NATIONAL DEPARTMENT OF EDUCATION
Government of the
Federated States of Micronesia

FedEMIS

NDOE report

FSM EDUCATION

SEPTEMBER 2022, version 1

Federated States of Micronesia (FSM)
National Department of Education (NDOE)
NDOE Education Indicator Report 2022

A publication of the NDOE Data Unit

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ABBREVIATIONS

ADB	Asia Development Bank
AR	Access Rate
ASER	Age-specific Enrollment Rate
CHK	Chuuk
COMET	College of Micronesia Entrance Test
DOE	Department of Education
DOI	Department of Interior
DR	Dropout Rate
ECE	Early Childhood Education
FedEMIS	FSM Education Management Information System
FedSIS	FSM Student Information System
FSM	Federated States of Micronesia
GER	Gross Enrollment Rate
GIR	Gross Intake Rate
KSA	Kosrae
NDOE	National Department of Education
NER	Net Enrollment Rate
NIR	Net Intake Rate
NMCT	National Minimum Competency Test
NSO	National Statistics Office
OIA	Office of Insular Affair
OOS	Out-of-School
PDF	Portable Document Format
PNI	Pohnpei
PR	Promotion Rate
PTR	Pupil-Teacher Ratio
RR	Repetition Rate
SDOE	State Department of Education
SR	Survival Rate
TR	Transition Rate
UIS	UNESCO Institute for Statistics
UN	United Nations
US	United States
WASH	Water Sanitation and Health

FOREWORD BY THE DEPARTMENT OF EDUCATION

On behalf of the FSM Department of Education, I am proud and privileged to present this year's FSM Education Indicators Report 2022. We continue to expand, further improve our data and implement new monitoring and reporting tools to support our operations. Unfortunately, the pandemic continues to affect our operations, in particular reaching out to states and their schools for further "on-the-ground" training, but we remain hopeful this will improve in the years to come.

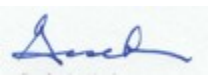
This year we bring a major addition to this primary publication: a chapter on benchmark targets. This new chapter aims at providing an at a glance summary of our progress towards our goals. I believe it will provide a better understanding of how and where efforts and resources were spent and where we need to put more focus in order to reach those goals based on best available evidence.

In all of these endeavors, we continue to receive tremendous support and collaboration from my fellow colleagues, both at the State and National Departments of Education. All the technical assistance and continuous financial support provided by development partners, especially from the Office of Insular Affairs of the US Government, the Asian Development Bank, the Government of Australia, and the Secretariat of the Pacific Community, is highly commendable and much appreciated.

We continue to publish two major data publications: FSM Education Indicators Report and FSM Education Statistics Digest. These publications of increasing quality are highlighting our commitment to improve education in the FSM. With the help of quality data, we will be able to make better rational distribution of our limited resources including our enhanced ability to make informed decisions.

Finally, I would like to extend my sincere thanks to all those individuals, especially the FedEMIS team, the SDOE and NDOE staff, and the organizations and development agencies who have provided their contributions to this initiative.

Best wishes,



Gardenia Aisek

Secretary of Education

FSM Department of Education

EXECUTIVE SUMMARY

This is the FSM Indicators Report for the school year 2021-22, which first started in the FSM known as the JEMCO Indicators Report. The data is almost entirely from a single integrated source: The Federated States of Micronesia Education Management Information System (FedEMIS), a byproduct of the recent data improvement initiative.

In this publication, we include an agreed upon selection of 25 indicators. In general, it includes only the data and analysis. Those interested in details about where our data comes from, how it is cleaned up and validated, and how the figures we publish are computed (methodology) are referred to the larger Education Statistics Digest. The publication is organized into the usual six simple themes each presenting indicators shown for the nation and by state.

While various indicators have improved, the FSM continues its slight decline in enrollments. Access to primary education is generally better than both ECE and secondary. The situation in all four states is similar for most indicators and most noticeable differences are discussed throughout the themes.

Two schools in Chuuk have closed and merged with other schools. We boast a very good pupil-teacher ratio and most of our teachers are considered qualified based on our current minimum requirements. Our teacher attrition (teacher turnover/retention) is now produced with higher accuracy than before due to new tools we have deployed. While our teacher attrition needs to be improved, qualified teachers have a higher tendency to remain in the education system.

DOCUMENT CONTROL

RELEASES

The release history of this document is in Table 1: Release Log. Additional work such as edits based on feedback from stakeholders, data quality fixes and new features will be logged here.

Table 1: Release Log

Version	*Date Released*	*Pages Affected*	*Remarks*
1	October 27, 2022	ALL	First draft of this document with currently available data for SY2021-22

CHANGES FROM PREVIOUS VERSIONS

From time to time, some changes are made to either fix something that was wrong or improve something. Here is a list of such changes for this report.

Table 2: Changes from previous publications

#	*Date Changed*	*Chapters Affected*	*Description of Change*
1	September 22, 2022	THEME 2	The notation for Transition rates were GK->G1 to mean ECE to Primary transition and G8->G9 to mean Primary to Secondary transition. This was changed to ECE->Primary to mean ECE to Primary transition and Primary->Secondary to mean Primary to Secondary transition.
2	September 22, 2022	Document Control	The structure of this chapter was only holding Log History section. Now it is a document control with sub-sections including this "CHANGES FROM PREVIOUS VERSIONS" subsection.
3	September 22, 2022	THEME 2	A new trend analysis not previously included (i.e. Survival Rates for past 5 years)
4	September 22, 2022	THEME 2	A new trend analysis of the graduation rate (Graduation rates for past 4 years)

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THEME 1: HOW MANY CHILDREN ARE IN SCHOOL?

STUDENT ENROLLMENT

Student enrollment portrays an important glimpse of a country's educational status. Along with the number of students enrolled, a few other indicators such as GER and NER aim at assessing and predicting the overall situation in terms of educational status.

In 2022, the total enrollments in FSM schools was 24,015[1] (Table 1.1). Of these total enrollments, the share of boys and girls were 12,052 and 11,963, respectively. Student enrollment across the states follows the general pattern of population distribution, i.e., states with higher populations such as Chuuk and Pohnpei have higher enrollments compared to Yap and Kosrae as revealed in the enrollments by state (Figure 1.1.)

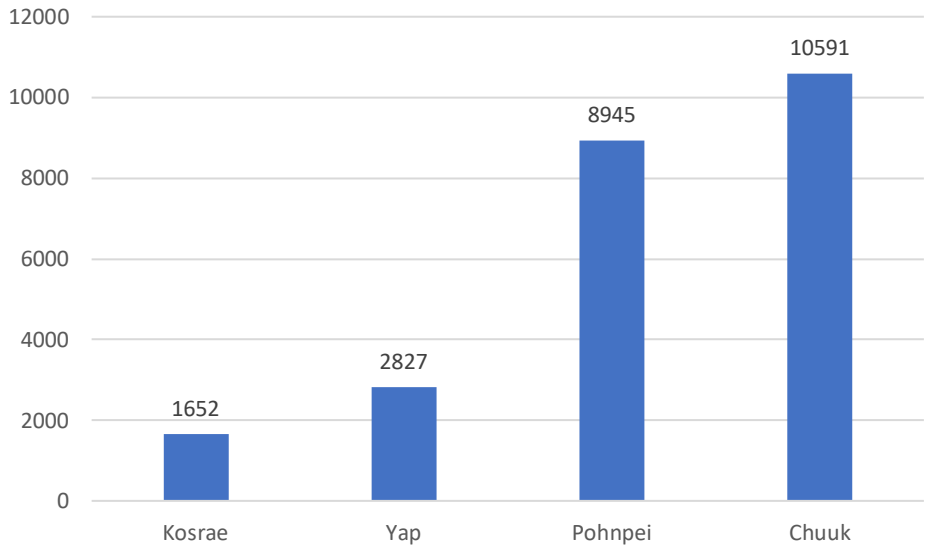


Figure 1.1: Student Enrollment by State

The states' enrollment trends over the last five years (2018-2022) indicate a pattern of gradual decline (Figure 1.2.) especially for Pohnpei and Chuuk the two largest states. Decline in student enrollment in Kosrae and Yap is lesser. While there was a larger decline in enrollment in 2020 with Chuuk this year it bounced back to a more expected number. After working closely with Chuuk DOE, it was found that some schools did not count and report students who does not have birth certificate.

[1] Includes enrollments in ECE, elementary and secondary schools in both public and private institutions.

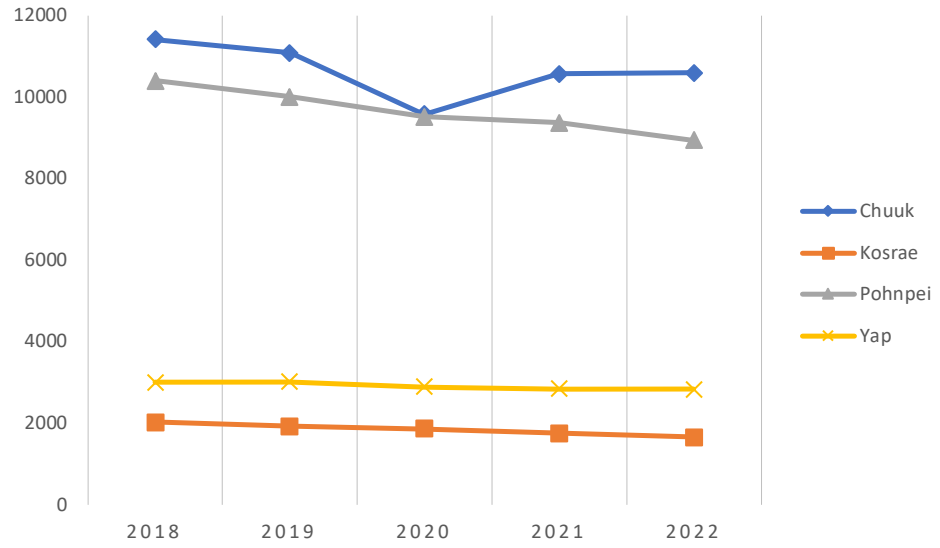


Figure 1.2: Enrollment trend over the past 5 year by state

A decline in enrollment is always alarming and needs more scrutiny. However, looking at data sources published by the World Bank it does seem that FSM has significantly higher out-migration than other Pacific countries. For example, FSM had an estimated out migration of ~3,000[2] in 2017 out of a population of ~112,000[3] that same year; this is 2.7% of the population migrating out. If we compare this to a couple of other Pacific countries, the difference is significant. Vanuatu had ~600 out migration in 2017[4] out of a total of ~286,000[5] or 0.21% migrating out. Similarly, Solomon Islands had ~8,000[6] out migration in 2017 with a population of 636,000[7] or 1.26% of its population in 2017 migrating out. The latest population census projected a slight increase in population ***but*** the census before that projected a slight decrease which would have been more in line with the enrollment we observe. To what extend is the current population projection correct? To what extent does it get the net migration factor correct?

Our decline could easily be explained with more precise migration and population data. More recent data on out migration should be obtained to confirm this hypothesis still holds true in more recent years.

Table 1.1: Enrollment data by state for the past 5 years

[2] https://data.worldbank.org/indicator/SM.POP.NETM?locations=FM

[3] https://data.worldbank.org/indicator/SP.POP.TOTL?locations=FM

[4] https://data.worldbank.org/indicator/SM.POP.NETM?locations=VU

[5] https://data.worldbank.org/indicator/SP.POP.TOTL?locations=VU

[6] https://data.worldbank.org/indicator/SM.POP.NETM?locations=SB

[7] https://data.worldbank.org/indicator/SP.POP.TOTL?locations=SB

Enrols	Chuuk		Chuuk Total	Kosrae		Kosrae Total	Pohnpei		Pohnpei Total	Yap		Yap Total	Total
	F	M		F	M		F	M		F	M		
2018	5619	5794	11413	976	1037	2013	5157	5235	10392	1414	1579	2993	26811
2019	5540	5548	11088	927	992	1919	4949	5048	9997	1433	1578	3011	26015
2020	4982	4590	9572	896	957	1853	4701	4813	9514	1380	1510	2890	23829
2021	5462	5104	10566	858	893	1751	4614	4746	9360	1367	1472	2839	24516
2022	5357	5234	10591	819	833	1652	4436	4509	8945	1351	1476	2827	24015

NET ENROLLMENT RATE

Net enrollment reflects the percent of students enrolled in school within their official school age. In the FSM, official school age is defined as 5 years of age before 31 December for ECE, 6 years of age before 31 December for Grade 1 and so on and so forth. In that regard, net enrollment indicates percent of students who are enrolled in their "official grade". A high NER indicates a high degree of coverage for the official school-age population.

In 2022, net enrollment in FSM schools is 77% in primary level, whereas it is only 50% in ECE and 47% at the Secondary level (Table 1.2, Figure 1.3). This year again, the girls' net enrollment is slightly higher than for that of the boys for all education levels, especially in secondary schools (Figure 1.3).

Since primary level education is compulsory in FSM, NER is higher than other education levels and stable at this level for both boys and girls. However, it remains well below a desirable NER for universal access to primary education. Furthermore, boys tend to dropout from high school relatively earlier than girls. We have started collecting data on the reasons for dropout; this is compiled in the Dropout indicator in the Digest.

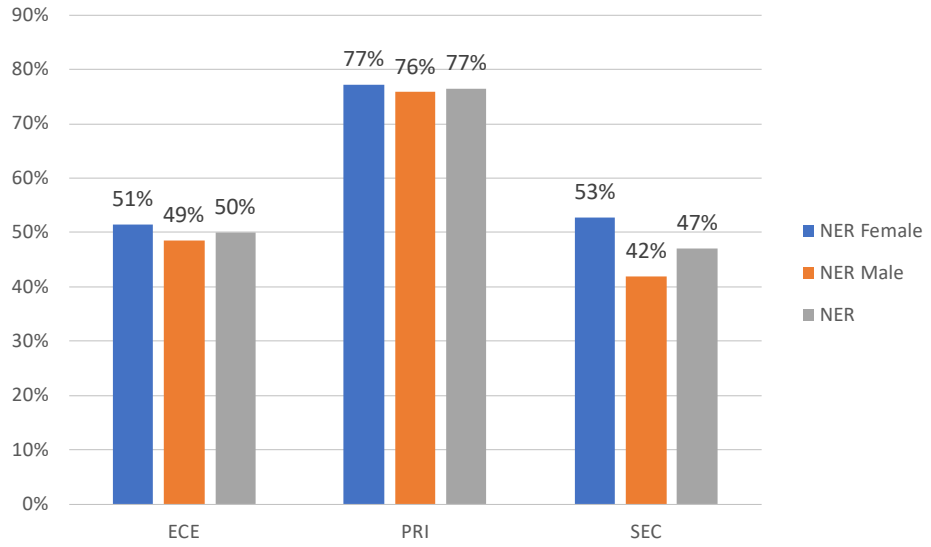


Figure 1.3: NER for the nation by education levels and gender/total

The NER trend over the last five years has mixed results. NER Primary has been relatively steady with a slight decline though it seems a bit more stable in the last two three years (Figure 1.4). NER in ECE has fluctuated a bit more than others reflecting its lack of policy enforcement. NER in Secondary has remained largely steady when looking at several of the recent years together. This data is also included for all states in Table 1.2 with a similar pattern as the national.

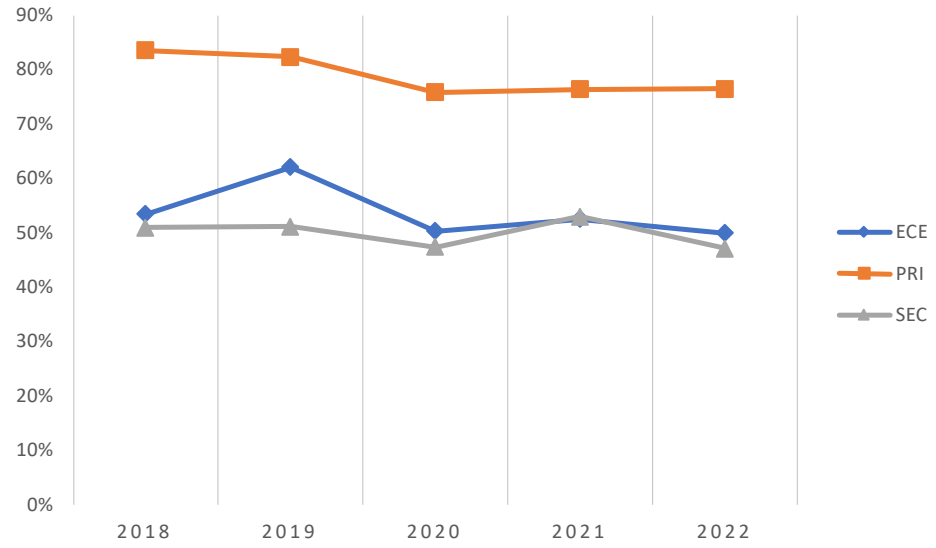


Figure 1.4: NER for the nation by education level for the past 5 years

All four states are performing in the similar range of 75-78% NER this year. Actually, the previously best performing states in recent years (i.e. Pohnpei and Kosrae) are now on the steepest decline requiring some immediate scrutiny (Table 1.2). Chuuk has regained some of its poor performance by properly counting students that they had left out in 2020.

Underreporting of students has a significant impact on the enrollment trend in 2020, but it has since return to normal.

Table 1.2: NER data for the nation by education level for the past 5 years

	Chuuk			Kosrae			Pohnpei			Yap			Total NER (M)	Total NER (F)	Total NER
	NER (M)	NER (F)	NER	NER (M)	NER (F)	NER	NER (M)	NER (F)	NER	NER (M)	NER (F)	NER			
2018	**61%**	**64%**	**62%**	**86%**	**88%**	**87%**	**77%**	**82%**	**80%**	**73%**	**73%**	**73%**	**70%**	**73%**	**71%**
ECE	51%	45%	48%	100%	89%	95%	49%	51%	50%	52%	84%	65%	54%	53%	53%
PRI	77%	77%	77%	86%	90%	88%	91%	95%	93%	85%	76%	81%	83%	84%	84%
SEC	32%	42%	37%	83%	84%	84%	58%	66%	62%	56%	64%	60%	47%	55%	51%
2019	**62%**	**66%**	**64%**	**82%**	**81%**	**82%**	**77%**	**81%**	**79%**	**70%**	**73%**	**72%**	**69%**	**73%**	**71%**
ECE	64%	57%	60%	71%	61%	66%	67%	56%	61%	64%	84%	72%	65%	59%	62%
PRI	77%	78%	77%	88%	87%	88%	89%	90%	89%	79%	78%	78%	82%	83%	82%
SEC	33%	44%	38%	73%	73%	73%	58%	68%	63%	54%	61%	57%	46%	56%	51%
2020	**51%**	**60%**	**55%**	**79%**	**78%**	**78%**	**74%**	**76%**	**75%**	**68%**	**70%**	**69%**	**62%**	**68%**	**65%**
ECE	43%	47%	45%	72%	82%	77%	54%	49%	51%	53%	63%	57%	50%	51%	50%
PRI	64%	70%	67%	86%	84%	85%	86%	86%	86%	78%	77%	77%	75%	77%	76%
SEC	27%	41%	34%	67%	67%	67%	55%	66%	60%	51%	58%	54%	42%	53%	47%
2021	**57%**	**65%**	**61%**	**75%**	**76%**	**75%**	**74%**	**76%**	**75%**	**66%**	**69%**	**68%**	**65%**	**70%**	**67%**
ECE	41%	48%	44%	65%	58%	62%	59%	54%	56%	58%	88%	71%	51%	54%	53%
PRI	69%	75%	72%	81%	79%	80%	84%	82%	83%	75%	73%	74%	76%	77%	76%
SEC	37%	50%	43%	66%	73%	69%	57%	70%	63%	50%	57%	53%	47%	59%	53%
2022	**58%**	**64%**	**61%**	**69%**	**72%**	**71%**	**69%**	**72%**	**71%**	**65%**	**68%**	**66%**	**63%**	**68%**	**65%**
ECE	42%	45%	43%	56%	57%	56%	52%	51%	51%	61%	86%	72%	49%	51%	50%
PRI	74%	78%	76%	75%	76%	75%	79%	78%	78%	77%	73%	75%	76%	77%	77%
SEC	30%	40%	35%	60%	68%	64%	55%	67%	61%	43%	54%	49%	42%	53%	47%
Average Total	**58%**	**64%**	**61%**	**78%**	**79%**	**79%**	**74%**	**77%**	**76%**	**68%**	**71%**	**69%**	**66%**	**70%**	**68%**

GROSS ENROLLMENT RATE

Generally, gross enrollment can easily exceed 100% due to over age and under age student populations in the system. However, in FSM schools, the gross enrollment is generally below 85% (Figure 1.5) at all levels of education, which indicates FSM is not yet approaching—though is doing better in primary—the number required for universal access of the official age group.

Another important thing to note is the 5-10% difference between GER and NER for primary and secondary (Figure 1.3 and 1.5) providing a glimpsed into the extent of over age and under age students in those education levels. This is not nearly as pronounced as the difference in ECE between the NER and GER (Figure 1.3 and 1.5) which suggests a real issue in the consistency of how students enter ECE to prepare them for school grades. The large NER/GER difference for ECE indicates we have kids of all sorts of ages in ECE that could be a contributing factor of a less optimal school preparation. Yap and Kosrae in particular contribute to an oddly high national GER in ECE with pupils starting at a younger age than the other states, only to dropout or repeat the ECE.

With the proposed new legislation making ECE compulsory in the FSM, NER and GER will improve as the nation's enrollment age is standardized.

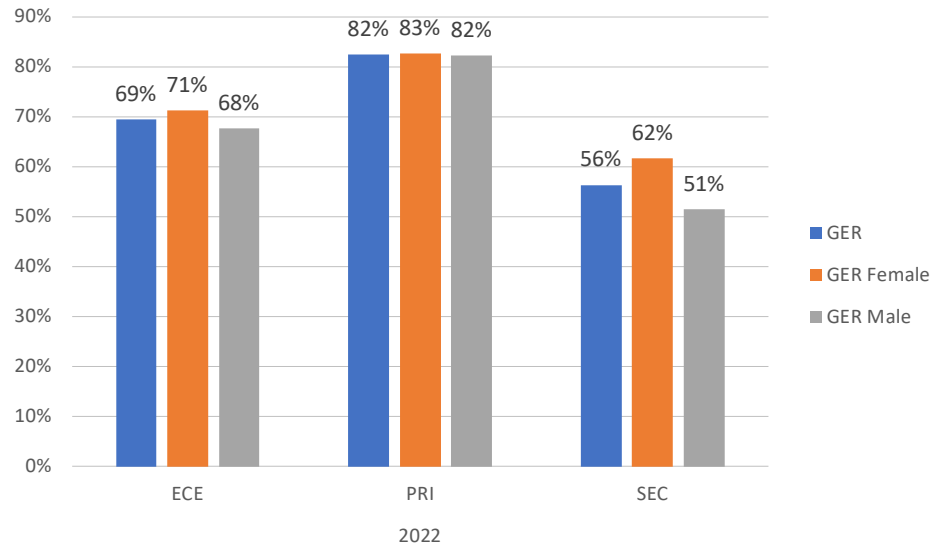


Figure 1.5: GER for the nation by education level and gender/total

The trend of the GER over the past five years (2018-2022) indicates a declining pattern in ECE and Primary levels of education, which is an indication of less participation in the schools (Figure 1.6) though it has improved compared to last year. However, participation to Secondary is again shown to be slightly on the rise which is positive. The generally low percentages of NER and GER could be due to the population projection not reflecting the actual population; only the next population census might offer more insight into this.

Across all three levels of education (ECE, Primary, and Secondary), with the exception of Yap, gross enrollment rates are generally significantly higher with girls than boys, meaning a higher participation among girls. The GER rate and thus the overall participation is higher in ECE and Primary level compared to secondary level.

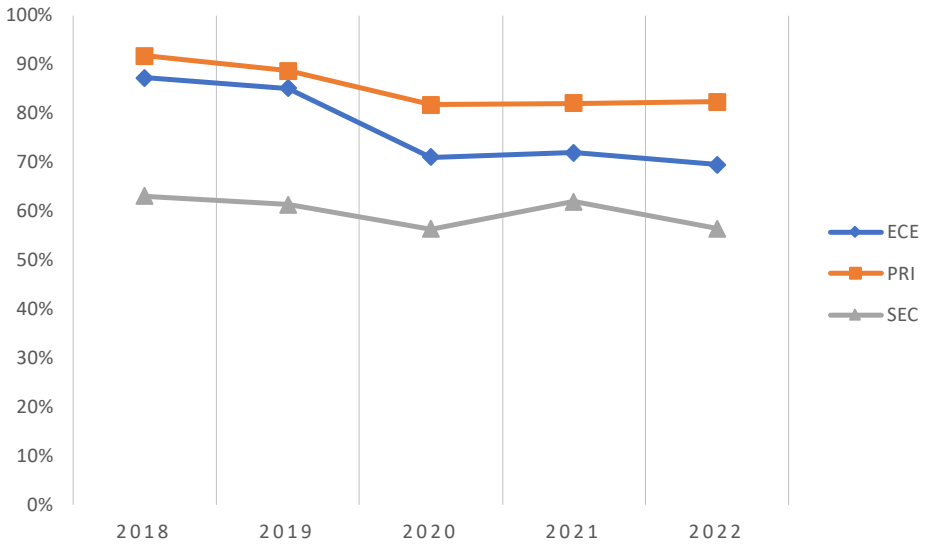


Figure 1.6: GER for the nation by education level over the past 5 years

The complete data set for all states and gender for the GER is included in Table 1.3 for further scrutiny.

Table 1.3: GER data by state, education level and gender for the past 5 years

	Chuuk			Kosrae			Pohnpei			Yap			Total GER (F)	Total GER (M)	Total GER
	GER (F)	GER (M)	GER	GER (F)	GER (M)	GER	GER (F)	GER (M)	GER	GER (F)	GER (M)	GER			
2018	**74%**	**72%**	**73%**	**93%**	**95%**	**95%**	**92%**	**89%**	**91%**	**89%**	**92%**	**90%**	**83%**	**82%**	**82%**
ECE	81%	85%	83%	104%	119%	112%	77%	77%	77%	166%	112%	135%	88%	87%	87%
PRI	85%	86%	86%	94%	91%	93%	102%	100%	101%	84%	94%	90%	92%	92%	92%
SEC	50%	42%	46%	90%	98%	94%	79%	72%	76%	82%	81%	82%	66%	60%	63%
2019	**73%**	**69%**	**71%**	**89%**	**91%**	**90%**	**89%**	**86%**	**87%**	**90%**	**91%**	**91%**	**81%**	**79%**	**80%**
ECE	73%	78%	76%	106%	94%	99%	70%	79%	75%	193%	140%	163%	84%	86%	85%
PRI	84%	83%	83%	90%	91%	91%	97%	95%	96%	86%	90%	88%	89%	89%	89%
SEC	52%	39%	45%	83%	90%	87%	78%	70%	74%	78%	82%	80%	66%	57%	61%
2020	**66%**	**57%**	**61%**	**85%**	**88%**	**87%**	**84%**	**82%**	**83%**	**87%**	**87%**	**87%**	**76%**	**71%**	**73%**
ECE	57%	56%	57%	103%	105%	104%	62%	68%	65%	162%	124%	140%	71%	71%	71%
PRI	75%	70%	72%	89%	89%	89%	92%	92%	92%	85%	89%	87%	83%	81%	82%
SEC	48%	32%	40%	75%	81%	78%	75%	65%	70%	76%	76%	76%	62%	51%	56%
2021	**72%**	**63%**	**67%**	**82%**	**82%**	**82%**	**82%**	**81%**	**81%**	**86%**	**85%**	**85%**	**78%**	**73%**	**75%**
ECE	59%	47%	53%	79%	100%	90%	66%	74%	70%	191%	135%	158%	74%	70%	72%
PRI	80%	75%	77%	82%	83%	83%	87%	89%	88%	80%	85%	83%	83%	82%	82%
SEC	59%	43%	51%	80%	76%	78%	77%	65%	71%	75%	73%	74%	68%	56%	62%
2022	**70%**	**64%**	**67%**	**78%**	**76%**	**77%**	**79%**	**76%**	**78%**	**84%**	**85%**	**85%**	**75%**	**71%**	**73%**
ECE	55%	53%	54%	86%	84%	85%	66%	66%	66%	174%	127%	147%	71%	68%	69%
PRI	83%	80%	82%	79%	77%	78%	83%	84%	84%	81%	88%	84%	83%	82%	82%
SEC	47%	37%	42%	75%	71%	73%	75%	63%	69%	74%	68%	71%	62%	51%	56%
Average Total	**71%**	**65%**	**68%**	**85%**	**86%**	**86%**	**85%**	**83%**	**84%**	**87%**	**88%**	**88%**	**79%**	**75%**	**77%**

GROSS INTAKE RATIO

Gross intake ratio (GIR G1 in Figure 1.7) number of intake (i.e. new entrants without repeaters) at any age into the first grade of primary education (i.e. grade 1.) expressed as a percentage of population at the official primary school-entrance age. Another related indicator of the same definition is the Gross Intake Ratio into the last grade of primary (GIR G8 in Figure 1.7.)

The figures below (Figure 1.7), indicate varying levels of GIR by grades and gender. Overall GIR is higher in grade 1 compared to grade 8 though not by a lot. In grade 1, GIR is slightly higher for males compared to females, whereas in grade 8 female GIR is substantially higher than male. A possible reason for this variation by gender could be associated with late entry of males in grade 1. Whereas, higher GIR for females in grade 8 supports the evidence seen elsewhere that they remain longer in the education system than males.

Another key thing to note is the difference of 5% between the GIR G1 (first grade of primary) and GIR G8 (i.e. GIRLG or GIR into last grade of primary). This indicates are medium degree of access to primary and also a medium degree of current primary education completion (expressed over the whole population of official age, and not completion of those attending school which is much higher). This could also mean a medium capacity of the education system to provide access to grade 1. States need to verify with each school if they can actually accommodate more students, especially the kids of the region they know are not enrolling. However, when looking at the Pupil Teacher Ratio data it seems the problem may not necessarily lie with the lack of capacity of the education system but lack of willingness of participation.

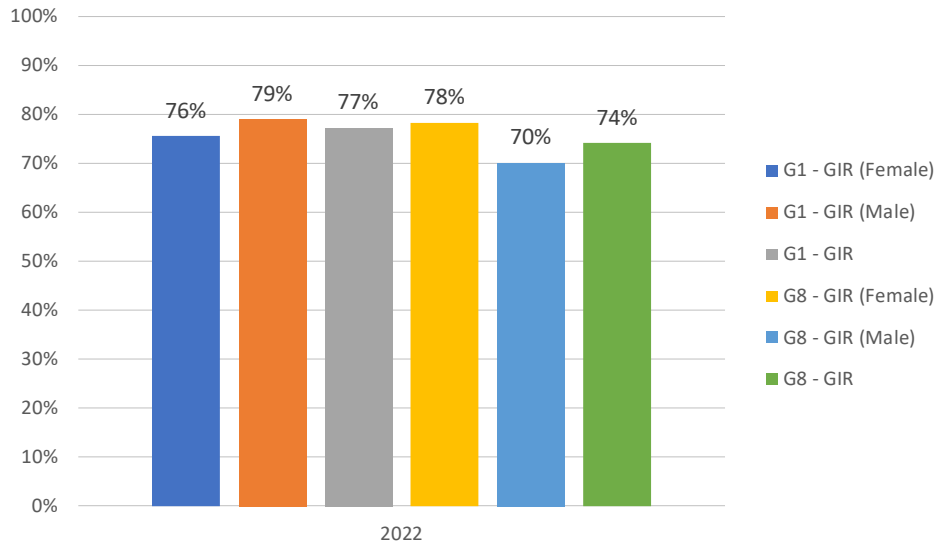


Figure 1.7: GIR (G1) /GIR (G8) for the nation by education level and gender/total

Just like the NER/GER the GIR is on the decline over the last five years (2018-2022) although it seems to have reverse and increased this year (Figure 1.8). Even looking at this encouraging increase this year, the general decline with this indicator reflects the decline seen in enrollments states are encouraged to work closely with schools to find kids not in school.

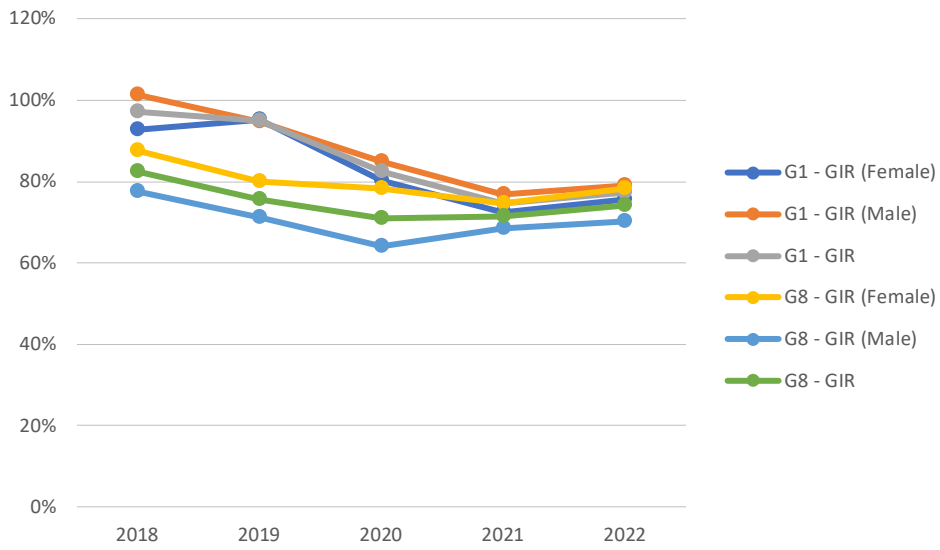


Figure 1.8: GIR (G1)/GIRLG (G8) for the nation by education level over the past 5 years

The complete data set of the GIR into the first and last grades of primary is included in Table 1.4 for further scrutiny.

Table 1.4: GIR (G1)/GIRLG (G8) data for the nation by education level for the past 5 years

	CHK			KSA			PNI			YAP			Total GIR (F)	Total GIR (M)	Total GIR
	GIR (F)	GIR (M)	GIR	GIR (F)	GIR (M)	GIR	GIR (F)	GIR (M)	GIR	GIR (F)	GIR (M)	GIR			
2018	**82%**	**79%**	**80%**	**114%**	**97%**	**105%**	**100%**	**104%**	**102%**	**80%**	**84%**	**82%**	**90%**	**89%**	**90%**
G1	85%	94%	89%	123%	101%	110%	100%	111%	106%	90%	102%	96%	93%	101%	97%
G8	80%	64%	72%	106%	92%	99%	100%	96%	98%	71%	70%	70%	88%	78%	82%
2019	**84%**	**77%**	**81%**	**104%**	**92%**	**98%**	**93%**	**93%**	**93%**	**79%**	**69%**	**74%**	**88%**	**83%**	**85%**
G1	92%	94%	93%	108%	91%	98%	97%	100%	98%	99%	80%	89%	95%	95%	95%
G8	75%	61%	68%	101%	93%	97%	89%	86%	87%	62%	60%	61%	80%	71%	76%
2020	**67%**	**62%**	**64%**	**121%**	**80%**	**98%**	**88%**	**90%**	**89%**	**85%**	**75%**	**79%**	**79%**	**74%**	**77%**
G1	73%	73%	73%	117%	75%	92%	85%	100%	93%	81%	90%	86%	80%	85%	83%
G8	60%	51%	55%	125%	87%	105%	92%	79%	85%	88%	62%	74%	78%	64%	71%
2021	**67%**	**68%**	**67%**	**91%**	**77%**	**83%**	**80%**	**82%**	**81%**	**72%**	**61%**	**66%**	**73%**	**73%**	**73%**
G1	65%	74%	69%	111%	74%	89%	77%	83%	80%	75%	71%	73%	72%	77%	75%
G8	70%	62%	65%	72%	80%	77%	83%	81%	82%	69%	53%	60%	75%	68%	71%
2022	**74%**	**70%**	**72%**	**87%**	**75%**	**80%**	**78%**	**79%**	**79%**	**79%**	**78%**	**79%**	**77%**	**75%**	**76%**
G1	70%	73%	72%	74%	68%	70%	79%	85%	82%	92%	92%	92%	76%	79%	77%
G8	79%	67%	73%	99%	84%	91%	78%	74%	76%	68%	67%	68%	78%	70%	74%
Average Total	**75%**	**71%**	**73%**	**103%**	**84%**	**93%**	**88%**	**90%**	**89%**	**79%**	**74%**	**76%**	**82%**	**79%**	**80%**

AGE SPECIFIC ENROLLMENT RATE

FSM school age range is 5-18 for grades ECE to high school. This means that ideally the population in this age range is expected to be in school. Figure 1.9 indicates a gradual improvement in enrollment from age 5 to 8. However, the enrollment starts slowly declining after age 8. In other words, the out of school population is higher in early ages as well in the later part of their education.

Both male and female student population have similar patterns (Table 1.5.) This could have been caused by high dropout rates in higher grades. In the secondary level, high dropout rate is understandable; however, high dropout rate in primary level contradicts with the compulsory education laws.

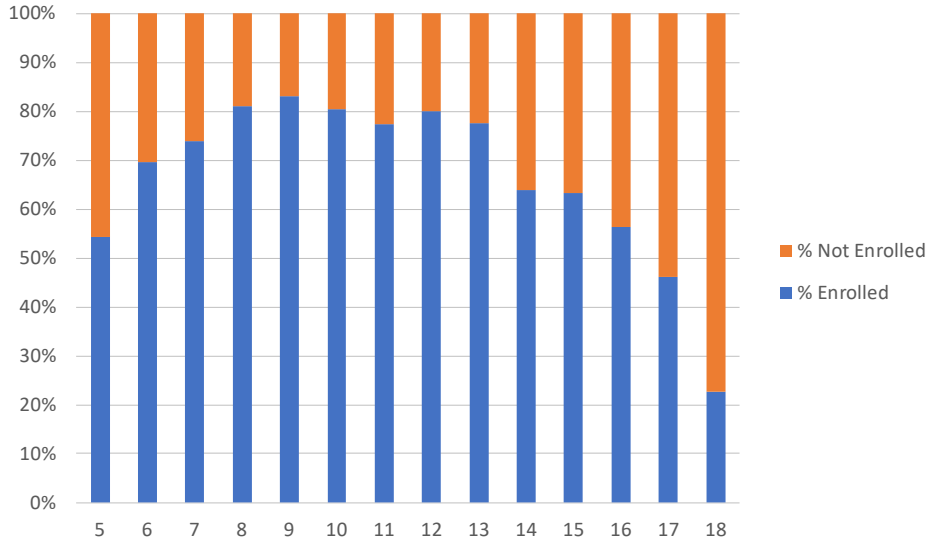


Figure 1.9: ASER for the nation

ASER trends over the last five years (2018-2022) reveal a mostly steady; only very slightly declining with the exception of this year with several age groups on the rise compared to last year. The most concerning trend is the one for ages 5-7 with the most pronounced decline over the last few school years (Figure 1.10.) The declining ASER is not a good sign, as these populations must remain in the system. The age 5-7 is when kids start school and the higher decline in this age group needs immediate attention.

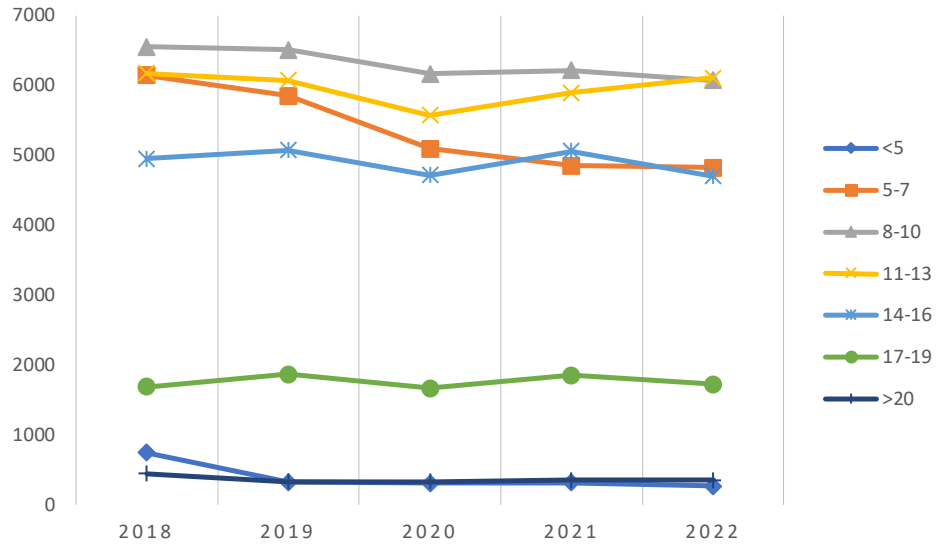


Figure 1.10: ASER for the past 5 years

The complete data set for all states and gender for the age specific enrollment rate in the education system is included in Table 1.5. Note that the total in Table 1.5 is close but does not equal total enrollments in the FSM since there are children outside the official age range enrolled.

Table 1.5: ASER data for the nation for the past 5 year

By Age	5		6		7		8		9		10		11		12		13		14		15		16		17		18	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
2018	854	940	1057	1120	1068	1102	1079	1185	1060	1119	1023	1086	1068	1043	1011	1002	1039	1012	910	906	860	844	755	674	620	600	180	282
2019	754	859	1073	1051	994	1122	1062	1110	1068	1180	1030	1061	983	1067	1050	1001	1001	973	959	908	889	859	774	686	655	603	271	333
2020	671	668	805	904	1038	1006	980	1078	1011	997	1023	1072	985	956	893	945	926	869	891	834	811	719	772	685	620	542	246	253
2021	681	683	824	827	879	953	1077	1049	987	1059	1025	1019	1047	1088	972	966	887	936	970	872	900	819	805	692	704	667	233	240
2022	663	658	837	868	886	906	881	980	1085	1059	986	1080	1026	1018	1049	1091	973	947	831	836	862	758	742	669	616	558	241	301
Total	**3623**	**3808**	**4596**	**4770**	**4865**	**5089**	**5079**	**5402**	**5211**	**5414**	**5087**	**5318**	**5109**	**5172**	**4975**	**5005**	**4826**	**4737**	**4561**	**4356**	**4322**	**3999**	**3848**	**3406**	**3215**	**2970**	**1171**	**1409**

ACCESS RATE

Access rate (AR) is the percent of the population in the system and is closely linked with the ASER discussed above. Comparing Figure 1.10 and Figure 1.11, we can clearly see a similar pattern of enrollment. In other words, Figure 1.10 was about enrollment by specific *age* and figure 1.11 is about enrollment by specific *grade*. Thus, these two categories (age and grade) are very much linked to each other. A decline is observed with subsequently higher grades. This is a sign of the education system not retaining its students. It could be kids progressively dropping out or leaving the education system for other reasons (e.g. out migration.)

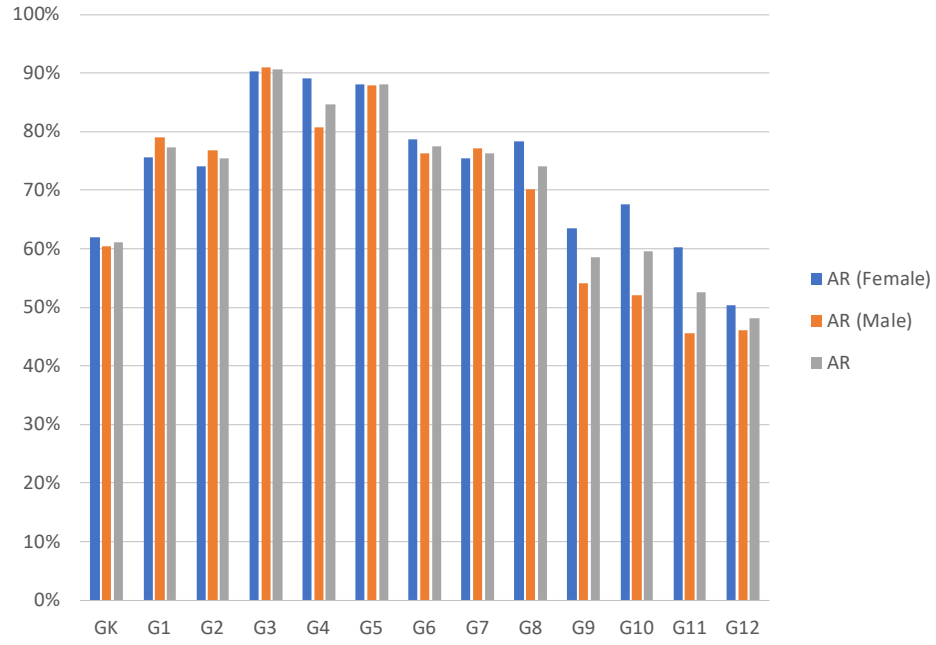


Figure 1.11: AR for the nation by grade and gender/total

In last five years (2018-2022) enrollment has gradually declined in FSM schools (Figure 1.12, 1.13, 1.14). This is cause for alarm as the population was projected to increase slightly over the years. It is important to note that others had projected the population to decrease which would explain our declining enrollments and change the narrative substantially.

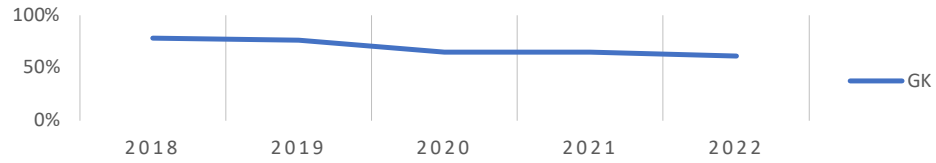


Figure 1.12: AR in ECE for the nation over the last 5 years

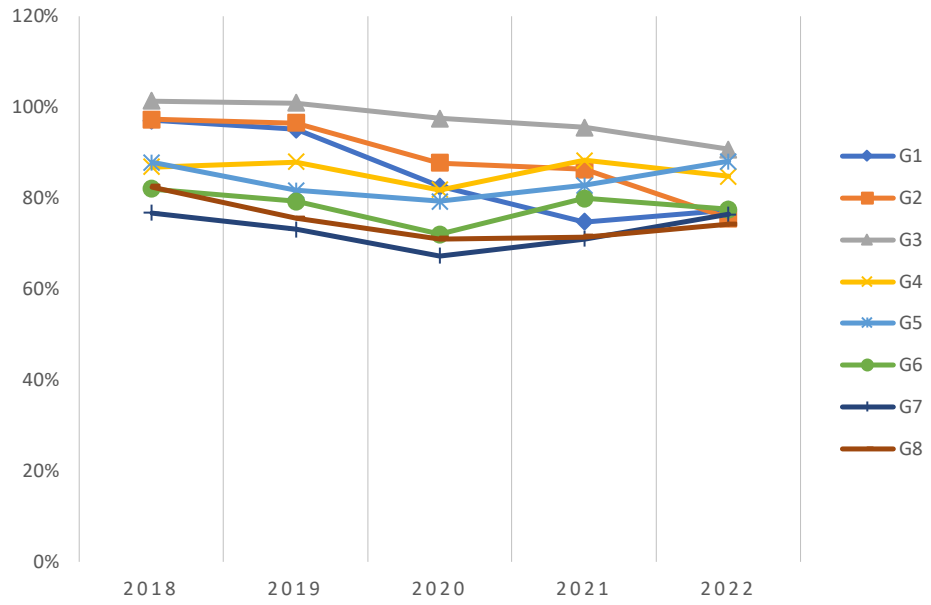


Figure 1.13: AR in primary for the nation over the last 5 years

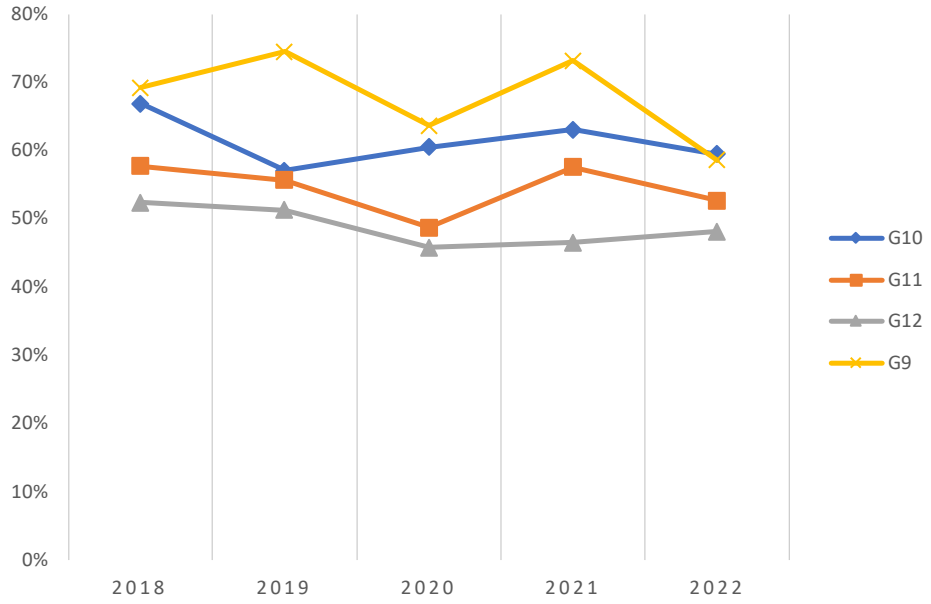


Figure 1.14: AR in secondary for the nation over the last 5 years

The complete data set for all states and gender for the age specific enrollment rate in the education system is included in Table 1.6.

Table 1.6: AR data for the nation for the past 5 year

AR	GK	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	Grand Total
CHK	**62%**	**79%**	**85%**	**93%**	**80%**	**82%**	**73%**	**66%**	**66%**	**55%**	**48%**	**39%**	**33%**	**66%**
2018	76%	89%	92%	93%	80%	88%	72%	70%	72%	51%	52%	40%	36%	70%
2019	73%	93%	93%	97%	83%	78%	76%	61%	68%	62%	43%	39%	34%	69%
2020	54%	73%	82%	90%	71%	73%	64%	57%	55%	49%	47%	31%	29%	59%
2021	53%	69%	85%	92%	83%	81%	77%	67%	65%	69%	52%	49%	32%	67%
2022	54%	72%	74%	93%	82%	90%	79%	77%	73%	46%	47%	37%	37%	66%
KSA	**97%**	**92%**	**85%**	**98%**	**86%**	**78%**	**76%**	**87%**	**94%**	**87%**	**85%**	**75%**	**80%**	**86%**
2018	112%	110%	96%	99%	88%	71%	86%	96%	99%	107%	88%	81%	100%	95%
2019	99%	98%	96%	108%	83%	81%	71%	98%	97%	93%	86%	82%	85%	90%
2020	104%	92%	87%	110%	90%	79%	78%	76%	105%	80%	77%	77%	78%	87%
2021	90%	89%	73%	97%	89%	78%	74%	86%	77%	89%	84%	68%	72%	82%
2022	82%	70%	75%	75%	82%	80%	71%	79%	91%	66%	90%	69%	67%	76%
PNI	**70%**	**92%**	**95%**	**103%**	**94%**	**89%**	**85%**	**81%**	**86%**	**78%**	**70%**	**69%**	**60%**	**82%**
2018	77%	106%	106%	113%	99%	94%	94%	87%	98%	81%	80%	78%	62%	90%
2019	74%	98%	104%	104%	97%	88%	88%	83%	87%	87%	65%	70%	66%	85%
2020	65%	93%	96%	104%	92%	88%	83%	80%	85%	76%	69%	63%	58%	81%
2021	70%	80%	93%	100%	94%	85%	84%	76%	82%	73%	70%	64%	58%	79%
2022	65%	82%	77%	92%	87%	88%	77%	78%	76%	72%	66%	69%	56%	76%
YAP	**80%**	**87%**	**84%**	**99%**	**89%**	**81%**	**78%**	**69%**	**67%**	**78%**	**79%**	**67%**	**63%**	**78%**
2018	73%	96%	92%	101%	77%	77%	87%	65%	70%	84%	78%	60%	69%	79%
2019	90%	89%	89%	105%	86%	79%	72%	80%	61%	77%	76%	73%	63%	80%
2020	87%	86%	86%	106%	98%	76%	70%	68%	74%	79%	84%	68%	65%	80%
2021	81%	73%	80%	96%	93%	86%	82%	66%	60%	83%	80%	71%	59%	77%
2022	68%	92%	74%	86%	90%	85%	78%	69%	68%	66%	77%	63%	62%	75%
Grand Total	**69%**	**85%**	**89%**	**97%**	**86%**	**84%**	**78%**	**73%**	**75%**	**68%**	**61%**	**54%**	**49%**	**74%**

THEME 2: HOW FAR DO THEY GET IN SCHOOL?

In this theme, we have several ***flow rates***. Examples of flow rates included in this theme are Transition Rate, Promotion Rate and Survival Rate. Typically, flow rates are produced using the *reconstructed cohort* method and need two consecutive years of *consistent* data collection to produce. Currently, in 2022 we can produce flow rates for SY2020-21=>SY2021-22. For example, we can calculate the promotion rate of the cohort of students that were in Grade 10 in SY2020-21 promoting into Grade 11 in SY2021-22. The reader interested in the more advanced discussions about how flow rate indicators are produced using the reconstructed cohort should refer to the FSM NDOE Education Statistics Digest.

TRANSITION RATE

There is 112% and 105% transition rate from ECE to Grade 1 for Males and Females respectively (Figure 2.1). A percentage higher than 100% is indication of inconsistent data collection mostly in Chuuk as discussed below. There is another important factor affecting the transition rate. In FSM, we have many students coming directly into Grade 1 without ECE background and this is what causes the model's assumption to be violated. The main things to consider here are:

- Is there compulsory ECE in all states? Compulsory ECE is not being enforced as shown by a transition above 100% for ECE=>Primary. This could have further reaching consequences including not preparing our students as well as we could for Grade 1.
- The violated assumption in the model is mostly affecting the ECE=>Grade 1 promotion/transition value. To address this we are now collecting a new piece of data: "Whether the students in grade 1 attended ECE". With this new data we will be able to produce the Transition Rate ECE=>Grade 1 with a more precise albeit smaller cohort.

Transition from primary to secondary at 84% and 88% for males and females respectively is an improved figure compared to last year which was affected greatly by Chuuk's inconsistent data collection and submission.

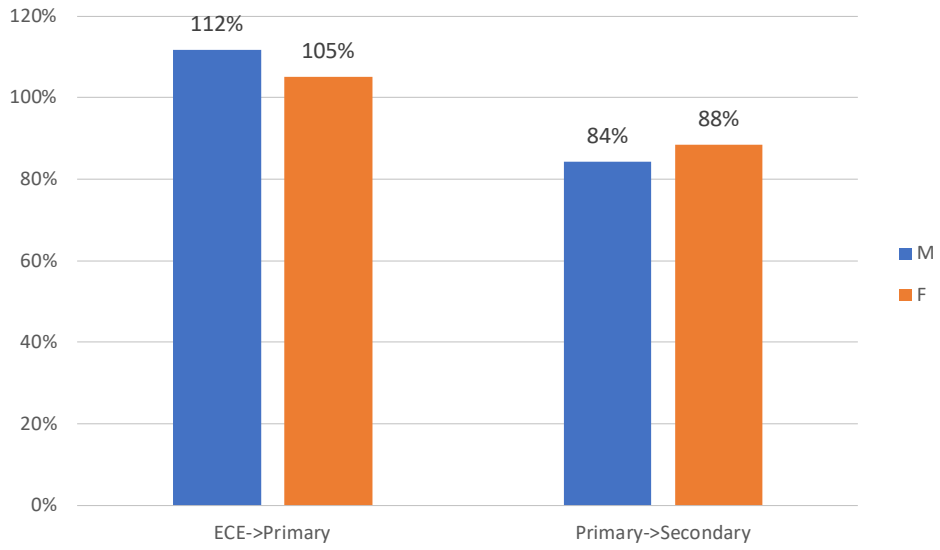


Figure 2.1: Transition ECE=>Primary and Primary=>Secondary for nation by gender

Analyzing the data by state shows the major culprit in distorting the national transition rates. In particular for ECE->Primary. Chuuk is reporting a transition rate of 145% for ECE to Primary and 104%

Primary to Secondary. This is caused by Chuuk having very little ECE enrollment recorded the previous year, either because of under-reporting ECE enrollments or very little ECE participation.

Kosrae has the most realistic ECE to Primary transition rates. A more reliable indicator in FSM is the Primary to Secondary with much better rates, especially Pohnpei and Yap (Figure 2.2). The high transition rate for Chuuk (ECE-Primary) is the result of not reporting outcome data in SY2020-2021.

Another noteworthy observation is the ECE to Primary transition rate of Yap at 61%. It means that there were more ECE enrollments in the previous year that did not make it to Grade 1 this year. In fact, this can easily be explained by the fact that Yap over enrolls under age ECE kids only for them to dropout and come back one or more years later.

A more standardized policy for starting ECE across all for states would improve both the data and better prepare kids for formal education.

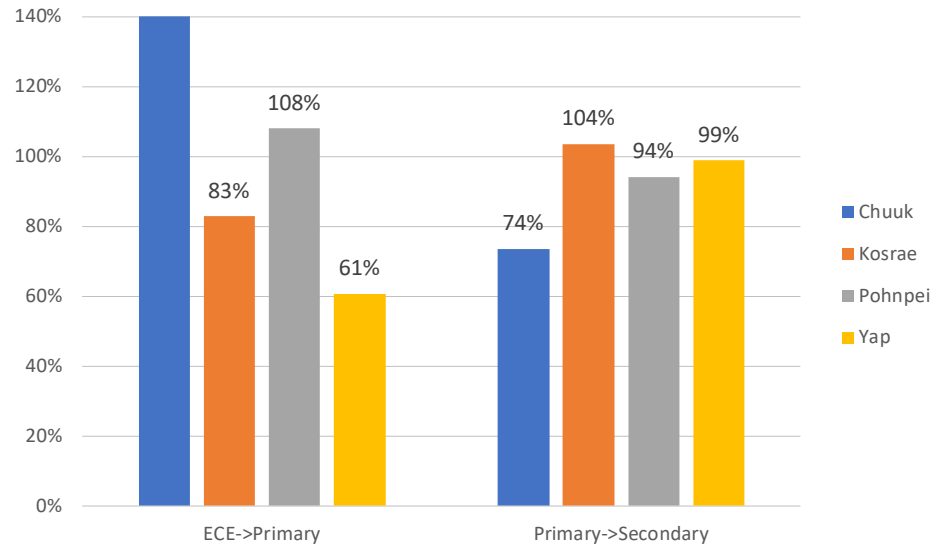


Figure 2.2: Transition ECE=>Primary and Primary=>Secondary by state

The trends in Figure 2.3 provides no additional insight. The fluctuation of the national transition trend is due to Chuuk SY2019-2020 (under reporting of enrollment) and not reporting outcome data in SY2020-2021.

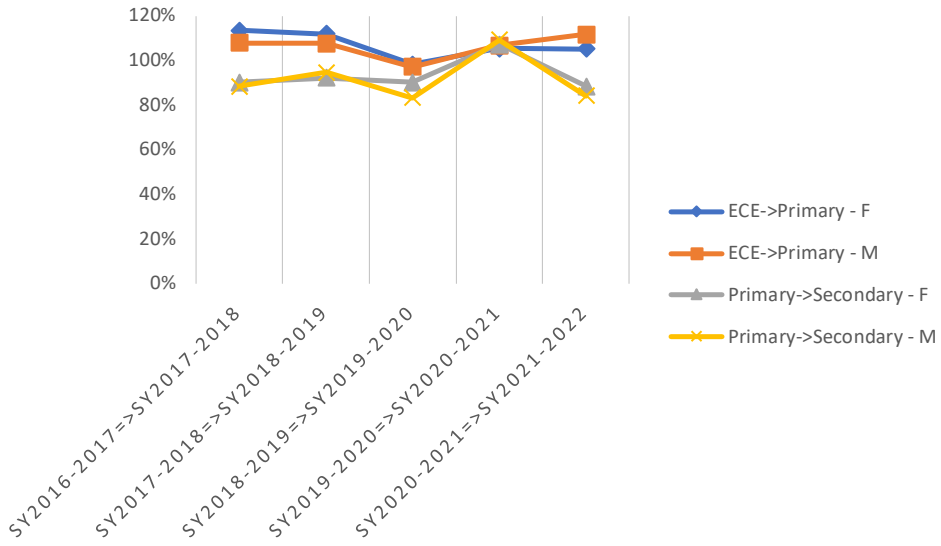
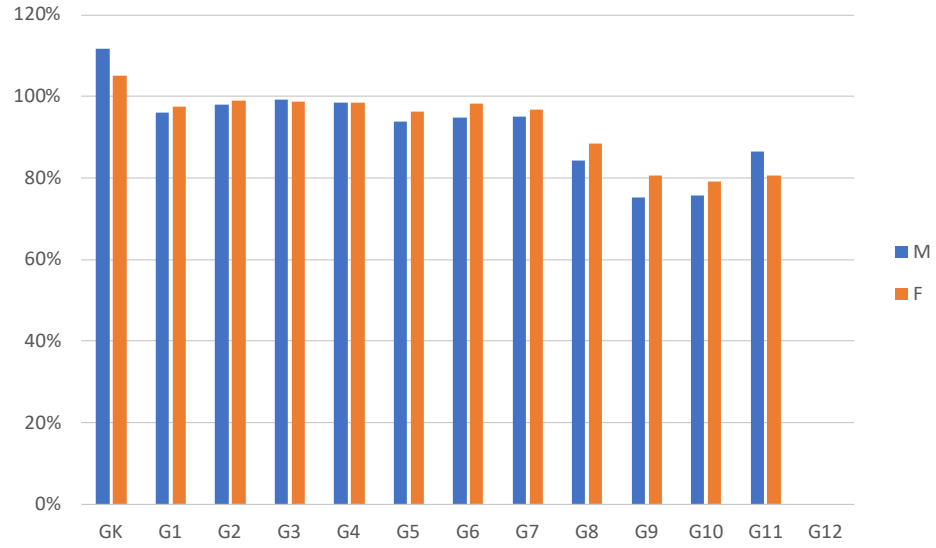


Figure 2.3: Transition ECE=>Primary and Primary=>Secondary by gender for past 5 years

PROMOTION RATE

This rate is a more general version of the transition rate above and reports on each grade as oppose to just across education levels like the transition rate. The main thing to observe here is a slight decline in promotion with each subsequent grades[1]. This means we are constantly loosing students throughout the life cycle of the K-12 education system (Figure 2.4). Females have a slightly better promotion health than males through most grades. That said, the promotion rate is near 100% in earlier grades and near 90% in higher grades which is a very acceptable promotion rate. However, we know Chuuk artificially increases this rate (especially last year) and therefore it is important to look at states individually.



[1] There is nothing in Grade 12 as students are not typically promoted beyond Grade 12. Rather refer to graduation rate for this.

Figure 2.4: Promotion by grade and gender for nation

The pattern observed in all four states is a similar one. Fortunately this year, Chuuk seems to have improved and does not increase artificially the national average to the same extent as seen last year. However, Chuuk still does have a few grade to grade promotion higher than 100% (Figure 2.5). Yap's over enrolling of under age kids also shows in promotion from Grade Kinder. But aside from this, Pohnpei, Kosrae and Yap have good promotion rate demonstrating relatively consistent data collection over the years.

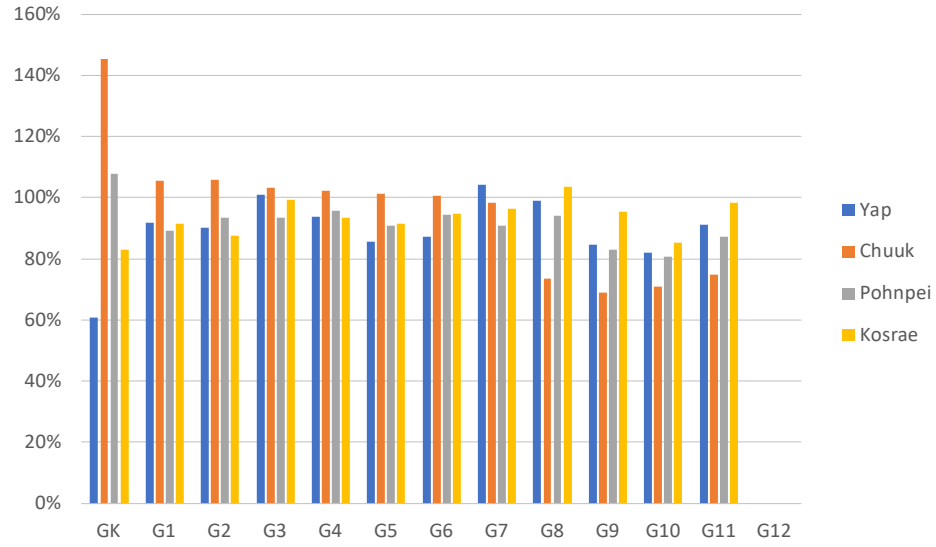


Figure 2.5: Promotion by grade and state

All data for the last five years is included in Table 2.1 to produce the above analysis using the more direct method.

Table 2.1: Promotion rates by grade, state and national

Promotion Rates	GK	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12
SY2016-2017=>SY2017-2018	**102%**	**93%**	**95%**	**96%**	**100%**	**94%**	**97%**	**91%**	**96%**	**86%**	**85%**	**91%**	**0%**
Yap	61%	79%	94%	91%	104%	88%	94%	86%	99%	73%	72%	87%	0%
Chuuk	116%	93%	87%	92%	94%	86%	92%	84%	78%	82%	79%	81%	0%
Pohnpei	137%	104%	104%	104%	106%	106%	105%	100%	93%	107%	104%	92%	0%
Kosrae	92%	97%	95%	99%	96%	95%	98%	96%	115%	80%	84%	104%	0%
SY2017-2018=>SY2018-2019	**100%**	**92%**	**94%**	**94%**	**95%**	**92%**	**91%**	**88%**	**99%**	**76%**	**84%**	**93%**	**0%**
Yap	70%	83%	93%	89%	101%	85%	89%	89%	99%	68%	88%	98%	0%
Chuuk	120%	97%	94%	97%	90%	88%	83%	81%	88%	82%	72%	82%	0%
Pohnpei	118%	94%	93%	92%	91%	95%	90%	90%	94%	79%	81%	87%	0%
Kosrae	92%	95%	96%	98%	95%	100%	101%	92%	113%	76%	95%	104%	0%
SY2018-2019=>SY2019-2020	**93%**	**90%**	**94%**	**93%**	**91%**	**89%**	**88%**	**90%**	**95%**	**77%**	**83%**	**86%**	**0%**
Yap	55%	89%	96%	98%	91%	81%	89%	92%	118%	80%	83%	89%	0%
Chuuk	103%	83%	89%	82%	82%	82%	73%	79%	74%	76%	70%	74%	0%
Pohnpei	114%	91%	94%	94%	93%	95%	93%	92%	91%	76%	86%	85%	0%
Kosrae	99%	97%	98%	97%	100%	99%	96%	97%	99%	78%	91%	96%	0%
SY2019-2020=>SY2020-2021	**97%**	**93%**	**98%**	**97%**	**96%**	**98%**	**96%**	**95%**	**106%**	**95%**	**90%**	**94%**	**0%**
Yap	54%	85%	96%	94%	91%	98%	93%	90%	100%	91%	86%	90%	0%
Chuuk	130%	108%	105%	103%	106%	106%	103%	104%	130%	104%	103%	102%	0%
Pohnpei	113%	93%	96%	96%	95%	95%	92%	94%	93%	87%	82%	90%	0%
Kosrae	91%	86%	94%	95%	92%	95%	97%	91%	101%	99%	90%	94%	0%
SY2020-2021=>SY2021-2022	**99%**	**95%**	**94%**	**99%**	**96%**	**92%**	**94%**	**97%**	**93%**	**83%**	**80%**	**88%**	**0%**
Yap	61%	92%	90%	101%	94%	86%	87%	104%	99%	85%	82%	91%	0%
Chuuk	145%	105%	106%	103%	102%	101%	101%	98%	74%	69%	71%	75%	0%
Pohnpei	108%	89%	93%	93%	96%	91%	94%	91%	94%	83%	81%	87%	0%
Kosrae	83%	92%	87%	99%	94%	91%	95%	96%	104%	95%	85%	98%	0%

PERCENTAGE OF REPEATERS

Total repeaters enrolled in the same grade as previous year expressed as percentage of total enrolled in specified grade[2]. By far the state with the highest repeating percentage is Yap with an especially high rate of repeaters in ECE. However, this is not cause for alarm as it merely shows what has been stated above about the nature of Yap's under age enrollments into ECE. An official and compulsory entrance age into ECE would be better. The higher percentage of repeaters in primary and secondary education could be due to Yap schools being a little stricter on their students or students' performance are lower than other states.

Kosrae has very little repeaters except in ECE while both Chuuk and Pohnpei maintains percentage of repeaters below 5%. These low values suggest good efficiency of the internal education system.

[2] Note this indicator is slightly different from the repetition rate that we also report in other publications such as the education statistics digest.

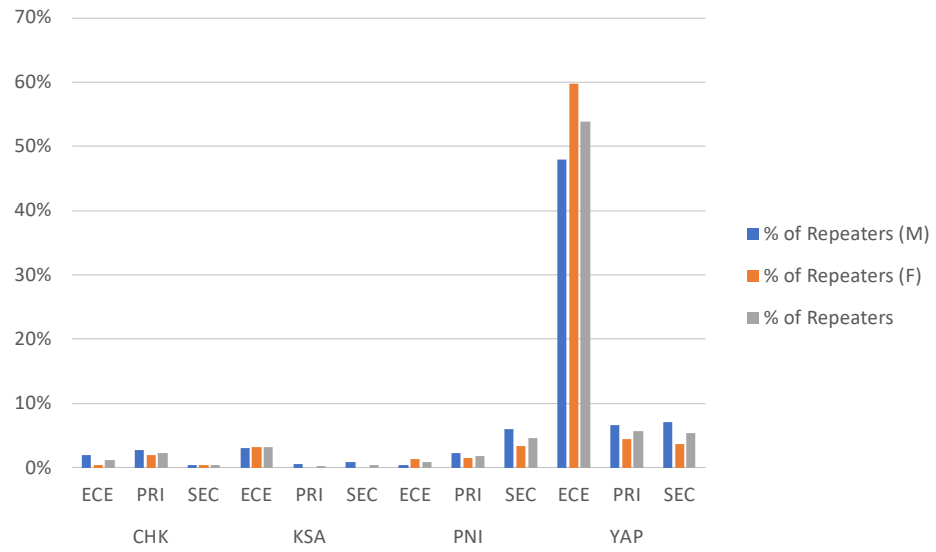


Figure 2.6: Percent of repeaters by state, education level and gender

The trend of percentage of repeaters suggests a recent rise in repeaters in Yap, a correction of data in Chuuk from last year's incomplete data and relatively steady Pohnpei and Kosrae percentage of repeaters (Figure 2.7).

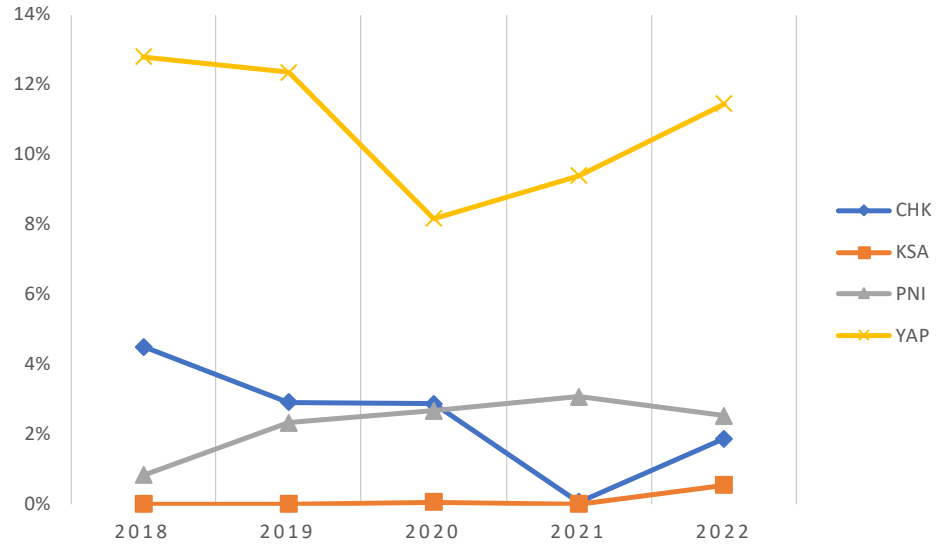


Figure 2.7: Percent of repeaters for the last 5 years by state

Table 2.2: Percent of repeaters by state and education level for past 5 years

% Repeaters

	CHK			CHK Total	KSA			KSA Total	PNI			PNI Total	YAP			YAP Total	Average Total
	ECE	PRI	SEC		ECE	PRI	SEC		ECE	PRI	SEC		ECE	PRI	SEC		
2018	8%	5%	2%	5%	0%	0%	0%	0%	0%	1%	0%	1%	46%	8%	11%	13%	4%
2019	4%	3%	1%	3%	0%	0%	0%	0%	1%	3%	2%	2%	45%	7%	10%	12%	4%
2020	5%	3%	2%	3%	0%	0%	0%	0%	0%	2%	4%	3%	38%	5%	2%	8%	3%
2021	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	7%	3%	49%	5%	1%	9%	2%
2022	1%	2%	0%	2%	3%	0%	0%	1%	1%	2%	5%	3%	54%	6%	5%	11%	3%
Average Total	**4%**	**3%**	**1%**	**2%**	**1%**	**0%**	**0%**	**0%**	**0%**	**2%**	**3%**	**2%**	**46%**	**6%**	**6%**	**11%**	**3%**

ATTENDANCE RATE

Generally, attendance as reported by schools in the FSM is high with ~93% and above (Figure 2.8).

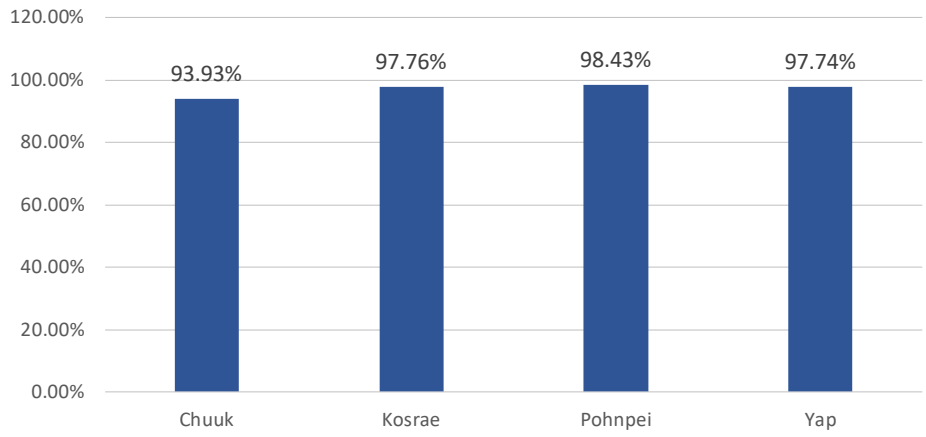


Figure 2.8: Attendance rate by states

The data to produce the above is shown in Table 2.3.

Table 2.3: Enrollments and Attendance

	Chuuk	Kosrae	Pohnpei	Yap
Total Enrollment	10591	1652	8944	2827
Total School Days	180	180	180	180
Possible Attendance	1906380	297360	1799280	508860
Total Absent	115677	6671.5	71166.5	11505
Actual Attendance	1790703	290688.5	1770982	497355
Attendance Rate	93.93%	97.76%	98.43%	97.74%

SURVIVAL RATE

The survival rates shown in Figure 2.9 read like this:

- Survival Rates (from G1) in legend to Grade 8 in vertical axis is the *expected* surviving percentage of the cohort starting in Grade 1 reaching Grade 8
- Survival Rates (from G1) in legend to Grade 12 in vertical axis is the *expected* surviving percentage of the cohort starting in Grade 1 reaching Grade 12
- Survival Rates (from G9) in legend to Grade 12 in vertical axis is the *expected* surviving percentage of the cohort that made it to Grade 9 and then go on reaching Grade 12. This is why there is no grey and yellow bars for Grade 8 in the vertical axis.

The survival rate is a measure to help *predict* the survival of student cohorts based on the promotion from grade to grade as observed by the data from the last two consecutive years[3].

The survival rate to grade 8 is considered acceptable at 78% for male and very good at 86% for females (Figure 2.9). The survival rate for a cohort starting in Grade 1 and making it to grade 12 is much lower at 32% and 39% for males and females. Once students make it to grade 9, the survival rate is around ~50% (Figure 2.9). This would suggest that once a student makes it to grade 9, that student is statistically more likely (~50% of the time) to complete all the remaining grades of secondary.

Some readers might notice that significant drop in survival rates nationally in FSM compared to last year (Figure 2.10). However, this is actually a return to normalcy at worse or even a slight increase (improvement) at best. The reason for this is that last year's national survival rate was artificially inflated by Chuuk inconsistent data in a previous year as explained several times.

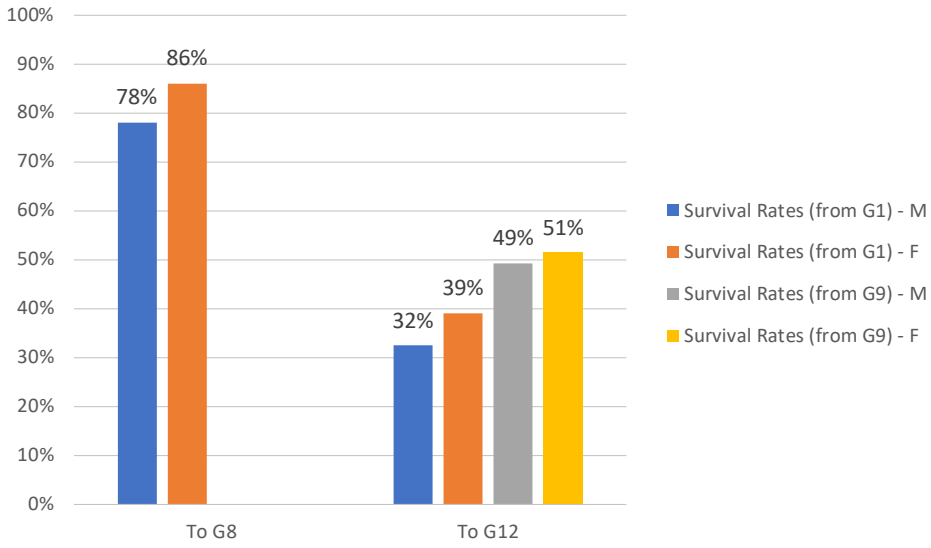


Figure 2.9: Survival rates by gender for the nation

[3] It does not tell you the actual survival percentage of a cohort. You would need to wait 8-12 years for this precise number.

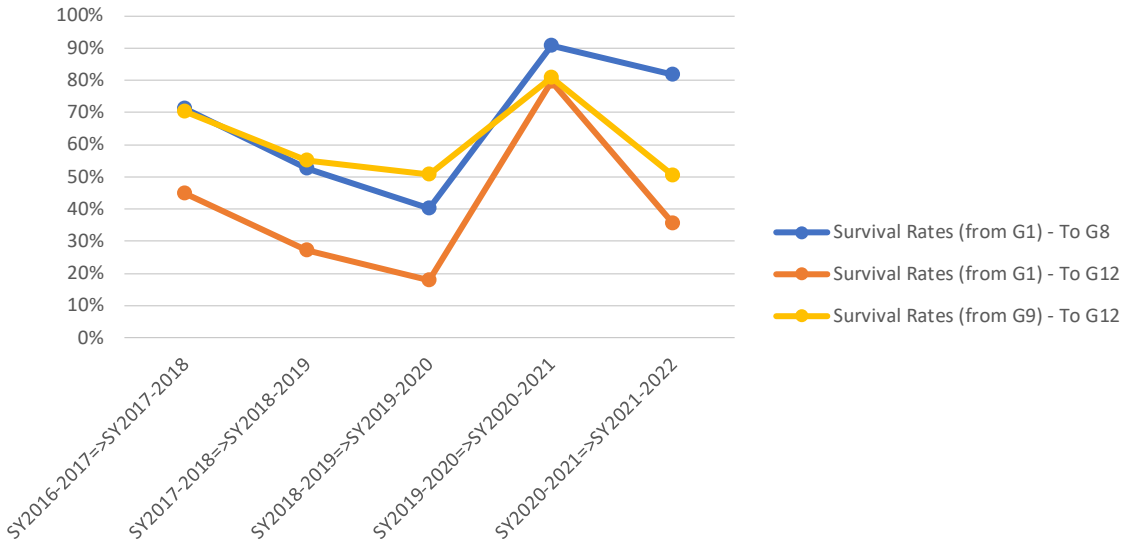


Figure 2.10: Survival Rates for past 5 years

Chuuk still does seem to distort this indicator as shown by their 118% survival rate (Figure 2.10) but less than last year. Pohnpei, Kosrae and Yap provide a picture closer to the reality. Only about 60% (62% Kosrae, 58% Pohnpei, 61% Yap) of students starting in Grade Kinder or Grade 1 will go on to make it to Grade 8. And only 30-50% (52% Kosrae, 32% Pohnpei, 38% Yap) will make it all the way to Grade 12. Those that do make it to Grade 9 have roughly 70% (80% Kosrae, 58% Pohnpei, 63% Yap) chance of making it to Grade 12 (Figure 2.10).

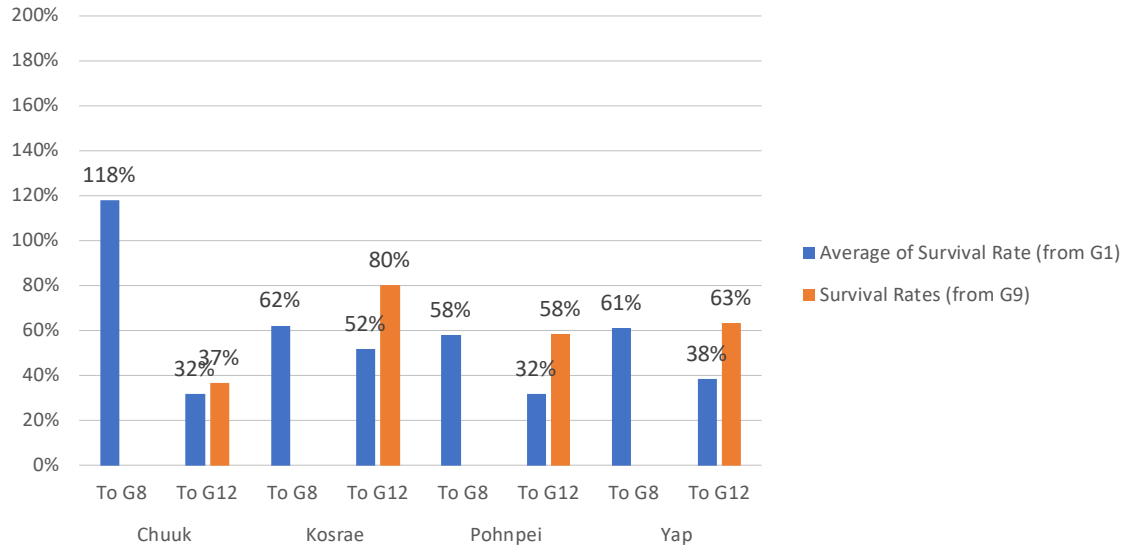


Figure 2.11: Survival rates by state

All data of estimated survival rates as computed in the last five years for all states is included in Table 2.4 and Table 2.5.

Table 2.4: Survival rates (from Grade 1) by state

Survival Rates (from G1)	Yap		Yap Total	Chuuk		Chuuk Total	Pohnpei		Pohnpei Total	Kosrae		Kosrae Total
	G1 to G8	G1 to G12		G1 to G8	G1 to G12		G1 to G8	G1 to G12		G1 to G8	G1 to G12	
SY2016-2017=>SY2017-2018	50%	23%	36%	46%	19%	32%	132%	127%	130%	79%	63%	71%
SY2017-2018=>SY2018-2019	47%	27%	37%	47%	20%	34%	57%	30%	44%	79%	67%	73%
SY2018-2019=>SY2019-2020	50%	35%	42%	24%	7%	15%	60%	30%	45%	85%	57%	71%
SY2019-2020=>SY2020-2021	56%	40%	48%	140%	200%	170%	67%	40%	53%	59%	50%	55%
SY2020-2021=>SY2021-2022	61%	38%	50%	118%	32%	75%	58%	32%	45%	62%	52%	57%

Table 2.5: Survival rates (from Grade 1) by state

Survival Rates (from G9)	Yap	Yap Total	Chuuk	Chuuk Total	Pohnpei	Pohnpei Total	Kosrae	Kosrae Total
	G9 to G12		G9 to G12		G9 to G12		G9 to G12	
SY2016-2017=>SY2017-2018	46%	46%	53%	53%	103%	103%	69%	69%
SY2017-2018=>SY2018-2019	58%	58%	49%	49%	56%	56%	75%	75%
SY2018-2019=>SY2019-2020	59%	59%	39%	39%	55%	55%	68%	68%
SY2019-2020=>SY2020-2021	70%	70%	109%	109%	64%	64%	84%	84%
SY2020-2021=>SY2021-2022	63%	63%	37%	37%	58%	58%	80%	80%

GRADUATION RATE

Once the students reach grade 8 and grade 12 they have a high rate of graduating with males 93% and females 96% graduating from primary (Grade 8) and graduating at 96% and 97% from secondary for male and females respectively (Figure 2.12).

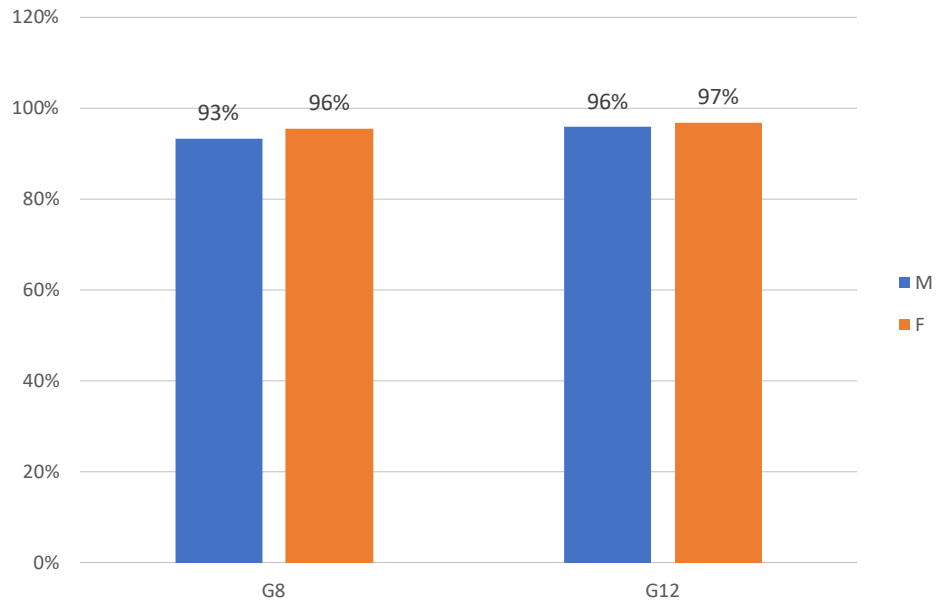


Figure 2.12: Graduation rate for Nation by Gender for Grade 8 and 12

The graduation rate as produced herein (i.e. using an annual census with end of year data recording the outcome of each student in the census) is available for the last 4 years. The trend is steady at a good level (>95%) as shown in Figure 2.13 except for the anomaly of low overall national graduation in 2021 which was caused by the state of Chuuk not submitting their end of year data.

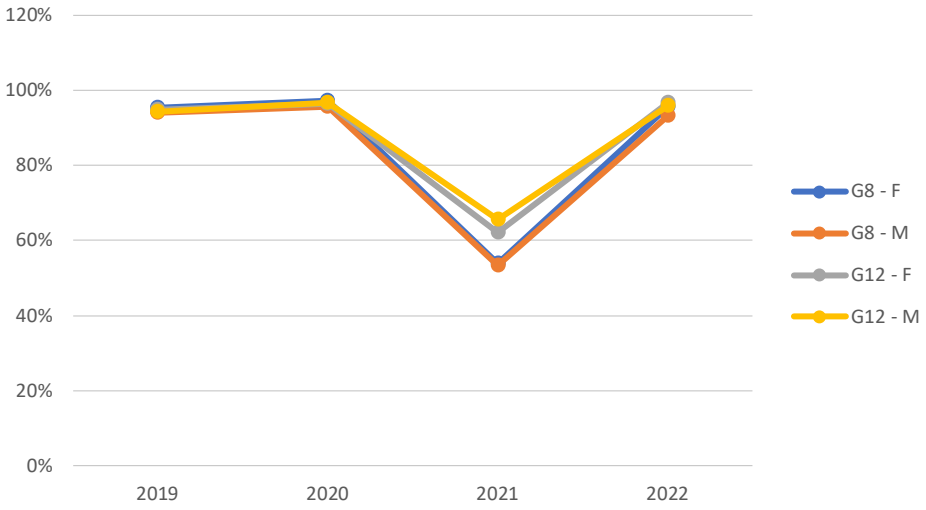


Figure 2.13: Graduation rates for past 4 years

THEME 2: How far do they get in school?

For all states the graduation for primary (i.e. grade 8 to grade 9) and secondary (completing grade 12) is in the range of 93-100% (Figure 2.14). Chuuk and Pohnpei have slightly lower graduation from primary of 94%, though it is still very good. It is important to note that there are several dropouts just close to graduation and therefore identifying those students and encouraging them to complete through the graduation would be an easy way to further improve the figures below.

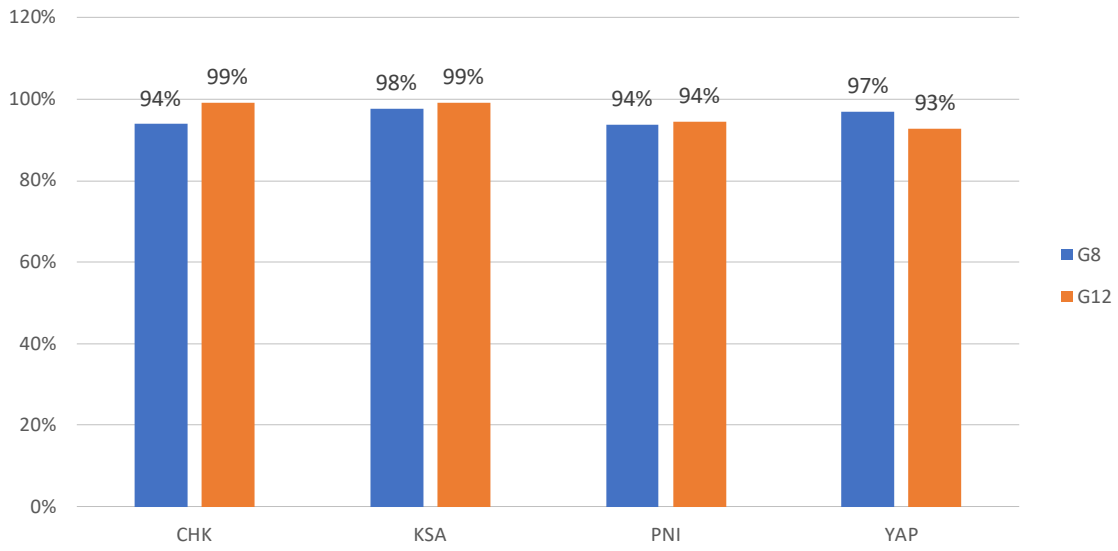


Figure 2.14: Graduation rate by state and gender for Grade 8 and 12

Table 2.6: Graduation rate by state and gender for Grade 8 and 12

Graduation	G8		G8 Total	G12		G12 Total	Grand Total
	F	M		F	M		
CHK	95%	93%	94%	99%	99%	99%	96%
KSA	99%	97%	98%	100%	98%	99%	98%
PNI	95%	92%	94%	95%	94%	94%	94%
YAP	98%	96%	97%	93%	92%	93%	95%
Grand Total	**96%**	**93%**	**94%**	**97%**	**96%**	**96%**	**95%**

DROPOUT RATE

The dropout rates hovers around 5% in FSM (Figure 2.15) and average 5.8% for males and 4.9% for females.

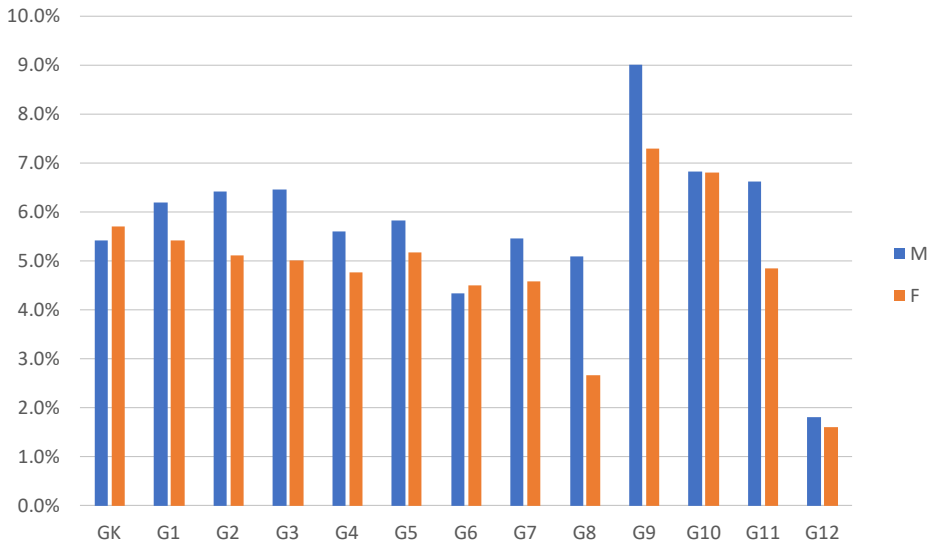


Figure 2.15: Dropout rates by grade and gender

Kosrae has the least dropouts (Figure 2.16). Generally, males have higher dropout rates than females. Pohnpei and Yap have the highest dropout rate in the country followed by Chuuk. However, Yap's dropout rate excluding Grade K goes down by 0.6%.

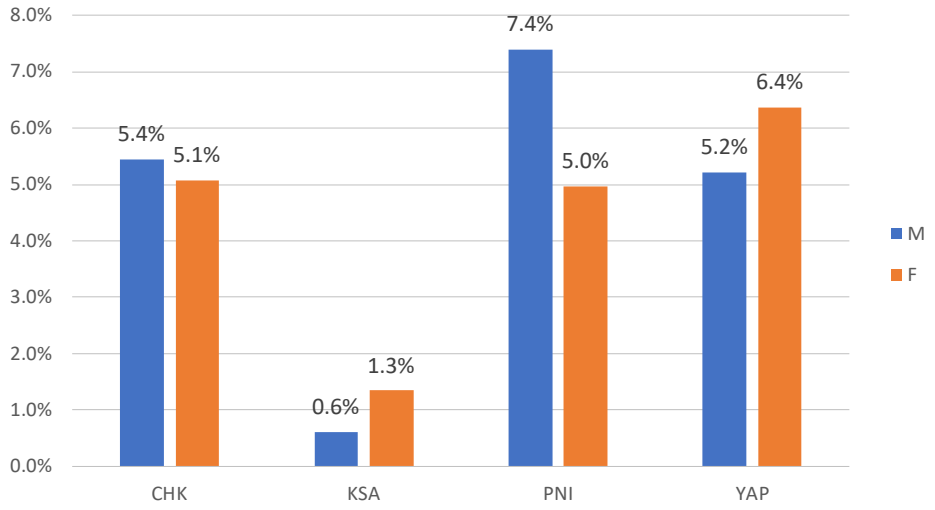


Figure 2.16: Dropout rates by states and gender

In Yap, the high dropout rate in ECE could be further improved by delaying enrollment until age 5 when children are more ready and less likely to dropout. Beyond that, most states have high dropout rates starting as early as Grade 1 and sustaining throughout all grades. This indicates a need for strategies to keep students in school throughout the whole education system. There are even significant dropouts near the graduation of high school when students are so close to completing a K-12 education. Strategies should be put in place to support these students to finish their education.

Table 2.7: Dropout by state, grade and gender data

	Dropouts				Enrollments				Total Dropouts	Total Enrollments
	CHK	KSA	PNI	YAP	CHK	KSA	PNI	YAP		
Female	**272**	**11**	**220**	**86**	**5357**	**819**	**4436**	**1351**	**589**	**11963**
GK	18		13	17	302	62	304	174	48	842
G1	18		24	10	439	49	350	122	52	960
G2	30		10	6	429	69	307	95	46	900
G3	34		10	7	529	56	337	95	51	1017
G4	27		22	4	544	70	376	122	53	1112
G5	41		13	3	543	72	383	102	57	1100
G6	35		11	1	522	64	361	95	47	1042
G7	26		15	6	499	67	365	96	47	1027
G8	16		7	2	441	68	337	91	25	937
G9	10	5	36	8	301	50	362	96	59	809
G10	13	6	26	13	310	75	359	107	58	851
G11	3		28	5	270	62	328	81	36	741
G12	1		5	4	228	55	267	75	10	625
Male	**285**	**5**	**333**	**77**	**5234**	**833**	**4509**	**1476**	**700**	**12052**
GK	10		19	17	303	66	308	173	46	850
G1	23		29	12	439	64	388	143	64	1034
G2	33		22	8	463	61	352	104	63	980
G3	40		30	2	547	55	407	106	72	1115
G4	40		18	5	550	73	387	116	63	1126
G5	41		24	6	572	72	436	137	71	1217
G6	22		18	5	494	65	360	118	45	1037
G7	35		19	4	514	61	379	107	58	1061
G8	26		18	2	406	65	325	106	46	902
G9	4	1	57	9	261	65	366	95	71	787
G10	8	3	36	3	277	74	289	93	50	733
G11	3		34	3	184	55	278	87	40	604
G12		1	9	1	224	57	234	91	11	606
Grand Total	**557**	**16**	**553**	**163**	**10591**	**1652**	**8945**	**2827**	**1289**	**24015**

COMET

The College of Micronesia-FSM Entrance Test (COMET) is a three-section test given to high school seniors, high school graduates and General Educational Development (GED) holders who want to enroll at COM-FSM, and who have not attended college.

COM-FSM cannot accept and enroll every high school graduate or GED holder who wants to attend college, and has to make decisions on admitting and enrolling students. Having a high school diploma or GED is by itself not enough for the college to determine admissions. As such, COM-FSM developed the COMET to help identify, select and admit students.

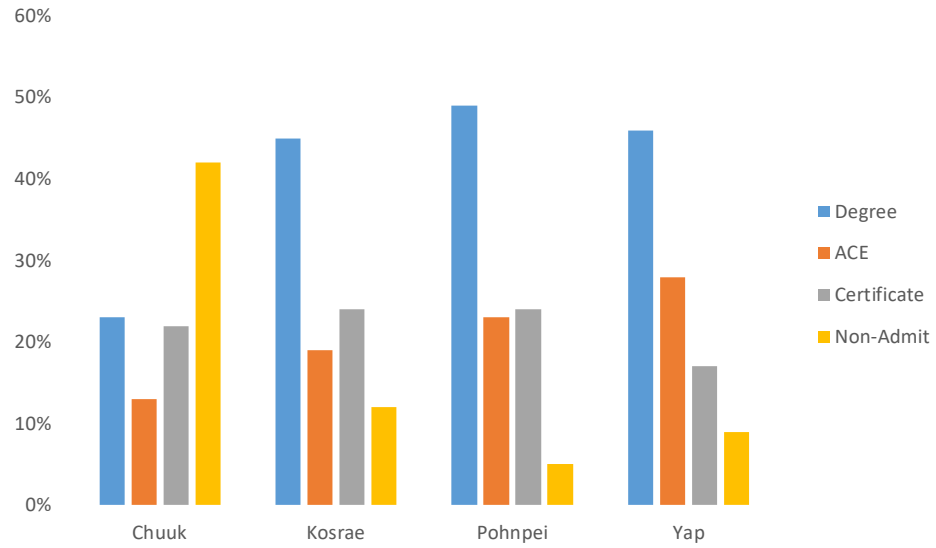


Figure 2.17: COMET by state

The purpose of the COMET is to assist COM-FSM in making decisions about admitting students to the college, and allows it to gather some information about how well prepared and "college-ready" prospective students are in English writing and reading, and in mathematics. It is also used to place admitted students into an appropriate COM-FSM academic degree, Achieving College Excellence (ACE), and vocational/technical certificate programs.

The most striking is the large disparity of the percentage of non-admissions in the state of Chuuk compared to other states. This could indicate the level of preparedness coming from Chuuk is nowhere near the level seen in other states. In addition, the percentage of entering a degree program is much lower in Chuuk seemingly directly affecting the outcome.

Table 2.8: COMET by state data

State	Testee Count	Degree	ACE	Certificate	Non-Admit
Chuuk	385	23%	13%	22%	42%
Kosrae	123	45%	19%	24%	12%
Pohnpei	647	49%	23%	24%	5%
Yap	197	46%	28%	17%	9%
Total	1352	41%	20%	22%	17%

THEME 3: HOW ARE STUDENTS PERFORMING?

The FSM National Minimum Competency Test (NMCT) is a standards-based assessment tool that allows to measure students' level of learning with respect to standards and benchmarks in Language Arts (Literacy) and Mathematics (Numeracy). All students who can take paper/pencil tests are required to do so. The results will be produced, analyzed, and reported to the schools in a format that teachers and school leaders can understand. Other types of reports are also created for other stakeholders.

While we have the ability to break down the analysis by various grades (i.e. Grade 4, 6, 8 and 10) and areas of knowledge (i.e. subjects, standards and benchmarks), the results here are averaged in two simple groups for a high level overview of FSM's literacy and numeracy skills progress.

While some results herein would be considered low by our own standard they cannot be compared to another country as this sort of analysis does not compare well from country to country. Unlike most other indicators that have comparable measures (e.g. an enrollment or population is counted the same whatever the country), assessment data have too many factors and differences in the standards based assessments tools used that it is meaningless to compare ourselves with neighbor countries or any country.

LITERACY (READING)

This year the students performing at minimum proficiency in literacy is 36% (Figure 3.1). The most concerning is the large percentage of well below minimum competency at 37% (Figure 3.1).

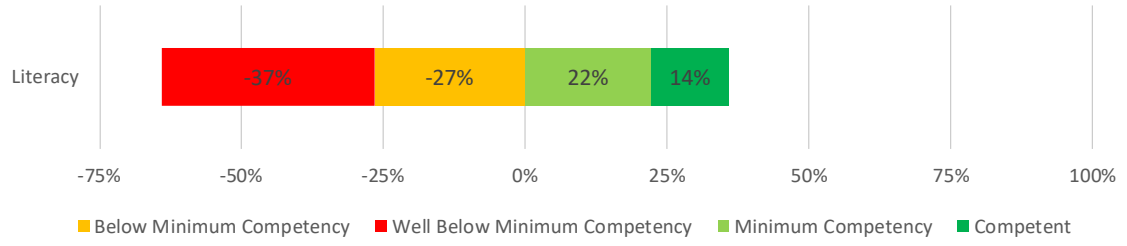


Figure 3.1: Literacy Nation Performance

The performance varies significantly by state with Kosrae clearly performing best and Chuuk performing the poorest (Figure 3.2) in literacy. When we are talking about the states and schools together, we have to bear in mind the geographical uniqueness and other factors that contributed to the impact of students' performance. For instance, in Chuuk, most schools are located on the islands in the lagoon. Most of which are secluded in the remote areas. Students have to walk miles to reach the campus. Yap and Pohnpei follow closely behind Kosrae sharing the "second position" for literacy. The disparity between the strongest (Kosrae with 51% minimum proficiency) and weakest (Chuuk with 18% minimum proficiency) performing state in literacy is very large. This indicates a very big difference in the quality of education between those states.

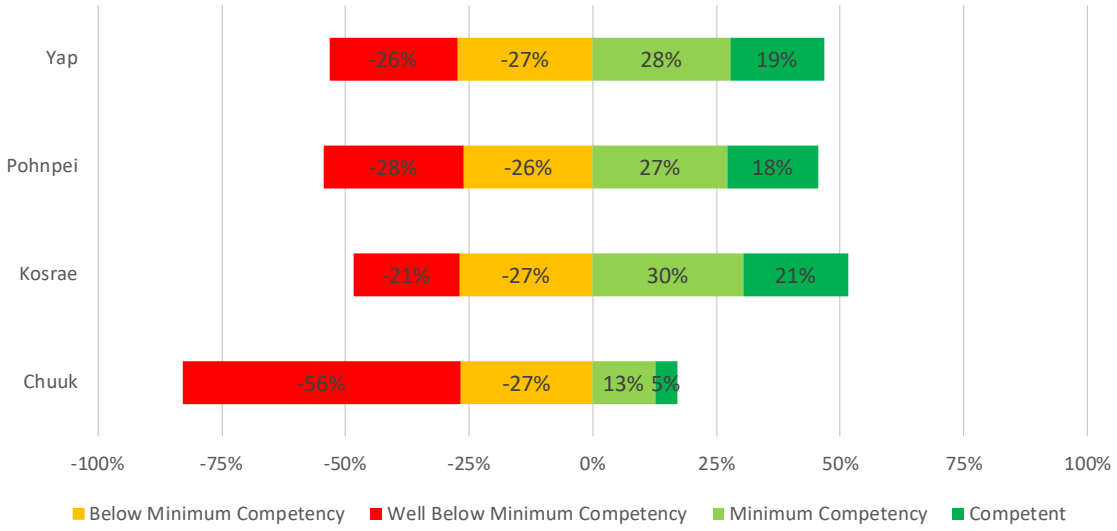


Figure 3.2: Literacy by State Performance

The trend is similar to recent years remaining stables though showing a slight improvement from last year.

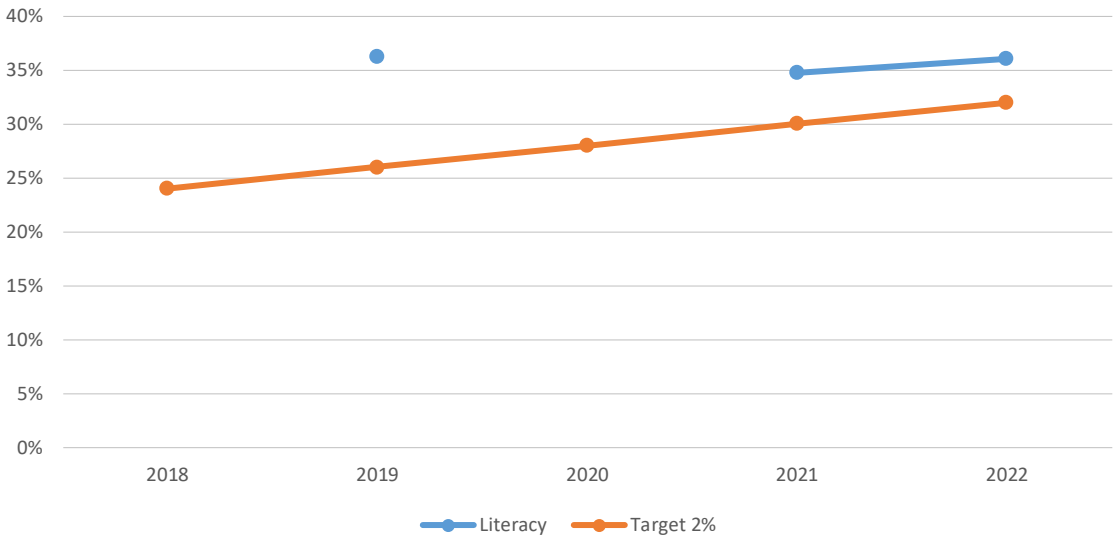


Figure 3.3: Literacy Nation Performance Trend

NUMERACY (MATHEMATICS)

This year the students performing at minimum proficiency in numeracy is 26% (Figure 3.4). Again, the most concerning is the large percentage at well below minimum competency (47%) (Figure 3.4).

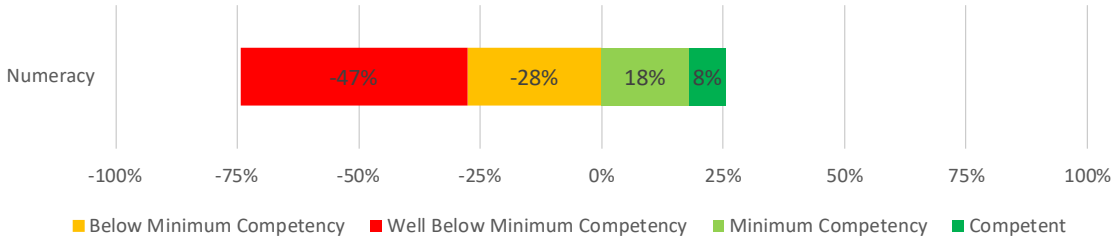


Figure 3.4: Numeracy Nation Performance

The performance varies significantly by state with Kosrae again clearly performing best and Chuuk performing the poorest (Figure 3.5) in numeracy. Pohnpei clearly takes second position nationwide followed by Yap in numeracy. The disparity between the strongest (Kosrae with 38% minimum proficiency) and weakest (Chuuk with 17% minimum proficiency) performing state in numeracy is very large. This indicates a very big difference in the quality of education between those states.

Another important thing to note is the large difference between literacy and numeracy, with the former generally stronger results. This indicators a need to increase resources in numeracy skills through better trained teachers.

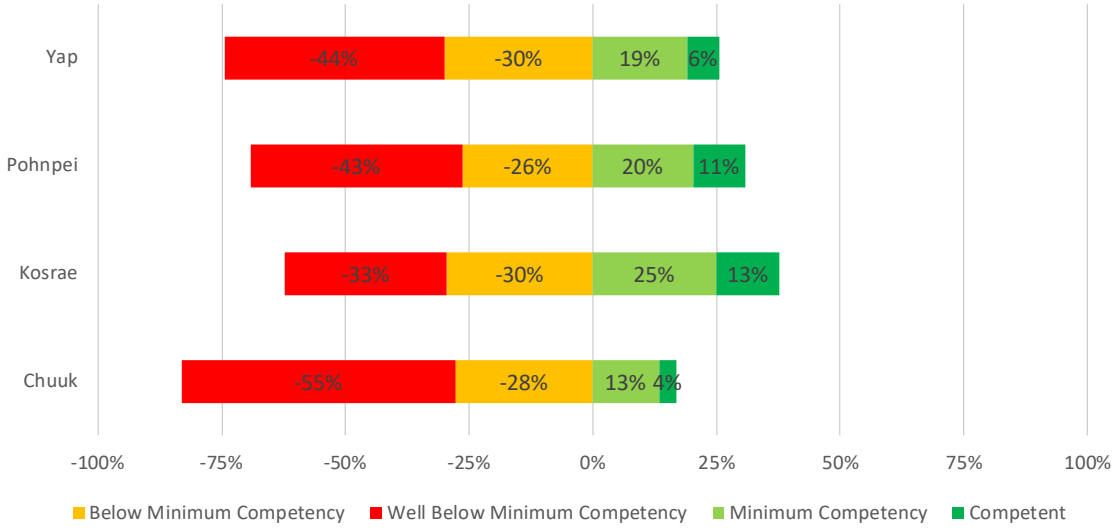


Figure 3.5: Numeracy by State Performance

The trend is similar to recent years remaining stables though showing a slight improvement from last year.

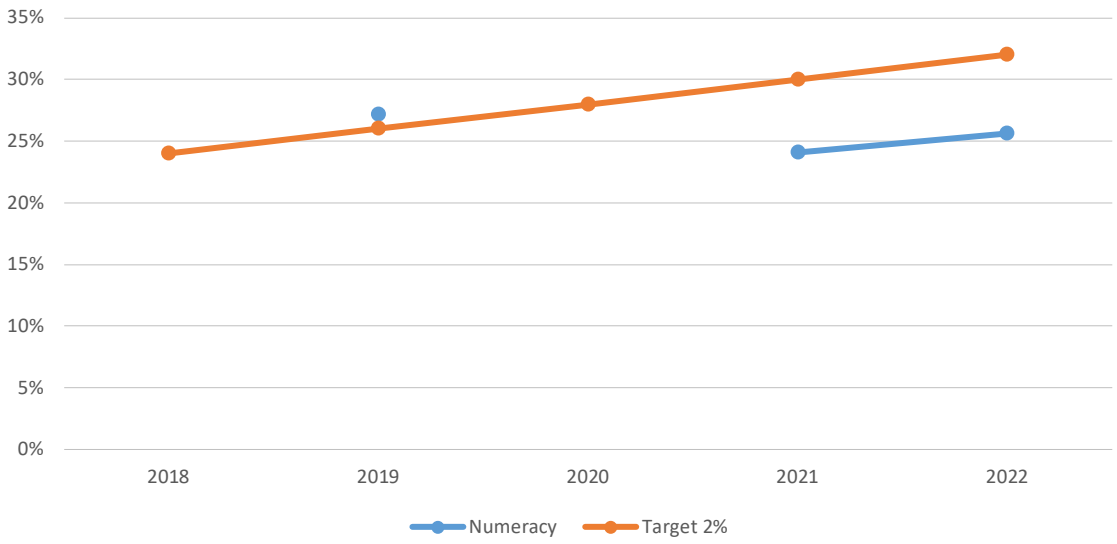


Figure 3.6: Numeracy Nation Performance Trend

THEME 4: HOW ARE TEACHERS DOING?

STUDENT TEACHER RATIO

A high student-teacher ratio suggests the teachers are responsible for larger groups of students hindering their ability to focus on individual student needs and learning abilities. Chuuk has the highest student teacher ratios among all states (Figure 4.1,) especially in ECE and Primary, suggesting a lack of teachers in those levels of education compared to the rest of FSM. Yap has the best teacher ratio followed by Kosrae and Pohnpei (Figure 4.1 and Table 4.1)

The difference between student-teacher ratio and student-*qualified* teacher ratio is small. This means that an increasing number of our teachers are considered qualified and generally more students have access to qualified teachers though this may not equally be the case in all regions (e.g. urban vs rural); deeper analysis is required to get to this information[1]. The student-*certified* teacher ratio is the highest amongst all ratios meaning many teachers do not have the certifications to teach in FSM. In Yap there are a lot less certified teachers than in other states. Certification of teachers was put on hold since COVID hit. The plan was set to conduct TOTs in all four states, then training with teachers. After these trainings, testing was to be done. We only got started on training in 2021 again, with testing as well. This can be disregarded as you have addressed this in the later passages.

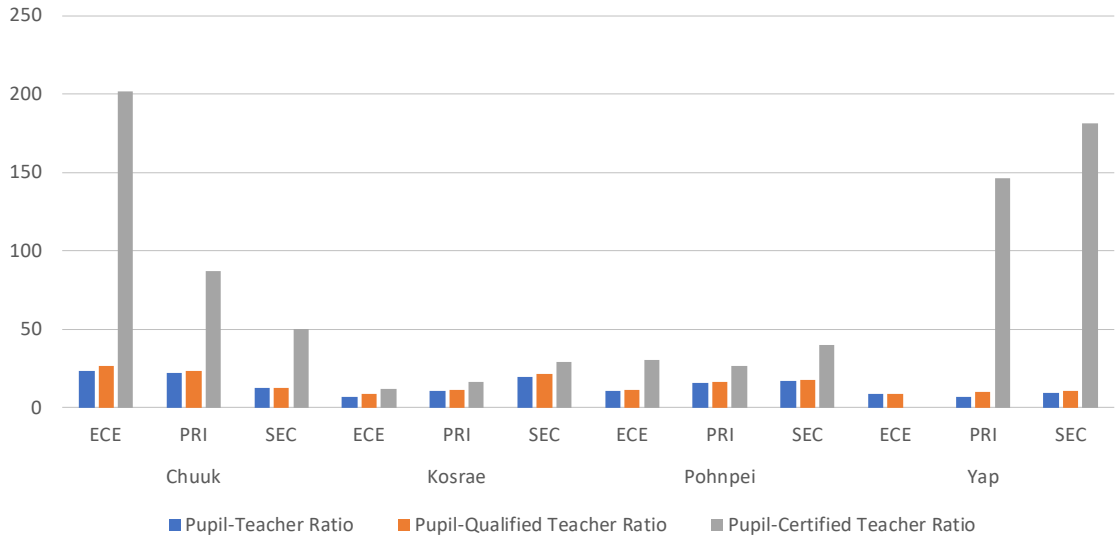


Figure 4.1: Student-Teacher Ratio for the nation by state and education levels

TEACHER BY DEGREE LEVEL

The majority of qualified teachers have either an Associate of Science or Associate of Arts followed by a Bachelor of Arts (Figure 4.2.) The fourth largest group is teachers with only a High School diploma, which does not meet the qualifications to teach. FSM does have teachers with higher qualifications but it forms a small percentage overall.

Table 4.1: Student-Teacher Ratios for the nation by state and education levels data

[1] This sort of in-depth analysis is often offered in our NDOE Education Statistics Digest publication.

	Pupil-Teacher Ratio	Pupil-Qualified Teacher Ratio	Pupil-Certified Teacher Ratio
Chuuk	**19**	**20**	**78**
ECE	23	26	202
PRI	22	23	87
SEC	13	13	50
Kosrae	**12**	**13**	**18**
ECE	7	9	12
PRI	10	12	16
SEC	20	21	29
Pohnpei	**15**	**16**	**30**
ECE	11	11	31
PRI	16	16	27
SEC	17	18	40
Yap	**8**	**10**	**177**
ECE	8	8	#N/A
PRI	7	10	146
SEC	10	11	181
Average Total	**15**	**16**	**44**

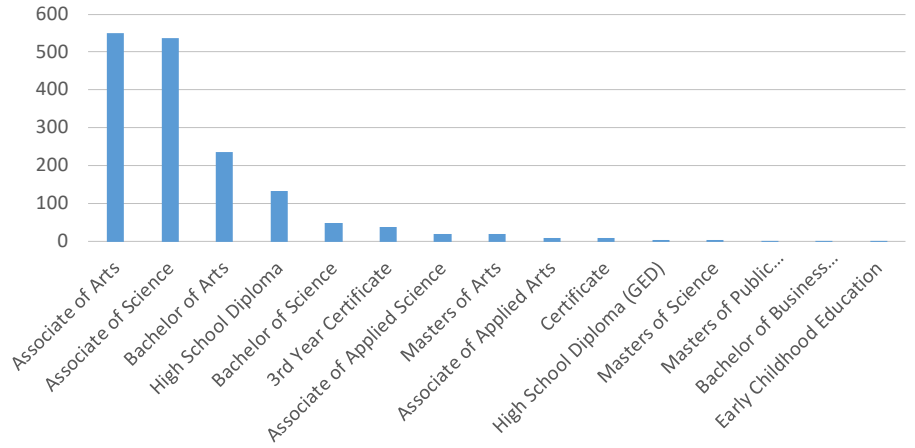


Figure 4.2: Teachers by Degrees

The situation is similar in all states though Yap has a very high number of teachers teaching with only a high school diploma (mostly cultural teachers) followed by Pohnpei (Table 4.2.) Note that the teachers reported here are all teachers regardless of their source of funding.

PERCENT OF QUALIFIED/CERTIFIED TEACHERS

The percentage of qualified teachers in FSM averages around >90% across all states and education levels and is similar for females and males (Figure 4.3.) The percentage of certified teachers however is much lower especially in Chuuk and Yap where no teachers have been certified, something that will be addressed in the near future. Pohnpei and Kosrae both have slightly higher qualified and certified teachers nearing 100% (Figure 4.3.)

Table 4.2: Teachers by Degrees and state data

Teachers by Degrees	Chuuk	Kosrae	Pohnpei	Yap	Grand Total
Associate of Arts	198	52	214	85	549
Associate of Science	197	58	171	111	537
Bachelor of Arts	68	7	120	42	237
High School Diploma	30		26	77	133
Bachelor of Science	18	6	10	14	48
3rd Year Certificate	2		22	14	38
Associate of Applied Science	5	3	1	11	20
Masters of Arts	6		10	4	20
Associate of Applied Arts	7			2	9
Certificate	3		3	2	8
High School Diploma (GED)			3	1	4
Masters of Science	3				3
Masters of Public Administration				2	2
Bachelor of Business Administration				1	1
Early Childhood Education		1			1
Grand Total	**537**	**127**	**580**	**366**	**1610**

[MK1]

The situation with certified teachers is not as good as already pointed out from the analysis on Pupil-Certified Teacher Ratio above. Kosrae seems to have the most certified teachers followed by Pohnpei and Chuuk (Figure 4.3 and Table 4.4.) That said, aside from Kosrae the percentage of certified teacher is generally below 40% and needs improvement. This is partially attributed to many teachers not yet taking the NSTT, which is the qualification test to become certified.

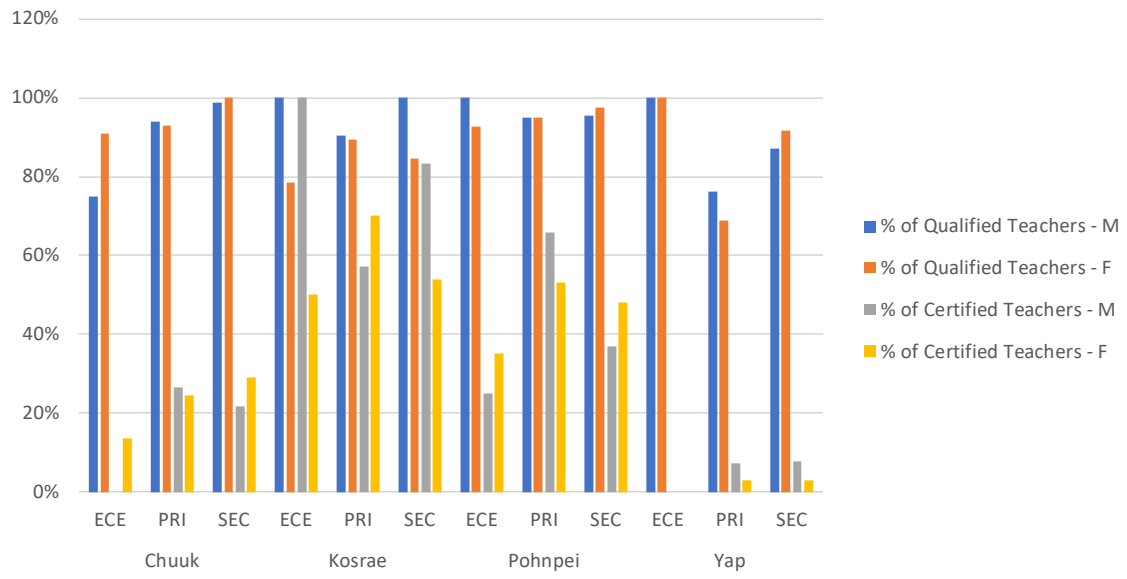


Figure 4.3: Percent of qualified and certified teacher for the nation by state and gender

TEACHER ATTENDANCE RATE

The attendance rate of teachers in all states is very good: all above 95%[MK2] (Table 4.3.) Kosrae has the lowest attendance at 95% for males and 94% for female. The attendance rate for males and females is similar in general.

Table 4.3: Attendance data by state and gender

	Chuuk		Kosrae		Pohnpei		Yap	
	Male	Female	Male	Female	Male	Female	Male	Female
Total Teachers	231	338	77	93	238	388	177	211
Total School Days	180	180	180	180	180	180	180	180
Possible Attendance	41580	60840	13860	16740	42840	69840	31860	37980
Total Absent	1087	1617	648	1070	1037	1710	509	653
Actual Attendance	40493	59223	13212	15670	41803	68130	31351	37327
Attendance Rate	97.39%	97.34%	95.32%	93.61%	97.58%	97.55%	98.40%	98.28%

Table 4.4: Percent of qualified and certified teachers for the nation by state and gender data

	% of Qualified Teachers		% of Certified Teachers		Total % of Qualified Teachers	Total % of Certified Teachers
	M	F	M	F		
Chuuk	**95%**	**95%**	**24%**	**25%**	**95%**	**25%**
ECE	75%	91%	0%	14%	88%	12%
PRI	94%	93%	27%	24%	93%	25%
SEC	99%	100%	22%	29%	99%	25%
Kosrae	**93%**	**87%**	**66%**	**64%**	**89%**	**65%**
ECE	100%	79%	100%	50%	83%	61%
PRI	90%	89%	57%	70%	90%	65%
SEC	100%	85%	83%	54%	92%	68%
Pohnpei	**95%**	**95%**	**56%**	**49%**	**95%**	**52%**
ECE	100%	93%	25%	35%	93%	34%
PRI	95%	95%	66%	53%	95%	58%
SEC	96%	97%	37%	48%	97%	43%
Yap	**81%**	**77%**	**7%**	**2%**	**79%**	**4%**
ECE	100%	100%	0%	0%	100%	0%
PRI	76%	69%	7%	3%	72%	5%
SEC	87%	92%	8%	3%	89%	5%
Average Total	**92%**	**90%**	**34%**	**33%**	**91%**	**33%**

TEACHER ATTRITION RATE

The percentage of teachers leaving the profession in a given school year is measured by the teacher attrition rate. This is estimated based on the data from the FedEMIS School Annual Census for two consecutive years. Anything above 10% is considered high and disruptive to students. Kosrae and Pohnpei have the highest teacher attrition (Figure 4.4.) Chuuk and Yap have better teacher attrition at 10% each (Figure 4.4.)

In addition to standard teacher attrition analysis we also provide attrition rates of our qualified and certified teachers. While similar to standard attrition, attrition of qualified teachers is a little lower also a good indication that qualified teachers tend to remain in the profession.

The certified teachers are the most likely to stay in the profession as shown by the lowest attrition rate (Chuuk 8%, Kosrae 16%, Pohnpei 15% and Yap 6%). Those are acceptable certified teacher attrition which provides evidence of yet another reason to continue training and certifying our teachers. However, note that all increased slightly from last year (i.e. not good) except for Yap.

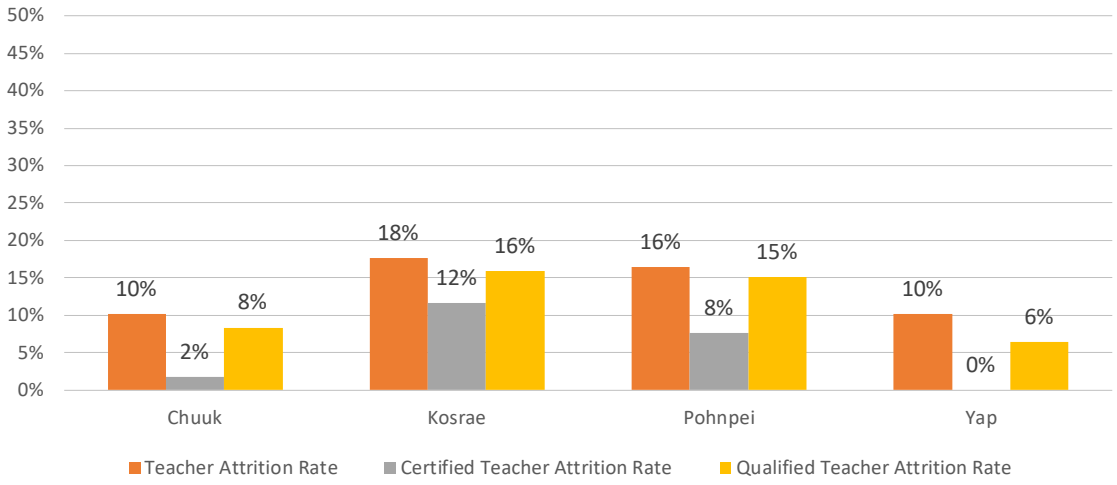


Figure 4.4: Teacher Attrition Rate by State

The teacher attrition in the FSM is still a little above target (Figure 4.4). Last year we have an 8% attrition rate (Figure 4.5) compared to this years 13%.[MK3]This may have been due to Chuuk's unreliable data of 2020 and 2021. Over the years, it seems to fluctuate about 13% (ideal is no more than 10%). As for qualified teachers attrition we are very close to the 10% ideal target over the years, something we need to maintain. The certified teacher has remained almost the same throughout the years at around 4%. Years before 2018 certification data was not well recorded which explains the 0% in years 2017-18. Table 4.5 has a bit more data that supports the analysis herein. In Table 4.5 you will find the number of new entrants, total number of teachers, and total exiting teachers by states for the past two years. One concerning factor, though, is that Chuuk is losing more qualified teachers than it has new qualified teachers entering the profession. This indicates a need to increase the recruitment efforts of qualified teachers in Chuuk. A similar though less dire conclusion can be made in all states of the FSM with certified teachers. Another important point to note is that Chuuk, Pohnpei, and Kosrae all have more certified teachers leaving than new certified teachers entering the profession. Where did those certified teachers go? Why are new ones not being certified at a higher rate?

Certified teachers are exiting faster than we are certifying new teachers coming in and this is a major problem both with timely data entry and the process of certifying teachers in FSM.

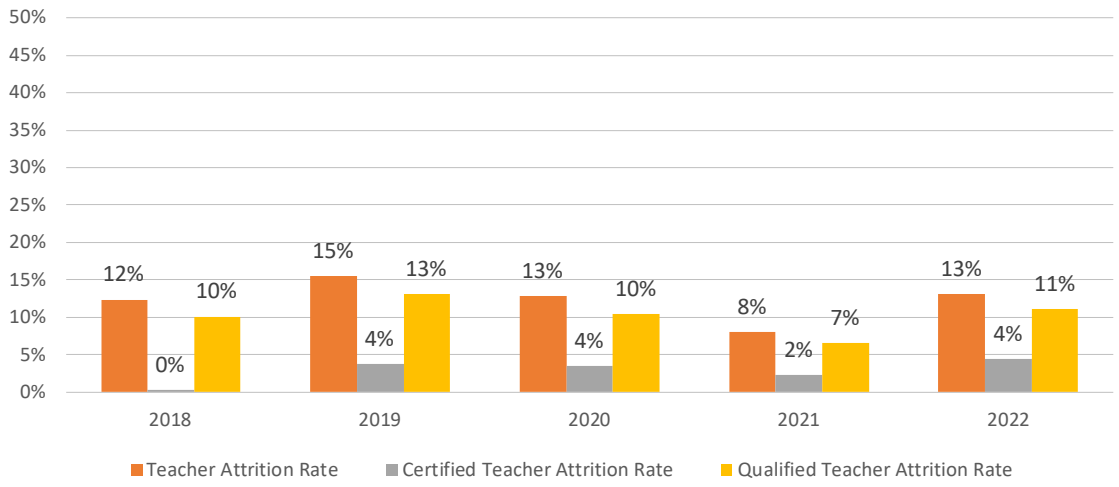


Figure 4.5: Teacher Attrition Rate National Trend

Table 4.5: Leavers and Teacher Attrition Rate by gender and state data

Year	State	New Entrants	Number of Teachers	Exiting Teachers	Teacher Attrition Rate
2021	Chuuk	14	562	20	
2022	Chuuk	57	550	57	10%
2021	Kosrae	38	164	28	
2022	Kosrae	9	142	29	18%
2021	Pohnpei	51	616	39	
2022	Pohnpei	68	580	101	16%
2021	Yap	39	355	50	
2022	Yap	49	366	36	10%
Year	**State**	**New Certified Entrants**	**Number of Teachers**	**Exiting Certified Teachers**	**Certified Teacher Attrition Rate**
2021	Chuuk	0	562	1	
2022	Chuuk	2	550	10	2%
2021	Kosrae	7	164	18	
2022	Kosrae	3	142	19	12%
2021	Pohnpei	7	616	18	
2022	Pohnpei	24	580	47	8%
2021	Yap	0	355	2	
2022	Yap	0	366	0	0%
Year	**State**	**New Qualified Entrants**	**Number of Teachers**	**Exiting Qualified Teachers**	**Qualified Teacher Attrition Rate**
2021	Chuuk	13	562	14	
2022	Chuuk	54	550	47	8%
2021	Kosrae	26	164	28	
2022	Kosrae	3	142	26	16%
2021	Pohnpei	44	616	34	
2022	Pohnpei	61	580	93	15%
2021	Yap	24	355	36	
2022	Yap	36	366	23	6%

THEME 5: HOW MUCH DO WE SPEND?

It is important to note that there are a few sources of budget data. The various sources may not always include all sources of funding. In addition, those sources of budget data can also at times be updated. For these reasons, there will likely be some differences between numbers in this section to budget numbers seen in other reports. Budget data management has already undergone some major improvements though not all data has been loaded. Therefore, we report the figures in this section as we have done in the recent years.

PER PUPIL EXPENDITURE

In the absence of current expenditures for the reporting period, the funding sources used in calculating the Per Pupil Expenditure (PPE) is from FY21 Sector and SEG funds allocated to all four states.

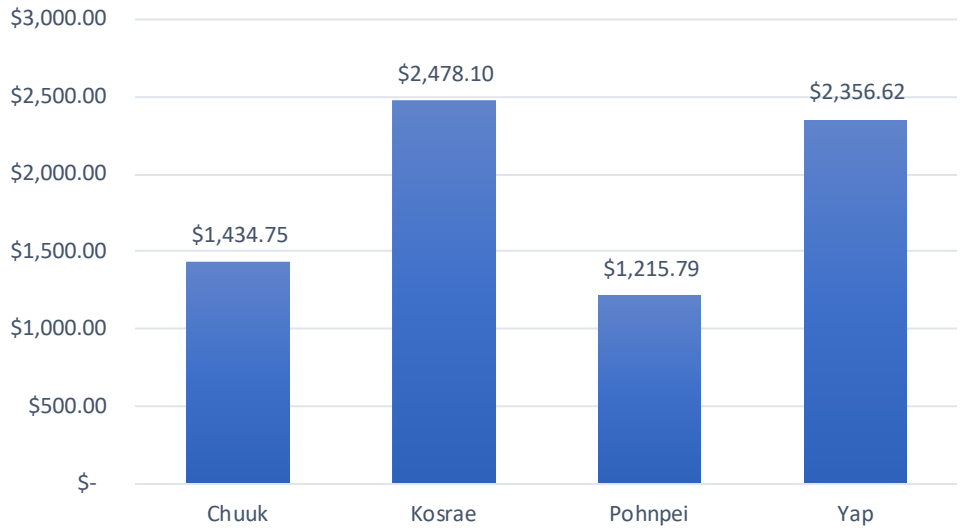


Figure 5.1: Per Pupil Expenditure by state

Data shows a slight increase in per pupil expenditure for all states from school year 2020-2021 to 2021-2022. The increase in PPE reflects the decrease in student enrollment from SY2020-2021 to 2021-2022.

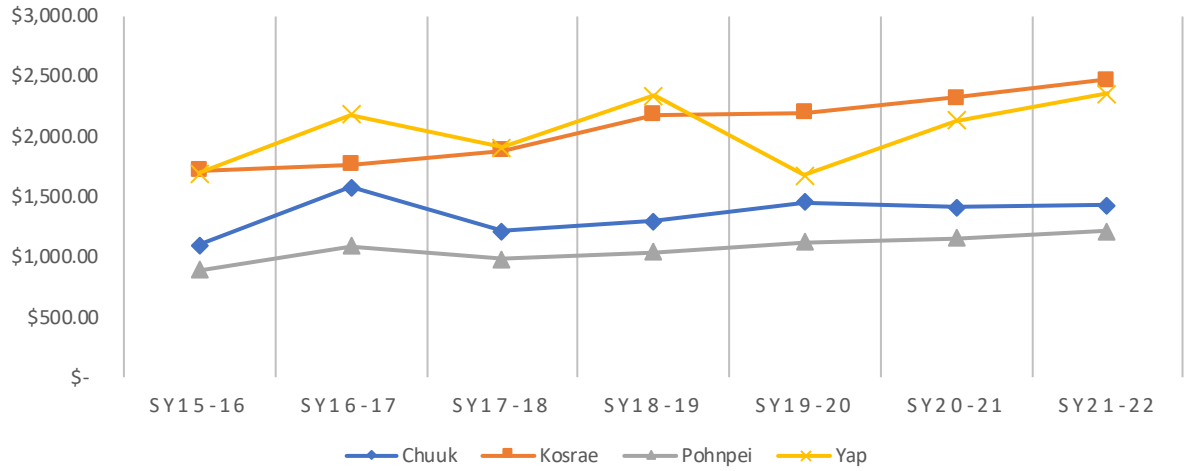


Figure 5.2: Per-Pupil Expenditure Trend

Table 5.1: Per-Pupil Expenditure by major funding sources

State	Sector	SEG	Total	Enrollment	PPE
Chuuk	$ 11,180,575.00	$ 4,014,877.00	$ 15,195,452.00	10591	$ 1,434.75
Kosrae	$ 2,942,182.00	$ 1,151,635.00	$ 4,093,817.00	1652	$ 2,478.10
Pohnpei	$ 8,201,140.00	$ 2,674,118.00	$ 10,875,258.00	8945	$ 1,215.79
Yap	$ 4,993,876.00	$ 1,668,286.00	$ 6,662,162.00	2827	$ 2,356.62
Nation	$ 27,317,773.00	$ 9,508,916.00	$ 36,826,689.00	24015	$ 1,533.49

GOVERNMENT EXPENDITURE ON EDUCATION AS % OF GDP

Data provided is based on the most recent data available on Real GDP from FSM Statistic estimates which is 2018. In using the latest Government Financial Statistics of 2020, government expenditure on education as percent of GDP is 10.87%.

GDP at purchase price	402Mil
% of GDP	10.87%

EXPENDITURE ON EDUCATION

The most recent data available on government spending is based on 2020 Government Finance Statement. The average expenditure on education from all government is about 10.87% of total expenditure. In all four states, Chuuk has the highest percent of public expenditure on education with about 38% of their 2018 government revenue spent on education.

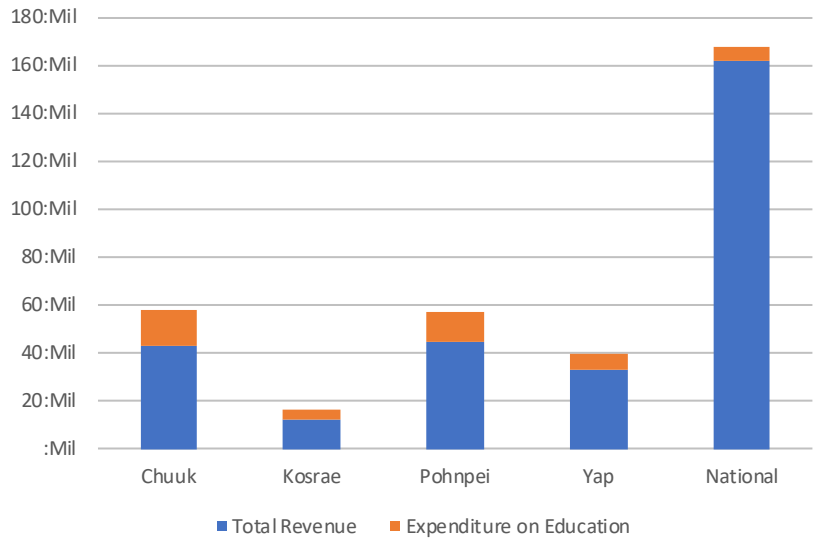


Figure 5.3: Expenditure on Education by Government

Table 5.2: 2020 Government Finance Statistics (GFS)

Government	Total Revenue	Expenditure on Education
Chuuk	$42,991,326.00	$14,823,609.00
Kosrae	$12,524,133.00	$3,770,911.00
Pohnpei	$44,966,676.00	$12,019,256.00
Yap	$32,673,453.00	$7,227,406.00
National	$162,402,515.00	$5,860,963.00
Total	$295,558,103.00	$43,702,145.00

NUMBER OF STUDENTS AWARDED

Students and school services provided under the government subsidies, grants and contributions which include but are not limited to financial assistance, merit scholarships[1] and sin tax scholarships for top qualified students pursuing higher degrees at the graduate and postgraduate levels.

As of September 30, 2022, 532 students have been awarded scholarships.

Table 5.3: Scholarships awarded

Scholarship Type	Student Awarded
National Scholarship	514
Sin Tax Scholarship	13
Merit Scholarship	5
Total	532

[1] Merit scholarships are given to the top four valedictorian students in the nation each year

THEME 6: HOW ARE SCHOOLS DOING?

SCHOOL ACCREDITATION

Each year both public and private schools in all states of the FSM are evaluated using a standard accreditation tool. However, due to different geographies and spread out populations, the time for school surveys have been different for each state. The evaluation of schools is done by State Schools Evaluation Team (SSET) or a combined SSET and Core Team members.

Once the school visits are done, a summary of results is produced in a standard format called the Form B. Form B provides initial results of the evaluation and the determination of the school's level. Schools are measured using four different levels:

- "Level-4" have exceeded standards as specified in the school accreditation manual.
- "Level-3" have met the benchmark as specified in the school accreditation manual.
- "Level-2" have met minimum standards as specified in the school accreditation manual.
- "Level-1" have not met the standards as specified in the school accreditation manual.

All schools that are determined at level 4 and 3 receive a National Special Certificate of Achievement. Schools that are determined at level 2 will receive a National Certificate of Accreditation. Schools that are determined at level 1 will undergo special measures and will be required to produce and implement a two-year Turnaround Plan. All schools are visited every other year regardless of accreditation level. The reader is referred to the *FSM School Accreditation System Procedures Mannual-2018* for more details.

In the year 2022, a total of 0 schools were evaluated in Kosrae, 15 schools in Pohnpei, 34 schools in Chuuk, and 15 schools in Yap for a total of 64 schools in all of FSM. Due to the geographical locations of our schools, only 34 schools have been approved and uploaded to the system. There are still 30 mores school surveys to be uploaded. Most schools evaluated this year were in Pohnpei and Chuuk. In Pohnpei, 11 schools were accredited at Level 3 or 4 while only 3 at level 2 and 1 at Level 1. (Figure 6.1.) In Chuuk, all schools are on level 1 or 2. In Yap, all schools are placed on level 2 or 3. Only one schools is placed on level 4 this evaluation year, a Pohnpei school (Figure 6.1.).

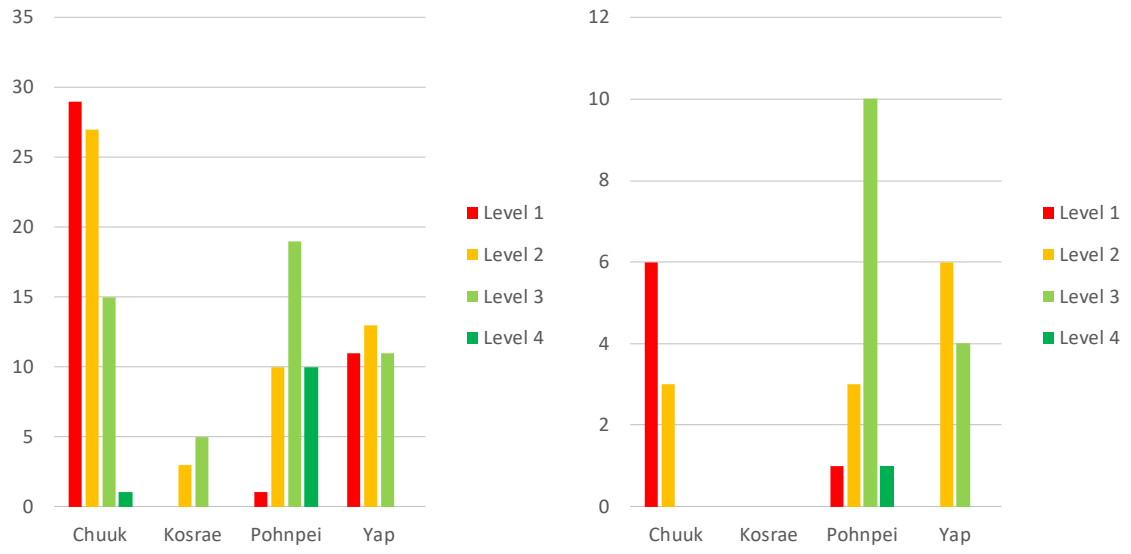


Figure 6.1: Accreditation Status (Left Cumulative to Year, Right Evaluated in Year)

As for cumulatively at the of time of this writing, Chuuk and Yap has the highest percentage of Level 1 schools largely due to having more remote rural schools while Kosrae and Pohnpei only have about 10% of their schools still at Level 1 (Table 6.1.)

Of the 64 schools evaluated in 2022 and 34 uploaded, about 2% of schools were classified at level 4, 41% at level 3, 35% at level 2 and about 21% at level 1 for an overall performance (Table 6.1.) In other words, for all completed evaluations of 34 schools, 44% will receive the national special certificate of achievement, 35% will receive a national certificate of accreditation and 21% is placed on special measures.

Table 6.1: School Accreditation Summary (Left Cumulative to Year, Right Evaluated in Year)

Cumulative to Year	Level 1	Level 2	Level 3	Level 4	Grand Total
Chuuk	29	27	15	1	72
Kosrae		3	5		8
Pohnpei	1	10	19	10	40
Yap	11	13	11		35
Grand Total	**41**	**53**	**50**	**11**	**155**

Evaluated in Year	Level 1	Level 2	Level 3	Level 4	Grand Total
Chuuk	6	3			9
Kosrae					
Pohnpei	1	3	10	1	15
Yap		6	4		10
Grand Total	**7**	**12**	**14**	**1**	**34**

Cumulatively, only 26% of schools nationally remain at level 1 and in need of assistance to improve their learning environment (Table 6.1.) This continues to improve year after year as shown in Figure 6.2. Note that Figure 6.2 represents each year with a bar and only the school accreditations ***evaluated in that year***. This enables slightly clearer improvement over the years then plotting the *cumulative* values at each year.

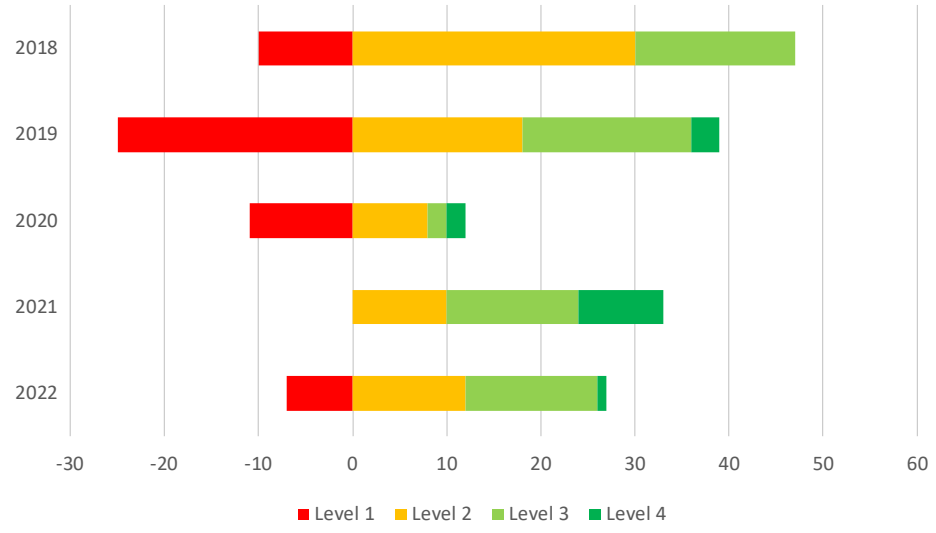


Figure 6.2: School Accreditation Trend (Evaluated in Year)