on how and when training occurs, decision making processes to determine training priorities, and procedures for selection of training participants;
2. mechanisms for establishment of individual, school or state performance expectations for each training activity or component;
3. mechanisms to provide support for implementation of training including materials, and follow up and follow through at the classroom, school, or work-site by principles, specialists, consultants or other support staff;
(4) directed at developing teacher competencies rather than teacher degrees, and
(4) assessment and evaluation procedures based on the performance expectations
for the training activity or training component.

**Strategy 2.** The FSM National Department of Education and the College of Micronesia -
FSM should assist the State in coordination of common training needs across the Nation
to maximize financial and human resources. Special attention should be given to COM-FSM’s role in pre service and inservice training of teachers. It is recommended that
COM-FSM work closely with the NDOE and State DOEs in review/revision of the
existing teaching degree and training programs to ensure that they meet instructional and
teaching needs of the FSM.

**Strategy 3.** The comprehensive plans should be the basis of negotiating long term training
agreements with technical assistance service providers such as PREL, Guam and Hawaii
UAP and WRRC.

**Strategy 4.** Assessment and evaluation should be an integral part of the CSPPD.

**Strategy 5.** Final evaluation of the CSPPD should be based on improved student
achievement.

**Objective 2.** Develop/revise certification systems for teachers, principals, and support
staff.

**Teachers**

**Strategy 1.** Conduct a review of the FSM Teacher Certification Standards and
development draft standards which will address: (1) content information needed,
(2) teaching strategies, and (3) have elements of classroom and student
performance incorporated into the certification requirements.

**Action Step 1.** Have all State review and comment on the Human
Resource Development in Micronesia: Phase 2 recommendations on
comprehensive.

**Action Step 2.** A review of effective certification systems be made by the
FSM NDOE and reports be made to the States on possible teacher
certification systems.

**Action Step 3.** Hold a Nation wide conference for developing new teacher
certification standards by December 1997.

**Strategy 2.** The FSM NDOE will, based on State input, coordinate the
development of revised teacher certification requirements by November 1997.

**Principals and Support Staff**

**Strategy 1.** The FSM NDOE and State DOEs will conduct research on
development of certification systems for Principals and Support Staff.

**Strategy 2.** The FSM NDOE will survey education personnel and the community
on principals certification requirements.

**Strategy 3.** Develop draft certification standards for principals by December
1997.
Objective 3. Devise and implement vocational teacher training programs at COM-FSM.

Strategy 1. COM-FSM and stakeholders will study and develop vocational teacher training programs in the following areas:
- Agriculture,
- Fisheries and Marine Areas, and
- Tourism Commerce & Industries

Strategy 2. Make State Department of Resources and Development, Commerce and Industry, and Planning members of the design and evaluation process for vocational training programs.

Objective 4. Devise and implement teacher training programs in the following areas: local languages and cultures, early childhood and content areas.

Strategy 1. Professional development for language and cultures will be developed in line with the FSM Language Policy.

Strategy 2. COM-FSM and Technical Assistance Service Providers will assist in development and delivery of early childhood education.

Action Step 1. One component will be directed at improving teachers knowledge of developmental stages of youth and appropriate teaching strategies.

Action Step 2. A second component will deal with public education current understanding of what neuroscience is saying about the development of infants and small children prior to their entry into school and what parents, extended family and the community can do to ensure appropriate development occurs in children prior to their entry into school.

Technical and External Assistance

For the FSM to improve its education system, technical assistance is needed. Organization such as the Pacific Resources for Education and Learning (PREL) and University Affiliated Programs at the Universities of Guam and Hawaii provide high quality technical assistance and support. However, currently there is an over reliance on external technical assistance service providers and insufficient efforts to develop and effectively use local capacity. The problem lies not with the external TA service providers, but more with the lack of will and effort to develop and use local capacity for Technical assistance.

The FSM Education System needs to develop its ability to provide technical assistance. This will not be easy. One major problem is the reluctance to view other Micronesians as having the skills and ability to deliver technical assistance. A second problem has been the lack of prioritization of developing a skilled education staff. Scholarship programs have not identified education as a priority area. The result has been that few Micronesians have Masters or Doctorate level degrees in educational related areas. In the case of the College
of Micronesia - FSM, its role is growing in providing technical assistance, but it is not generally looked to as the first choice for technical assistance.

Assessment and accountability systems which apply to external technical assistance providers for student learning and achievement must be expanded/developed. To maximize our human and financial resources, we must also examine closely the impact of external technical assistance on student learning and achievement, the ability of teachers to provide higher quality instruction, and for other staff to support teachers in the classroom.

A key area is to combine the strengths of external technical service providers with local strengths. For example: a TA provider might provide training in special education early childhood learning, but follow up and follow through on the training at the school and classroom level would be conducted by principals and curriculum specialists.

**Objective 1.** Develop policies on use of technical assistance (TA).

**Strategy 1.** Develop a listing of Micronesian educators with areas of expertise. This list should go beyond the FSM and include Guam, Palau, Marshalls, and CNMI. The list should be reviewed prior to seeking TA assistance.

**Strategy 2.** Needs for technical assistance, training, and support needs to be determined locally. TA providers can assist, but should not be in charge of needs determination.

**Strategy 3.** Technical assistance needs should be prioritized and TA should not be accepted only because it is available.

**Strategy 4.** External assistance and service providers should be consultants and provide assistance in planning, application development, and seeking of funds, but should not be the lead agency or lead person in programs and projects.

**Objective 2.** External aid should be sought based on priority needs of the FSM.

**Strategy 1.** Priority areas should be established which have the greatest impact on improving the education system.

**Strategy 2.** Seeking of external aid should be based on priority areas for educational improvement.

**Strategy 3.** Develop nationwide procedures and standards for development of project applications to maximize sources of input and ability to respond quickly to needs for development of proposals.

**Strategy 4.** A critical decision making system needs to be put in place for evaluation of the impact of external assistance prior to its acceptance. The decision making system should also take into account local personnel time requirements and future financial commitments.

**Objective 3.** Local capacity for providing technical assistance needs to be developed.
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Strategy 1. Scholarship programs should be established at the Masters and Doctorate levels to meet needs future technical assistance needs. Emphasis needs to be given to the productive sector needs, language, assessment and math science.

Strategy 2. Proposal and application development should reflect the need to develop COM-FSM as a regional center for technical assistance.

Strategy 3. Mechanisms for exchange of local expertise among the States need to be developed and put in place.

Objective 4. Expand/develop assessment and accountability systems of technical assistance providers.

Strategy 1. Expand/develop mechanisms which access the impact of technical assistance on:
- developing local capacity to provide training and support services to teachers and other staff,
- improving teaching, and
- improving student learning and achievement.

Strategy 2. Actively interact with technical assistance providers in improving assistance and delivery, training systems.

Strategy 3. Expand/develop briefing materials for external technical assistance service providers on:
- state of the FSM and individual State economy and economic priorities,
- local cultural values, beliefs and systems of governance and decision making,
- preferred teaching strategies,
- do’s and don’ts of technical assistance,
- background information on skills and knowledge of the group being trained or assisted with special emphasis on previous training, and
- possible case studies for use.

Strategy 4. Use local expertise to actively plan training and technical assistance which is:
- based on actual practices and conditions of the work site or classroom,
- understands preferred methods of instruction or activities,
- takes into account background of staff being trained or assisted, and
- ensures that training and technical assistance is based on priorities of the education system.

Systems and System Wide Improvement

The location, size, and economic and political structure of the FSM all contribute to making difficult system wide improvement both across the Nation and in individual states. With some schools reachable only by ocean going vessels (from one to six months between a half day stop), four largely independent States connected only by daily airline connections (one of the States can only be reached by going through another country),
and an economy still very much in a developmental stage, making changes which affect the whole school system even within an FSM State is extremely difficult.

A second barrier to system wide improvement is the lack of institutional infrastructure. This includes: lack of policy frameworks directed at promoting learning, lack of identified priorities, decision making systems which are data based and involve all segments of the education system and community, and interlocking implementation systems at all levels in education with feedback mechanisms. A policy structure needs to be put in place which emphasizes learning and sets conditions which support and encourage education improvement. Recommendations on this policy development is included in a number, if not all, of the components of this plan. Policies on learning, curriculum professional development, community involvement, decision making need to be developed or reviewed. However, the policies should not be developed piecemeal but be part of a system wide effort.

A major need is to ensure that financial resources are assigned for priority areas. A second area is to recognize that human resources usage needs to be prioritized as well as financial resources. If in class support of teachers is deemed a priority - principals, specialists and other support staff need to devote significant portions of their time to the activity. If assessment and evaluation and other educational data are seen as the basic building blocks of decision making systems, significant human and financial resources need to be devoted to obtaining quality and timely information. Additionally, systematic approaches need to be used in planning for implementation of priorities. Language improvement in both local language and English are set as the major overall priority for the immediate future. This means that human and financial resources need to be assigned for development of standards and curriculum, materials (including grammars and dictionaries), professional development and assessment and evaluation tools and instruments. In all cases, priorities should focus on development of systems which provide either direct learning or development of the support structure for improvement of learning.

The interlocking implementation systems need to follow sound management strategies. For example, if local language development is recognized as a priority, there needs to be mechanisms to ensure that human and financial resources are assigned to curriculum and materials development, professional development to support teachers in implementing changes, and assessment systems be put in place. These actions will not take place unless there are well defined mechanisms on how resources will be allocated, monitored and evaluated. The end focus in all cases must be the improvement of learning and teaching in the classroom.

The shape of the solution is found in effective business practices. Priorities need to be identified and a tighter focus on human and financial resources directed to priority areas. Institutional and organizational changes need to be made which allow the system to focus on the learning as the end goal. Communications to all segments of education and the community need to be developed. Interlocking systems at the National, State, School and
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Classroom levels need to be put in place to allow two way exchange of information and data.

There needs to be recognition of basic planning strategies. National and State level planning should emphasize broad policy directions and priorities with enough specifics to establish accountability systems. Each organizational structure and system than needs to develop detailed operational plans on how it will implement the policy directives. For example, curriculum planning needs to establish specific timelines and personnel assignments and allocate financial and human resources to meet the curriculum and instructional materials needs. Professional development would be coordinated with the curriculum section in design and implementation of training as needed for implementation of new curriculum and instructional materials. In both cases accountability and reporting systems need to be established.

Goal. Develop instructional and organizations systems which focus on learning as the key to improving education through effective policy development, priority setting, information and communications systems, and assessment and evaluation.

Objective 1. Develop policy structure at all levels of education system to support learning.

   Strategy 1. Develop National and State levels policies on support of learning activities, standards development, assessment and evaluation, seeking external funding and application development, communications, professional development, decision making, and other areas needed to support educational improvement.

   Strategy 2. Improve institutional and organizational structures for implementation, planning, assessment and evaluation, and reporting based on effective business practices. Provide professional development in management and operation of effective operations with emphasis on mechanisms on how to respond to established priorities.

   Strategy 3. Develop mechanisms for establishment and communication on goals and priorities for the education system and on mechanism to report and the progress made towards reaching those goals.

Objective 2. Develop effective information management and communication systems to allow top down and bottom up flow of information.

   Strategy 1. For National and State activities, implement the FSM Information Management System based on connections via the Internet for email and project and program development and implementation. Plans should include structured growth for the IMS system to become the basis for a professional development delivery system focused on the school site.

   Strategy 2. States expand/develop effective communication systems between schools and the central office and between schools and the community. The
mechanisms for the communications will vary from State to State but should have the following common elements:

- provide mechanisms for teachers, principals and the community to receive and understand student achievement data,
- provide mechanisms for top bottom and bottom top communication patterns,
- provide mechanisms for teachers, principals and the community to understand and help develop priorities for the education systems and assist in setting policy directives,
- make effective use of technology to include outer island and remote schools in the information system, and
- mechanisms for understanding of the progress being made in the State and the FSM towards meeting educational goals.

Objective 3. Develop financial operational procedures and budgeting processes which will support policy directives and priorities of the school systems.

Strategy 1. Implement performance based budgeting for regular budgets.
Strategy 2. Development process for improving development of external aid applications at both the Nation and State level to ensure concentration on priority areas.
Strategy 3. Allocate external funding on an equitable basis.
Strategy 4. Require external funded activities to be evaluated based on performance expectations form policy directions and goals.
Strategy 5. Evaluate external technical assistance based on the same performance goals as required for locally funded activities.
Strategy 6. Request external technical assistance based on established priorities and policy directives. Make requests for technical assistance specific and in line with general principles such as the professional development and materials development principles included in this plan.
Strategy 7. As stated in the section on finance, establish agreements with budget and finance departments on processes and procedures to be used to allow funds to be available when they are needed for program implementation activities.
Strategy 8. Establish reporting mechanisms on how any human and financial resources are used and their impact on achieving stated goals.
Strategy 9. Evaluate external technical assistance based on their effectiveness in reaching stated goals.

Promoting bottom-up Reform

Bottom-up reform is hampered in the FSM by communications and management issues. There are few mechanisms for ideas to be actively collected at the classroom level and transmitted for incorporation in reform planning and implementation activities. The communications issue has been addressed in a number of the sections of this plan and many of the recommendations on improving communications and exchange of information.
within the school system apply to bottom-up reform. Additionally, the traditional methods of decision making varies between island group. In some cases there is very strong decision making by the chiefly caste. In other island groups consensus is also used. An additional aspect is the definition of an adult. In many of the island cultures, a 20 or even 30 year old is not expected to contribute directly to decision making. Of importance also is the fact that many of the Micronesian cultures promote group not individual achievement and responsibility. Individuals are not to put themselves above others.

However, there is wide recognition of the importance of involving all segments of the education system and community in improving the education systems. The questions is what is the best approach to take.

**Goal.** Improve the participation, representation and authority of teachers and the community in education improvement.

**Objective 1.** Develop school based evaluation and observation systems for determining effective instructional practices, materials and programs which have a positive impact on student learning, and identifies strengths and problems with materials, programs and curriculum.

**Strategy 1.** Expand/develop teacher and principal of the year programs. Incorporate community input in selection systems at the school, State and National levels.

**Strategy 2.** Develop National/State standards for teacher observation and support systems.

**Strategy 3.** Develop multimedia programs for promoting effective teaching practices.

**Objective 2.** Develop at the State and National level mechanisms for compiling the collected data from schools and classrooms into the FSM Information Management System.

**Strategy 1.** Develop Internet access to the FSM IMS for teacher use.

**Strategy 2.** The FSM in cooperation with the States will begin a series of publication on effective school practices in the FSM.

**Strategy 3.** The FSM R&D cadre will actively research issues of importance and means for improving information form teachers, the classroom and the community into decision making.

**Strategy 4.** The FSM R&D cadre will develop a research agenda on decision making systems in the communities of the FSM and means to incorporate those systems into the school system.

**Objective 3.** Develop at the State and National level mechanisms for decisions making which either directly use representatives from teachers and classrooms or mechanisms
which ensure that the school based information is a key factor in decision making on resource allocation, training, and direction of the school system.

**Strategy 1.** Include teachers in all planning and improvement activities and decision making processes.

**Strategy 2.** Develop information dissemination and training sessions for effective teaching practices.

### Dropout Strategies

The development of dropout strategies is made difficult by the lack of a universal access to high school. Generally, education is only assured through age 15 or graduation from the 8th grade. Entrance into high school is based on competitive exams administered by each State Department of Education. For the FSM a major question is - What is a drop out? Is someone who has not completed elementary school (8th Grade)? Or is a drop out someone who does not complete high school?

**Goal.** Develop a system for defining and tracking of drop out students.

**Objective 1.** Develop definition of what is a drop out in terms of local conditions.

- **Strategy 1.** Survey community input for definition of drop out.
- **Strategy 2.** Ensure that definition of drop out is relevant in the context of the FSM as a developing country and the desire to increase the subsistence portion of the FSM economy.
- **Strategy 3.** Incorporate into the definition of drop clarification as to different degrees such as drop out of elementary school, high school, and postsecondary institutions.

**Objective 2.** Expand/develop the IMS to track drop outs. Track drop out rates at elementary, secondary and postsecondary levels.

- **Strategy 1.** Expand/develop mechanisms at the school level to Track transfer students: where are they moving and why?
- **Strategy 2.** Expand/develop mechanisms to report on elementary age children not attending school.
- **Strategy 3.** Expand/develop procedures through National and State scholarship boards to Track postsecondary students: number of years in system, current degree status, etc.

**Objective 3.** Develop school and community based programs to assist students to complete school.
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Strategy 1. Expand/develop career education programs which target a) completion of elementary school (8th grade), b) completion of high school, and c) postsecondary.

Strategy 2. Expand/develop programs to identify and assist students at risk.

Objective 4. Expand alternate programs such as GED, T3, JTPA, etc. to accommodate student who do not attend high school or who drop out of high school.

Strategy 1. Expand/develop coordination between the education system and T3, JTPA, on program design, staff, and facilities.

Strategy 2. Expand career education to include alternate programs information.

Coordinating Strategies for the Integration of Academic & Vocational Education and School-to-Work Coordination

A summary of major issues in vocational education will be covered in this plan. A more detailed analysis of the current state of vocational education is covered in the FSM Human Resource Development Study: Phase I and should be reviewed for fully understanding of the difficulties facing vocational education and its relationship with other non education training programs in the FSM. This portion of the plan will also be support for a separate National School-to-Work Implementation plan which is under development and will be completed by March 1998.

The FSM Education System has not done a good job in preparing students for careers which are important to the private productive sectors (identified in the FSM Economic Summit as agriculture, marine, and tourism). Detailed population listing by industry and work status are included in the appendix. The current education system is one which as been described as one which: Elementary School prepares children for High School, High School prepares children to attend the College of Micronesia - FSM, the College of Micronesia - FSM prepares students to attend four year Institutes of Higher Education, the IHE prepares students for government jobs. In this area, the education system reflects the broader community views that government jobs are prestigious and productive sector employment is something for other people’s children.

Reviews of the current education system show little emphasis on the productive sectors, value development related to the productive sectors or career education in the productive sectors. Instructional materials do not emphasis the productive sectors and often use U.S. textbooks which seldom address issues such as subsistence and/or small scale farming and fishing, marine or fisheries areas, or the advantages and disadvantages of tourism.

Much of the discussion related to vocational education, and education in general, has revolved around the Secretary Commission on Achieving Necessary Skills (SCANS) reports and recommendations. SCANS is based on the view that individuals will change their profession numerous times in the lifetime. Additionally, the rapid change occurring in economics throughout the world due to changes in technology, information system, and
the movement towards a world economy means that today’s jobs are unlikely to be the jobs 20 or even 3 - 5 years from now. The planing for vocational education, and general education, must take this into account and focus on equipping all students with basic skills, thinking skills and personal qualities they will need to succeed in life - whatever their occupation. For development of the FSM, career education needs to focus on realities for the potential economic, social and political development in the FSM.

Additionally, students and the community have little understanding of what constitutes quality high performance work in the monetary economy. Level of performance in the subsistence economy are very well understood. The education system must work closely with business to determine high performing companies and individuals and use these examples as what to strive for in development of the future workforce for the FSM. In this regard, the FSM should incorporate School-to-Work principles into its program design and implementation. Given the lack of quality employment opportunities, school based employment models should be developed to provide students with understanding of what quality work is.

Goal. Develop a vocational program which emphasizes development of SCANS skills, career education based on the productive sectors and promotes the economic and social development of individuals, families, and the community.

Objective 1. Instructional programs will be designed to emphasize the primary FSM productive sectors (agriculture, marine, and tourism).

   Strategy 1. The process of developing standards for the productive sectors will begin in June 1997 and be complete by the end of calendar year 1997. The activity will be lead by the FSM NDOE with the cooperation of the States. Standards development will support the SCANS approach to development of basic and transferable skills.

   Strategy 2. State curriculums will be reviewed/revised/developed in line with the new standards for the productive sectors. Implementation of the standards should go beyond the development of direct instructional programs.

   Strategy 3. Standards, curriculum and instructional program for the productive sectors will be incorporated into language arts, social studies and mathematics and science programs as the early grades and into materials development projects at all grade levels.

   Strategy 4. Increase participation of representative from the productive sectors in design and implementation of standards, curriculum and instructional programs.

Objective 2. Expand/improve Vocational Education Teacher Training in the FSM

   Strategy 1. Establish Vocational Education Teacher certification standards for the FSM.

   Strategy 2. Set up a Vocational Teacher Training Academy through COM-FSM.
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**Strategy 3.** In cooperation with National and State Resources and Development Organization, develop a comprehensive professional development program to upgrade the professional capability of teacher in the productive sectors.

**Strategy 4.** Incorporate R&D and business people in evaluation and assessment of vocational programs for the productive sectors.

**Strategy 5.** In cooperation with COM-FSM develop preserve training programs for the productive sectors.

**Objective 3.** Vocational instruction will be delivered in an environment that is appropriate, safe, and conducive to learning in terms of tools, equipment, instructional materials, facilities, and quality of personnel.

- **Strategy 1.** Acquire appropriate equipment, supplies, tools, and instructional materials.
- **Strategy 2.** Renovate or build Vocational facilities to insure a working/learning environment that meet safety and instructional requirements.
- **Strategy 3.** Establish effective maintenance and repair programs for both equipment and facilities.
- **Strategy 4.** Develop State level strategies and agreements for sharing of materials, equipment and instructors with JTPA, T3 and other skill and job related programs.

**Objective 4.** To establish an information management system at both the National and State levels, to aid in the Vocational Education reform movement. Basic to the IMS system would be to cooperate with National and State Planning Office in collection, analysis, projection and publication of information on careers and labor market data.

**Objective 5.** Develop or Enhance Career Education, Career Counseling, and Job Placement programs in the FSM

- **Strategy 1.** Establish "one-stop" career education and counseling centers at the COM-FSM State Extension Campuses (FSM DOE).
- **Strategy 2.** Use the Principles of Materials Development to develop career and role models materials appropriate for the FSM.

**Objective 6.** Provide for an Accountability System in the FSM

- **Strategy 1.** Publish a yearly report on the status of Vocational Education in the FSM; compiled from data/ contributions by the State programs
- **Strategy 2.** Write and submit a School to Work Implementation Plan for the FSM)

**Equity**
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Mechanisms must be established who ensure access of all students to quality education. Currently, the remotes of schools, sex and gender, physical conditions, are economic status of families are all contributing to less than quality education for some students.

**Goals:** To ensure that All k-12 grade students are given equal opportunities to utilize their learning potentials.

**Objective 1.** To ensure continuity of equitable education services to All children in the FSM.

- **Strategy 1:** Train teachers and parents on Special Education methods and effective practices.
- **Strategy 2:** Localize funding source for Special Education Program.
- **Strategy 3:** Establish programs for At-Risk and Gifted and Talented students.
- **Strategy 4:** To have each state to enact law to support FSM PL 8-21 to provide free and appropriate education and services to children with disabilities with funding support from the general fund.

**Objective 2:** In cooperation with the Departments of Health Services, to ensure that equitable health care services are provided to All children in the FSM.

- **Strategy 1:** Mandate that primary health care services are accessible to All children.
- **Strategy 2:** Establish an inter-agency chapter of the President Advisory Council on Right of the Child in all the states.
- **Strategy 3:** Encourage traditional and church leaders to take active part in promoting the provisions of the Convention on Rights of the Child.
- **Strategy 4:** Funding allocation has to be redirected to ensure that funds spent are in compliance to the human resource development needs of the nation.

**Objective 3.** To provide pre-service and in-service training to enhance teachers sensitivity to the differences in ability and learning styles of All children.

- **Strategy 1:** Mandate Special Education courses be part of the teaching requirement.
- **Strategy 2:** Teachers should have course in area of multiple intelligence.
- **Strategy 3:** Teachers should attend workshops that help them develop materials and strategies to address the multiple intelligence seen in the classroom.
- **Strategy 4:** Increase training opportunities to teachers and parents of the remote schools.

  In-service training be focused more on classroom oriented methodologies.

**Objective 4.** To improve communication facilities, resources and information sharing to enhance teaching and learning.
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Strategy 1: Using appropriate technology, establish communication systems for all schools which can be used for information exchange and professional development.

Strategy 2: Establish library at all schools.

Strategy 3: All schools to have access to computers and the Internet.

Strategy 4: Establish a FSM depository for collection and distribution of information.

Objective 5: To encourage students to enter programs or studies identified by national or states as priorities.

Strategy 1: Align the curriculum with the national and state priorities.

Strategy 2: Increase scholarship funds to support the priorities at COM-FSM.

Strategy 3: Ensure equitable opportunity to enter the programs of studies.

Objective 6: To provide On the Job Training and equal opportunity to all students.

Objective 7: To ensure that all students mastered social and life skills prior to exiting grade 8.

Strategy 1: Base skills and personal quality development and instruction on the SCANS framework as modified to fit the needs of the FSM.

Strategy 2: Establish performance expectations based on real life conditions for eighth grade students.

Objective 8: To increase allocation of money into the Scholarship Funds in areas targeted by the Economic Summit with great considerations of an "Affirmative Action."

Objective 9: To provide sufficient English skills in reading, writing and speaking so high school graduates can succeed in college without extensive remedial work.

Postsecondary education and education of the workforce

The FSM has approximately 655 (Note: this figure does not include members of the FSM teaching force who are working on obtaining there AA/AS, BA/BS or advanced degrees) students engaged in postsecondary instruction in SY 1996-97. Over 50% of these students attend COM-FSM. The fields of study of these students may be found in the appendix. Approximately 18% are engaged in study in areas related to productive sectors and 72% percent in service related fields. This is an increase of 3% in production sector study over SY 1995-96. Students are primarily financed through Compact Section 216(a)(3) funding, PELL Grants, and work study. These are all tied into funding from the U.S. Federal Government in some way.
The College of Micronesia - FSM is the only post secondary institute of education in the FSM. It provides associate levels degrees with a third year program in education. It is accredited by the U.S. Western Association of Colleges and Universities. Its main campus is located in Palikir, Pohnpei with extension campus in each of the States. Bachelor and advanced degrees can be obtained only outside of the FSM. Attendance at COM-FSM is primarily by FSM citizens. COM-FSM has articulated agreements with the University of Guam (the major BA and advanced degree provider in the Micronesian region) on transfer of credit and mechanisms for providing technical assistance.

A major problem for COM-FSM is the level of student knowledge upon entering COM-FSM. In the fall of 1996, 87% of the freshmen class were taking non credit mathematics courses. Forty six percent were taking remedial MS 50. Only 1% were able to move into MS 101. The English program shows similar traits. Over a period from 1991 to 1997 5,693 students were administered the FSM entrance test with 1524 students passing (26.77%). The entrance test contains English and mathematics sections. A passing score requires only a 400 on TOFEL and a similar level for the mathematics portion of the test. Passing the test makes students eligible to attend at the main campus. Students who do not pass the entrance test may attend the State extension campuses for non degree preparation courses.

**Linkages between secondary education and COM-FSM**

At the current time, there is little linkage between secondary and postsecondary education curriculum and instruction. Efforts such as the FSM NDOE 221 (b) program College Admissions Testing Counseling Program (CAT-C) are being made to improve these linkages, however, much greater work needs to be done. Additionally, there is general agreement that COM-FSM needs to be a leader in providing technical assistance and support services to the FSM education system, however, in practice COM-FSM has not been chosen by the NDOE or States as the first choice for seeking technical assistance for program design and training.

**Objective 1.** Develop linkages and articulation between secondary and postsecondary curriculum and instruction.

**Strategy 1.** A working committee of COM-FSM staff, FSM NDOE personnel and State curriculum specialist be convened to review secondary and postsecondary curriculum, instructional materials and instructional methods.

**Strategy 2.** A review process be established in which COM-FSM is actively involved in developing standards and curriculum and the NDOE and States comment on programs and curriculum development at COM-FSM.

**Strategy 3.** Continue and strengthen programs such as the FSM NDOE 221 (b) College Admissions Testing Counseling Program (CAT-C) and Upward Bound administered by COM-FSM as the basis for improving linkages.
Objective 2. Develop COM-FSM capacity to deliver technical assistance and short term professional development for the existing education staff.

   Strategy 1. COM-FSM prepare a summary of staff expertise for distribution.
   Strategy 2. COM-FSM review staff time allotments and policies to allow technical assistance to be delivered during the school year.
   Strategy 3. COM-FSM in cooperation with the FSM NDOE set up the National Language and Culture Institute as proposed in the FSM Language Policy.

Objective 3. Revitalize the concept of a National Leadership/Management Center at COM-FSM.

   Strategy 1. FSM NDOE and State Department of Education prioritize use of COM-FSM for developing leadership and management programs and become active partners with COM-FSM in design of programs.
   Strategy 2. FSM NDOE, COM-FSM and SDOE actively seek funding and write grant applications which promote the ability of COM-FSM to provide leadership and management training for the region.
   Strategy 3. COM-FSM and the FSM NDOE with the assistance of the States conduct a study of the impact of COM-FSM programs on improving education.

Scholarships

The issue of scholarships was extensively discussed during the Education MegaConference. Key recommendations follow below. It should be noted that changes in the scholarship programs must be complemented by greater career education at the elementary and secondary level if they are to be effective. It is unlikely that large numbers of students will elect on their own to identify productive sector careers unless they are provided with quality career education programs and instructional and reading materials which promote Micronesian values and cultures and productive sector employment.

Objective 1. Review and revise existing National and State scholarship programs and policies to ensure greater coordination and linkage with national training needs.

   Strategy 1. Revise methods for establishing scholarship priorities by November 1997. In the revision take into account the priorities established by the Economic Summits and using a systems approach to ensure essential management expertise is developed.
   Strategy 2. Incorporate systems for tracking student progress and completion rates into the IMS.
   Strategy 3. Increase coordination of scholarships programs with COM-FSM.
   Action Step 1. The vast majority of students should attend COM-FSM to obtain their associate degree.
Action Step 2. Awarding of scholarships for 3rd year and beyond should be initially based on demonstration of competence and ability at COM-FSM. Possible minimum criteria could be: at least two semesters at COM-FSM with a GPA of 2.5 or above in 100 or above level courses.

Action Step 3. COM-FSM main or extension campus personnel should be either members or ex officio members of scholarship boards to provide input on programs and opportunities available at COM-FSM.

Strategy 4. Award scholarship funds directly to the training institution - not to students.

Strategy 5. Improve student commitment and program completion rates by making scholarships a loan or a contract with co-signers, not a simple grant. Implement firm repayment plans that include in service repayment or actual monetary loan repayment.

Strategy 6. Encourage COM-FSM to develop relationships with Institutes of Higher Education similar to the agreements with the University of Guam on transfer of credits and program design.

Strategy 7. Scholar programs should strongly consider providing more guidance to students on what colleges or universities to attend. Emphasis needs to be placed on institutes which provide quality programs with high standards in priorities areas for the FSM.

Strategy 8. The FSM NDOE in cooperation with the Department of External Affairs needs to actively seek international assistance in meeting scholarships and training needs.

Action Step 1. A working group composed of Education, Resources and Development and External Affairs personnel needs to be established to design and implement a communications and decision making systems for intentional scholarship programs.

Action Step 2. A formal review needs to be conducted on the impact of past international scholarship and training programs on meeting the FSM manpower needs.

Strategy 9. Tie in scholarship programs with career education programs as detailed in the School-to-Work portion of this plan.

Objective 2. Develop curriculum/programs in public schools that helps students and families make career decisions and build positive attitudes towards higher education that reflect the needs of the nation. [Note: This same recommendation occurs in several different parts of the Strategic Plan due to its importance for meeting development needs.]

Strategy 1. COM-FSM, FSM NDOE and State DOEs need to work closely through the School-to-Work programs to develop one stop career centers in each of the FSM States.

Strategy 2. All States need to develop career education programs which emphasis the productive sectors and skills and values needed for economic growth and social development in the FSM.
Linkages with the workforce

According to the FSM 1994 Census\(^8\), of persons 25 years and older, 68% did not complete high school and 14% of the remaining 25 years and older citizens highest education attainment was a high school diploma. **53% of FSM citizens 25 years and older have at most an 8\(^{th}\) grade education.** There is a great need for educational improvement of the existing workforce.

The FSM NDOE will coordinate improvement efforts with JTPA, T3, State and National entrepreneurial training, COM-FSM Extension programs and other short and long term programs for improvement of the existing work force and to maximize facilities, equipment and human resources.

The NDOE and State School-to-Work teams will also develop data collection mechanisms to obtain input from both public and private sectors on training needs of the existing workforce and also to evaluate quality of students entering the workforce from the education system.

Facilities

Educational facilities in the FSM vary from new concrete classrooms to failing down falling down structures with leaking tins roofs and no ceilings. A number of problems are faced. The major problem is the tropical location of the FSM. On the high islands of Pohnpei and Kosrae 200 to 400 inches of rain fall a year with high humidity. Outer Island Schools and many high island schools are exposed to the direct ocean wind with its high salt content. Almost of equal importance is the lack of established maintenance programs and planned construction programs to accommodate the large increase in enrollment faced by the school system. Historically, maintenance has not been a priority item. This has largely been a result of lack of funds, but also a hold over from the Trust Territory Government where little or no funds or maintenance programs were established. This trend carried over into the Compact period.

There are no National or State standards for educational facilities nor or there established building codes at either the National or State level.

Construction and maintenance of facilities are a State responsibility. The National role is to establish, in cooperation with the States, standards for facilities. In the FSM, recent trends have been for education facilities to be been seen as a government responsibility. The role of the community and its responsibilities for its schools needs to be well defined.

Goal. Establish quality educational facilities for students and support staff.

**Objective 1.** In cooperation with the States, establish standards for educational facilities.

\(^8\) See National Detailed Tables No. 17 in the appendix for additional information.
Strategy 1. Develop a database as part of the Information Management System to include facilities. At a minimum the database should include size, basic construction materials used, age and general condition of structures.

Strategy 2. Convene a working group of National and State education and construction and engineering personnel to review existing status of facilities and develop draft standards for construction and maintenance of facilities. Initially, facilities standards are expected to be non binding.

Objective 2. Develop comprehensive plans for construction and maintenance of education facilities.

Strategy 1. Each State is recommended to develop long range plans which set forth the need for new and replacement construction based on enrollment trends and condition of existing structures.

Strategy 2. The long term facilities plan of the State school systems will be presented to the FSM Congress, State Legislatures and other potential funding sources.

Strategy 3. Each State is recommended to develop comprehensive maintenance plans which include active community involvement.

Strategy 4. The National Government should use the developed State construction and maintenance plans in seeking external assistance.

Technology

The intelligent use of technology is critical to the economic growth of the Nation. The impact of technology on economic and social system is exponentially increasing. The way we interact across our State and international boarders will be completely changed by new technologies. However, technology itself is not the issue. Rather it is our understanding and ability to effectively use technology to meet the priority needs of the Nation. Failure to identify and prepare for the realities of the 21st Century will mean our children will never reach their full potential.

Technology is not restricted to computer technology, but also technologies related to genetics, environmental issues, electronics, mechanical systems, transportation systems, traditional technologies, energy (solar, thermal, and other types of renewal energy), manufacturing, and educationally related technologies, etc.

Goal: Technologically literate population able to rapidly respond to changing conditions in the world economy.

Objective 1: Provide quality mathematics and science programs to form the basis for understanding and using current and future technologies.

Strategy 1: Prioritize mathematics and science instruction.
Strategy 2: Provide for “hands on” instructional programs and activities.

Strategy 3: Tie in mathematics and science instruction with traditional technologies for agriculture, ocean use, navigation, conservation, medicine and tools.

Strategy 4: Provide necessary review and revision of standards, curriculum, materials and training as new technologies arise. Periodic updates on technology to teachers.

Objective 2: Develop student computer literacy for understanding and use of information technologies.

Strategy 1: Develop standards, curriculum, instructional materials and provide training for computer literacy programs.

Strategy 2: Set up model programs for computer usage.
   Programs should be equitably spread over the States taking into account geography, school size and physical state of the school.
   Programs should be accessible by others schools and the community.
   Additional programs should be set up as resources become available.

Objective 3: Develop operational plans for effective use of the Internet and other information technologies for improvement of instructional and support staff training programs.

Strategy 1: Promote training plans which focus on school based delivery of training.

Strategy 2: Encourage COM-FSM to design teacher training programs for delivery over the Internet or with a combination of Internet usage, video and other technologies.

Strategy 3: Promote on site support of teachers by DOE staff through information technologies.

Strategy 4: Design and implement programs for outer island Internet connection through appropriate technologies, e.g., through use of short wave-computer interconnectivity.

Objective 4: Provide for repair and maintenance and upgrading of technological resources.

Strategy 1: Provide scholarships which will provide personnel with on site capability for repair/maintenance of technology systems.

Strategy 2: Include in all planning and program and project design provisions for repair/maintenance.

Strategy 3: Provide ongoing in-service training programs in repair/maintenance of technological equipment.

Objective 5: Allocate financial and technical resources for assistive technologies.
Strategy 1: Identify needs for assistive technologies in the FSM and seek means to meet the needs of individual students.
Strategy 2: Provide training programs for specialized faculty and staff.
Strategy 3: Identify alternate financial and technical resources for expansion of programs.

Data Collection, Analysis, Reporting & Definitions

Introduction - The basis of a results based education system is current and accurate data on student achievement, finances, enrollment, status of facilities, student tracking, and other key pieces of information. Often results cannot be expressed in measurable terms without baseline data. The current situation is that while some data is available, it is often in a fragmented state and difficult to obtain. Additionally, data has often not been analyzed to determine trends and other types of information which can be the basis of educational decision making.

Goal: Develop and implement an educational information management system (IMS).

Objective 1: Develop a computerized IMS for the FSM.

Strategy 1: FSM NDOE provide an initial computer to each State for the IMS.
Strategy 2: Data forms, analysis, and reporting will be developed for the IMS based on the Microsoft Access database program.
Strategy 3: FSM NDOE will provide initial group training on the IMS with follow up Technical Assistance to the States.
Strategy 4: Development a Memorandum of Understanding on the IMS between the NDOE, State DOEs, COM-FSM and other involved parties.
Strategy 5: Develop definitions of key terms as they apply to FSM education.
Strategy 6: Cooperate and collaborate at both the National and State levels with economic planning and Offices of Planning and Statistics on sharing data and developing manpower projections and other needed economic and social development data.

Objective 2: Develop a research agenda to assist in the acquisition of data.

Strategy 1: Develop a FSM R&D agenda.
Strategy 2: Develop a Memorandum of Understanding among the NDOE, State DOEs and COM-FSM on FSM R&D activities.

Monitoring the Plan

Currently, there insufficient monitoring on implementation activities associated with improving education. When monitoring does occur it focuses more on process issues.
instead of looking at how well the plan or activities is meeting performance expectations or for impact on student learning and achievement. Where monitoring does occur, it is often not done for the purpose of making changes and improvement in programs and projects. Formal monitoring programs and procedures must be established which focus on the impact of programs and projects on student achievement and development of the infrastructure needed for improvement.

Due to the fact that this plan is to provide the general direction of educational improvement in the FSM, but that instructional delivery is a State responsibility, the monitoring reports are more in line with being status reports on the state of education in the FSM and progress is meeting overall National and State vision and goals instead of actual progress reports on implementation of the Strategic Plan.

The FSM NDOE and the State DOE will provide timely (minimum of interim and one year summary) progress reports on efforts to improve the education system. The summary report would be distributed each November. At a minimum the reports would include:

- Progress made in priority areas of education as shown by student achievement data and trends and program and project evaluation,
- Enrollment data and trends,
- Financial data and trends in expenditure patterns,
- Professional development of teachers,
- Role of community in education,
- Status of facilities,
- Progress in meeting specific goals, objectives, and performance expectations established in this plan and in individual state plans, and
- Changes which must be made to reflect the findings of the monitoring and evaluation effort.

Information will be compiled based on:

- a minimum of one site visit to each State by NDOE personnel,
- review and updating on goals, objectives and performance expectations of the overall, State and individual schools,
- classroom observation data,
- analysis of FSM National Standardized Tests (NST) data,
- analysis of data supplied by States on status of student learning and achievement,
- analysis of FSM Information Management System (IMS) data,
- analysis of data provided by States,
- trends in professional development and professional competence of teaching and support staff,
- analysis of data provided by the College of Micronesia - FSM and other postsecondary institutions of higher education,
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- student surveys and interviews,
- parent surveys and interviews,
- analysis of data and evaluations provided by external Technical Service Providers, and
- other data and analysis as appropriate.

With the establishment of the FSM IMS and with training/updating in use of email and electronic conference and increase in network capabilities, it is expected that as information becomes available, sections of the progress and monitoring reports will distributed for review and revision with reports prepared for public distribution based on State review process.

Public dissemination of the status of education to all stakeholders will occur in a variety of formats from dissemination of written reports, radio broadcasts, PTA meetings, TV programs, and individual meetings with parents and communities.

Benchmarks and Timelines

Because of the nature of the relationship between the National and State governments, development of timelines can be difficult as individual States will move at different rates and with somewhat different priorities. The NDOE will coordinate with the States development of timelines based on individual States priorities. The following is a brief summary of upcoming Nation wide activities.

<table>
<thead>
<tr>
<th>Area</th>
<th>Timeline and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislation</td>
<td>The President of the FSM has instructed that the Attorney General will assist in drafting necessary legislation for implementation of the Strategic Plan an Language Policy for the October 1997 session of the Congress of the FSM. Included in legislation for the Language Policy will be creation of a National Language &amp; Cultural Institute at the Main Campus of the College of Micronesia - FSM.</td>
</tr>
<tr>
<td>Information Management System</td>
<td>Initial training and distribution of computers to States will occur in September 1997. Follow up training and assistance will be State based and occur within three months. Revision and updating of the IMS will be constant.</td>
</tr>
<tr>
<td>Standards</td>
<td>Standards review/revision/development begin in June 1997 with a follow up workshop scheduled for September 1997. Site visits to all States were made during July - September 1997. Standards development will be completed by December 1997.</td>
</tr>
<tr>
<td>Teacher Certification</td>
<td>Active research begin in August 1997 with a FSM wide meeting set to review/revise existing</td>
</tr>
</tbody>
</table>
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| **School-to-Work Implementation Planning** | Training for STWO programs began in December 1996 with a Nation wide workshop. Currently State based review and design is being undertaken. Individual States are to have STWO draft plans completed by February 1998 with the Nation wide plan completed by March 1998. |
| **Scholarship** | Review of existing scholarship programs and awards are ongoing at the National and State levels. Recommendations for changes will be made by March 1998. |
| **FSM History & Close-Up Program** | Research is ongoing at the State level for development of a FSM History Text is currently being undertaken with a initial writing workshop scheduled for November 1997. The FSM Close-Up will be held during the May session of the Congress of the FSM. |
| **Monitoring and Reporting** | Yearly reports to be made each November with interim reports during the wet season. |

**Review and Update of Plan**

The FSM NDOE in cooperation with State DOE’s and broader Human Resource Development panels will conduct semiannual reviews of the progress made on improving education and the FSM and made recommendations to FSM Association of Chief State School Officers (FACSSO) for modifications and re prioritization of the plan. These reviews and revisions will be included in the interim and yearly progress reports.

The NDOE will be working to establish electronic means of communication for review and revision with a broad group for advise on Human Resource Development in the FSM of the Strategic Plan and for assistance in implementation activities. However, the FSM is still very much an oral society and electronic communications can supplement but not replace personal contact. However, the high cost of travel in the FSM makes large group meetings very expensive and detracts funds from implementation and improvement activities. The NDOE will work to establish a single educational panel which will function to advise the education system on strategic planning, school-to-work and language policy issues. Linkages will also be established with the broader FSM Economic Council and the Council on Sustainable Human Resource Development in the FSM to address the ties of education to economic growth and social development.