

**Federated States of Micronesia  
Education Sector**

**FSM NATIONAL JEMCO  
20 EDUCATION INDICATORS  
REPORT  
July 2010**



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# FSM JEMCO Education Indicators

Indicators of Educational Progress (as revised in February, 2007)

1. Number of schools by grade level (i.e., elementary and secondary schools)
2. Number of schools by size (i.e., enrollment under 50, 51-100, 101-200, 201-300, 301-500, 501-1000, and over 1000)
3. Number of schools operating half-day sessions
4. Average teacher attendance rate by grade level (elementary and secondary)
5. Number & percent of staff by education level (i.e., high school diploma, AA/AS, BA/BS, etc.)
6. Number of teachers/staff by grade level
7. Student-to-teacher ratio (private and public)
8. Base populations by school age groups (i.e., total no. of 4-5 yr. olds, 6-13 yr. olds, 14-18, 19-22 yr olds)
9. Percent of base school-age population in school by age groups (% of 4-5 yr. olds, 6-13 yr. olds, 14-18 yr. olds actually enrolled)
10. Student enrollment by grade level and gender
11. Average daily student attendance rate by grade level and gender
12. Drop-out rate by grade level and gender (use beginning and ending enrollment)
13. Number and percent of students achieving "Proficiency" level & above, at selected grade levels for standardized tests (e.g., SAT ) or criterion-referenced tests (e.g., locally developed tests)
14. Completion/graduation rate for 8<sup>th</sup> and 12<sup>th</sup> grades (private and public)
15. Number and percent of grade completers going to high school and high school graduates going to higher education
16. Number of student textbooks by subject areas and grade level
17. Per pupil expenditure (annual or entire budget operating k-12 budget divided by enrolled student count)
18. Number of parent involvement activities per year by school and average number of parents participating
19. Student enrollment in local institutions of higher education (IHE)
20. Number of IHE graduates by each diploma/degree level

•Must be reported by July 31 each year

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## **A. Introduction**

This year's submission of the JEMCO 20 Education Indicators Report for 2010 as required under the Compact of Free Association, as amended (PL 108-188), is still hampered by several key factors that affected our abilities to meet our deadline on this fifth annual report. This report covers issues on enrollment, attendance, test assessment and simple trends in these areas. Clearly, this fifth submission indicates areas still needing improvements and modification with our data collection efforts at all levels and improvements needed within our school activities to improve students' and teachers' performance.

The collected data thus far shows insignificant changes in performance skill levels in the content areas with still high level of non-proficient group, persistent poor level of teacher attendance coupled with teachers without teaching credentials and a disturbing 22% decline in enrollments between 2008 and 2010. There is however a slight increase of teachers earning AA/AS degree compares with last year report, but a slight decrease of number of teachers by 7% compares with last year.

Unfortunately, the NDOE does not have the ready explanation as to all of the statuses under the required Indicators, although some of the indicators were revised presumably to modify and simplify how they are reported from the local delivery agencies. The following part reflects the NDOE's general assessment of each condition based on submitted reports and few site visits and meetings conducted during the fiscal period at the states' and national levels.

### ***Reporting Issues***

We still experienced this year problems with data accuracy, consistency, credibility and submission. Compared with last year's submission, this year's efforts seemed to have dropped slightly with issues or factors, most of which are attributed to largely by human factors, compounded by the serious lack of effective communication means and transportation in the nation.

#### **1. Different Data Management Application**

The four (4) states' Departments of Education still showing difficulties in using the PEDMS and FSMEIMS data collection and conversion methods concurrently, despite some efforts and TA provided to their data specialists. Accordingly, the technological aspect in the data collection, requiring computer technology and application still pose as problematic area in the reporting systems. NDOE has sent its ICT technician on 12 month training at PREL to acquire the skill and shares it with the other data specialists.

#### **2. Consistency and timely submission of data**

These recommendations were made in last year's report as possible remedies to our setbacks in the reporting of the JEMCO 20 Indicators:

- Incorporate grant conditions into the states' Education Sector grant which may lead to the withholding of state's sector grant allotment should the practices of late submission continues;
- Replacement of data specialists at the states;
- Take the issue up to the states higher up leadership; and,
- Recommend to the Congress to mandate stricter sanctions for defiant state.
- Other measures may be considered on a case to case basis.

The only recommendation incorporated as grant condition is the teacher certificates that required all teachers getting paid by Compact funds to be certified. The rest of these recommendations still yet to be implemented or revisited to determine their effectiveness in impacting and changing our data collection system as a major

component in our education system. The NDOE needs to assess the impacts of these conditions to corroborate how best to understand the declines in our school enrollment and resolve or remove the impediments within our data reporting system:

- Dropout rates
- Retention/Transfer
- Migration (domestic/overseas)
- Mortality rate (6-18 yrs)
- Communication/Transportation
- Costs of fuel
- Others

The issue on a single uniform data collection system still persists and therefore the NDOE, FACSSO and School Boards should seriously address it immediately.

### **3. Accuracy and cleanliness of data**

This year report is based on 2010 Population Projection as provided by the Office of SBOC which thus compromised further the accuracies of our submission. A 2010 census is underway nationwide, as reported last year, and therefore it is anticipated that next year report will slightly be improved.

### **4. Training for Data Managers**

There was an earlier plan to expand on this 20 Indicator report, as suggested by former Office of Compact Management (OCM), using performance measures identified during a contract with the USDA experts three years ago, however this plan was consequently put on hold. It is the expressed opinion of the NDOE to first master the current Education 20 Indicators Report requirements and activities before any expansion would be considered. Training is however still needed to align the collection system and develop a uniform system that even the remotest schools in the nation could use the manual version and regularly report the results to the states' Departments of Education.

## **B. Executive Summary**

The overall performance and preparation on this year's Annual Education 20 Indicators Report clearly indicate a slight decline in the quality, volume and timeliness of the states' submissions toward the said report, thus hindering the nation's submission to the Office of Insular Affairs. Based on the states' report, there is a significant decline in students' enrollment at roughly 22% contributed to by factors not readily assessed and number of teachers at 7% which could be the results of retirement, mortality and migration. These are not research-base findings, but simply general observations.

There is insignificant data on testing results, however based on what has been submitted, students and teachers performance skills in the content areas have not improved. However the Micronesia Teachers Education Conferences (MTEC) in 2009 and 2010 have addressed the critical areas in teachers' language related skills, math and other teaching methodology to improve both the teachers and students skills. More works still needed under teacher certificate requirements and the student's quota on textbooks. Purchasing of textbooks still continued at the states' DOEs. The copies of the draft Job Audit findings are circulated at the NDOE and Kosrae, Pohnpei and Chuuk DOE and copies for OIA have been forwarded.

**1. Number of Schools by elementary and secondary level, including ECE/Sped centers**

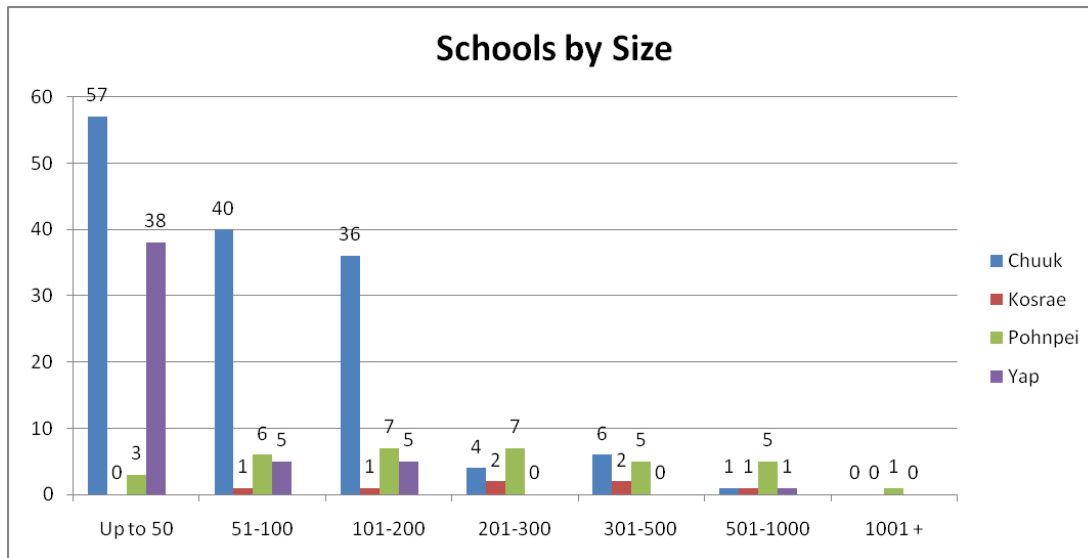
State	ECE	Elementary	Secondary	Other	No. Schools
Chuuk	45	83	21		149
Kosrae		7	1		8
Pohnpei		31	3		34
Yap	25	22	2		49
FSM	70	143	27		240
Percent	29%	60%	11%	0%	100%

As of school year 2009-2010, Chuuk and Yap still have not integrated their ECE with the Elementary schools. Decline in the number of schools for both Chuuk and Yap likely from inaccurate figures reported to the National Education.

**2. Number of schools by size**

State	Up to 50	51-100	101-200	201-300	301-500	501-1000	1001 +	Total
Chuuk	57	40	36	4	6	1	0	144
Kosrae	0	1	1	2	2	1	0	7
Pohnpei	3	6	7	7	5	5	1	34
Yap	38	5	5	0	0	1	0	49
FSM	98	52	49	13	13	8	1	234

Chuuk shows a higher school count in the size of 200 and under.



**3. Number of schools operating half-day/double session by elementary and secondary level**

Not Applicable

**4. Average teacher attendance rate by gender and elementary and secondary level**

State	Elementary			Secondary		
	Male	Female	Rate	Male	Female	Rate
Chuuk						
Kosrae						
Pohnpei						
Yap						
FSM						

Data submitted from all 4 states are not sufficient to calculate for this table.

### 5. Number and percent of Teachers by education level

State	No degree		AA/AS		BA/BS		MA/MS		PhD		Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Chuuk	162	185	188	247	41	51	5	1	0	0	880
Kosrae	4	0	87	82	14	9	0	0	0	0	196
Pohnpei	4	19	201	183	60	48	0	1	0	0	516
Yap	94	87	92	44	11	11	1	0	0	0	340
Total	264	291	568	556	126	119	6	2	0	0	1932
% Total	13.66%	15.06%	29.40%	28.78%	6.52%	6.16%	0.31%	0.10%	0.00%	0.00%	100%

Kosrae reported a total of 200 teachers. 4 teachers was not included in the above chart due to missing data on teacher degree.

There is a decline in the percentage of teachers without degree from 34.6% in 2009 to 28.7% in 2010. The percentage of teaching staff with an AA/AS increase from 54.3% in 2009 to 58.2% in 2010

### 6. Number of teachers and staff by elementary and secondary level

State	Elementary		Secondary		Total
	Teachers	Staff	Teachers	Staff	
Chuuk	314	72	556	148	1090
Kosrae	161	20	39	6	226
Pohnpei	404	49	112	26	591
Yap	274	7	66	9	356
FSM	1153	148	773	189	2263

This tables shows the breakdown of teaching staff to none teaching staff by state and school level. Secondary has the higher percentage of none teaching staff with 24.45% compared to 12.84% in Elementary.

10 from Chuuk is unaccounted for due to lack of data on data element (Elementary or Secondary).

### 7. Student-to-teacher ratio by elementary and secondary level

State	Elementary Students		Elementary Teachers		Elementary Ratio		Secondary Students		Secondary Teachers		Secondary Ratio	
	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public
Chuuk	478	10183	51	607	9	17	536	2311	58	154	9	15
Kosrae		1636		161		10		571		39		15
Pohnpei		7837		404		19		2463		112		22
Yap		1741		274		6		716		66		11
FSM	478	21397	51	1446	9	15	536	6061	58	371	9	16

Student teacher ration dropped to 9:1 compared 14:1 in 2009 in Elementary. Secondary ration also dropped from 12:1 to 9:1 in 2010. This figure reflects the decline in student enrollment and also under reporting.

### 8. Base populations by school age group (Census Projection Data 2010)

State	4-5 yr	6-13 yr	14-18 yr	Total
Chuuk	2533	9967	5061	17562
Kosrae	429	1468	722	2619
Pohnpei	1817	6871	3024	11712
Yap	603	2178	878	3660
FSM	5383	20484	9685	35553

This projection was updated by the statistics office and is based on 2010 projection

### 9. Percent of base school-age population enrolled in school

State	4-5 yr	6-13 yr	14-18 yr	Total
Chuuk	26.84%	85.37%	78.06%	74.82%
Kosrae	5.13%	82.16%	123.51%	80.94%
Pohnpei	33.01%	105.33%	81.46%	87.95%
Yap	41.29%	54.63%	92.46%	61.51%
FSM	28.81%	88.56%	83.82%	78.22%

Based on the 2010 projections, FSM wide is serving 78.22% of actual projected population in the above age range. In the age range of 4-5, Kosrae data shows a 5.13% or 22 of the projection being enrolled in school.

### 10. Student enrollment by elementary and secondary level and gender

State	Elementary		Secondary		Total
	Male	Female	Male	Female	
Chuuk	5435	5226	1354	1493	13508
Kosrae	829	807	297	274	2207
Pohnpei	4011	3826	1174	1289	10300
Yap	922	819	395	321	2457
FSM	11197	10678	3220	3377	28472

Based on the data shown in the above table, there is no gender disparity. Of the total enrollment of 28472, 50.6% are male and 49.4% are female with a difference of 1.2%.

### 11. Average daily student attendance rate by elementary and secondary level and gender

State	Elementary			Secondary		
	Male	Female	ERate	Male	Female	SRate
Chuuk						
Kosare						
Pohnpei						
Yap						
FSM						

Data submitted from all 4 states are not sufficient to calculate for this table.

### 12. Drop-out rate by grade level and gender

Grade Level	Drop Out		Enrollment		Rate		Overall Rate
	Male	Female	Male	Female	Male	Female	
ECE	1	1	1129	1107	0%	0%	0%
1	0	1	1297	1232	0%	0%	0%
2	0	1	1215	1127	0%	0%	0%
3	2	0	1280	1217	0%	0%	0%
4	2	1	1417	1258	0%	0%	0%
5	3	3	1235	1188	0%	0%	0%
6	3	1	1242	1237	0%	0%	0%
7	8	4	1142	1161	1%	0%	1%
8	12	4	1134	1078	1%	0%	1%
9	77	56	989	937	8%	6%	7%
10	48	53	953	1005	5%	5%	5%
11	55	33	745	776	7%	4%	6%
12	17	20	639	732	3%	3%	3%
<b>Total</b>	<b>228</b>	<b>178</b>	<b>14417</b>	<b>14055</b>	<b>2%</b>	<b>1%</b>	<b>1%</b>

There is a slight decline in the overall rate from 1.5% in 2009 to 1.4% in 2010.

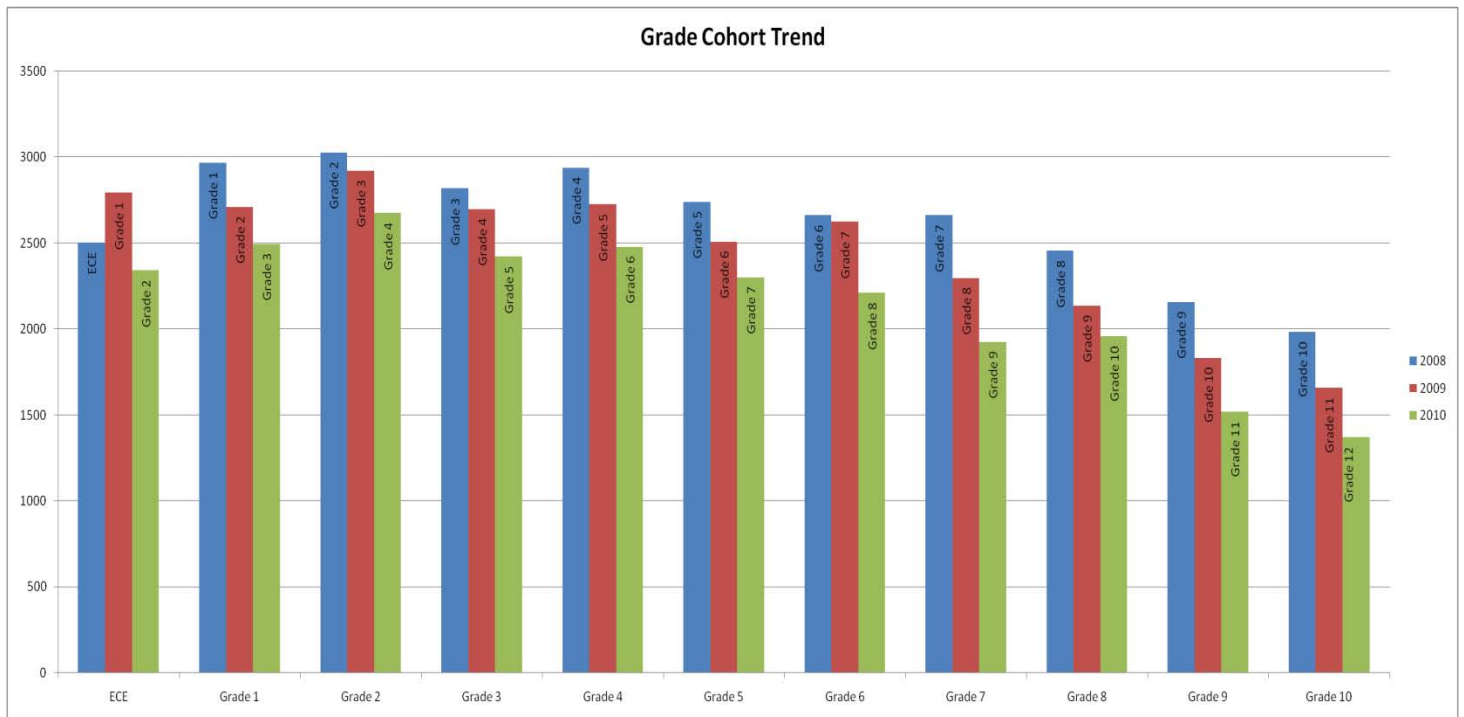
Grade	2008 Enrollment	Grade	2009 Enrollment	Percent of 2008	Grade	2010 Enrollment	Percent of 2008	Percent of 2009
ECE	2502	Grade 1	2794	12%	Grade 2	2342	-6%	-16%
Grade 1	2969	Grade 2	2711	-9%	Grade 3	2497	-16%	-8%
Grade 2	3029	Grade 3	2922	-4%	Grade 4	2675	-12%	-8%
Grade 3	2819	Grade 4	2698	-4%	Grade 5	2423	-14%	-10%
Grade 4	2940	Grade 5	2726	-7%	Grade 6	2479	-16%	-9%
Grade 5	2741	Grade 6	2508	-9%	Grade 7	2303	-16%	-8%
Grade 6	2663	Grade 7	2626	-1%	Grade 8	2212	-17%	-16%
Grade 7	2662	Grade 8	2298	-14%	Grade 9	1926	-28%	-16%
Grade 8	2456	Grade 9	2138	-13%	Grade 10	1958	-20%	-8%
Grade 9	2158	Grade 10	1834	-15%	Grade 11	1521	-30%	-17%
Grade 10	1983	Grade 11	1658	-16%	Grade 12	1371	-31%	-17%

The table above tracks cohort of students from 2008 to 2010. ECE students enrolled in 2008 are shown as grade 1 in 2009 and grade 2 in 2010.

The highest decline in the cohort are those grade 10 in 2008 which shows a 31% decline in their enrollment to grade 12 in 2010. From 2008 to 2010, to smallest decline is ECE cohort in 2008 who would have been in grade 2 in 2010 by 6%.

Based on the data above, overall there is a 18% drop in the three year period.

With only Chuuk state reporting private school data, transfer could be one of the factors in the decline. Other factors may include out migration, drop outs, mortality and repeaters.



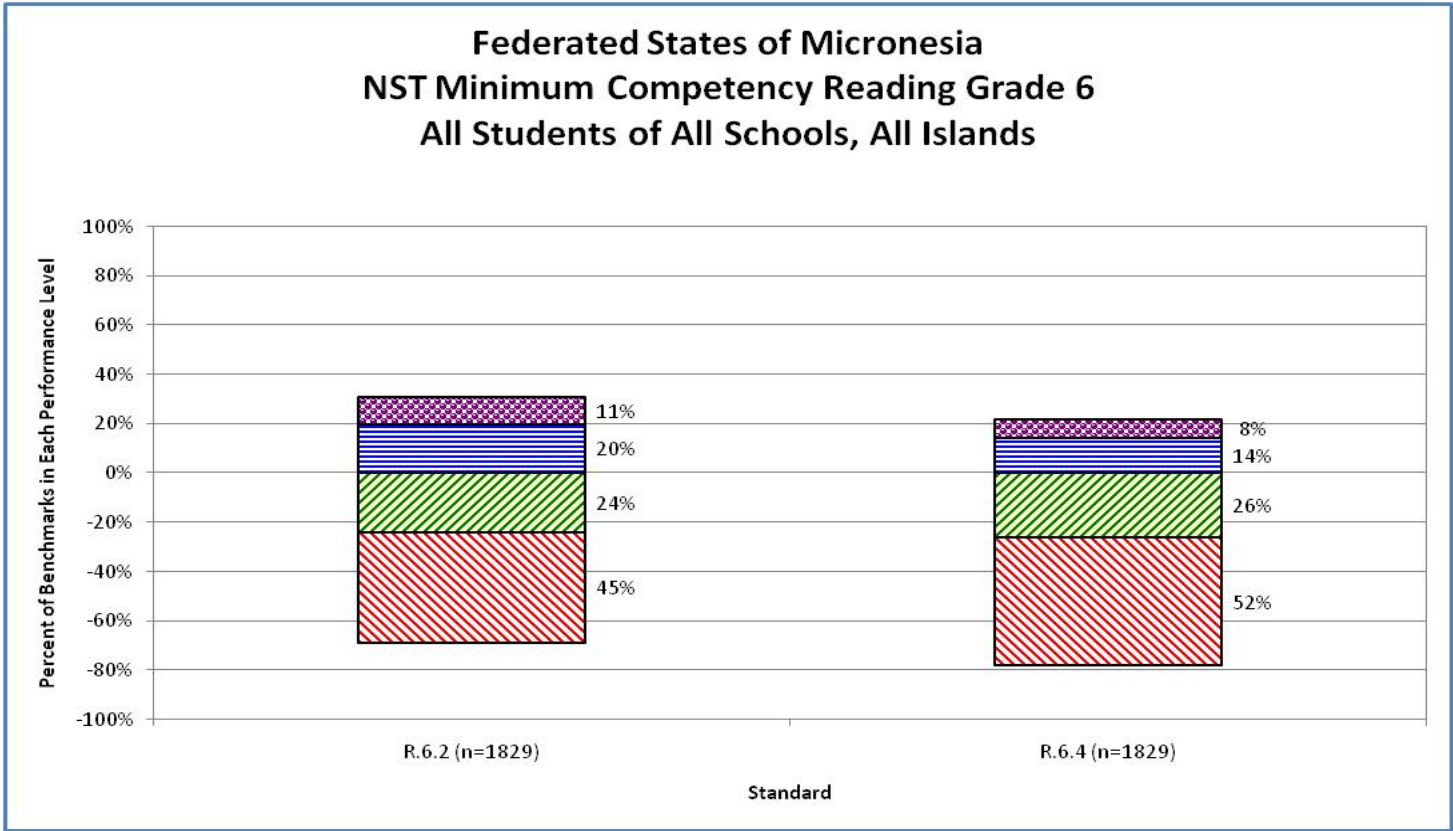
This chart shows another view of the progress of each cohort over the three year period.



**13. Number and percent of students achieving "Proficiency" level & above, at selected grade levels for standardized tests**

**Standard 2: Reading 6.2** - Students will demonstrate competence in reading skills and strategies to comprehend variety of texts/media for social, academic, and career-related purposes.

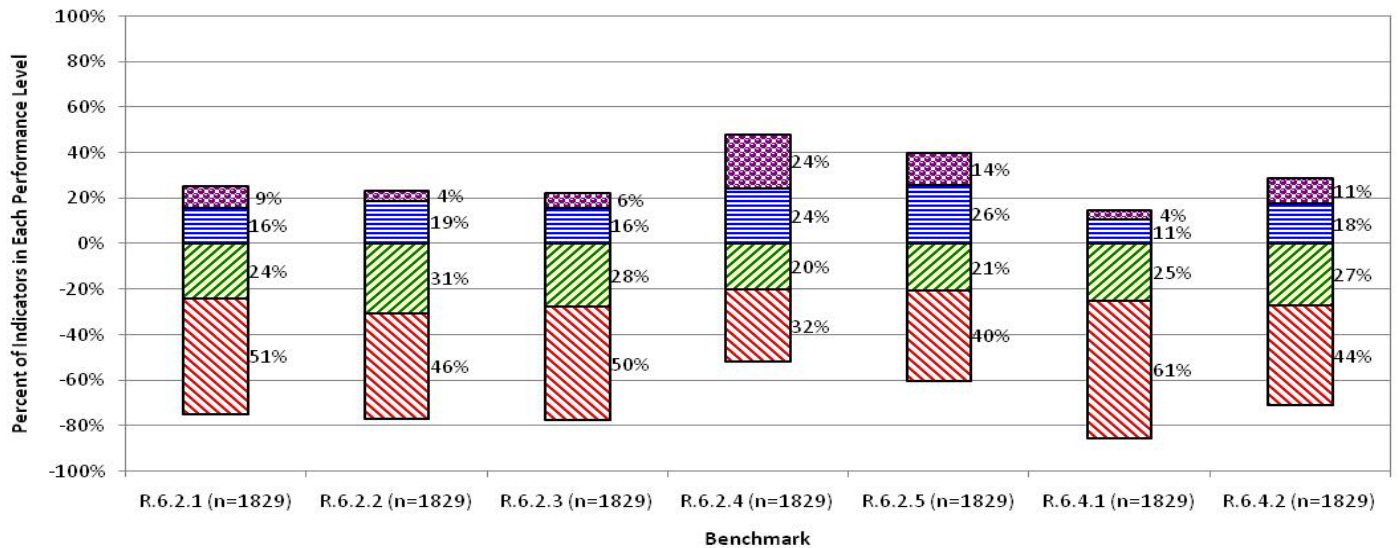
**Standard 4. Literature 6.4** - Students will study literature (oral, written) in their own culture as well as selected literary works from other cultures. They will develop the ability to understand other cultures and gain insights into their own, relate to others, and recognize universal and unique qualities in others.



Students understand Standard 6.2 better than 6.4. 31% of the R.6.2 benchmarks meet or exceed the minimum competency expectation compared with 22% of the R.6.4 benchmarks

In 2009, standard 2 (Reading) shows a 12% for students who are at competent level and standard 4 (Literature) also shows a 9% for students who are at competent level. Each standard decline by 1% this year.

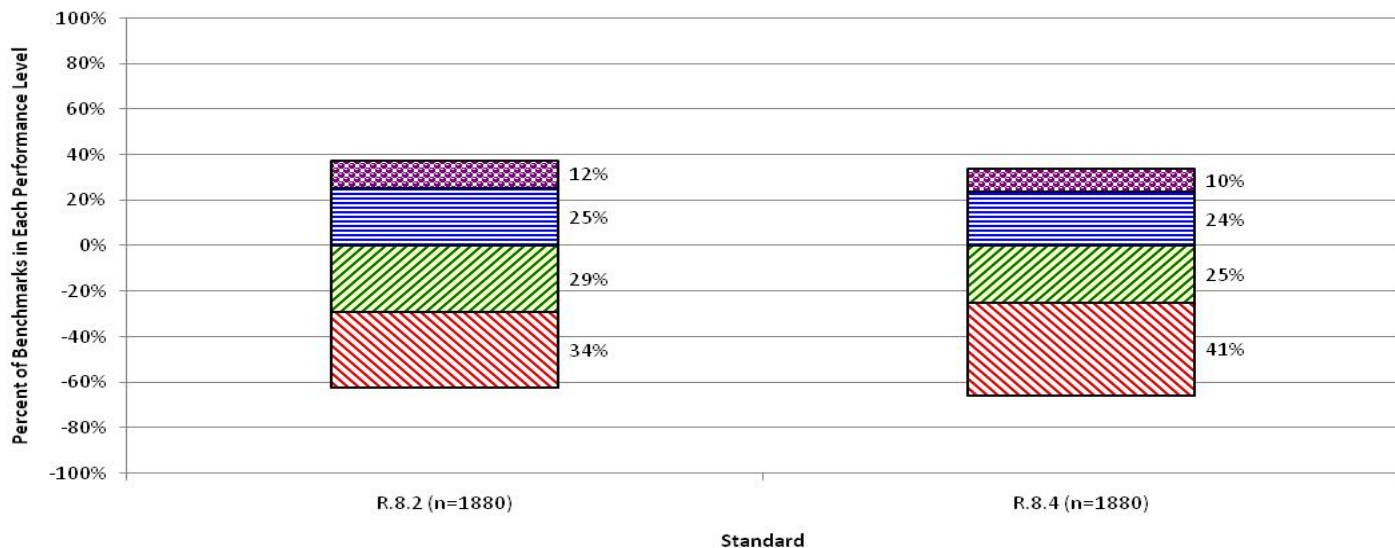
## Federated States of Micronesia NST Minimum Competency Reading Grade 6 All Students of All Schools, All Islands



There are 7 Benchmarks on the NST Reading Grade 6 Test. Students understand benchmark 6.2.4 the best where 48% (24% + 24%) of the indicators meet or exceed minimum competency. Students struggle with benchmark 6.4.1 the most. Only 15% of the indicators meet minimum competency expectations

- 6.2.4: Locate and use features of textbooks such as chapter titles, sub-headings, chapter summaries, to summarize, compare/contrast, and draw conclusions.
- 6.4.1: Demonstrate understanding of character's behaviors and attitudes (e.g., actions, motives, and traits of different characters; interactions among main and minor characters, the importance between the characters to plot or theme.

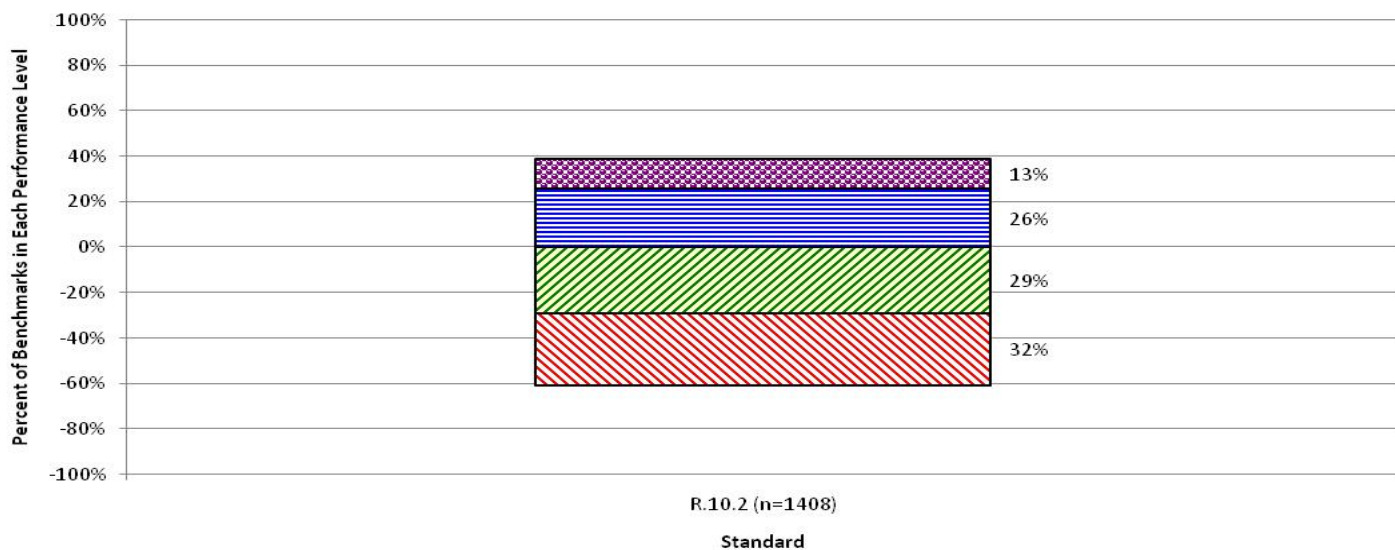
**Federated States of Micronesia  
NST Minimum Competency Reading Grade 8  
All Students of All Schools, All Islands**



Students understand Standard 6.2 better than 6.4. 37% of the R.6.2 benchmarks meet or exceed the minimum competency expectation compared with 34% of the R.6.4 benchmarks

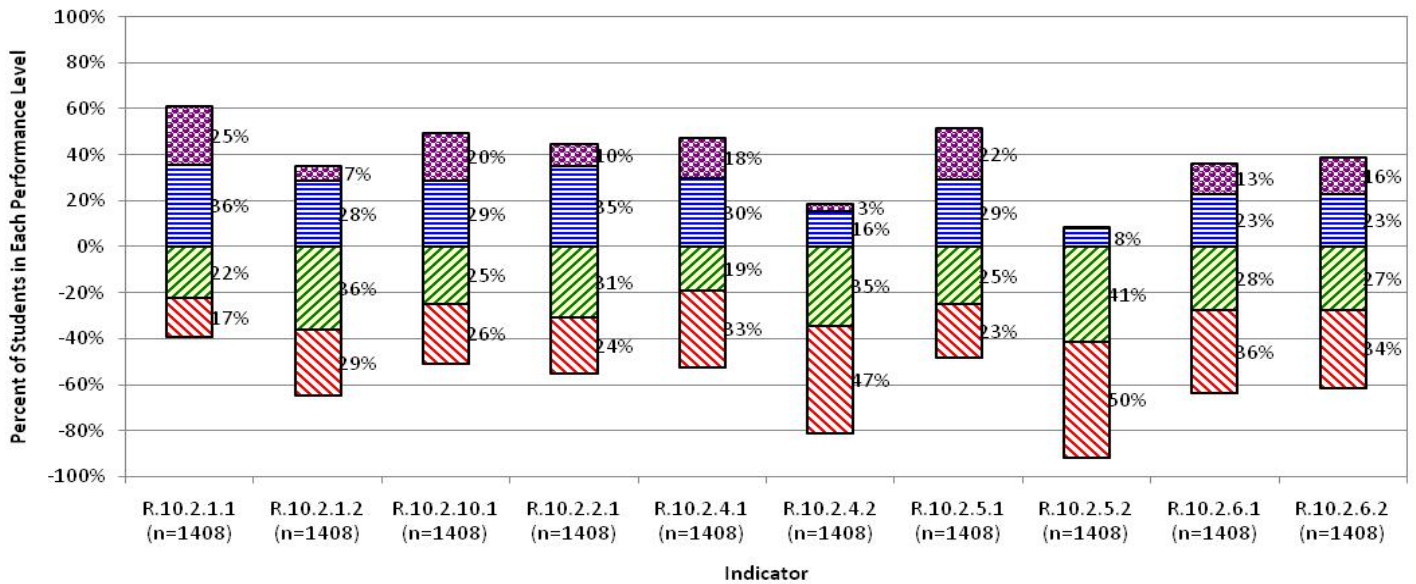
There is only one standard in grade 10

**Federated States of Micronesia  
NST Minimum Competency Reading Grade 10  
All Students of All Schools, All Islands**



On Standard R.10.1, 39% of the benchmarks meet or exceed minimum competency.

**Federated States of Micronesia**  
**NST Minimum Competency Reading Grade 10**  
**All Students of All Schools, All Islands**



The best performance by students is in indicator 10.2.1.1 with 25% competent. Use new grade-appropriate vocabulary, including content area vocabulary, learned through reading and word study.

Students performed the least in R10.2.5.2 with only 8% meet expectation. Demonstrate understanding those factors that commonly affect the use of language (gender, social class, family relationship, ethnic groups).

**14. Completion/graduation rate for 8th and 12<sup>th</sup> grades (Private/Public)**

State	Type	8th Enrolled	8th Grad	Rate	12th Enrolled	12th Grad	Rate
Chuuk	Public	980	832	84.90%	433	360	83.14%
	Private	72	61	84.72%	143	126	88.11%
Kosrae	Public	156	153	98.08%			#DIV/0!
	Private	7	7	100.00%			
Pohnpei	Public	908	850	93.61%	526	502	95.44%
	Private			#DIV/0!			#DIV/0!
Yap	Public			#DIV/0!			#DIV/0!
	Private			#DIV/0!			#DIV/0!
<b>Total</b>		2123	1903	90%	1102	988	90%

Yap did not submit any data for the above indicator.

**15. Number and percent of grade 8 completers going to high school and high school graduates going to higher education**

State	Completed 8	Going to HS	Percent	Completed 12	Going to HEd	Percent
Chuuk	893			486	486	100.00%
Kosrae	153	153		128	128	100.00%
Pohnpei	850	733		502	403	80.28%
Yap						#DIV/0!
<b>FSM</b>	1896	886	46.73%	1116	1017	91.13%

Yap failed to submit data for this indicator and Pohnpei show a slight decline in the going to HED by about 17%.

**16. Number of student textbooks by subject areas and elementary and secondary**

Textbooks	Chuuk		Kosrae		Pohnpei		Yap	
	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary
Math			No textbook purchased		3898	1025	No textbook purchased	
LangArts					7454	2539		
Science					7454	2539		
Social Study					7454	2539		
<b>Total</b>	0	0	0	0	26260	8642	0	0

Only Pohnpei showed purchases on textbook. Chuuk did purchased textbooks based on their data but could not be included due to lack of clarification on figures.

**17. Per pupil expenditure (annual operating k-12 budget divided by enrolled student count)**

State	ESG	SEG	Enrollment	PPE
<b>Chuuk</b>	\$10,047,249	\$ 4,480,706.00	\$ 13,508.00	\$ 1,075.51
<b>Kosrae</b>	\$2,524,286	\$ 1,285,255.00	\$ 2,207.00	\$ 1,726.12
<b>Pohnpei</b>	\$7,599,557	\$ 2,954,336.00	\$ 10,300.00	\$ 1,024.65
<b>Yap</b>	\$4,199,923	\$ 1,769,879.00	\$ 2,457.00	\$ 2,429.71
<b>FSM</b>	\$24,371,015	\$ 10,490,176.00	\$ 28,472.00	\$ 1,224.40

All 4 states showed an increase in PPE. This is likely from the decline in the number of enrollment.

**18. Number of parent involvement activities per year by states and average number of participants**

State	Total No. of Activities	Total No. Participants	Average
<b>Chuuk</b>			#DIV/0!
<b>Kosrae</b>			#DIV/0!
<b>Pohnpei</b>	189	30198	159.78
<b>Yap</b>			
<b>FSM Total</b>	189	30198	159.78

Only Pohnpei submitted data on this indicator

**19. Student enrollment in local institutions of higher education (IHE) by gender**

State	Fall 2009		Fall 2009 Total	Spring 2010		Spring 2010 Total
	Female	Male		Female	Male	
<b>Chuuk</b>	362	222	584	332	241	573
<b>Kosrae</b>	93	140	233	102	116	218
<b>National</b>	563	448	1011	524	405	929
<b>Pohnpei</b>	334	379	713	280	314	594
<b>Yap</b>	128	101	229	120	89	209
<b>Grand Total</b>	<b>1480</b>	<b>1290</b>	<b>2770</b>	<b>1358</b>	<b>1165</b>	<b>2523</b>

Enrollment shows an increase from 2202 in 2009 to 2523 in 2010.

**20. Number of local IHE graduates by each diploma/degree level and by gender (2006-2007)**

Degree/Certificate	Fall 2009		Total	Spring 2010		Total	Grand Total
	Female	Male		Female	Male		
Accounting				4		4	4
Agriculture and Food Technology		3	3		2	2	5
Bookkeeping		1	1				1
Building Technology	1	3	4		1	1	5
Business Administration	11	7	18	3	3	6	24
Carpentry					1	1	1
Computer Information Systems	7	5	12	11	5	16	28
Construction Electricity		2	2				2
Early Childhood Education				1	1	2	2
Electronics Technology	1	3	4		1	1	5
General Business				1	1	2	2
General Studies	7	5	12	7	3	10	22
Health Career Opportunities Program	6	1	7	4		4	11
Hospitality Management	2	3	5	1	4	5	10
Liberal Arts	12	12	24	11	8	19	43
Liberal Arts / Media Studies	1		1		1	1	2
Marine Science		3	3	2	3	5	8
Micronesian Studies	6	9	15	5	2	7	22
Refrigerator and Air Conditioning		2	2				2
Teacher Education - Elementary	18	15	33	10	5	15	48
Teacher Preparation	2	1	3	1	3	4	7
Teacher Preparation - Elementary	2	6	8	2	2	4	12
Telecommunication Technology				1	1	2	2
<b>Grand Total</b>	<b>76</b>	<b>81</b>	<b>157</b>	<b>64</b>	<b>47</b>	<b>111</b>	<b>268</b>

Graduation in 2010 shows an increase from 2009 by 16% or 43. Compared to 2009, this year shows a fewer courses than 2009 but higher graduated from the courses listed above.