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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Development of the Strategic Plan was partly funded by U.S. Federal Grant funds under the Goals 2000, Bilingual Education and School-to-Work programs.

Note: This current version of the Strategic Plan represents a major update incorporating information, recommendations and agreements from the 1^{st} FSM Education Summit held in Pohnpei State from September 5 – 8, 2000. Major additions or changes to this Strategic Plan resulting from the 1^{st} FSM Education Summit are in italic.

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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 that 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 that 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 that 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.

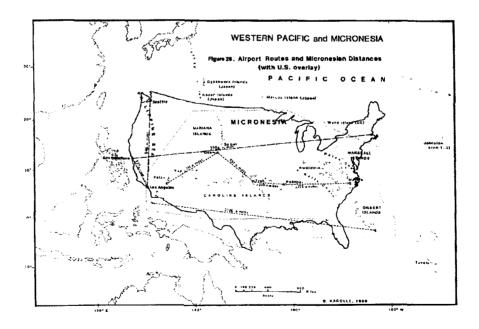
This plan has been updated to include information, recommendation and agreements from the 1st FSM Education Summit held in Pohnpei State from September 5 – 8, 2000.

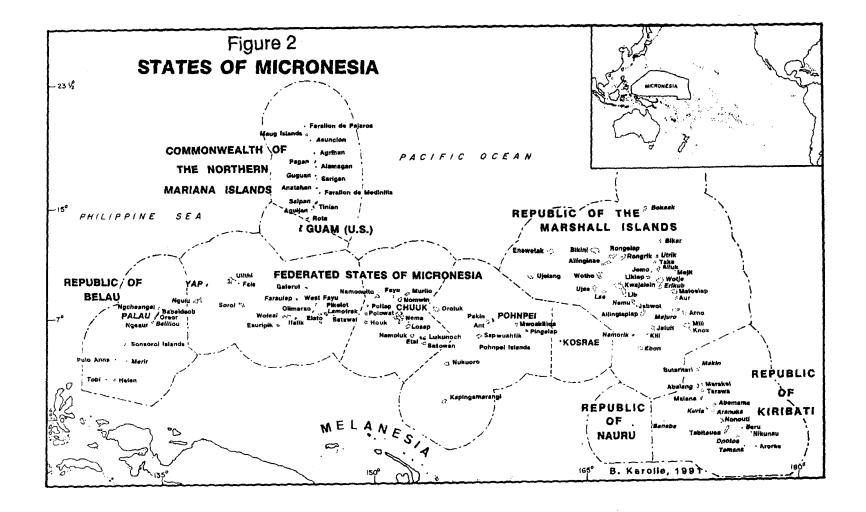
Introduction to the FSM and its School System

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. The 607 different islands of the FSM dot this immense expanse of ocean. 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/ Micronesia 737 service that also allows access to international destinations. Normally service is provided only once a day either east bound or west bound. Travel to and from Yap to other FSM States is via Guam and is only available two days a week. While small commuter planes connect a few of the outer islands, 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 that 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.





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 that 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 that are culturally relevant in local languages and in English. Not only must they develop instructional materials in the local languages, but also 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 (multilingualism) is a must and not just a desired goal.

Major Native Languages of the FS	M
State	Languages
Yap	Yapese
	Ulithian ¹
	Woleian ¹
Chuuk	Chuukese
	Satalwalese
	Mortlockese
	Western

Pohnpei	Pohnpeian
	Pinglapese
	Mwoakilese (Mokilese)
	Sapwuafikese (Ngatikese)
	Nukuoroan ²
	Kapingamarangian ²
Kosraean	Kosraean

While the areas where Ulithian & Woleian are spoken are politically part of Yap, they actually have a basis in Chuukese.

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)¹developed 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 objects 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 that contribute a significant amount to the overall education budget.

Nukoroan and Kapingamarangian are descended from the Polynesian language group.

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. Efforts are underway to develop BA programs, especially in education, for COM-FSM. In cooperation with San Diego State University and the University of Guam Masters programs are being delivered in the FSM. The University of Guam (UOG) is the Micronesian area IHE for BA and advanced degrees.

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.

FSM Student Enrollment 95/96 School Year						
State/Nation	No. of Schools	Males	Females	Total		
Chuuk Total	109	9001	8629	17630		
Chuuk Private	8	1021	1234	2255		
Chuuk Public	101	7980	7395	15375		
Kosrae Total	10	1437	1282	2719		
Kosrae Private	2	49	47	96		
Kosrae Public	8	1388	1235	2638		
Pohnpei Total	40	5493	5110	10603		
Pohnpei Private	5	626	505	1131		
Pohnpei Public	35	4867	4605	9472		
Yap Total	36	1725	1502	3227		
Yap Private	2	194	165	359		
Yap Public	34	1531	1337	2868		
FSM Total	195	17656	16523	34179		
FSM Private	17	1890	1951	3841		
FSM Public	178	15766	14572	30338		

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 result from Outer Island Schools and schools in remote locations.

Update on enrollment from 1998/1999. The figures indicate a slight decrease in overall enrollment from 1995/1996. At this time it is not clear is this decrease is results from different reporting criteria or is an actual decrease in the student enrollment due to a decrease in the birth rate and/or out migration. Research is needed to determine exactly what the figures mean. A close review will also be made of 1999/2000 and 2000/2001 enrollment figures.

Total Enrollment 1998/1999 Public and Private Schools				
	Public	Private	Total	
Chuuk	15,894	2,033	17,927	
Kosrae	2,454	55	2,509	
Pohnpei	8,517	1,279	9,796	
Yap	2,871	451	3,322	
Total	29,736	3,818	33,554	

Schools - power and accessibility

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 provide 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].

Schools in the FSM - Power & Accessibility Issues						
			Accessil	oility from Sta	ate DOE	
	Has power	Auto	Small boat	Ocean	Small	Auto +
				going ship	plane	walking
Kosrae	87.5%	87.5%	12.5%	-	_	-
Pohnpei	75.0%	82.5%	5.0%	12.5%	_	2.5%
Chuuk	17.3%	18.4%	51.0%	31.6%	_	-
Yap	40.0%	40.0%	-	60.0%	31.0%	-
Total	37.6%	39.8%	29.3%	31.5%	6.1.%	0.5%

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 are included in the appendix. In general, we are seeing data that 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.

In 2000 e are seeing improvement in education. Since 1997 each public high school has shown gains on the College of Micronesia – FSM entrance test.

- Kosrae High School from 38% to 73%
- Bailey Olter High School from 45% to 72%
- Yap High School from 25% to 60%
- Yap's Outer Island High School has gone from 20% to 39%
- Chuuk High School from 2% to 11%

However, we also know that few of our graduating high school students are actually functioning at college level. In this year's COM-FSM freshmen class only 6% are able to take college level mathematics courses and approximately 58% are placed in college level English classes.

Teacher Background and Competence

The normal FSM teacher has only an AA/AS degree, with a substantial percent 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 Study² 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 not documented. 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.

To help guide teacher development the 1St FSM Education Summit in September 2000 recommended use of "Propositions for Quality Teaching in the FSM" to assist in guiding professional development activities. Four main propositions are made:

- 1. Teachers are committed to students and learning.
- 2. Teachers know and use their content knowledge and are able to convey that content knowledge to students.

² A study financed by the Asian Development Bank on behalf of the Government of the Federated States of Micronesia - May 1995.

³ Clyde Maurice, et al., Human Resource Development in Micronesia: "An Assessment of the Context and Conditions of Education and Training, (Pohnpei, FSM: Good News Press, 1995) p. 266.

- 3. Teachers know a wide variety of teaching strategies and have the skills to manage students and classrooms and provide appropriate instruction and support to students.
- 4. Teachers are learners and are constantly updating their content knowledge and teaching skill and strategies.

The details of the "Propositions for Quality Teaching in the FSM" can be found in the appendix to this revision of the Strategic Plan.

A continuing trend is being seen in the lack of content upgrading. Most professional development in concentrated on education strategies and programs, there is little or no training programs or activities being undertaken to address the need for improving English competence of teachers and staff or specific content knowledge needed by teachers.

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

FSM Teacher Degree Status 1994/95

There has been little change in the degree attainment by percent. Listed below is the teacher degree status as of 1998/1999. Approximately 83% of teacher possesses at most an AA/AS with 29% of teachers having no degree.

Qualification (%)	Yap	Chuuk	Pohnpei	Kosrae	FSM Total
No degree	40.2	39.5	11.3	8.9	29.0
AA/AS degree	48.8	45.8	70.9	58.3	54.5
BA/BS degree	10.0	13.3	17.0	31.5	15.5
MA/MS degree	1.1	1.3	0.8	1.2	1.1
Ph.D.	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0

FSM Teachers by Degree Status, 1998-99

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

October 2000 Page 10 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.

In 2000 improvements in communications have primarily been made in Yap State with schools actively using radio, microwave and other communications media for management and training purposes.

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.

In 2000 the Joint Committee on Compact Negotiations is actively working with the United States on negotiating continued financial and other assistance. The United States has indicted they place a high priority on education and health in the negotiations. There is also discussion of continued financial assistance from the United States to be in the form of sectoral assistance – including education.

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 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.

In	Income Levels 1993 - Based on the 1994 FSM Census							
Type of	FSM	Yap	Chuuk	Pohnpei	Kosrae			
Income		_		_				
Household								
Number	11233	1426	4875	4025	907			
Median (\$)	4694	5998	2444	7503	6739			
Mean (\$)	8645	8298	5443	12412	9686			
Family								
Number	10649	1285	4696	3793	875			
Median (\$)	4473	5810	2268	7084	6574			
Mean (\$)	8133	7924	5140	11671	9167			
Individual								
Number	20924	2557	9283	7032	2052			
Median (\$)	2637	3509	987	4312	3253			
Mean (\$)	4740	4809	2875	7174	4753			

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

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 workweek 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 Indicators⁴ that 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):

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

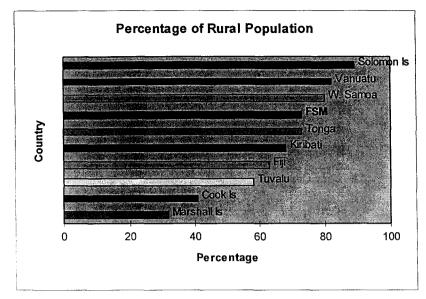
Gross Development Product Per Capita information is provided below.

Pacific Human Development Index					
	GDP Per Capita (\$US)	HDI			
Cook Islands	\$3,416	0.985			
FSM	\$1,474	0.604			
Kiribati	\$461	0.439			
Marshall Islands	\$1,576	0.611			
Niue	\$3,051	0.879			
Tuvalu	\$1,068	0.652			

Source: UNDP, 1994

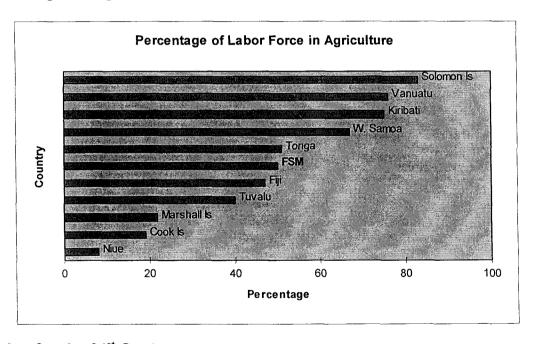
The percentage of rural population is show in the chart below:

⁴ Human Resource Development: Smaller Pacific Island Countries, Office of Pacific Operations - Asian Development Bank, March 1995.



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 that 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 that 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 that 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 SCANS⁵ 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 TIMSS⁶ 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 that 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 to be used as planning and/or 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.

⁵ Secretaries Commission on Achieving Necessary Skills, U.S. Department of Labor.

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 that 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 that focus on second order changes that 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 that 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 that focus the education system on learning and support of the instructional staff. Through out 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 polices 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 polices 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 began 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 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.

The 1st FSM Nationwide Education Summit addressed the issues of leadership and education policy and made a series of recommendations on policy issues.

- 1. Teachers are a key to educational improvement and substantial efforts needs to be undertaken to improve the quality and condition of teaching.
 - a. Encourage and review education leadership at all levels.

- b. Revisit the policy for teachers taking sabbatical/education leave from 1 year to 2 years.
- c. Create a pool of substitute teachers that can be accessed across states, Micronesia and the Pacific region.
- d. Provide support to increase the number of teacher to accommodate existing and future shortages of teachers through scholarships and other incentives (example 500 by 2010).
- e. Formulate a comprehensive personnel development plan for all educators.
- f. COM-FSM is asked to provide evening and distance learning classes for professional development and teacher upgrading.
- g. Enforce contractual agreement to return or repay after sabbatical leave of absence.
- h. Upgrade policy for certification.
- i. Review the retirement programs and their impact on providing quality teachers.
- 2. States should move to establish language policies that complement the national language policy.
- 3. Establish cultural demonstration schools that promote the development in the context of our language and cultures.
- 4. Develop programs and policies that support and ensure education leaders at all levels of the education system.
- 5. Provide incentives for excellence performance in schools and communities.
- 6. Improve the role of COM-FSM and other Institutions of Higher Education in improving development of local capacity.
- 7. The FSM should take all steps necessary for uninterrupted continuation of U.S. Federal Education Programs and actively seek new programs such as E-rate.
- 8. The FSM should take all steps necessary secure funding from non-U.S. foreign sources to support education improvement.
- 9. The FSM Telecommunications should be requested to extend services to all schools in the FSM including meeting the needs of special needs students.
- 10. The Joint Committee on Compact Negotiations (JCN) and the national and state governments should take all necessary steps to ensure continuation of U.S. federal education and training grant programs. JCN and the national government should take all necessary steps to ensure that eligibility for U.S. federal education and training programs do not expire as of September 30, 2001.
- 11. The National Standardized Tests (NST) program should be extended to entrance at all appropriate education levels.
- 12. The nation and state should increase the expenditure of local and compact funds to support education personnel, materials and supplies and textbooks.

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.

Accountability, Quality, Governance & Finance

Accountability and Quality

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 that are not under the control of the education system. A related area is the lack of performance based budgeting systems through out 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.

The 1st FSM Nationwide Education extensively addressed the issues of accountability and quality of education. The following is a summary of the policies, recommendations and interventions.

Improving transparency: Policies

- The FSM National and State governments should identify the most effective methods of reporting for each stakeholder and periodically and in a timely manner report all appropriate school information pertinent and relevant to the educational achievement of all students to all stakeholders (students, parents, staff, teachers, school administrators, central office staff and administrators, state and national office staff and administrators, state and national legislators and government officials, civic and private community organizations, state and national government societies, private business, etc.). Significant rewards and punishments/consequences shall be related to this procedure.
- □ All Schools should have equitable access to services (communications and transportation) to guarantee the realization of the most effective methods of reporting at all levels and throughout all regions to all stakeholders.
- All Schools should be clear and well informed as to the standards, roles responsibilities and expectations of all the various stakeholders. Furthermore, all schools should be very clear as to how to disseminate these expectations, standards, roles and responsibilities to all stakeholders. Again, significant rewards and consequences shall be attached to this policy.

Improving Quality

- □ General Context and Recommendations
 - FSM National and State Departments of Education need to establish very clear roles and responsibilities. Full accountability systems for each then need to be planned and implemented.

- Resources necessary to accomplish this are essential. The implementation of such accountability plans will remedy many of the problems being faced currently.
- At the same time, and as part of the accountability plans for national and state departments of education, particular focus needs to be given to adequate teacher preparation programs, both pre and in service. Well-prepared teachers are fundamental to student success.
- Many interventions or strategies for addressing specific problems have been suggested. Careful consideration should be paid to what is causing the problems more than the problems themselves. To that end, it is believed that having carefully planned and implemented accountability systems for the national and state governments will resolve many of the problems. Implied, of course, is the fact that accountability systems at any level will only alleviate problems at school levels if they are rigorously, consistently and fairly enforced.

□ Policy

- Full accountability systems need to be developed for both the FSM National and State departments of education. Policies for implementing these systems need to be developed, complete with rewards and corrective actions.
- Policy needs to be developed guiding development and implementation of curriculum around content standards.
- All policies need to be aligned for all levels and rigorously enforced.
- Credentialing and certification systems need to be revised and policies made reflect accountability reassures for all classifications.
- All education staff, both at national and state levels, should be placed on performance contracts that are aligned with the accountability system. Substitutes should also be on contracts.
- FSM Language Policy needs to be modified to include options for additional languages. (note: the Language Policy already includes this option).
- All teachers must submit daily lesson plans for all school children.
- Basic education needs to be assured for all teachers and administrators, whether they can leave their home island or not.
- BA as a minimum, and in education. (note: different recommendations were made during the summit on this issues the differences will be shorted out in the revision and development of certification systems.
- *Mandate both pre-school and Headstart for all children.*

- Policies and solutions to problems need to have input from all stakeholder groups, particularly from the grassroots stakeholders so they feel informed and a sense of belonging in the school and the education system.
- Interventions
 - Implement community based management systems
 - Research established models of excellence and adapt for local school implementation.
 - Involve parents and community in classrooms, in extended day settings as tutors.
 - *Utilize parents in the community whose children have* already graduated from school.
 - Use retired teachers as contracted substitutes who can fill classrooms long term while the regular teacher completes degree education.
 - Find local school champions who can and will vocally support and encourage the school.
 - Teachers should not teach out of their endorsement area.
 - School calendars need to be examined to assure the learning occurs, not just 180 days of seat time.
 - Regular continuous professional development days to be built into the annual school calendar.
 - Schools should be recognized for their successes.
 - School achievement data (not individuals) need to be made available.
 - Adequate and appropriate instructional materials need to be assured.
 - Schools need better data to make informed decisions. Data collection is part of the accountability plan.
 - Headstart and special education need to be integrated.

Goals. Develop accountability systems that 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 and or 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 that 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 and/or develop systems that 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 percent 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.

Title 40 of the FSM Code governs the FSM National Government 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
 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 that

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 that 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. Implement 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 that 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 that 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.

- 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.

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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, and 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.

The Education System is being allocated with a total of \$27.9 million to implement its educational services through the FSM, both at the National and the State levels. According to the audit report the total expenditures for fiscal year 1999 was 24.3 million. This amount was expended at an average of 82% on personnel cost and 18% for all others. We have a current total of 35,776 students and 2928 teachers with 83.5% possess AA/AS degree or less, by 2010 the total student population would be little under 40,000 and we will need additional of 500 well-trained teachers. There are 194 schools. Our basic funding sources are from the US, 98% of the total is from, Compact and the federal grants, 2% of the total is from our local revenue. There are other resources from Japan, Australia and other countries, but it is difficult to account for the amount because all cost incur from those were taken care of by the respective country (scholarship, technical assistance and other equipment donated for the education system).

As presented in the general session, we all can clearly see the grim condition in which our school system is facing, from lack of instructional supplies to poor condition of classroom facilities and specifically the achievement level of our student and quality of our teaching force. It is of utmost importance that corrective measures be done to upgrade the quality of our teachers and the performance level of our students. And as our group recommended, need additional funds to carry out these activities.

There are also some other factors that hinder or delay the utilization of funds in carrying out activities under the education system at the national and state levels, such as authorization, processing of purchase requisition, reimbursement and allocation of funds. The group was very fortunate that we have some members who were from our national finance office who participated in the session.

The format in which the group used in deciding on some recommendation was reviewing the question posted in the finance section of the agenda and provides the answers based

on the information shared during his summit. We started by dividing the group into two groups one to work on policy and procedures aspect of financing and the other on identifying sources or strategies for financing our education system. We regroup and shared our recommendations and came up with the group consensus on the following recommendations:

Before we decide upon what to recommend for this area, some corrective measure was volunteered from National Department of Finance, which we believe will greatly help in expediting the utilization of fund as well in the reimbursement process:

- 1. By fiscal year 2001 the allotment of all funds coming from the National finance to the State will be done once at the beginning of the year. Reprogramming or budget adjustment could be done upon requested any time.
- 2. A refined reporting system has been developed by the Department of Finance in reporting expenditures on a periodical in order to expedite reimbursement to the States.
- 3. Because of the federal requirement for expending cash draw down which allows only 72 hours or three days to expend the drawn amount, the Finance Department also came up with an Advance Mechanism to advance so much for personnel cost in order to run the program. At the beginning of the program or the fiscal year.

Group Recommendations:

The listing is not listed in priorities:

- 1. Propose that an amendment be made to the current Financial Management Act to eliminate the re-appropriation process at both the State and the National level. In consultation with State Departments of Education, the National Division of Education will develop alternatives to re-appropriation by December 31, 2000. The recommendations will be transmitted to Congress and all State Governors and Legislatures.
- 2. To develop transparent reporting system that include source of funds, how they are being expended and to include in-kind contribution from at the community and incorporate financial data in the data management system. The report should be distributed to the community, to the leadership at he State and the National levels. To be implemented with a report on funds usage in Fiscal Year 2000.
- 3. The group recommends that all education departments should use the performance base budget scheme and that training should be provided at all levels within the system. The National Division of Education in cooperation with

- the National Office of Budget will compile a list of potential tanners and a training program to enhance implementation of performance based budgeting.
- 4. Recommends that an increase be made on the revenue sharing from 20% to 35% and that the increase of 15% should go the education 5% from the national share and 10% from the State share. <u>The recommendation will be transmitted to the President and the Congress of the FSM.</u>
- 5. Recommends that strategies be developed to promote in-kind contribution to minimize cost of the education system. The National Division of Education in cooperation with State Departments of Education will develop a series of recommendation to increase in-kind contributions by March 31, 2001.
- 6. To develop an alternative plan for the nation to take care of the anticipated termination of the federal grants by September 30, 2001. A recommendation of FACSSO will be transmitted to the President and JCN on the importance of U.S. federal grants and request for joint assistance with education in securing continuation of funding.
- 7. Establishment of a trust fund at the State level utilizing the scheme used by the COM-FSM Endowment funds to meet the 500/2010 teachers needs. National Division of Education will assist states with planning and report yearly on progress being made in establishment of trust funds.
- 8. To provide tax break or incentive to donors (business, organization and individuals) who donate to the 500/2010 trust funds. The National Division of Education with assistance from the Department of Finance will develop a series of potential tax considerations for transmittal to Congress and State Governors and Legislatures.
- 9. To earmark 50% of the tax collected from cigarettes and alcohol for education.

 The recommendation will passed to the President, Congress, State Governors and

 State Legislatures.
- 10. To continue our eligibility for the federal grants programs. <u>FACSSO will pass</u> these recommendations to the President, JCN and Congress.
- 11. Recommending adjustment on the dates for awarding scholarship, instead of awarding from October to July we should move up the time to June 30 of each year to allow ample time for the students to register and prepare. In cooperation with State Departments of Education, a review of potential changes to the scholarship program will be prepared by December 31, 2000.

Cooperation and Collaboration

The 1st FSM Nationwide Education Summit addressed the issue of cooperation and collaboration and cooperation in depth. Of major concern has been the perception that while it is easy to gain agreement that cooperation and collaboration are important, it is difficult to point to specific examples of where cooperation and collaboration is actually being practices. The following short and long interventions were recommended and impact on all programs, projects and activities in the education system.

Short Term Interventions:

- □ Sharing (exchange) of impact reports;
- □ Avoid promising too much;
- □ *Recognition and incentive (with consistency & multiple approaches)*;
- □ *Hiring of well qualified people/candidates*

! Long Term Interventions:

- Establish a working group in each State with at least one upper-level administrator from NDOE, COM-FSM (National and/or State Campus), and each State DOE form a State Educational Planning Council to develop collaborative plans to share resources, personnel, and training on these common goals and objectives; monitor educational goals derived from State and national Educational Plans; coordinate and share information on programs which they administer separately or jointly.
- □ Accountability and quality strings attached to funding;
- □ Decision making within an overall framework such as training be under and overall framework such as training be under and overall framework for certification (both pre-service and in-serve);
- □ Change local legislation (FSM Congress and State Legislature) to encourage greater cooperation;
- □ Develop and use list of local capacity (within the FSM) for training and technical assistance:
- □ *Across the board coordination for service providers*;
- □ Establish program and processes that increase the business and the community in decision making and sharing of authority; and
- □ Community involvement has to be involved in improving student learning, achievement, and teaching.

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 make 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 area 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 that 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 is 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 that 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.

- Micronesia will become a multilingual society with high competence (read, write 1. and the ability to converse) in local languages, English, and other international languages.
- 2. Our languages convey our values, cultures and traditions.
- Our languages areas still strong [however there are trends which indicate language 3. 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.
 - All local languages need reference grammars and dictionaries. b)
 - Student grammars and dictionaries must be developed at appropriate grade c)
 - 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.
 - Assessment instruments and evaluation processes must be established for f) local languages.
 - Instructional materials, general reading and content specific information g) 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.
- Students should be introduced to English through materials that are relevant to 6. 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 that are relevant to the economic, political, and social development of the FSM.

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- 7. Valid assessment instruments and evaluation processes for English and other international languages must be developed or adopted and the results are 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 student's 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.
- Language maintenance and expansion cannot be addressed only by the school 11. 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.

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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 initiates a process to review and revise the NMS. Participants will include curriculum specialists, teachers, parents, community sectors, and service providers in the region. Initial emphasis is on language arts standards that provide guidance for acquisition of student's 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

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.

Updates 2000 – Revision of the Language Arts Standards have been completed. Standards for agriculture, marine and tourism have been drafted and are being taken to the States for final review. Revisions of the NST Language Arts tests are being undertaken to align them with the revised language arts standards. Pilot testing is ongoing for a science component of the NST. SCANS is being used as a major foundation tool for design and revision of all standards.

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 are 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 he 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 polices 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 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 innovate 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 that 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

- 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.

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⁷ The National Language and Cultural Institute (NLC1) 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.

- 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 teacher's 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.

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- 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 also 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 he 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, and businesses or from published materials such as articles on tourism, brochures on fisheries or the banking system, etc.
- **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 that 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 decisionmaking 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 that 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 show 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 that feed information into education, community and family decision-making systems.

Role of Assessment and Evaluation in the FSM		
Assessment and Evaluation Activity	Uses	Level
National Standardized Test (NST)		
Overall status of education system	 Report to Congress and the Nation on the status of Education and ability of students to meet content standards Basis for decision-making and planning in the Nation on educational issues Basis for seeking additional funding for education Possible basis for distribution of FSM Funds for education improvement Provides basis for comparison of FSM students against international norms 	 National State School Community
State composite results	 Report to State Legislature, parents and the community on the status of education Assist in design of curriculum and instructional programs and setting of priority areas for instructional improvement 	StateSchoolCommunity
Individual School Data	 Determine educational achievement of schools Report to the community on the status of their children's education Assist in design of school and community based improvement programs 	SchoolCommunity
Individual Student Data	 Determine educational achievement of students Report to parents on educational progress of their children Assist in design of instructional programs for the classroom and individual students 	ClassroomParents
High School Entrance Tests	 Determine who goes to high school Provides input into quality of schools Provides information of curriculum and instructional improvement 	StudentsParentsCommunity

College of Micronesia - FSM	Determines who goes to COM - FSM	• Nation
Conege of which onesia - Fow	Provides input on the quality of State	• State
		- · ·
	educational programs	
	Determines ability of students in	• Students
	English and mathematics	• Parents
State Curriculum Referenced Tests	Determine progress in	• State
	implementation of curriculum	• Schools
	Assist in establish student	• Students
	achievement levels	 Parents
	Provides input for improvement of	
	curriculum and instruction	
TOFEL, SAT, ACT and other	Provides data on student ability on	 Nation
measures	standardized tests	• State
	Provides comparison data against	 Students
	U.S. and International norms	 Parents
In class Assessment and Evaluation	Provides teacher's data for	• School
	determining student learning	 Students
	Provides input for improving	 Parents
	teaching strategies	
Training and professional	Provides input on impact of training	Nation
development	and professional development on	 State
	improving learning	 School
	 Provides input for improving 	 Community
	program design and delivery for	
	professional development programs	
	Provides input for decision-making	
	on allocation of resources for	
	professional development	
Program Evaluation	Provides data on impact of program	Nation
	implementation	State
	Provides data for improvement of	• Funding
	program design and implementation	agencies
	Provides data for justification of	
	program funding	
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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.

- 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 that 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.

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 a 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. The tradition chiefs make some community's major decisions, while other

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emphasize development of consensus on all issues. Community involvement must take into account these systems of governance and decision-making.

Goal. To 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 that incorporate traditional systems of governance and decision-making.

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Strategy 3. Ensure that school based management programs focus not only on increased local decision-making but also 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.

The 1st FSM Nationwide Education Summit addressed the issue of accreditation issues and made of number of recommendations.

First, accreditation is a school improvement process. The Accreditation recommended that accreditation be primarily a state issue with support and assistance from the National Government. Some benefits of accreditation include:

- Provides benchmarks to guide judgment of school success.
- Can assist in improving student achievement.
- It involves the parents, educators, and other stakeholders in a continuous review of their school and its performance in relation to standards.
- It provides a basis for technical assistance.
- It provides a policy framework that allows the DOE to determine how monies will be spent to improve schools.
- It provides a level of staff pride in being recognized as excellent.
- It provides needed date for professional development needs, school building improvement, fiscal allocations and school management issues.
- It provides decision makers a reliable baseline data on meeting national and state standards.

A few key issues that were raised:

• State need to research and develop committees for accreditation with assistance from the NDOE and other agencies.

- Work on accreditation systems should start this year.
- While there are many possible options the only one that is not possible is to do nothing.

Reports will be made on progress being made by the states in accreditation of programs.

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 that 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).

The 1st Education Summit also addressed a number of specific areas for improving professional development and quality of staff.

First is the concern over local capacity for providing training and technical assistance. There are two issues, we are still dependent on external services providers for much of the technical assistance and training being conducted in the FSM. Second, where we have training and qualified Micronesians, they are underutilized as trainers.

An additional major area was how to improve the use and access to distance learning as a means to upgrade staff and improve education.

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 hock, but should be based on an overall - comprehensive plan for professional development which reflects the <u>priorities</u> 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 <u>follow up</u> and <u>follow through</u> 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 <u>Student Achievement</u> 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 that 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

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islands and distance schools to restrict training opportunities. We need to actively explore information technology solutions to improving communications and training of <u>all</u> 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 to be used in design, implementation and assessment of professional development systems and programs in the FSM.

The 1st FSM Education Summit also adopted a series of "Propositions for Quality Teaching in the FSM". The main propositions are listed below and the complete "Propositions" may be found in the additional appendix to the Strategic Plan.

Propositions for Quality Teaching Federated States of Micronesia

- 1. Teachers are committed to students and learning.
- 2. Teachers know and use their content knowledge and are able to convey that content knowledge to students.
- 3. Teachers know a wide variety of teaching strategies and have the skills to manage students and classrooms and provide appropriate instruction and support to students.

4. Teachers are learners and are constantly updating their content knowledge and teaching skill and strategies.

One important point needs to be made. Proposition #2 calls for teachers to know and use their content knowledge. Of major concern is the lack of training directed at increasing content knowledge and understanding. The 1995 Human Resource Development Study pointed out a lack of teacher competence in English. Since (or before) that report there has been little or no training programs directed at increasing teacher competence in content areas such as English, Mathematics and Science.

Goal: Provide for highly qualified education staff.

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 that 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.

Strategy 6: Provide provisions in the CSPPD system to develop a cadre of local trainers. **Strategy 7:** Provide an annual update on the progress being made in upgrading education staff and in developing local capacity to provide training and technical assistance.

Strategy 8: Develop and enhance national, state and foreign scholarship programs that are directed at providing local capacity to provide training and technical assistance.

Action Step 1: Tie scholarships to education service in the FSM on completion.

Action Step 2: Revise existing scholarship priorities to include education and the development of local capacity.

Action Step 3: Centralize administration of foreign scholarships, money and information.

Action Step 4: Develop standards of quality for response of national government to states needs and requests.

Strategy 9: Enhance the usage of local public and private sectors to provide training and technical assistance.

Action Step 1: Identify local resources in the public and private sectors and develop Memorandum of Understanding on how to request assistance from other departments and agencies of the national and state government.

Action Step 2: In cooperation with Chambers of Commerce, other private sector organizations, and private businesses develop a listing of potential providers of training and technical assistance.

Action Step 2:

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

Update from FSM Education Summit 9 2000

- 1) The current certification system does not provide for well-qualified teachers in the classroom.
- 2) A new competency based teacher certification system should be developed with the following components:
 - i) Basic AA/AS degree required,
 - ii) Competency based requirement for content knowledge,
 - iii) Competency based requirements for teaching methodologies, classroom management, etc., and
 - iv) Separate competency requirements for elementary and secondary teachers,
 - v) Provisions to be made for vocational teachers to include competency skills in lieu of the AA/AS requirements.
 - vi) Note: competency based requirements could be in the form of assessment or checklists.
- 3) The following process is recommended for development of the new system:
 - i) States form working groups composed of teachers, training coordinator, principals, representatives of local COM-FSM campus, state legislators and personnel officers.
 - ii) The State working groups should select representatives to attend a working group session to be convened by the National Division of Education in October 2000 to expand upon the competency based teacher certification system outlined above. The working group will also include individuals from the national COM-FSM campus and selected serviced providers.
 - iii) The draft certification program will be taken to States for review and comments. Recommendations should be made by mid November 2000.

- iv) If necessary, an additional certification working group session will be convened to review recommendations and compile the final certification system.
- v) The regulations for the new certification system are to be finalized by December 31, 2000.
- 4) The "Propositions for Quality Teaching Federated States of Micronesia" are recommended to be a guide for the development of the new certification system.
- 5) COM-FSM should be given a mandate to expand its distance-learning program to accommodate the competency based certification system.
- 6) COM-FSM should align its curriculum with the new teaching certification system.
- 7) Personnel and salary systems should be aligned with the revised teacher certification system.
- 8) The Congress of the Federated States of Micronesia should build compliance provisions for implementation of the new teacher certification system into funds authorizations for education.
- 9) The "Principles of Professional Development" should be used as a planning and evaluation guide for designing and implementing competency requirements and include those trainings and workshops conducted by service providers and State and National Education Staff or other agencies of the State and National governments.
- 10) Certification systems should also be developed for principals, specialists and counselors once the teacher certification system is in place. A similar process similar to that used for development of the teaching certification development should be used. Principal, specialists and counselor certification should be completed within 3 months after completion of the teacher certification system.
- 11) Provisions should also be undertaken to developed certification programs for tradesmen. COM-FSM would take the lead in this effort in cooperation with the National Division of Education, WIA, T3, and Office of Immigration. Details of the program should be completed within 1 year.
- 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 teacher's 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.

Objective 4: Recognize, support and prioritize distance learning as a vital source of education for the people and students of the FSM.

Strategy 1: Establish a computer laboratory in every school in the FSM.

Strategy 2: Internet services will be available in every laboratory.

Strategy 3: Establish a sustainable technical support staff at the state level that will be able to maintain the infrastructure that supports distance-learning technology.

Strategy 4: Create a program in instructional educational technology at the elementary, secondary and teacher education level.

Strategy 5: COM-FSM should collaborate with other institutions to meet State needs using distance education.

Strategy 6: Encouraged and support all individuals to purse higher degrees through distance education, noting that anyone can be a potential student.

Strategy 7: Revisit the issues of scholarships for distance learning.

Strategy 8: The JCN and the national government should aggressively purse inclusion of the FSM in the E-rate and other programs and sources that support technology and distance learning, through compact negotiations as well as through bilateral contact.

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 that 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 exam 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.

The 1st FSM Nationwide Education Summit addressed the issue of technical assistance and service providers. It found some barriers and challenges:

- 1. Lack of agreement between FSM States, FSM-NDOE, and COM-FSM to collaborate and share information about needs and priorities for selecting and retaining service providers.
- 2. Lack of coordination between FSM States, FSM NDOE, and COM-FSM regarding the utilization of service providers.
- 3. Failure to develop policies that facilitate building local capacity to provide technical assistance within the FSM.
- 4. Lack of information on service providers available within the FSM.
- 5. Few established policies or procedures on accountability for both internal and external technical service providers, especially for sustaining services on an ongoing basis.
- 5. Lack of formalized assessment systems for technical assistance providers that are based upon outcomes.

The Summit can up with a series of recommended strategies that reflect much of what is in original plan, but has not be implemented. Both the original and newly recommended strategies are provided below.

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

- **Strategy 1.** Develop a listing of Micronesian educators with areas of expertise. This listing should go beyond the FSM and include Guam, Palau, Marshalls, and CNMI. The list should be reviewed prior to seeking TA assistance.
- Strategy 2. Technical assistance, training needs must 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 Nation wide procedures and standards for development of project applications to maximize sources of input and ability to response 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.
 - 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, math, science and assessment.
 - 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 and or develop assessment and accountability systems of technical assistance providers.
 - **Strategy 1.** Expand/develop mechanisms that access the impact of technical assistance on:
 - developing local capacity to provide training and support services to teachers and other staff,

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- 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 decisionmaking,
- 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 that 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.

Strategy 1: Create a database/resource directory of potential internal and external service providers and distribute it to FSM educational institutions.

Responsible implementers: Assistant Secretary, FSM-NDOE.

Time Frame: As soon as possible; continuous addition and review.

Strategy 2: Create state policies that mandate a mechanism for needs assessment, follow-up, and follow-through when using internal and external service providers.

Responsible Implementers: Assistant Secretary, FSM-NDOE; President, COM-FSM, State Directors of Education, FACSSO.

Time Frame: As soon as possible; continuous review.

Strategy 3: Create specific Requests for Proposals (RFPs) for service providers that emphasize local planning and sustaining and monitoring the implementation of services.

Responsible Implementers: Assistant Secretary, FSM-NDOE; President, COM-FSM, State Directors of Education, FACSSO.

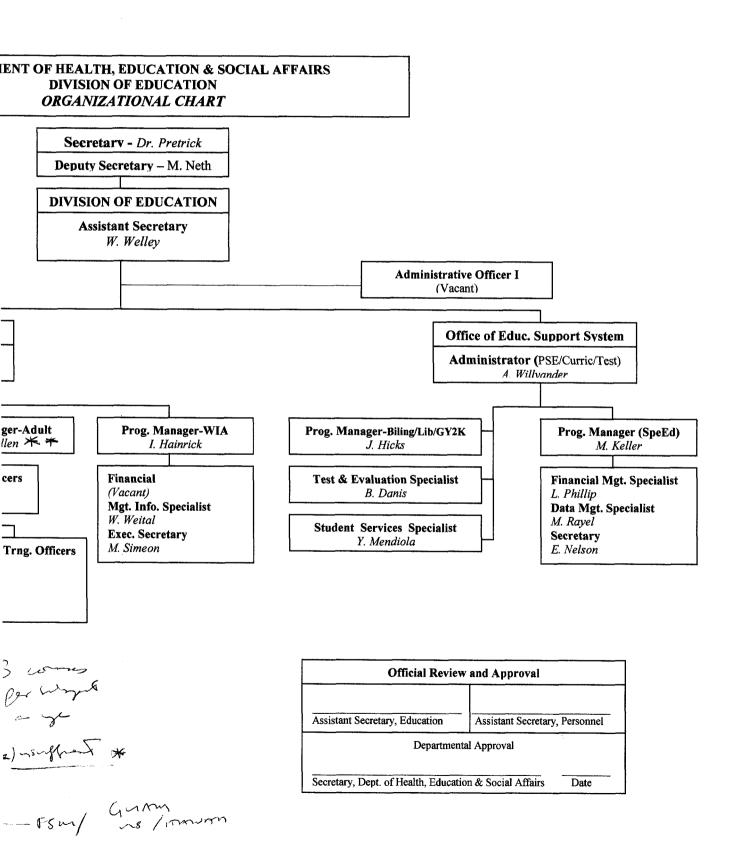
Time Frame: As soon as possible; continuous review.

Strategy 4: Create policies or RFPs that give local service providers priority when they are available and are of equal quality or capacity.

Responsible Implementers: Assistant Secretary, FSM-NDOE; President, COM-FSM, State Directors of Education, FACSSO.

Time Frame: As soon as possible; continuous review.

Strategy 5: Priorities for the use of service providers should be established which have the greatest impact on improving the education system and the people within it.



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Responsible Implementers: Assistant Secretary, FSM-NDOE; President, COM-FSM, State Directors of Education, FACSSO.

Time Frame: As soon as possible; continuous review.

Strategy 6: Scholarship programs should be established at the Masters and Doctorate levels to help meet future technical assistance needs. Emphasis needs to be given to the productive sector needs, language, assessment, mathematics, and science.

Responsible Implementers: Assistant Secretary, FSM-NDOE; President, COM-FSM, State Directors of Education, FACSSO.

Time Frame: As soon as possible; continuous review.

Strategy 7. Develop COM-FSM as a regional center for technical assistance.

Responsible Implementers: Assistant Secretary, FSM-NDOE; President, COM-FSM, State Directors of Education, FACSSO.

Time Frame: Within three months or at next meeting; continuous review.

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 that emphasizes learning and sets conditions that support and encourage education improvement. Recommendations on this policy development are 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 <u>and</u> 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 that 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 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.

A discussion was developed in a number of the breakout sessions for the 1st FSM Education Summit on the need for great quality in implementation efforts. Concern was raised in the context of the U.S. Congress General Accounting Office review of Compact funding and the Asian Development Bank review of the FSM Public Sector reform program. Both of these studies indicated that while important issues were being addressed (developing fisheries and reforming the public sector) the quality of the implementation effort prevented the full range of improvement goals to be reached. There were two major sides to the discussion, problems are mostly human and individual

or group based as opposed to the issues of improvement of systems within education and the overall government structure. One outcome is to emphasis formal systems for improving quality of management and implementation activities.

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 will 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,

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- 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 that 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.

Objective 4. Review and adopt formal systems for improving quality management at all levels of the education system.

Strategy 1. Review different quality management systems and evaluate their appropriateness and potential impact on improving education in the FSM.

Strategy 2. Provide training to all staff on quality management.

Strategy 3. Set continuous improvement goals for all aspects of the education system.

Strategy 4. Prepare and implement a public information campaign to increase the understanding of quality management Plan-Do-Check-A cycle.

Strategy 5. Conduct a systems review exercise at each level of the education system to determine strengths and weaknesses of current education systems.

Promoting bottom-up Reform

Communications and management issues hamper bottom-up reform in the FSM. 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 vary between island groups. 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 decisionmaking. 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 and/or 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. Develop systems to 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.

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 and/or 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 that 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 that are important to the private productive sectors (identified in the FSM Economic Summit as agriculture, marine, and tourism). Detailed populations 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 planning 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. Levels 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.

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 information management systems 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

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 intelligences.

Strategy 3: Teachers should attend workshops that help them develop materials and strategies to address the multiple intelligences seen in the classroom.

Strategy 4: Increase training opportunities to teachers and parents of the remote schools.

Strategy 5: In-service training is focused more on classroom-oriented methodologies.

Objective 4. Improve communication facilities, resources and information sharing to enhance teaching and learning.

Strategy 1: Using appropriate technology, establish communication systems for all schools that 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. 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 workforce education

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. The U.S. Western Association of Colleges and Universities accredits it. 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 was taking non-credit mathematics courses. Forty six percent were taking remedial MS 50. Only 1% of students 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.

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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 prepares 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. *Legislation is before the October 2000 session of Congress.*

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 that 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.

The 1st FSM Nationwide Education Summit addressed the role of COM-FSM and made the following recommendations on roles:

- Delivery quality postsecondary degree and certificate programs inline with the needs of the FSM; offer BA (UOG) in education at National Campus through partnership with UOG.
- *Articulate programs with other colleges and universities.*
- Offer tailor-made training programs in response to the workforce development needs of the community.
- Offer programs to support teacher certification.
- Offer professional development programs for teachers and other educators.
- Offer adult Education Programs and programs for life-long learning.
- Collaborate and cooperate with the NDOE and State Departments of Education.

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- Develop and assist with learning resources.
- Support language development in both English and local languages.
- Officer courses in distance education.
- Offer PELL Grant assistance to students.

The overall recommendation is that COM-FSM includes the recommendations listed in eh above chart in its strategic plan. Such plan will include a timetable for implementation, an indication of person(s) responsible by position and an estimate of resources needed.

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 is 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.

The 1st FSM Nationwide Education Summit addressed the need for revising scholarship programs to develop local capacity to provide education training and technical assistance. The Summit also called for revisions in scholarship programs to support distance learning.

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. 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.

Action Step 1: Prioritize scholarships that meet the needs of:

- Productive sectors
- Developing local capacity for training and technical assistance

Action Step 2: Recognize the importance of distance learning and develop scholarships procedures that allow local access to scholarships that use distance learning as a medium of instruction.

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 that 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 Census⁸, 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 8th 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.

The 1st FSM Nationwide Education Summit addressed the issue of linkages between education and the economy and made the following recommendations.

- 1) Direct the preparation of a survey for each state to determine the current and future employments needs of each state and the FSM and update the surveys as often as deemed necessary to maintain current mark information. The collection of relevant data is to be used as a basis for educational planning and career advice. Note: The FSM Workforce Investment Act Program is committed to the development of a labor market analysis system and will be taking the lead in this area.
- 2) Direct and support the creation of working committees for each State, made up of representatives from the various education service providers, the federal and state governments, members of the private and public sectors, and any other interested parties that do not fall within the previously mentioned categories, to be charged with the responsibility of evaluation, providing input and making recommendations concerning the issues raised relating to education and the economy. Issues to be considered by the committees should include, but are not necessarily limited to the following:
 - 1) Whether the current educational curriculum is sufficient in content and level to meet the state's and the nation's current and future employment needs as identified by the data contained in the state surveys recommended in item 1.

⁸ See National Detailed Tables No. 17 in the appendix for additional information.

- 2) The identification of the current educational system's strengths and weaknesses in preparing students to fill current and future employment demands both in the states, the FSM and overseas, and to recommend strategies for eliminating those weaknesses based on the committee's findings.
 - Evaluate the existing programs offered in the elementary, high school and colleges and recommend changes in the existing curriculum to ensure students are sufficiently skilled to move to the next level, and are equipped to take on the demands of higher education and /or entrance into the work force.
 - Evaluate all existing programs (both federal and state) which are currently offering vocational training to determine the scope and purpose of each program, identify weaknesses in the program and overlapping efforts, and based on the committee's findings make practical recommendations on how to eliminate the weaknesses identified to ensure the best use of available resources.
 - Consider the most feasible method for providing pathways for which young people who exit the educational system can effectively re-enter at a later point in their working lives.
 - Consider the most feasible method for providing pathways for adults to be retrained or to enhance skills useful in the industry in which they are employed.
 - Ensure that students of all ages are provided with practical information regarding potential employment opportunities both within and outside of the FSM.
 - Consider the implementation of licensing programs to ensure prospective employers both in the FSM and overseas that FSM licensees have satisfied key educational requirement and have established levels of competency.
- 3) Identify and recommend industry incentives (e.g. favorable tax treatment) to encourage employers to bare the responsibility and cost of training and retraining employees.
- 4) Identify the most appropriate service provider, agency or industry sector to take responsibility for pursuing the committee's recommendations and the most effective and practical means for the implementation of these recommendations.
- 5) Recommend organization and first meeting of the state committees no later than summer 200 and as frequently thereafter as deemed necessary.

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.

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 that 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.

Objective 3: Develop a comprehensive survey of facilities and costing of needed repairs and improvements

Strategy 1: Provide comprehensive plan to JCN for use in Compact Negotiations

Strategy 2: Use as a means of seeking additional funds for facilities improvement from foreign donor nations

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. Provide periodic updates on technology to teachers.

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

Strategy 1: Develop standards, curriculum, and 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 that 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.

Decision Support System and Research and Development

Introduction - The basis of a results based education system is current and accurate data on student achievement, finances, enrollment, and 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 that can be the basis of educational decision-making.

The 1st FSM Nationwide Education Summit addressed Data Systems and Decision-Making in some depth and the following revision of objective 1 representative the agreements from the Summit. A number of barriers and challenges to a quality data management and improved decision making were also idenfied.

Barriers/Challenges

- 1. Lack of agreement between FSM-NDOE and COM-FSM to collaborate and share information with FSM States
- 2. Lack of understanding of the need to have data to justify educational programs
- 3. Failure to use data to justify educational decisions
- 4. Lack of community and government leadership to request data for use in decision-making
- 5. Lack of formal systems of decision-making: little history of data
- 6. Lack of self-assessment systems
- 7. Lack of follow-up and follow-through on collection, analysis, and reporting of data
- 8. Lack of personnel (resources) to maintain database
- 9. Lack of collaborative effort between FSM-NDOE and service providers

The second component of a results based education system is an active research and development component that actively seeks out research information on the Internet and from other external sources and conducts local research to determine best practices and effective education programs and projects within the FSM. The goal of research and development is what programs, projects, materials and other factors provide the best results in improving student learning and achievement and teaching in the FSM.

A key issue is to develop a culture of data and research as the basis of discussions on education. To often our discussions on education in the FSM are subjective without firm data or research to determine the effective of different programs and practices.

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

Objective 1: Develop a computerized IMS and decision making system for the FSM.

Strategy 1: Include FSM-NDOE and COM-FSM with the FSM State Departments of Education in the use of the Pacific Education Data Management System.

Responsible Implementers: Assistant Secretary, FSM-NDOE; President, COM-FSM; State Directors of Education, FACSSO.

Time Frame: Within three months (or at next meeting).

Strategy 2: Create a policy to share data from the Pacific Education Data Management System between FSM State Departments of Education, FSM-NDOE, and COM-FSM.

Responsible Implementers: Assistant Secretary, FSM-NDOE; President, COM-FSM, State Directors of Education, FACSSO.

Time Frame: Within three months (or at next meeting).

Strategy 3: Create a policy at state and national levels that all FSM educational programs should make relevant decisions—including needs assessment—utilizing data from those who directly participate or are affected by those programs.

Responsible Implementers: Assistant Secretary, FSM-NDOE; President, COM-FSM, State Directors of Education, FACSSO.

Time frame: Within three months (or at next meeting).

Strategy 4: Create a national policy that all student achievement scores (reported in a collective form) from all FSM educational institutions should be made available to all those affected by educational programs (parents, educators, government, community leaders).

Responsible Implementers: Assistant Secretary, FSM-NDOE; President, COM-FSM, State Directors of Education, FACSSO.

Time Frame: Within three months (or at next meeting).

Strategy 5: FSM National Government MUST assist FSM State educational institutions to provide more resources to effectively train principals, teachers, parents, support staff, and community members in effective collection and use of educational data.

Responsible Implementers: Assistant Secretary, FSM-NDOE; service providers.

Time Frame: As soon as possible.

Strategy 6: FACSSO MUST regularly meet in each FSM State, interact with community members, and observe school programs and activities in all FSM States and share information about those programs to make well-informed decisions on a collaborative basis.

Responsible Implementers: Assistant Secretary, FSM-NDOE; President, COM-FSM, State Directors of Education, FACSSO.

Time Frame: Within three months (or at next meeting); continuous at meetings.

Goal 2. Develop an active research and development program within the FSM.

Objective 1: Establish a national center for coordination of education research and development at the NDOE prior to the end of calendar year 2000. It is recommended that this education center eventually become a part of a larger research and development group for the nation. Additionally, establish state research and development centers in the same time period.

Strategy 1: Identify a research and development cadre in the FSM and tap external sources (initial discussions have been held with the University of Guam College of Education on assisting in research on education in the FSM) for additional research.

Strategy 2: Determine internal and external support for training of staff in research and development.

Objective 2: Develop a cultural that promotes the use of data and research in decision-making and resource allocation.

Strategy 1: Develop training modules on the use of data and research findings in decision-making and implement a training program for educators, parents and the community.

Strategy 2: Develop strategies to deal with cultural issues related to data collection.

Strategy 3: Develop continuous monitoring and assessment programs to allow determination of effective teaching and instructional practices and form the basis for effective research and development on education practices in the FSM.

Objective 3: Actively dissemination FSM education data and analysis and research information to all education stakeholders.

Strategy 1: Establish criteria for dissemination of data and analysis research information to all partners in improving education.

Strategy 2: Develop formal systems for dissemination of education data and analysis and research information to all education stakeholders.

Monitoring the Plan

During the 1st FSM Education Summit there was concern expressed over the lack of implementation of plans. There has been a great deal of planning, but little implementation. This was attributed to a number of factors:

- Disagreement over roles and responsibilities between state and national levels of government,
- A concern over quality of implementation efforts,
- Discussion over problems are the major problems with individuals or with systems,
- Financial resource allocation is often not affected by plans or policies,
- Human resources are not being used effectively (example, time management practices are not affected by new policies), and
- Lack of a management infrastructure to address changes in systems and reallocation of human and financial resources.

The U.S. Congress General Accounting Office review of Compact funding and the Asian Development Bank review of the FSM Public Sector reform program set the discussion

over plan implementation in the context of recent studies. Both studies found a lack of management ability to fully implement programs and projects in a quality matter.

A major recommendation of the 1St Education Summit is to establish a working group at each State composed of State representatives, representative(s) from COM-FSM local campus and FSM National Division of Education representative(s) to address plan coordination and implementation issues. The working groups are to meet regularly and set us timeless for major goals and objectives. Details of the working groups will be developed by FACSSO during it October 2000 meeting.

Currently, they're 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,
- 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.

Area	Timeline and Description
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Legislation	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 & Cultural Institute at the Main Campus of
	the College of Micronesia - FSM.
Information Management	Initial training and distribution of computers to States
System	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.
Standards	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.
Teacher Certification	Active research begin in August 1997 with a FSM
	wide meeting set to review/revise existing
	requirements by December 1997.
School-to-Work	Training for STWO programs began in December
Implementation Planning	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	Research is ongoing at the State level for
Program	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 that 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.