Ministry of Education, Public School System

Government of the Republic
of the Marshall Islands

MIEMIS

MARSHALL ISLANDS EDUCATION MANAGEMENT INFORMATION SYSTEM

publication

EDUCATION STATISTICS DIGEST

OCTOBER 2020, VERSION 2

Republic of the Marshall Islands (RMI)
Ministry of Education, Sports & Training (MoEST)
Public School System (PSS)
MoEST/PSS Education Statistics Digest 2020

A publication of the PSS Information System Office

ACRONYMS

ADB	Asia Development Bank
DB	Database
DOI	Department of Interior (United States)
EMIS	Education Management Information System
FOSS	Free Open Source Software
JEMFAC	Joint Economic Management And Financial Accountability Committee
GNI	Gross National Income (previously GNP)
GNP	Gross National Product (now GNI)
IT	Information Technology
MIS	Management Information System
MIEMIS	Marshall Islands EMIS
MoE	Ministry of Education
MoEST	Ministry of Education, Sports & Training (Previously MoE)
NSO	National Statistics Office
OIA	Office of Insular Affairs
OSS	Open Source Software
PSS	Public School System
SPC	Secretariat of the Pacific Community
TCO	Total Cost of Ownership
UNICEF	United Nations Children's Fund

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

FOREWORD BY THE MINISTER

We are proud to present this Education Statistics Digest for the School Year 2019-20. This digest contains data from various sources that are *mostly* all integrated into a single system: The Marshall Islands Education Management Information System (MIEMIS). This report offers only the tip of the iceberg of our data and statistics capabilities that are constantly improving. This "tip of the iceberg" is however quite comprehensive and the report provides a relatively large amount of data and statistics. Readers wanting a shorter version should refer to the classic Indicators Report publication.

There are nine chapters: Indicators, Budgets, Schools, Teachers, Exams, Students, Special Education, School Accreditations and Water Sanitation and Hygiene (WASH). Each chapter has sections (and subsections) presenting a selection of data and statistics from the MIEMIS data warehouse and other sources. We discuss details of the source of raw data, calculation methods, limitations and narratives on the data analysis.

While there will inevitably be issues and errors, the quality of our data has improved significantly over the past few years and continues to improve and covers an ever increasing amount of new useful information. Hence, we encourage constructive feedback from data users, planners and policy makers to help us in our quest to make better use of data to improve education for our current and future generations.

Hon. Kitlang Kabua
Minister
Ministry of Education, Sports & Training

Introduction by the Commissioner

Marshall Islands' formal education has 94 public and private elementary schools and 18 public and private secondary schools spread out over 23 atolls and islands. Data collection, therefore, is not easy, especially during the Covid-19 pandemic. However, the Public School System Information System Office puts forth considerable effort in the collection of data and providing for the information needs of the school system through its Marshall Islands Education Management Information System (MIEMIS).

This digest is part of the continuing effort by the PSS to improve the dissemination of information on the education system in order to inform better decision making and drive initiative to improve services to children. Hopefully, as improvements are made in the MIEMIS, subsequent digests will reflect these improvements and will expand and be more comprehensive.

We have also launched an accompanying digital version of this digest where interested stakeholders can download the data in the palm of their hands on their mobile phones or tablets. We call it the Pacific Open Education Data app (aka. MIEMIS Open Education Data app) and can be downloaded the Play Store (Android devices) or the Apple Store (iPhone). It is a work in progress and new data and analysis gets added continuously based on feedback.

Kanchi Hosia
Commissioner
Marshall Islands Public School System

EXECUTIVE SUMMARY

This is version 2 of this publication. Three schools have not submitted their annual census yet and thus a small amount of enrollment and other data is still missing. Also some numbers have been updated with new data since publishing the Indicators report so there could be minor differences. All the school accreditation surveys conducted since September 2019 have not yet been approved nor loaded into MIEMIS. Special education data has been loaded into MIEMIS for the first time exposing some data issues to address. The whole exams section is currently taken from an external data source as we continue finalize the migration to the new system of all exams data. That aside, data is mostly up-to-date and as clean as possibly can be in our current context.

The Gross (~78%) and Net (~70%) Enrollment Rate are lower than the desirable values (>95%) for universal access to (primary) education and they have been on the decline in the past few years. Only the next population census will be able to say if the currently available projection data plays a role in affecting our ratios (e.g. over estimated.)

The most current budget data available is 2018 (with 2019 available soon.) A few years ago, the RMI was spending more on education as percentage of total government expenditures and of GNI than the international average. However, this has recently slipped below the average for percentage of total government expenditures and steadily been decreasing for percentage of GNI with the latter still a little above international average in 2018.)

The PSS manages about ~80% of all schools in the RMI, most of which are located in Majuro, Kwajaleine, Arno, Jaluit and Ailinglaplap Atolls. Majuro, Kwajalein and Jaluit make up an approximately ~80% of all enrollments in the country though both Majuro and Kwajalein enrollments have been on a decline for the last four years. Roughly, two-thirds of enrollments are in urban schools while one-third in rural schools. The urban enrollments are slightly more on a decline then rural enrollments.

Most student enrollments are of the official age for their respective grades. Most under and over age students can be found in Grades K, 1 and 7 and up. The highest percent of student repeaters are in grade 1-5. Some Atolls seem to have more under and over age in general with Mili and Ailinglaplap actually showing increasing trends

of over age students. Primary is where the enrollments are more seemingly on the decline in the past few years.

Data on teacher has significantly improved and we can now report teacher attrition (measure of teachers leaving) for all teachers, certified teachers and qualified teachers results in the excellent range of 3-5%.

Furthermore, before we delve into the detailed statistics and analysis an executive summary of data of interest to RMI decision makers is provided in the form of simple tables below. Only the last three years are included here for brevity but throughout the report the last 5 years are provided whenever possible.

First enrollments by school types (the levels taught). There are no longer any kinder schools in 2020.

Table 1: Enrollments by School Types (Levels Taught), Authority and Gender

Enrollments	2018		2018 Total	2019		2019 Total	2020		2020 Total	Grand Total
	F	M		F	M		F	M		
Kindergarten	**116**	**123**	**239**							**239**
Public	116	123	239							239
Primary School	**5356**	**5459**	**10815**	**5263**	**5575**	**10838**	**4950**	**5273**	**10223**	**31876**
Private	1131	1102	2233	1111	1074	2185	1114	1034	2148	6566
Public	4225	4357	8582	4152	4501	8653	3836	4239	8075	25310
Secondary School	**1747**	**1664**	**3411**	**1758**	**1664**	**3422**	**1777**	**1628**	**3405**	**10238**
Private	414	420	834	388	410	798	345	429	774	2406
Public	1333	1244	2577	1370	1254	2624	1432	1199	2631	7832
Grand Total	**7219**	**7246**	**14465**	**7021**	**7239**	**14260**	**6727**	**6901**	**13628**	**42353**

And below enrollments by education levels, not to be confused by types of schools above followed by enrollment by region (rural and urban).

Table 2: Enrollments by Education Levels

Enrollment	2018		2019		2020	
	#	%	#	%	#	%
ECE	1267	8.76%	1262	8.72%	1179	8.15%
PRI	10185	70.41%	9939	68.71%	9375	64.81%
SEC	3013	20.83%	3059	21.15%	3074	21.25%
Grand Total	14465		14260		13628	

Table 3: Enrollments by Region

Enrollment	2018		2019		2020	
	#	%	#	%	#	%
Rural	4387	30.33%	4373	30.23%	4064	28.10%
Urban	10078	69.67%	9887	68.35%	9564	66.12%
Grand Total	14465		14260		13628	

The following indicator provides the number of primary schools by the number of teachers. Small schools with fewer than eight teachers are regarded as multi-grade schools and account for over 50% of school. These schools struggle with the unique challenges of multi-grade teaching. Most primary schools with under 8 teachers are located in the outer islands, except for the 2 schools in Kwajalein and 3 schools in Majuro, thereby compounding the challenges of the multi-grade situation.

Table 4: Number of Multi-Grade Primary Schools

No. of Teachers	No of Schools	% of Schools
3	21	27%
4	14	18%
5	9	11%
6	6	8%
7	7	9%
8 +	22	28%
Total	**79**	**1**

Table 5: Summary of Budget data for the most complete latest years

	GNP	Actual Expenditure			
		Education Expenditure	Government Expenditure	Ed/Govt %	Ed/GNP %
2016	$262,593,500.00	$20,364,368.85	$123,013,963.00	16.6%	7.8%
2017	$273,486,100.00	$24,033,905.41	$143,518,807.00	16.7%	8.8%
2018	$282,605,100.00	$19,049,762.59	$153,223,075.00	12.4%	6.7%

The MISAT High School Entrance Test for grade 8 was the only one administered this year. Results for all standards combined for 1140 students in 2020 was as follows:

Table 6: MISAT III 2020 Performance Levels Percentages

Performance Level	Percent
Advanced	9%
Proficient	17%
Developing	25%
Beginning	49%

Overview of Education System

The education levels in RMI can be summarized as in Figure 1: RMI Education Levels while the ISCED levels are shown in Figure 2: International Standard Classification of Education (ISCED, RMI 2018). All statistics provided in this publication disaggregate by the RMI Education Levels though we have the capability to produce the disaggregation by the ICED levels as well for most data.

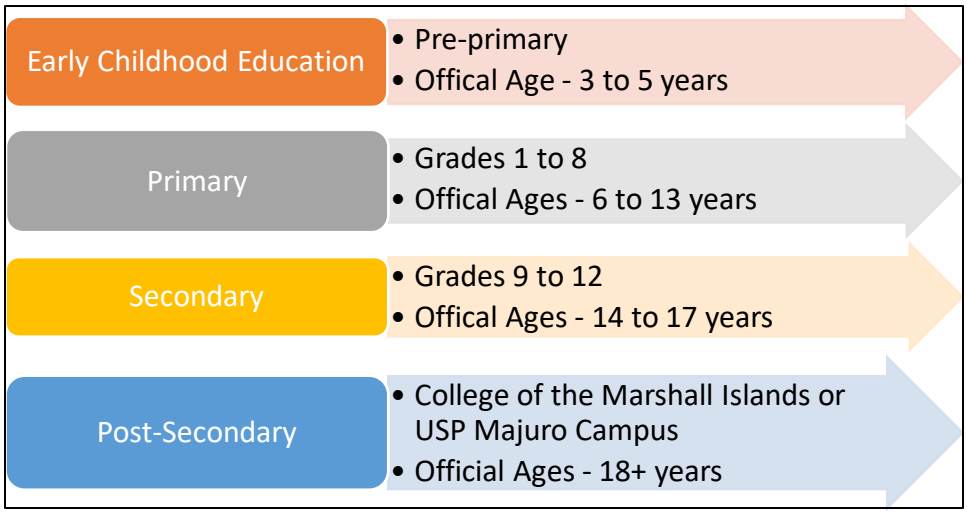

Figure 1: RMI Education Levels

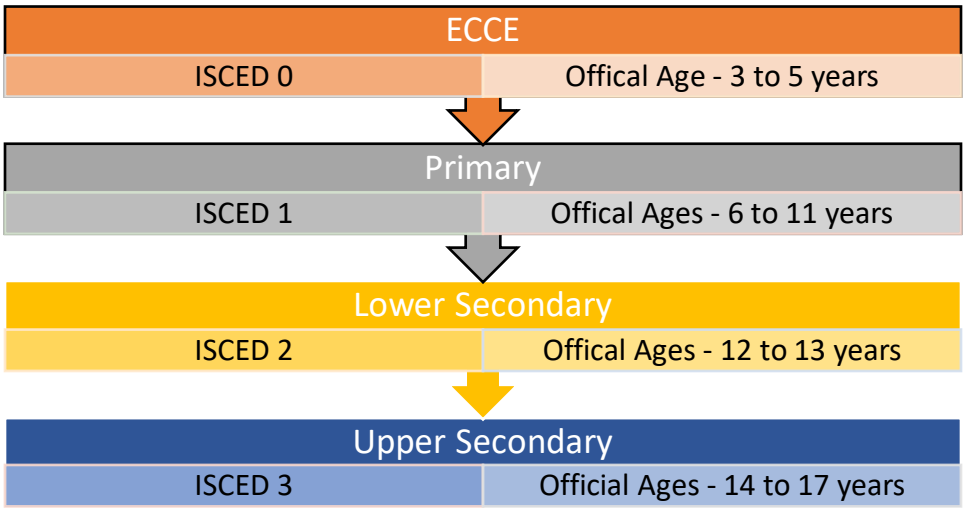

Figure 2: International Standard Classification of Education (ISCED, RMI 2018)

Page left intentionally blank

DOCUMENT CONTROL

Contribution

This result is possible by the hard work of many people. If someone is omitted, please accept our sincerest apologies and let us know so we can update.

Management

Kitlang Kabua, Minister of Education, Sports and Training
Kanchi Hosia, Commissioner of Education
Stanley Heine, Assistant Commissioner – Policy, Planning and Standards

Technical

Newton Langidrik, Information Systems Office Director and staff
Tricia Marie Taklur Menke, Data Officer
Maidher Kabua, Data Officer
Dohsis Lokot, Network Administrator and his team

Operational

Sandy Y. Konelios, Staff Development Office Director and Staff
Frank Horiuchi, Director of Special Education Office & Staff
Winnie Benjamin, Director of Policy & Accreditation Office & Staff
Kia deBrum, Director of Testing & Evaluation Office (Exams) & Staff

Consultants/Contractors

Ghislain Hachey, Project Lead, Information Systems and Data Adviser
Brian Lewis, Software Architect and Full Stack Developer
Omega-R Team, Android Developers
Pacific Testing, Hendrick Cho, Assessment Specialist

Donors and other assistance

United States Department of Interior, Office of Insular Affairs, JEMCO/JEMFAC
Asia Development Bank (ADB)
United Nations Children's Fund (UNICEF)
Secretariat of the Pacific Community (SPC)

Preparation

Action	Name	Date
Prepared By:	Newton Langidrik, Ghislain Hachey	17 August 2020
Verified By:	Stanley Heine	20 September 2020
Approved By:	Kanchi Hosia	5 October 2020

Releases

There will likely be subsequent releases of this document as new data becomes available or improved. We keep a release history of remarks on what have changes

Version	Date Released	Pages Affected	Remarks
1	23 August 2020	ALL	First draft of this document with currently available data for SY2019-20
2	5 October 2020	ALL	Refreshed the report with latest MIEMIS data warehouse snapshot, drafted new Special Education and WASH chapters

CHAPTER 1: INDICATORS

Indicators in this section are mostly based on internationally recognized standards as documented in (UNESCO Institute for Statistics, 2009). Most of the core enrolment and flow indicators are included in this chapter. While other indicators are included in their respective following chapters as well.

Background

Data Source

There are two primary data sources for the production of all these key education indicators: the population projection from the National Statistics Office (NSO) and the MIEMIS annual school census from the Public School System (PSS).

Limitations

Due to small population, various indicators can fluctuate significantly for small data quality issues. It is important to bear this in mind when analyzing the statistical indicators.

The two most common types of disaggregation with the indicators herein are by gender (which we publish) and by geographical location (which we do not). While MIEMIS support geographical location disaggregation of the core indicators herein it would require loading population projection by atolls and islands as many indicators depend on population data. We do publish data by geographical location throughout subsequent chapters however when population data is not required (e.g. total enrolments.)

Gross Enrollment Ratio and Net Enrollment Rate

Definition and Purpose

Gross Enrollment Ratio (GER)

It is total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population[1] corresponding to the same level of education in a given school year. It shows the general level of participation in a given level of education. It indicates the capacity of the education system to enroll

[1] The non-official age group for ECE level is 5 has used in the system for calculations, Primary level (grades 1-8) is age 6 to 13 and for Secondary level (grades 9-12) is age 13 to 17.

students of a particular age group. It can also be a complementary indicator to net enrolment rate (NER) by indicating the extent of over-aged and under-aged enrolment.

Net Enrollment Rate (NER)
It is the enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population. It is to show the extent of coverage in a given level of education of children and youths belonging to the official age group corresponding to the given level of education.

Methods of Calculation

Gross Enrollment Ratio (GER)
This is calculated just like in (UNESCO Institute for Statistics, 2009): Divide the number of pupils (or students) enrolled in a given level of education regardless of age by the population of the age group which officially corresponds to the given level of education and multiply the result by 100.

Net Enrollment Rate (NER)
This is calculated just like in (UNESCO Institute for Statistics, 2009): Divide the number of pupils (or students) enrolled who are of the official age group for a given level of education by the population for the same age group and multiply the result by 100.

Analysis and Discussions

The GER for 2020 is considered low. A GER of 90% or higher is considered the norm to reach universal access to education for kids. The highest is in primary at roughly ~78% and ~80% for males and females respectively. This low indicator (Figure 1.1 GER/NER) could be affected by either of the following:

- An over stated population projection (population is actually smaller then projected during last census)
- A education system not able to accommodate its school-age children into school
- Declining school-age children into the education system

When comparing it with the NER the difference is not too high meaning the proportion of overaged or under aged students is not too high which is a good thing. But that does confirm a generally low participation into the education system.

In the figure below (Figure 1.1), both GER and NER is presented by gender for all three level of education: Early Childhood Education (ECE), Primary (Elementary), and the Secondary level. Males have a slightly higher participation in ECE while Female have

increasingly higher participation with higher levels of education. At a glance, for both ECE and Primary it is clear that the difference between male and female students is marginal in both GER and NER at all level of education (i.e. less then 2% difference). This signifies that the gender parity or gender ratio is well balanced in those levels of education. However, in secondary education the difference increases to ~7% meaning girls tend to remain in school longer then boys.

In ECE, the NER falls below 40% of the population. This suggest that less than half kids are preparing for formal education. In other words, the number of kids not preparing for formal education is alarmingly high and there is a need to develop plans to bring this population in the school. Nearly the same situation is true for in secondary where the NER is below 50%.

In summary, while participation to the education system in 2020 has been low in general, it is particularly poor at getting kids ready for education (ECE) and completing the education (secondary).

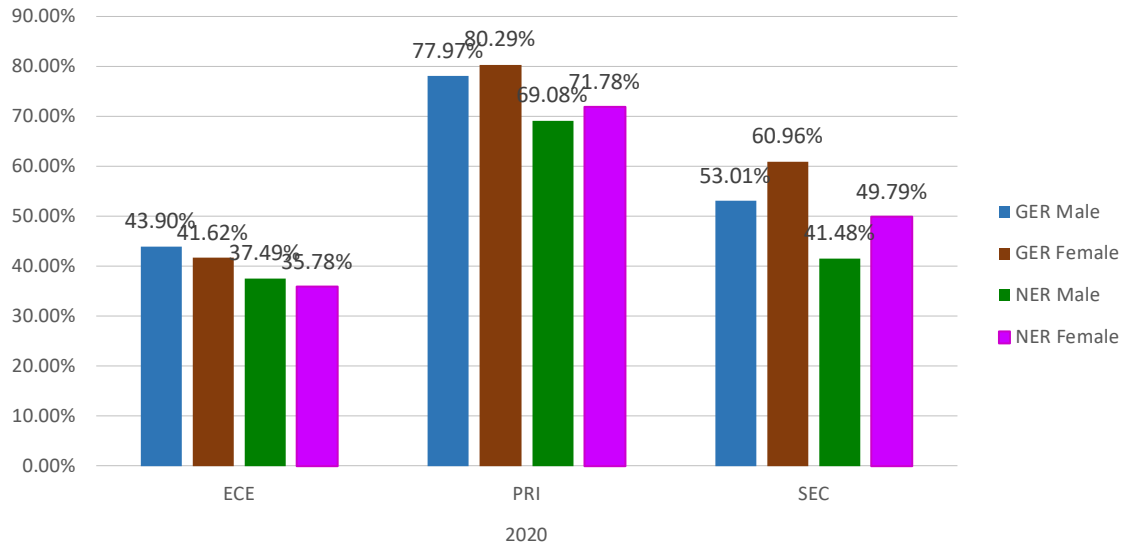

Figure 1.1: GER and NER by Education Level and Gender Chart

Figure 1.2 below compares timeseries data for overall GER and NER. Interestingly, both GER and NER has followed similar patters over the past six years. Unfortunately, this pattern is a slight but noticeable downward trends, largely driven by a declining GER/NER at the primary level. Since we know that enrolment for ECE and secondary have been relatively stable and declining at primary (Figure 5.5) this makes sense. This pattern is observed for both male and female (Figure 1.3).

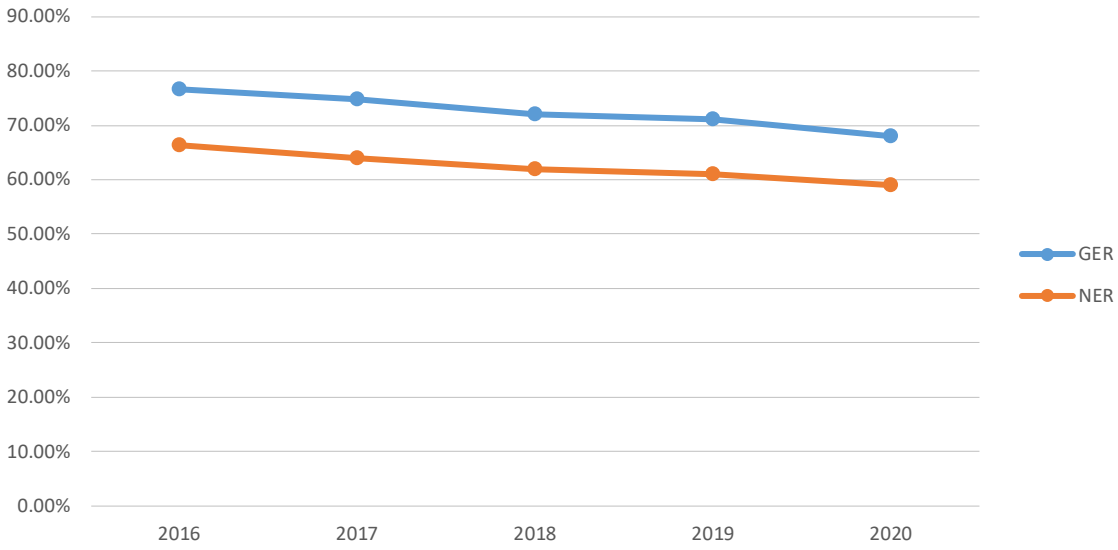

Figure 1.2: Historic trend by GER/NER nation

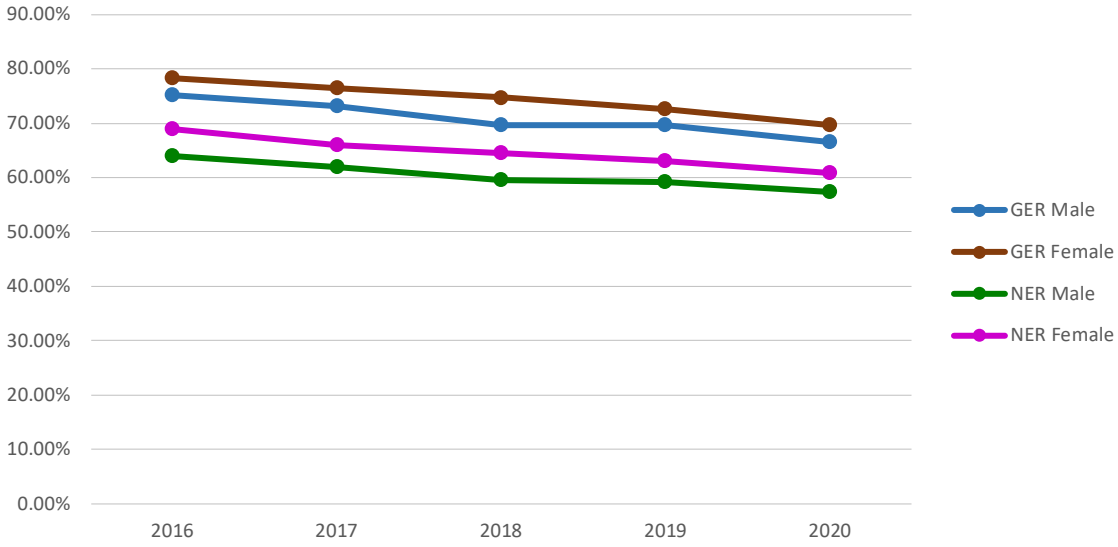

Figure 1.3: Historic trend by GER/NER by gender

The data used in producing GER/NER charts is available in Table 1.1 and was actually produced from Table 5.2 extracted from the MIEMIS data warehouse.

Table 1.1: GER/NER by Year, Education Level and Gender

	GER	GER Male	GER Female	NER	NER Male	NER Female
2016	**76.68%**	**75.12%**	**78.37%**	**66.32%**	**63.94%**	**68.90%**
ECE	45.02%	45.43%	44.58%	38.65%	38.39%	38.92%
PRI	92.33%	91.60%	93.11%	81.62%	79.90%	83.46%
SEC	60.32%	55.92%	65.12%	48.46%	43.54%	53.83%
2017	**74.76%**	**73.20%**	**76.43%**	**63.90%**	**61.91%**	**66.06%**
ECE	45.13%	45.03%	45.23%	39.72%	39.62%	39.82%
PRI	90.07%	89.27%	90.93%	79.15%	77.62%	80.80%
SEC	58.06%	53.89%	62.58%	44.21%	40.01%	48.76%
2018	**72.12%**	**69.70%**	**74.72%**	**61.90%**	**59.50%**	**64.48%**
ECE	42.99%	41.63%	44.44%	36.31%	34.52%	38.21%
PRI	86.20%	83.91%	88.67%	75.99%	73.51%	78.67%
SEC	56.90%	53.46%	60.60%	44.70%	42.02%	47.59%
2019	**71.10%**	**69.69%**	**72.62%**	**61.08%**	**59.26%**	**63.04%**
ECE	44.33%	43.72%	44.97%	37.30%	36.08%	38.60%
PRI	83.66%	82.88%	84.51%	74.05%	72.77%	75.42%
SEC	57.41%	53.99%	61.07%	44.88%	41.32%	48.68%
2020	**68.09%**	**66.58%**	**69.70%**	**59.02%**	**57.32%**	**60.84%**
ECE	42.79%	43.90%	41.62%	36.66%	37.49%	35.78%
PRI	79.09%	77.97%	80.29%	70.38%	69.08%	71.78%
SEC	56.85%	53.01%	60.96%	45.50%	41.48%	49.79%
Grand Total	**72.54%**	**70.86%**	**74.36%**	**62.44%**	**60.38%**	**64.65%**

Gross Intake Ratio and Net Intake Rate

Definition and Purpose

Gross Intake Ratio (GIR)

Is the total number of new entrants in the first grade of primary education, regardless of age, expressed as a percentage of the population at the official primary school-entrance age. It helps indicate the general level of access to primary education. It also indicates the capacity of the education system to provide access to grade 1 for the official school-entrance age population.

Net Intake Rate (NIR)

Defines the new entrants in the first grade of primary education who are of the official primary school-entrance age, expressed as a percentage of the population of the same age. It is meant to precisely measure access to primary education by the eligible population of primary school-entrance age.

Methods of Calculation

Gross Intake Ratio (GIR) in First Grade of Primary (G1)

This is calculated just like in (UNESCO Institute for Statistics, 2009): Divide the number of new entrants in grade 1, irrespective of age, by the population of official school-entrance age, and multiply the result by 100.

Net Intake Rate (NIR) in First Grade of Primary (G1)

This is calculated just like in (UNESCO Institute for Statistics, 2009): Divide the number of children of official primary school-entrance age who enter the first grade of primary education for the first time by the population of the same age and multiply the result by 100.

Gross Intake Ratio (GIRLG) in Last Grade of Primary (G8)

Also known as the Primary Completion Rate (PCR) in other publication. This is calculated just like in (UNESCO Institute for Statistics, 2009): Divide the number of new entrants in last grade of primary, irrespective of age, by the population of theoretical entrance age to the last grade of primary and multiply the result by 100.

Net Intake Rate (NIRLG) in Last Grade of Primary (G8)

This is calculated just like in (UNESCO Institute for Statistics, 2009): Divide the number of children of official primary school-entrance age who enter the last grade of primary education for the first time by the population of the same age and multiply the result by 100.

Analysis and Discussions

Both the GIR and NIR are considered low indicating a low degree of access to primary education. Interestingly, the GIRLG (i.e. GIR into Grade 8) is higher than the GIR into grade 1 even known that we loose students as secondary approaches. This could suggest a better degree of access to secondary education then primary education, while it should be the other way around. Degree of access to primary is similar for both males and females but changes in the last grade of primary with a higher degree of access almost certainly because more girls keep in school longer and not necessarily for a lack of capacity to take in students.

NIR is considered very low and nowhere near the 100% necessary condition for the policy goal of universal primary education. Moreover, the large difference between the GIR and NIR (from Figure 1.4 ~15-20% difference for GIR and 35-40% difference for GIRLG) indicates kids accessing primary education at a high degree of varying ages (i.e. over/under) which is a sign of lack of enforcement and planning on how

children are to start and progress through the education system. This is reflected in Figure 5.1 which shows over/under age distribution more pronounced in the early years (Pre-K, K, Grade 1) and near the end of primary/beginning of secondary (Grade 7-9).

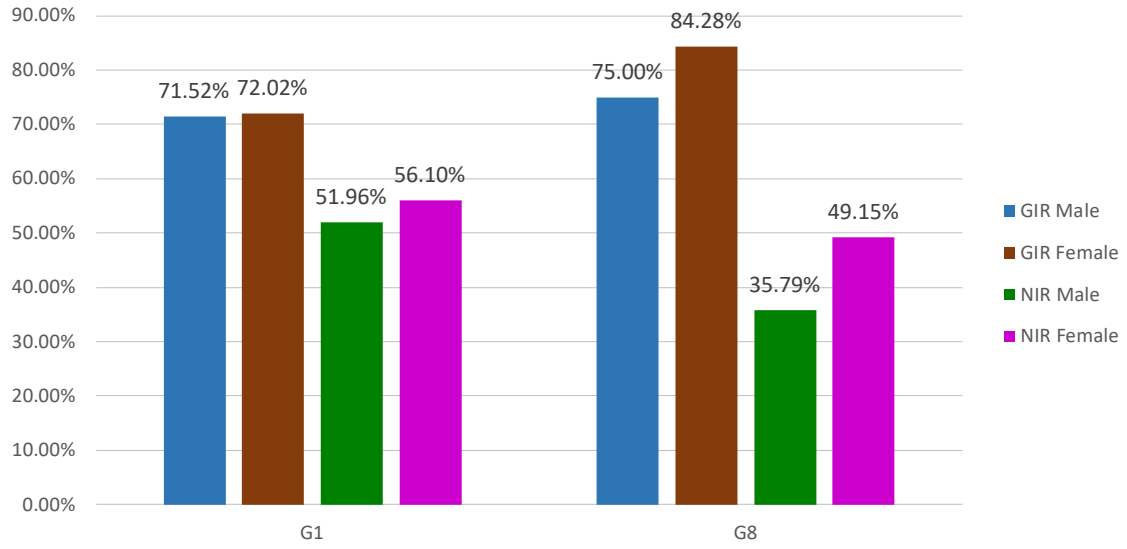

Figure 1.4: GIR/NIR First/Last Year of Primary Education by Gender 2020

Both the GIR/NIR where looking better several years ago with a slight decline in the past years (Figure 1.5.) While this may be cause for alarm, it is noteworthy that the past few years RMI has significantly improved data collection processes, tools and methodology. It is known that past years add a number of issues with the data. On a bright note, the GIRLG is seeing an increase in the past few years indicating a clear increase in the degree of primary completion ("GIR – G8" from Figure 1.5.)

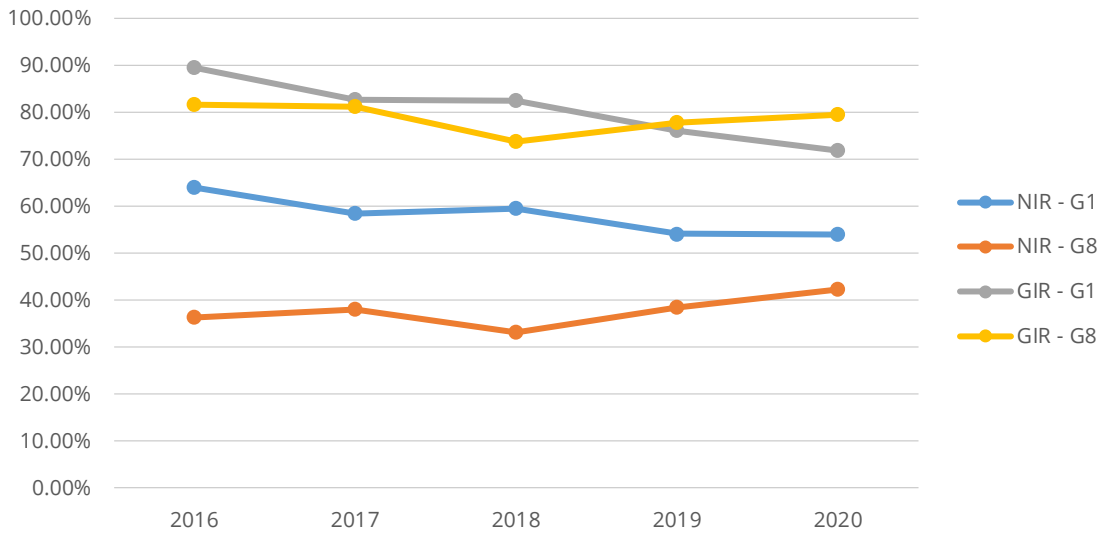

Figure 1.5: NIR/GIR First/Last Year of Primary Education Trend

The data used in producing GIR/NIR/GIRLG/NIRLG charts is available in Table 1.2[2]. Care is taken not to include repeaters in new entrants improving on the quality of this indicator.

Table 1.2: NIR/GIR First/Last of Primary Education by Year and Gender

	NIR	NIR Male	NIR Female	GIR	GIR Male	GIR Female
2016	**50.89%**	**46.77%**	**55.35%**	**85.71%**	**83.00%**	**88.65%**
G1	63.89%	58.21%	70.12%	89.44%	84.97%	94.33%
G8	36.28%	33.76%	38.96%	81.53%	80.75%	82.36%
2017	**48.58%**	**47.43%**	**49.81%**	**81.97%**	**83.03%**	**80.83%**
G1	58.47%	58.29%	58.67%	82.64%	84.21%	80.92%
G8	38.01%	35.66%	40.52%	81.25%	81.74%	80.73%
2018	**47.00%**	**45.76%**	**48.31%**	**78.36%**	**77.15%**	**79.65%**
G1	59.55%	59.77%	59.30%	82.53%	85.12%	79.79%
G8	33.09%	30.26%	36.11%	73.74%	68.34%	79.49%
2019	**46.42%**	**44.36%**	**48.62%**	**76.88%**	**75.23%**	**78.63%**
G1	54.06%	52.54%	55.68%	76.02%	76.14%	75.90%
G8	38.46%	35.86%	41.24%	77.76%	74.29%	81.48%
2020	**48.04%**	**43.77%**	**52.60%**	**75.65%**	**73.28%**	**78.19%**
G1	53.96%	51.96%	56.10%	71.77%	71.52%	72.02%
G8	42.22%	35.79%	49.15%	79.47%	75.00%	84.28%
Grand Total	**48.17%**	**45.61%**	**50.92%**	**79.68%**	**78.30%**	**81.15%**

[2] And Table 1.2 was actually derived from more foundational data from the MIEMIS data warehouse that is shown in Chapter 6's Table 6.2 for the more technically inclined reader.

Access Rate

Access Rate is not specifically defined in the UNESCO technical guideline (UNESCO Institute for Statistics, 2009) but is in other publications (UNESCO, World Bank, UNICEF, 2014). It is essentially the GIR by grade instead of specifically only just for the first and last year of primary education.

Definition and Purpose

Access Rate (AR) by Grade

The AR is the total number of new entrants in a particular grade, regardless of age, expressed as a percentage of the population for that grade. It helps indicate the general level of access to any grade and indicates the capacity of the education system to provide access to specific grade levels for the official age population for that the specific grade levels.

Methods of Calculation

Access Rate (AR) by Grade

This is calculated just like in (UNESCO Institute for Statistics, 2009) for the GIR but by individual grades: Divide the number of new entrants in grade *i*, irrespective of age, by the population of official school-entrance age, and multiply the result by 100.

Analysis and Discussions

Access rate is quite stable in grades 1 through 8 and similar to the GIR discussed previously. Beyond grade 8, there's a steady decline in intakes (new entrants) up to grade 12 (Figure 1.6). This pattern is similar for both male and female students with the expected higher intake rate of females in late primary and secondary.

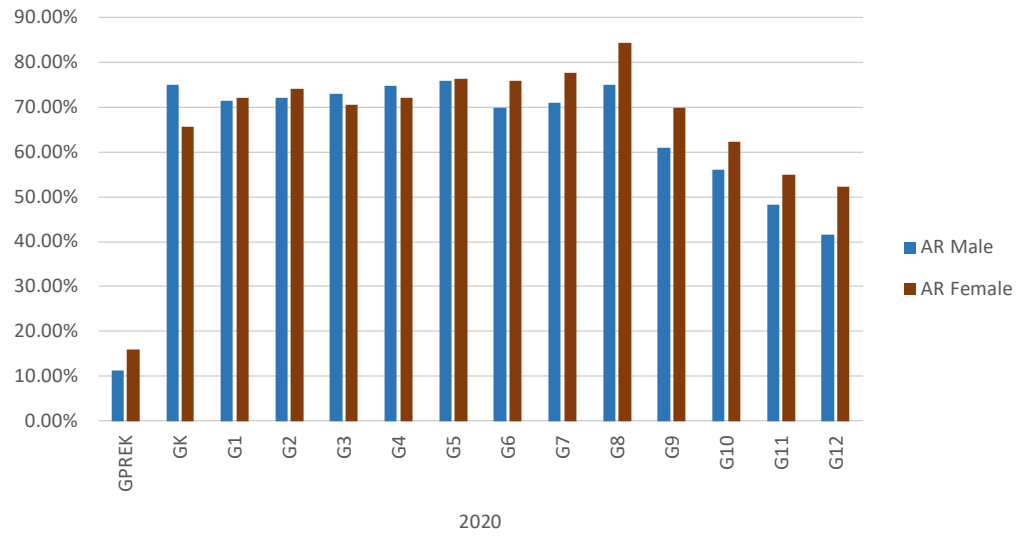

Figure 1.6: Access Rate by Grades for 2020

Looking at the trend for ECE grade a stable access rate can be observed (Figure 1.7). However, when looking at primary grades (i.e. 1-8) we can observe a clear downward trend already discussed in the GIR section. Like ECE grades, secondary grade access have a steady trend which ideally would take an upwards trend in future years.

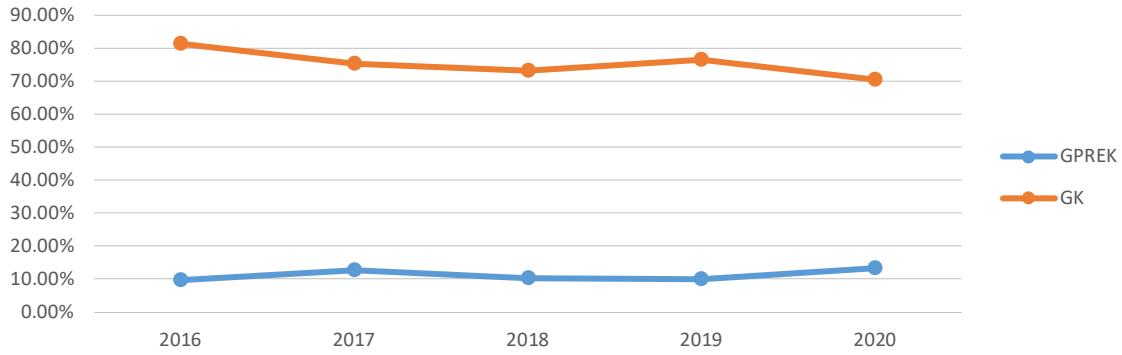

Figure 1.7: Access Rate for ECE Trend

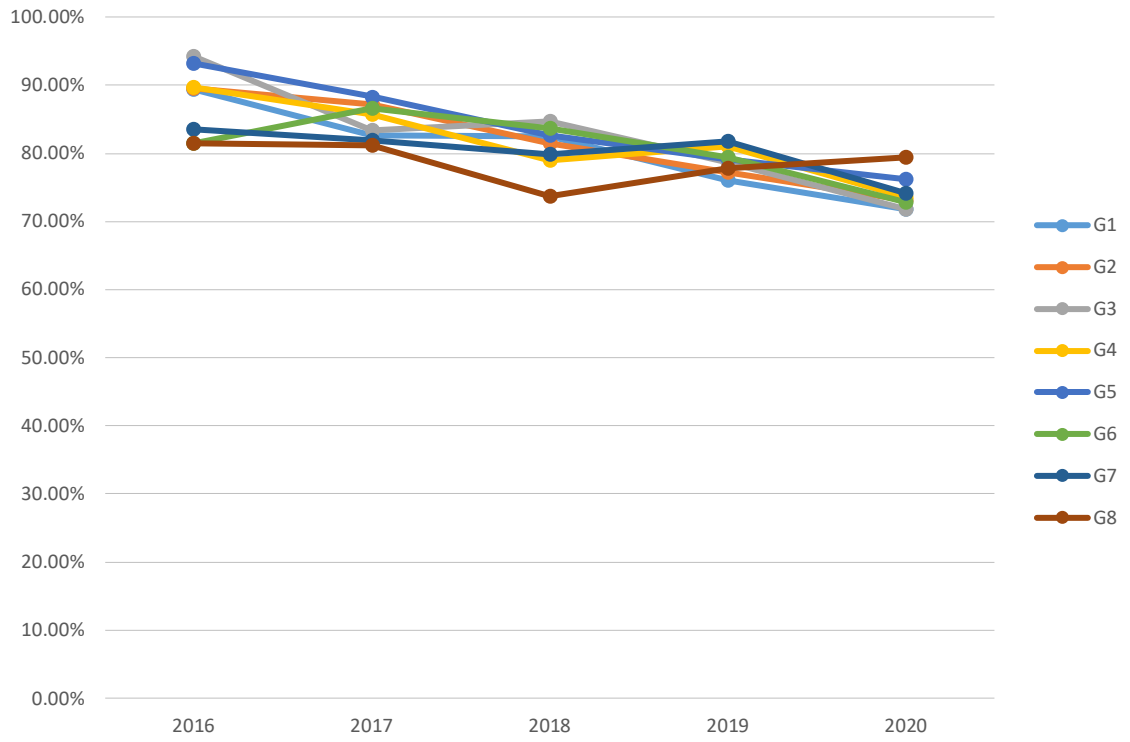

Figure 1.8: Access Rate for Primary Trend

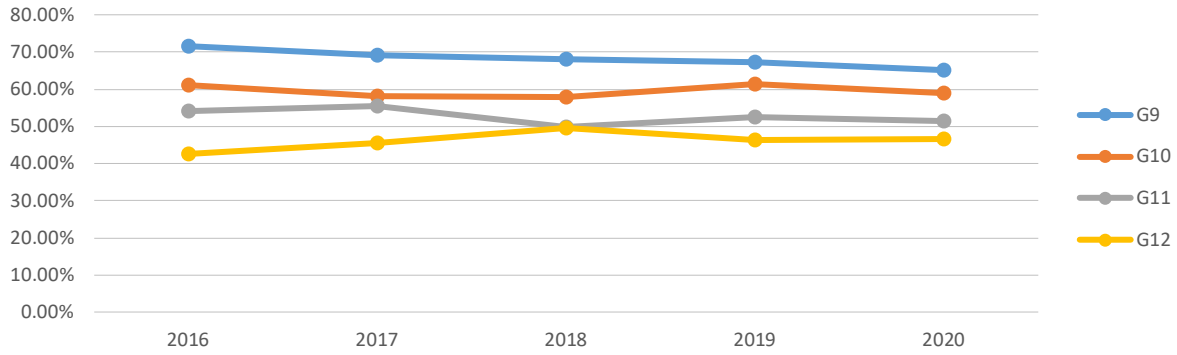

Figure 1.9: Access Rate for Secondary Trend

Graduation Rate

Graduation Rate is not specifically defined in the UNESCO technical guideline (UNESCO Institute for Statistics, 2009). However, it is an indicator that RMI has been reporting for years.

Definition and Purpose

Graduation Rate (GR) [using Proxy Indicator]

The GR is the total number of new entrants in grade 8 and 12, regardless of age, expressed as a percentage of the population for that grade. It helps indicate the general level of access to primary and secondary graduation and indicates the capacity of the education system to provide access to graduation grade levels (Grade 8 and 12) for the official age population for that the specific grade levels.

Graduation Rate (GR) [using direct data from end of year census]

The GR without using the proxy can be defined as the percentage of pupil graduating from grade 8 and 12. The purpose is the same.

Methods of Calculation

Graduation Rate (GR) [using Proxy Indicator]

One UIS widely accepted method for getting the graduation rate for primary and secondary is to use *a proxy indicator* (i.e. GIR for Grade 8 and GIR for Grade 12.) Since GIR is produced by class levels (i.e. grades) you can get the GR for primary using the GIR for grade 8 and the GR for secondary using the GIR for grade 12.

Graduation Rate (GR) [using direct data from end of year census]

This version of the GR is computed using direct data submitted at the end of the year. At the end of the year, schools normally submit the outcome of students (i.e. Complete, Repeat, Dropout, Transfer Out) for all the student on the roster for that school year. This information can be used to produce this indicator more “directly” without the need for the proxy version above.

Analysis and Discussions

Graduation rate is generally high once the cohort makes it to the end of primary and secondary. Unsurprisingly, the graduation rate for primary is significantly higher (~75%) than for secondary (~45%). Note that this method of calculating the graduation rate actually follows a cohort of students from the start. This means graduation rate in 2020 for primary is 75% and for secondary is 45% of the cohort that started together in grade 1 (or ECE). This is not the same as a graduation rate that looks at how many of grade 8 complete successfully grade 8. Graduation rate for female is generally higher for both primary and secondary.

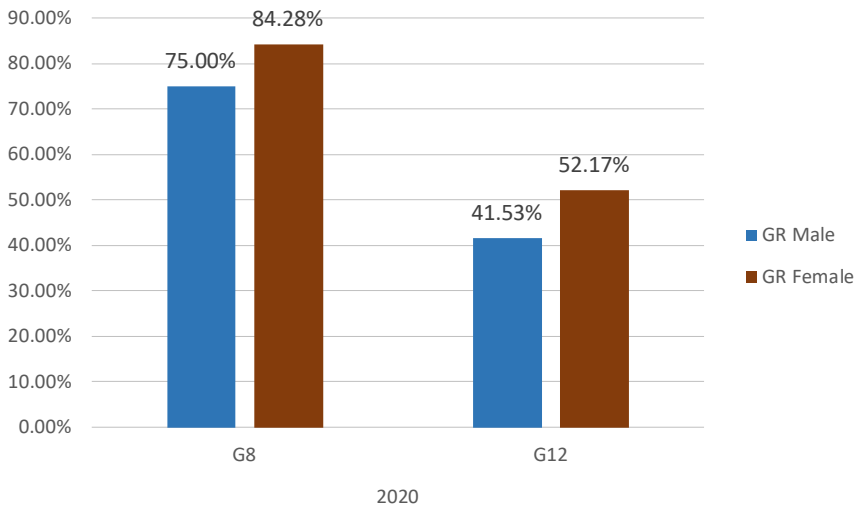

Figure 1.10: Graduation Rate Proxy Version (Primary/Secondary) by Gender for 2020

There is a positive upwards trend in the last few years in graduation rate for both primary and secondary when using the proxy indicator to analyze the results. The only exception is the graduation rate of secondary for males (Figure 1.11.)

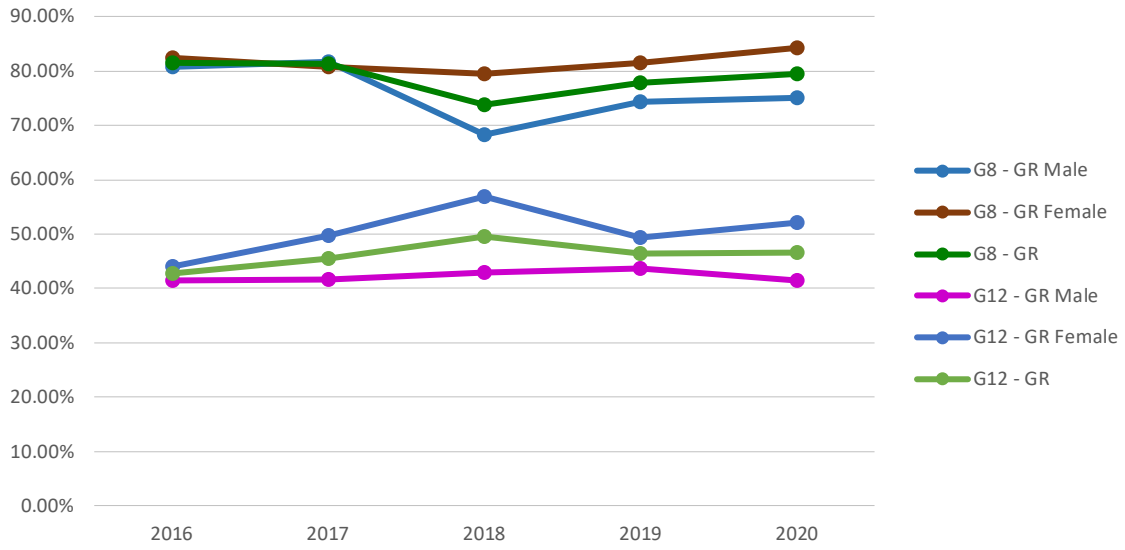

Figure 1.11: Graduation Rate Proxy Version (Primary/Secondary) by Gender Trend

In previous years, RMI has used the data directly available from end of year completion status. Unfortunately, this year the world health crisis has affected a number of activities and the end of year completion status of students are mostly unknown and will only be known in the this coming school year. We will aim to gather this information to produce this indicator using the direct method to show it side by side with the proxy indicator.

Percentage of Repeaters

The percentage of repeaters is not to be confused with the Repetition Rate discussed with other flows below.

Definition and Purpose

Percentage of Repeaters

Total number of pupils who are enrolled in the same grade as in a previous year, expressed as a percentage of the total enrolment to the specified grade. The purpose is to measure the extent and patterns of repetition by grade, as part of the internal efficiency of education system.

Methods of Calculation

Graduation Rate (GR) [using Proxy Indicator]

This is calculated just like in (UNESCO Institute for Statistics, 2009). In our MIEMIS census when recording the enrolment we record where the student came "from" (.e.g. New Enrol, Repeater, ECE, Transfer In).

Analysis and Discussions

While males have higher percentage of repeaters than females both a considered low indicating that once kids get into the education system there is no big repeating problems and they progress with a good degree of internal efficiency. The percentages of repeaters is higher in primary (~3%) then ECE (1%) and secondary (2%) which is understandable considering most of the enrolments are also found in primary.

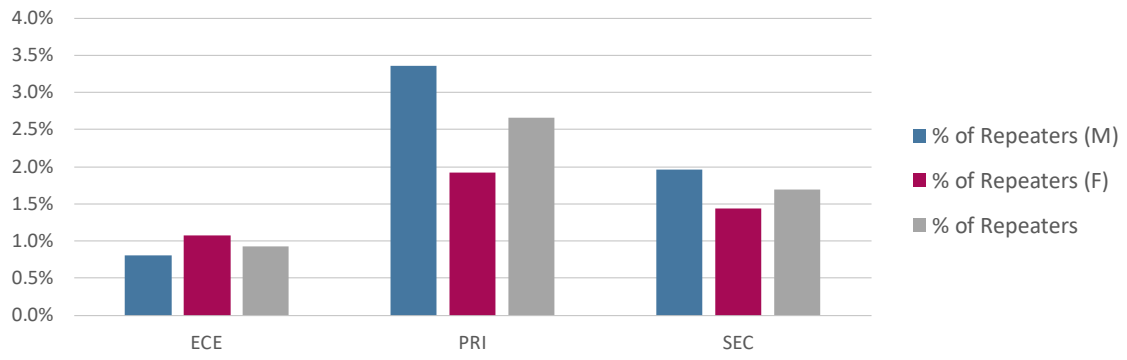

Figure 1.12: Percentage of Repeaters by Education Levels and Gender

As for percentage of repeaters over the year ECE is seeing a slight decrease, primary a slight increase and secondary a decrease followed by significant increase this

school year (Figure 1.13.) In short, when examining very closely the percentage of repeaters is fluctuating but as an overall indicator it is remaining stable in an acceptable territory.

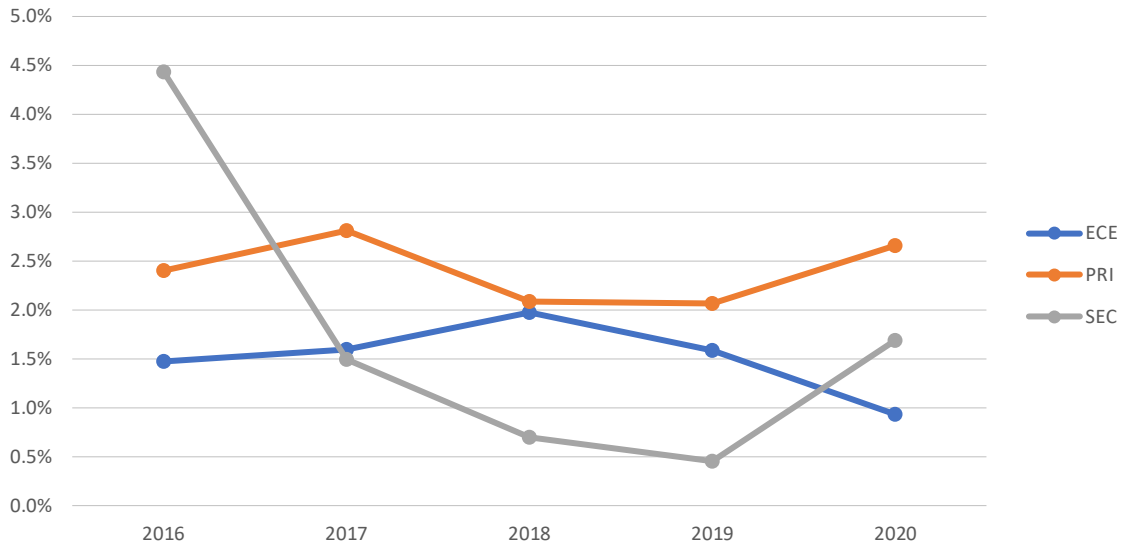

Figure 1.13: Percentage of Repeaters by Education Levels and Gender Trend

Exact percentage of repeaters can be found in Table 1.3.

Table 1.3: Percentage of Repeaters by Year, Education Level, Gender

	% Repeater Male	% Repeaters Female	% Repeaters Total
2016	**3.02%**	**2.47%**	**2.7%**
ECE	2.11%	0.77%	1.5%
PRI	2.74%	2.06%	2.4%
SEC	4.43%	4.45%	4.4%
2017	**3.08%**	**1.77%**	**2.4%**
ECE	1.56%	1.64%	1.6%
PRI	3.62%	1.96%	2.8%
SEC	1.82%	1.20%	1.5%
2018	**2.28%**	**1.30%**	**1.8%**
ECE	2.37%	1.57%	2.0%
PRI	2.70%	1.47%	2.1%
SEC	0.75%	0.65%	0.7%
2019	**2.06%**	**1.30%**	**1.7%**
ECE	1.72%	1.45%	1.6%
PRI	2.52%	1.59%	2.1%
SEC	0.61%	0.32%	0.5%
2020	**2.83%**	**1.74%**	**2.3%**
ECE	0.80%	1.08%	0.9%
PRI	3.36%	1.92%	2.7%
SEC	1.96%	1.44%	1.7%

Percentage Dropouts

Definition and Purpose

Percentages of Dropouts

The dropouts here are not the same as the dropout rates in the flows below (from reconstructed cohort.) The purpose of reporting both is it provides another means to improve data quality. Comparing both provides ways to identify some outlying data.

Methods of Calculation

Percentages of Dropouts

At the end of the school year our MIEMIS annual school census is updated with a outcome column (e.g. Completed, Dropout, To Repeat, Transfer out). These records are used to produce the direct percentage of dropouts at each grade level for all schools.

Analysis and Discussions

The data for the calculation of dropouts is not yet available. Due to the covonavirus world health crisis, most school principals have not attended the annual workshop where they usually complete the end of year census. As a result, this data will take longer to gather than usual.

Age Specific Enrollment Rate

Definition and Purpose

Age Specific Enrollment Rate (ASER)

Enrollment of a specific single age enrolled, irrespective of the level of education, as a percentage of the population of the same age. It is meant to show the extent of the educational participation of a specific age cohort.

Methods of Calculation

Age Specific Enrollment Rate (ASER)

This is calculated just like in (UNESCO Institute for Statistics, 2009): Divide the number of pupils (or students) of a specific age enrolled in educational institutions at all levels of education by the population of the same age and multiply the result by 100.

Analysis and Discussions

Enrollment by single age tends to correspond with the general pattern of GER/NER and GIR/NIR discussed earlier (Figure 1.15). These distributions indicate that there

are students yet to be enrolled in almost all grades from ECE to the secondary level. Participation is highest between 6 and 14 years of age. At the age 5, considered the age to enroll in ECE programs, there are just over ~35% of children out of pre-school. Similarly, around ~30% of children at each official age of primary are not in school. After 14 years of age, the non-enrolled population increases substantially. By the age of 18 corresponding with grade 12 education, around 75% are out of school (Figure 1.15.)

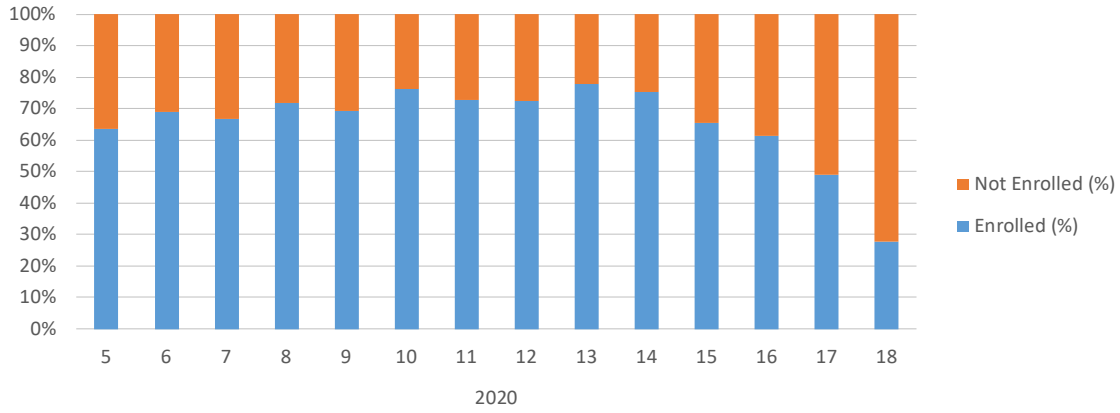

Figure 1.14: Age Specific Participation to Education System Chart

Over the past six years, there is the slight decline already discussed also observed from this angle. And just as we observed more steady secondary enrolments we also observe more steady participation by the age groups 14-16 and 17-20. This adds weight to the fact that efforts should be geared a bit more toward improving primary enrolments.

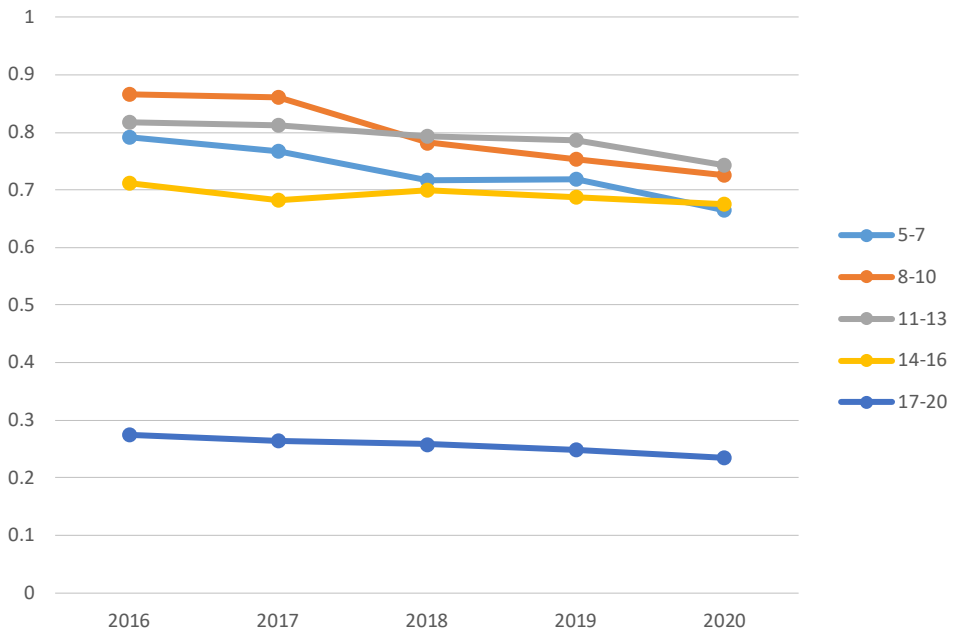

Figure 1.15: Age Specific Enrollment Rate trend

Out-of-school Children

Definition and Purpose

Out-of-school children (OOS)

Children in the official primary school age range who are not enrolled in either primary or secondary schools. It is to identify the size of the population in the official primary school age range who should be targeted for policies and efforts in achieving universal primary education.

Methods of Calculation

Out-of-school children (OOS)

This is calculated just like in (UNESCO Institute for Statistics, 2009): Subtract the number of primary school-age pupils enrolled in either primary or secondary school from the total population of the official primary school age range.

Analysis and Discussions

Population remain out of school for two reasons: 1) that they were never enrolled in school and 2) enrolled in school but dropped out early without completing certain level or grade of education. Both NER and GER are relatively low at the primary and secondary level. This tends to indicate that in general children were never enrolled

in the first place. The total number of out-of-school children to reach out to are similar at all levels of education with ECE a little less.

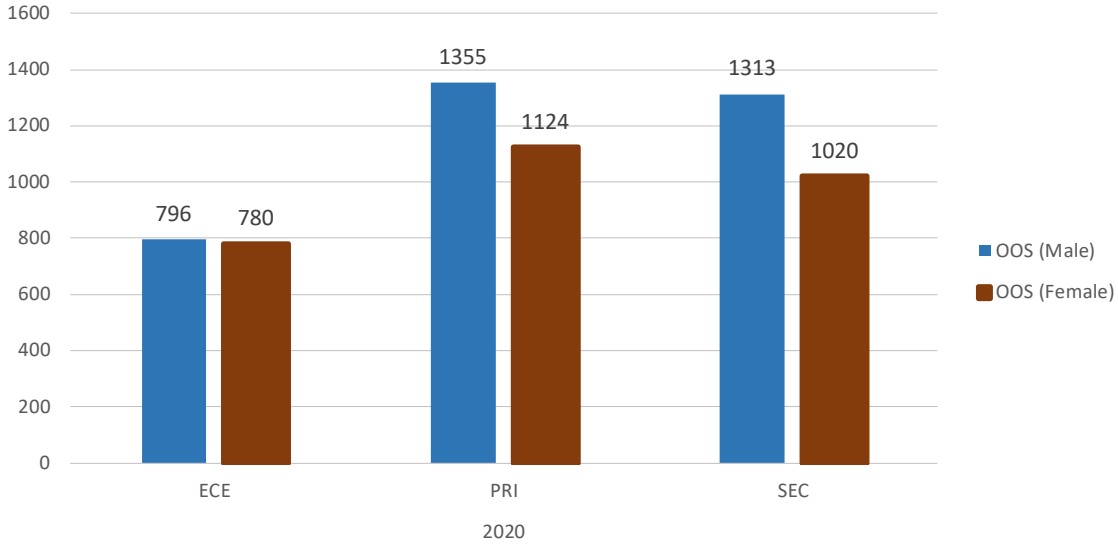

Figure 1.16: Out-of-school Children by Education Level and Gender for 2020

The time-series data on Out-Of-School children reveals an alarming increasing pattern in the out-of-school males and females of primary while ECE and secondary out-of-school have remain more steady over the years. This suggest a strong action needed to reverse this trend at the primary level.

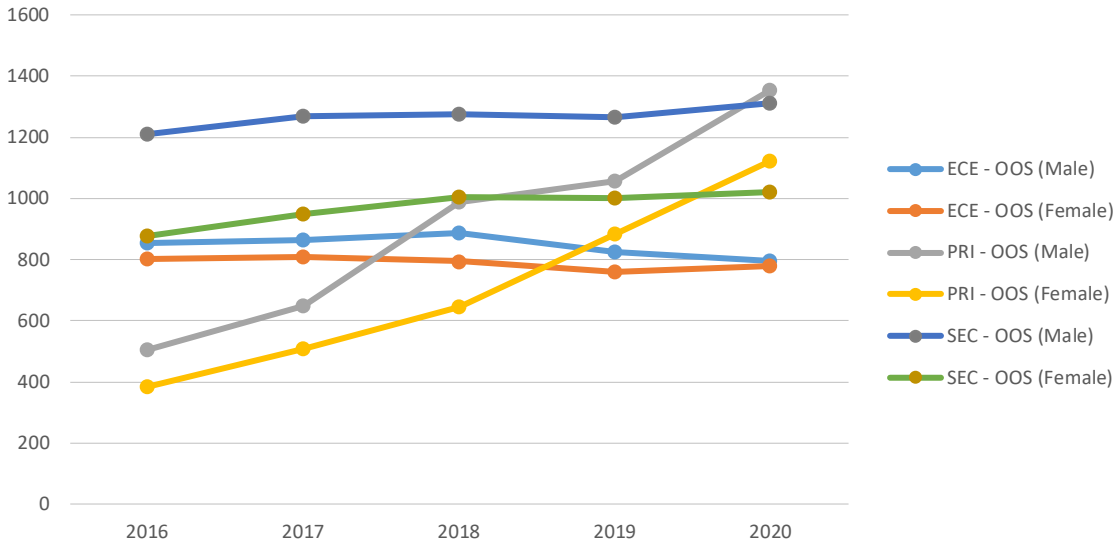

Figure 1.17: Out-of-school Children by Education Levels Trend

The exact out-of-school numbers can be found in Table 1.4.

Table 1.4: Out-of-school children by year, education level and gender

	OOS Male	OOS Female	OOS Total
2016	**2569**	**2066**	**4635**
ECE	853	803	1656
PRI	505	385	890
SEC	1211	878	2089
2017	**2782**	**2269**	**5051**
ECE	863	810	1673
PRI	650	509	1159
SEC	1269	950	2219
2018	**3150**	**2443**	**5593**
ECE	886	794	1680
PRI	987	644	1631
SEC	1277	1005	2282
2019	**3148**	**2647**	**5795**
ECE	825	760	1585
PRI	1056	885	1941
SEC	1267	1002	2269
2020	**3464**	**2924**	**6388**
ECE	796	780	1576
PRI	1355	1124	2479
SEC	1313	1020	2333
Grand Tota	**15113**	**12349**	**27462**

Transition, Repetition, Survival, Promotion, Dropout

Indicators in this section are referred to as ***flow rates***. Flow rates included are Transition Rate, Repetition Rate[3] Promotion Rate and Survival Rate. The reader may notice that the latest year of data is *2019*. This is in fact correct. Since flow rates typically mean from one year to another we need data for two consecutive years. Currently, in 2020 we can produce flow rates for SY2018-19=>SY2019-20, identified by 2019 in the charts and tables. For example, we can calculate the promotion rate of the cohort of students in Grade 10 in SY2018-19 promoting into Grade 11 in SY2019-20.

Definition and Purpose

Transition Rate (TR)

The number of pupils admitted to the first grade of a higher level of education in a given year, expressed as a percentage of the number of pupils (or students) enrolled

[3] Not to be confused with the Percentage of Repeaters indicator which is elsewhere and slightly different

in the final grade of the lower level of education in the previous year. It is meant to convey information on the degree of access or transition from one cycle or level of education to a higher one.

Repetition Rate (RR)

Proportion of pupils from a cohort enrolled in a given grade at a given school year who study in the same grade in the following school year. It is meant to measure the rate at which pupils from a cohort repeat a grade, and its effect on the internal efficiency of educational systems. In addition, it is one of the key indicators for analyzing and projecting pupil flows from grade to grade within the educational cycle.

Survival Rate (SR)

Percentage of a cohort of pupils enrolled in the first grade of a given level or cycle of education in a given school year who are expected to reach successive grades. It is meant to measure the retention capacity and internal efficiency of an education system. It illustrates the situation regarding retention of pupils from grade to grade in schools, and conversely the magnitude of dropout by grade.

Promotion Rate (PR)

Proportion of pupils from a cohort enrolled in a given grade at a given school year who study in the next grade in the following school year. It is meant to measure the performance of the education system in promoting pupils from a cohort from grade to grade, and its effect on the internal efficiency of educational systems. It is also a key indicator for analyzing and projecting pupil flows from grade to grade within the educational cycle.

Dropout Rates (DR)

Proportion of pupils from a cohort enrolled in a given grade at a given school year who are no longer enrolled in the following school year. It is meant to measure the phenomenon of pupils from a cohort leaving school without completion, and its effect on the internal efficiency of educational systems. In addition, it is one of the key indicators for analyzing and projecting pupil flows from grade to grade within the educational cycle.

Methods of Calculation

Transition Rate (TR)

Here we simply make use of the Promotion Rate ECE=>G1 for Transition Rate for ECE to Primary and Promotion Rate G8=>G9 for Transition Rate for Primary to Secondary

since the Promotion Rate is essentially a more general granular version (by grade instead of through education levels) of the Transition Rate.

Repetition Rate (RR)
This is calculated just like in (UNESCO Institute for Statistics, 2009): Divide the number of repeaters in a given grade in school year *t+1* by the number of pupils from the same cohort enrolled in the same grade in the previous school year *t*.

Survival Rate (SR)
This is calculated just like in (UNESCO Institute for Statistics, 2009): Divide the total number of pupils belonging to a school-cohort who reached each successive grade of the specified level of education by the number of pupils in the school-cohort i.e. those originally enrolled in the first grade of primary education, and multiply the result by 100. The survival rate is calculated on the basis of the reconstructed cohort method, which uses data on enrollment and repeaters for two consecutive years.

Promotion Rate (PR)
This is calculated just like in (UNESCO Institute for Statistics, 2009): Divide the number of new enrollment in a given grade in school year *t+1* by the number of pupils from the same cohort enrolled in the preceding grade in the previous school year *t*.

Dropout Rates (DR)
This is calculated just like in (UNESCO Institute for Statistics, 2009): Dropout rate by grade is calculated by subtracting the sum of promotion rate and repetition rate from 100 in the given school year. For cumulative dropout rate in primary education, it is calculated by subtracting the survival rate from 100 at a given grade (see survival rate).

Important Considerations

All the flow data shown in Table 1.5 are produced using the reconstructed cohort method. As stated in (UNESCO Institute for Statistics, 2009) Pupil-flow rates (dropouts, promotion, repetition rates and derived indicators) are derived by analyzing data on enrollment and repeaters by grade for two consecutive years. One should therefore ensure that such data are consistent in terms of coverage over time and across grades. While the MIEMIS has been in use for at least three years, the data collection in prior years was not as consistent as it has been these last three years. Another factor to consider is well the data is reported by schools and loaded into MIEMIS. Special attention should also be paid to minimizing some common errors which may bias these flow-rates, such as: Over-reporting enrollment/repeaters

(particularly in grade one); incorrect distinction between new entrants and repeaters; transfers of pupils between grades and schools. MIEMIS goes a long way in eliminating these common errors.

This is the reason why one will observe what seems to be theoretically "impossible" values such as negative dropouts. But looking at the raw data we have more enrollments recorded on the second of the two consecutive years and this is why we arrived at such negative dropout rate in some instances. Going forward with our single same consistent data collection tools we should see less and less of this even when using the reconstructed cohort. Furthermore, we plan to include the dropouts calculated directed and put it side by side with the reconstructed cohort method for comparison since we are collecting this data.

Analysis and Discussions

As stated earlier in this section, data on promotion, repetition and dropouts tends to be most challenging for a variety of reasons. This is not just the case in RMI but in general it is common issue across the nations. As such even UIS uses some estimates to derive these rates. Some of the common cause of the discrepancy is linked with poor student tracking system and frequent student transfers caused by both international and internal migration. Because student movement within RMI and abroad is all too common, getting to the exact numbers is always challenging. That said, we see strong indication that the quality of our data is improving and observing reconstructed cohort data is one solid way to analyze this.

Transition Rate

The transition rate ECE=>Primary is very good at 90% and 93% for males and females respectively. The transition Primary=>Secondary is much lower at 61% and 64%. While these figures are currently very satisfactory we still need to keep a close eye as we know that ECE enrolments are much lower then what they ideally would be. When ECE enrolments increase we need to make sure the transition remains high. Improving transition to secondary is definitely in need of attention.

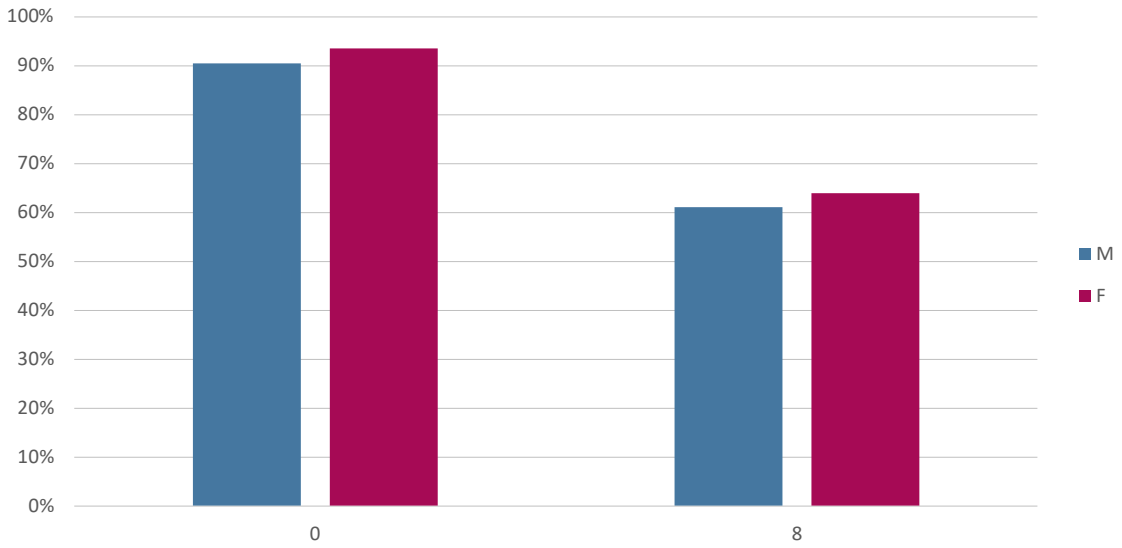

Figure 1.18: Transition ECE=>Primary and Primary=>Secondary for nation by gender

The trends shown in Figure 1.19 shows a slight decline for transition ECE=>Primary. However, it shows a decline from a theoretically impossible higher than 100% to a more realistic figure. This could very well be a sign of improving quality of data.

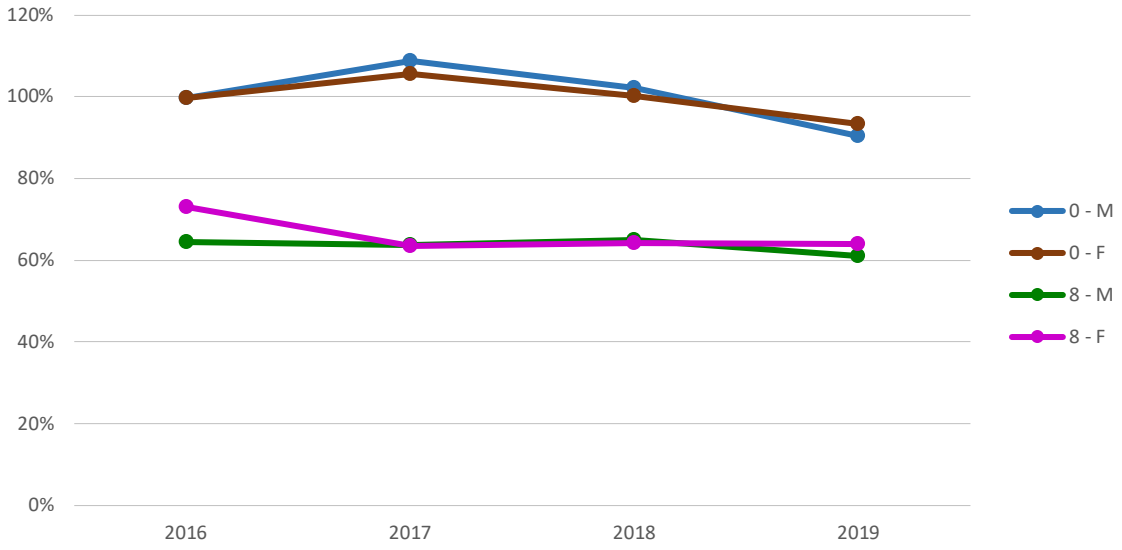

Figure 1.19: Transition ECE=>Primary and Primary=>Secondary by gender for past 5 years

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. This means that the Grade 0 and 8—representing ECE=>Primary and Primary=>Secondary

transitions respectively—are shown and discussed above in Transition Rate already. The two main things to observe here are

- a very acceptable promotion rate for all grades including in secondary. This means once student make it to a grade they are quite likely to promote to the next grade.
- The only abnormality is in grade 7 (and 8 to a lesser degree). There is a much higher percentage of students that promoted from Grade 6 last school year into Grade 7 this school year. Further digging into the raw data for Grade 6 last year and Grade 7 this year might identify an isolated data issue that could be resolved.

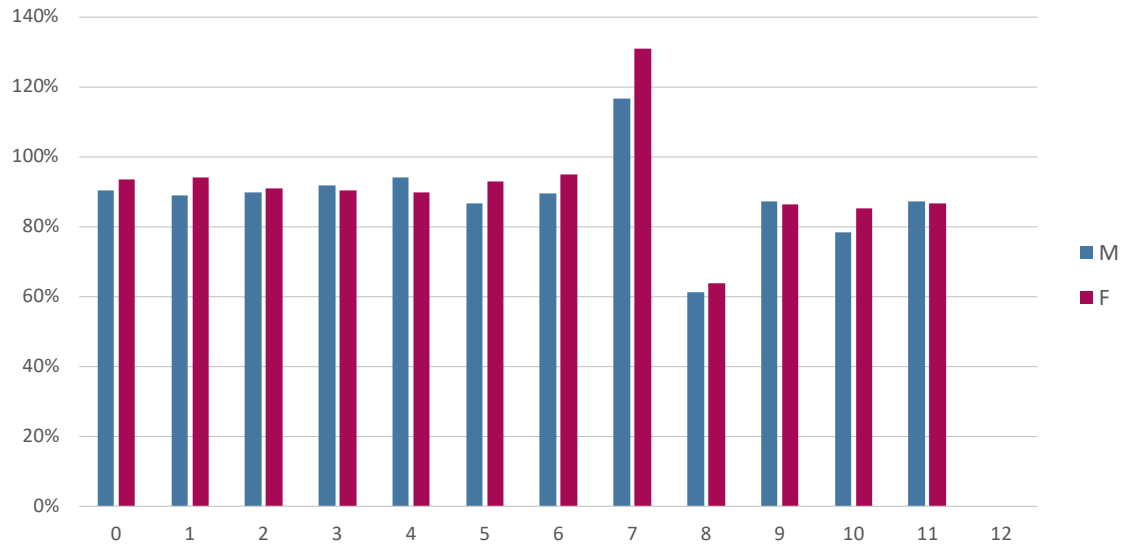

Figure 1.20: Promotion by grade and gender for nation

Repetition Rate

The repetition rate (Figure 1.21) are low in general and similar to the percentage of repeaters reported earlier. The first 5 grades show a slightly higher repetition rate and would deserve a closer examination has to the cause (is it data, is it the internal efficiency of the education system).

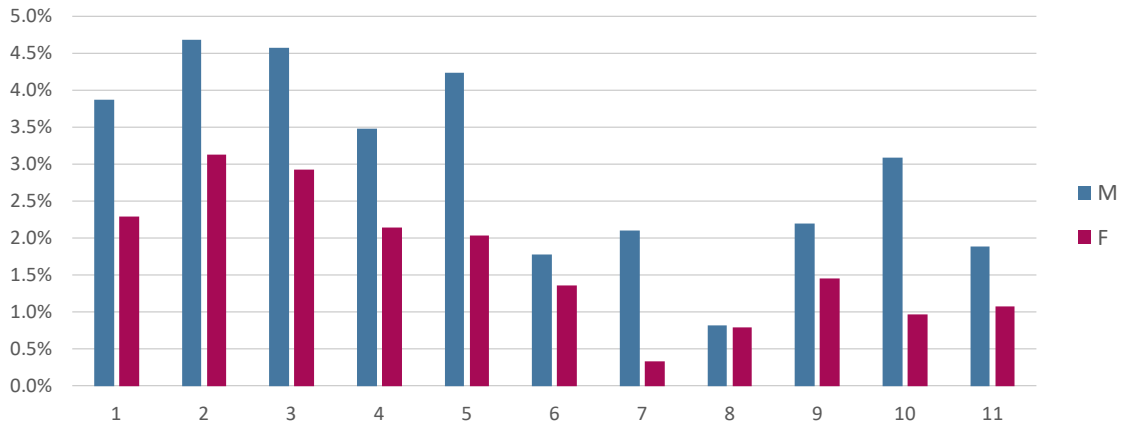

Figure 1.21: Repetition Rate by gender and grade (using reconstructed cohort)

Survival Rate

The survival rates (Figure 1.22) read like this:

- Survival Rates (from G1) in legend to Grade 8 (left on horizontal 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 (left on horizontal 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 (right in horizontal 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 horizontal 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. In addition, when comparing the total number of students in grade 1 to those in grade 8 and 12 as a snapshot in time with relatively constant population the survival rates presented provide a realistic expectancy rate.

Most survival rates throughout the nation are considered low with female having slightly higher survival rate than males (80% vs 62% surviving to grade 8, 33% vs 23% surviving to grade 12, and 64% vs 59% survival to grade 12 when making it to grade 9.)

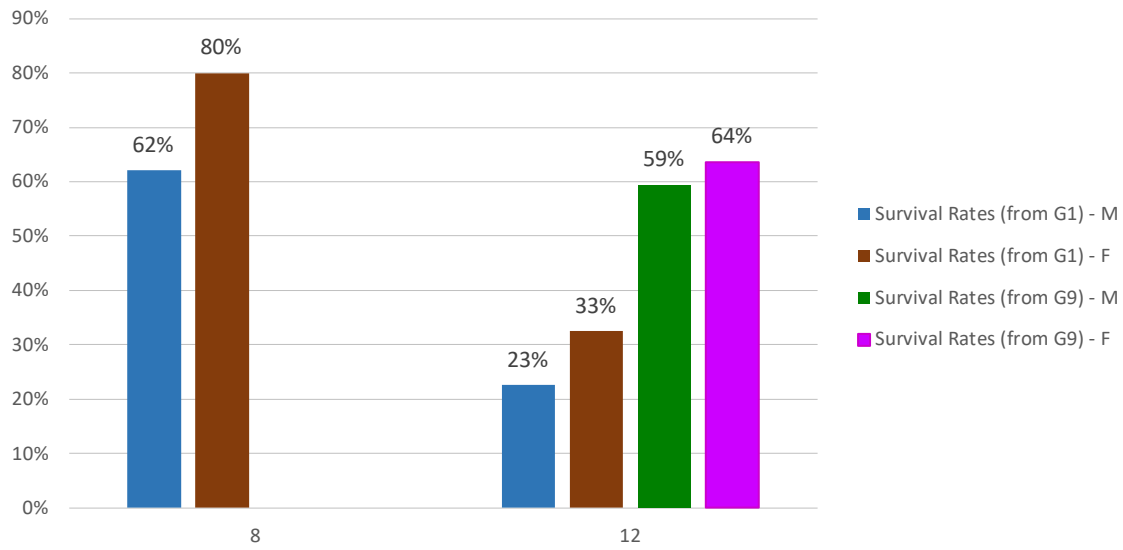

Figure 1.22: Survival rates by gender

The picture may not be as bleak as it seems however. The low survival rates are something new to this school year. Prior to this year, the survival expectancy was slightly on the rise. This school year the RMI was dealing with a number of issues including Dengue outbreak and the current Coronavirus world health crisis. Unfortunately, this affects enrolments and the derived estimated survival.

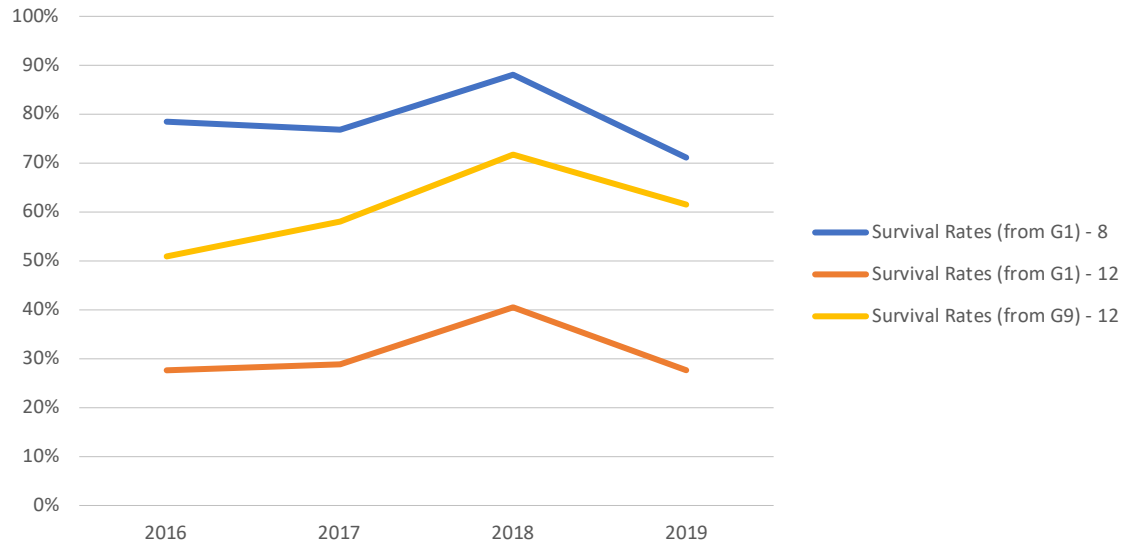

Figure 1.23: Survival Rates Trend

Dropout Rate

Aside from the odd spikes in Grade 7 and 8 in Figure 1.24 requiring further scrutiny, nothing too surprising in terms of dropout rates. The dropout rate is steadily

increasing with (most) grades. Starting in the range of 4-6% in Grades ECE-4, increasing to 6-7% in Grades 5-6 and further 11-15% in Grades 9-11.

Figure 1.24: Dropout rates by states and gender

All the flow data can be computed for the Table 1.5 below.

Table 1.5: Detailed Flows Data using Reconstructed Cohort

	Promotion Rates	Repetition Rates	Transition Rates	Dropout Rates	Survival Rates (from G1)	Survival Rates (from G9)
SY2015-2016=>SY2016-2017	**83.7%**	**2.2%**	**83.7%**	**14.1%**	**65.6%**	**72.4%**
F	**84.7%**	**1.6%**	**84.7%**	**13.7%**	**69.6%**	**72.1%**
0	99.8%	1.8%	99.8%	-1.6%		
1	94.3%	4.1%	94.3%	1.6%	100.0%	
2	90.5%	3.0%	90.5%	6.5%	94.3%	
3	90.0%	2.1%	90.0%	7.8%	85.4%	
4	96.0%	1.6%	96.0%	2.4%	76.9%	
5	93.5%	1.2%	93.5%	5.3%	73.8%	
6	99.8%	1.2%	99.8%	-1.0%	69.0%	
7	124.9%	0.7%	124.9%	-25.6%	68.9%	
8	73.1%	0.9%	73.1%	26.0%	86.0%	
9	73.4%	0.8%	73.4%	25.9%	62.8%	100.0%
10	88.8%	0.4%	88.8%	10.8%	46.1%	73.4%
11	76.9%	3.3%	76.9%	19.8%	40.9%	65.1%
12	0.0%	0.0%	0.0%	100.0%	31.5%	50.1%
M	**82.8%**	**2.8%**	**82.8%**	**14.4%**	**61.6%**	**72.6%**
0	99.7%	1.7%	99.7%	-1.4%		
1	92.9%	4.3%	92.9%	2.9%	100.0%	
2	89.8%	5.0%	89.8%	5.2%	92.9%	
3	86.5%	3.1%	86.5%	10.4%	83.4%	
4	95.4%	4.4%	95.4%	0.1%	72.1%	
5	87.8%	3.4%	87.8%	8.8%	68.8%	
6	95.6%	3.6%	95.6%	0.9%	60.4%	
7	123.0%	3.3%	123.0%	-26.3%	57.8%	
8	64.5%	1.3%	64.5%	34.2%	71.0%	
9	75.8%	2.7%	75.8%	21.5%	45.8%	100.0%
10	82.9%	1.3%	82.9%	15.8%	34.7%	75.8%
11	82.3%	2.3%	82.3%	15.4%	28.8%	62.8%

12	0.0%	0.0%	0.0%	100.0%	23.7%	51.7%
SY2016-2017=>SY2017-2018	**84.4%**	**1.6%**	**84.4%**	**14.0%**	**66.2%**	**76.9%**
F	**86.2%**	**1.2%**	**86.2%**	**12.6%**	**74.2%**	**80.0%**
0	105.7%	1.8%	105.7%	-7.4%		
1	94.2%	1.4%	94.2%	4.4%	100.0%	
2	97.2%	2.5%	97.2%	0.3%	94.2%	
3	95.5%	1.4%	95.5%	3.0%	91.6%	
4	93.6%	0.6%	93.6%	5.8%	87.5%	
5	96.8%	1.8%	96.8%	1.4%	81.9%	
6	93.1%	1.3%	93.1%	5.6%	79.3%	
7	126.0%	1.4%	126.0%	-27.4%	73.8%	
8	63.5%	1.1%	63.5%	35.3%	93.0%	
9	85.7%	0.2%	85.7%	14.1%	59.1%	100.0%
10	84.7%	0.8%	84.7%	14.5%	50.6%	85.7%
11	84.9%	1.0%	84.9%	14.2%	42.9%	72.6%
12	0.0%	0.7%	0.0%	99.3%	36.4%	61.6%
M	**82.5%**	**2.0%**	**82.5%**	**15.5%**	**58.2%**	**73.8%**
0	108.7%	2.4%	108.7%	-11.1%		
1	93.1%	2.7%	93.1%	4.2%	100.0%	
2	88.4%	4.2%	88.4%	7.4%	93.1%	
3	87.9%	3.5%	87.9%	8.6%	82.3%	
4	92.5%	3.0%	92.5%	4.5%	72.3%	
5	88.0%	1.7%	88.0%	10.3%	66.9%	
6	86.9%	2.2%	86.9%	10.9%	58.8%	
7	118.0%	1.4%	118.0%	-19.4%	51.1%	
8	63.7%	1.7%	63.7%	34.5%	60.4%	
9	76.8%	1.1%	76.8%	22.1%	38.5%	100.0%
10	82.8%	0.8%	82.8%	16.4%	29.6%	76.8%
11	85.8%	0.6%	85.8%	13.6%	24.5%	63.6%
12	0.0%	0.4%	0.0%	99.6%	21.0%	54.6%
SY2017-2018=>SY2018-2019	**86.6%**	**1.5%**	**86.6%**	**11.9%**	**71.2%**	**84.9%**
F	**86.6%**	**1.2%**	**86.6%**	**12.2%**	**70.2%**	**88.0%**

0	100.2%	1.6%	100.2%	-1.8%		
1	93.7%	3.1%	93.7%	3.1%	100.0%	
2	93.9%	1.7%	93.9%	4.4%	93.7%	
3	88.3%	1.3%	88.3%	10.4%	88.0%	
4	95.4%	1.7%	95.4%	3.0%	77.7%	
5	95.0%	2.4%	95.0%	2.6%	74.1%	
6	93.7%	0.8%	93.7%	5.5%	70.3%	
7	127.2%	0.7%	127.2%	-27.9%	65.9%	
8	64.1%	0.7%	64.1%	35.2%	83.9%	
9	92.4%	0.7%	92.4%	7.0%	53.8%	100.0%
10	89.7%	0.2%	89.7%	10.1%	49.7%	92.4%
11	92.7%	0.3%	92.7%	7.0%	44.5%	82.8%
12	0.0%	0.0%	0.0%	100.0%	41.3%	76.8%
M	**86.6%**	**1.9%**	**86.6%**	**11.6%**	**72.2%**	**81.8%**
0	102.3%	1.9%	102.3%	-4.2%		
1	89.2%	5.2%	89.2%	5.6%	100.0%	
2	91.4%	3.5%	91.4%	5.1%	89.2%	
3	97.9%	2.4%	97.9%	-0.3%	81.5%	
4	100.2%	2.3%	100.2%	-2.4%	79.9%	
5	93.3%	2.1%	93.3%	4.6%	80.0%	
6	97.7%	1.1%	97.7%	1.1%	74.6%	
7	126.5%	2.1%	126.5%	-28.6%	72.9%	
8	64.9%	1.1%	64.9%	34.0%	92.3%	
9	85.8%	0.4%	85.8%	13.8%	59.8%	100.0%
10	87.5%	1.4%	87.5%	11.1%	51.3%	85.8%
11	88.5%	0.6%	88.5%	10.9%	44.9%	75.1%
12	0.0%	0.0%	0.0%	100.0%	39.8%	66.4%
SY2018-2019=>SY2019-2020	**83.1%**	**2.1%**	**83.1%**	**14.8%**	**62.6%**	**79.8%**
F	**84.6%**	**1.7%**	**84.6%**	**13.8%**	**66.4%**	**80.8%**
0	93.5%	0.7%	93.5%	5.8%		
1	94.0%	2.3%	94.0%	3.7%	100.0%	
2	91.0%	3.1%	91.0%	5.9%	94.0%	

3	90.3%	2.9%	90.3%	6.8%	85.5%	
4	89.8%	2.1%	89.8%	8.1%	77.2%	
5	92.9%	2.0%	92.9%	5.1%	69.3%	
6	94.9%	1.4%	94.9%	3.7%	64.4%	
7	130.9%	0.3%	130.9%	-31.3%	61.1%	
8	63.9%	0.8%	63.9%	35.3%	80.0%	
9	86.3%	1.5%	86.3%	12.3%	51.1%	100.0%
10	85.2%	1.0%	85.2%	13.8%	44.1%	86.3%
11	86.6%	1.1%	86.6%	12.3%	37.6%	73.5%
12	0.0%	2.6%	0.0%	97.4%	32.5%	63.7%
M	**81.6%**	**2.6%**	**81.6%**	**15.8%**	**58.8%**	**78.7%**
0	90.4%	0.5%	90.4%	9.0%		
1	88.9%	3.9%	88.9%	7.3%	100.0%	
2	89.7%	4.7%	89.7%	5.6%	88.9%	
3	91.8%	4.6%	91.8%	3.6%	79.7%	
4	94.0%	3.5%	94.0%	2.5%	73.2%	
5	86.5%	4.2%	86.5%	9.3%	68.8%	
6	89.5%	1.8%	89.5%	8.7%	59.5%	
7	116.7%	2.1%	116.7%	-18.8%	53.3%	
8	61.1%	0.8%	61.1%	38.1%	62.1%	
9	87.1%	2.2%	87.1%	10.7%	38.0%	100.0%
10	78.4%	3.1%	78.4%	18.5%	33.1%	87.1%
11	87.1%	1.9%	87.1%	11.0%	25.9%	68.2%
12	0.0%	0.0%	0.0%	100.0%	22.6%	59.4%
Grand Total	**84.4%**	**1.9%**	**84.4%**	**13.7%**	**66.4%**	**78.5%**

CHAPTER 2: BUDGET

This chapter looks at several important budget related indicators. We have significantly improved our data management in this aspect and now provide a means for better comparison with other countries internationally. It can be a little tricky to compare with other countries, as there are a number of factors to account for in the differences producing those numbers. That said, the changes in reporting we are making by using MIEMIS is significantly improving our situation to achieve this to the extent possible.

Background

Data Source

Budget related indicators analysis always lag a little behind as it depends on the release of the Basic Financial Statements Independent Auditor's Report and World Bank data (for GNP and GNP/capita). We show the most recently available year at the time of publishing the release and 4 years prior to that for historical analysis.

Methods of Calculation

For each year, we enter the budgets (i.e. total expenditures) for the whole government of the RMI[1]. We then enter every single Ministry of Education expenditure carefully classified into cost centres. Cost Centres are essentially accounts from the accounting system (e.g. Admin Salaries, Primary Schools Textbooks, etc.). Cost Centres define how the expenditures are to be calculated and distributed through education sectors.

- Post to sector (money used for a specific education sector (e.g. AID to Primary Private Schools)
- Prorate (money used/prorated against all education sectors (e.g. MoE Personel, Budget, Admin)
- Ignore (money not counted/ignored for indicators computation)

Limitations

While every effort is taken to take into account all sources of fund and all expenditures, sometimes other sources of funding are provided which are not

[1] Expenditure for the government would preferably include budgeted and actual figures but those are currently only available for the General Fund source and not all expenditures. Therefore, budgeted and actual government-wide expenditures are currently set to the same amount.

included into the system. Those however would have only a minimal impact as the major sources of funding are all accounted for.

Furthermore, most of the education expenditures can be considered current expenditures. While this provides good budget data, it is currently unclear where are (if any) capital expenditures. Further improvements in budget data could be achieved with a clearer picture of capital expenditures. Those expenditures typically include major renovations or large asset purchases and maintenance (e.g. new building, vehicle, boats, building renovations.)

GNP and Government Spending Indicators

Public Expenditure on Education as % of Gross National Income (GNI)

In 2015 the Public Expenditure on Education as % of Gross National Income (GNI) (shortened to Ed/GNP %) was 8.8% and have steadily been decreasing to 6.7% in 2018 (Table 2.1.) While expenditures of the education system has remains relatively stable, the whole government expenditures have increased which explains the decrease in percentage.

In 2016, RMI's Ed/GNP % is 8.8% which is higher than the average of 4.5% as published by the World Bank[2]. RMI has nevertheless need decreasing this percentage but it remains higher than the international average

Public Expenditure on Education as % of Total Government Expenditure

In 2016, RMI's Public Expenditure on Education as % of Total Government Expenditure (shortened to Ed/Govt %) is 16.6% (Table 2.1) which is a little higher than the average of 14.6% as published by the World Bank[3]. While it was good back then in 2018 at 12.4% RMI has already slipped below the international average needing further scrutiny.

[2] https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS?name_desc=true
[3] https://data.worldbank.org/indicator/SE.XPD.TOTL.GB.ZS?name_desc=true

Table 2.1: GNP and Government Actual and Budgeted Expenditures

	GNP	Actual Expenditure				Budgeted Expenditure			
		Ed Expenditure	Govt Expenditure	Ed/Govt %	Ed/GNP %	Ed Expenditure	Govt Expenditure	Ed/Govt %	Ed/GNP %
2015	$248,100,100.00	$21,727,761.11	$112,393,680.00	19.3%	8.8%	$23,294,147.46	$112,393,680.00	20.7%	9.4%
2016	$262,593,500.00	$20,364,368.85	$123,013,963.00	16.6%	7.8%	$22,309,353.84	$123,013,963.00	18.1%	8.5%
2017	$273,486,100.00	$24,033,905.41	$143,518,807.00	16.7%	8.8%	$26,411,678.22	$143,518,807.00	18.4%	9.7%
2018	$282,605,100.00	$19,049,762.59	$153,223,075.00	12.4%	6.7%	$20,538,118.00	$153,223,075.00	13.4%	7.3%

Education Expenditure by Sectors

Percentage Distribution of Public Current Expenditure on Education by Level of Education (Sector)

As a whole sector, Primary gets the largest percentage of the public current/total expenditure at 55.4%, while ECE and Secondary get 12.7% and 31.9% respectively (Table 2.2 Actual expenditures.)

However, the per-pupil expenditure (Figure 2.2) tells a slightly different story with pupils in ECE and Secondary generally getting more then students in Primary.

Table 2.2: Government Actual and Budgeted Expenditures by Education Sectors

	Early Childhood		Primary		Secondary		Total	
	Actual	Budgeted	Actual	Budgeted	Actual	Budgeted	Actual	Budgeted
NATIONAL	$2,421,231.15	$2,505,291.51	$10,551,304.63	$11,490,205.03	$6,077,226.81	$6,542,621.46	$19,049,762.59	$20,538,118.00
Total	$2,421,231.15	$2,505,291.51	$10,551,304.63	$11,490,205.03	$6,077,226.81	$6,542,621.46	$19,049,762.59	$20,538,118.00

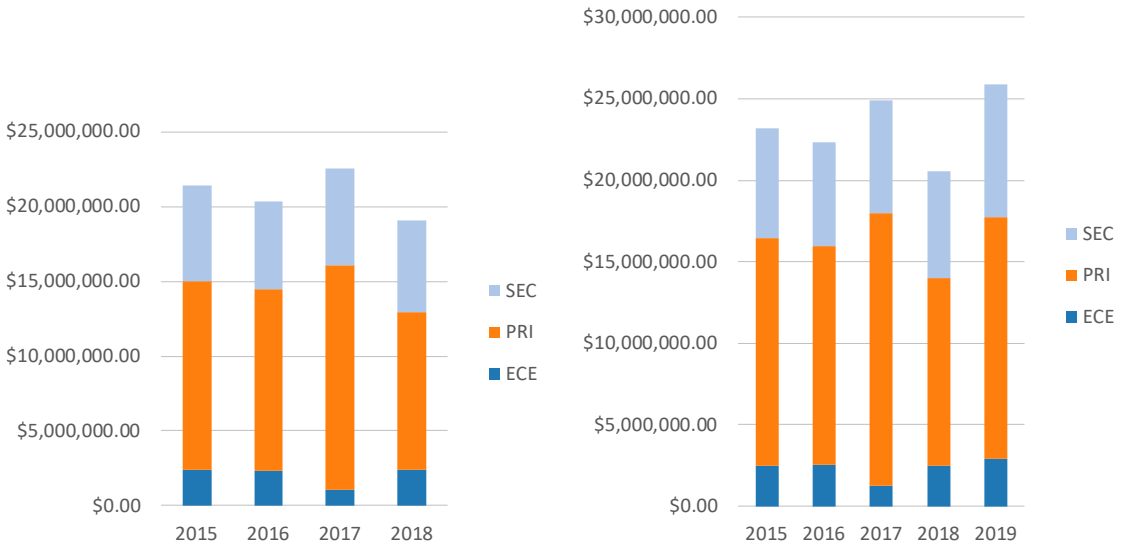

Figure 2.1: Actual and Budgeted Education Expenditure

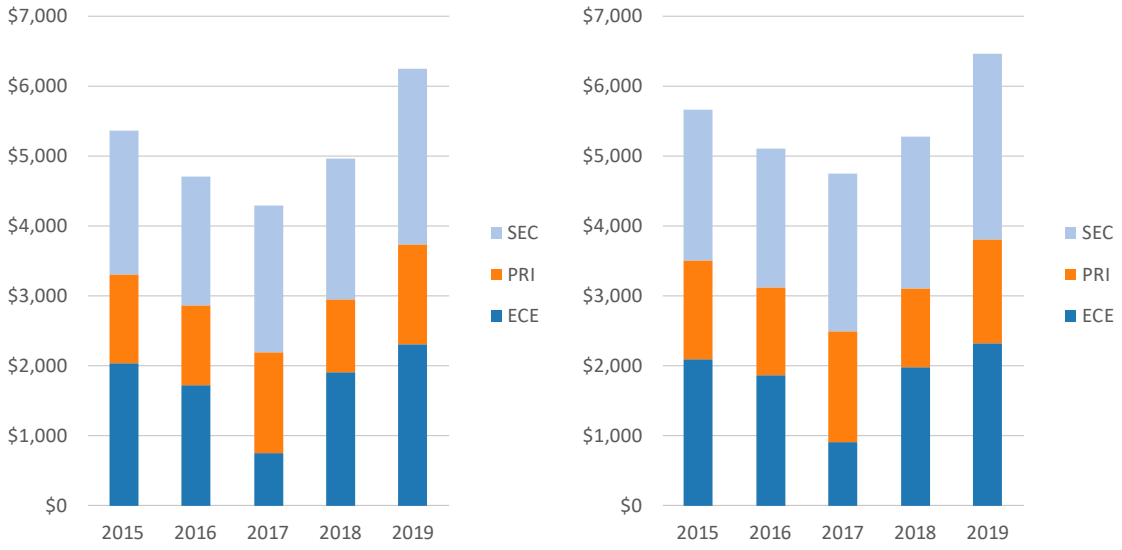

Figure 2.2: Actual and Budgeted Expenditure per Pupil

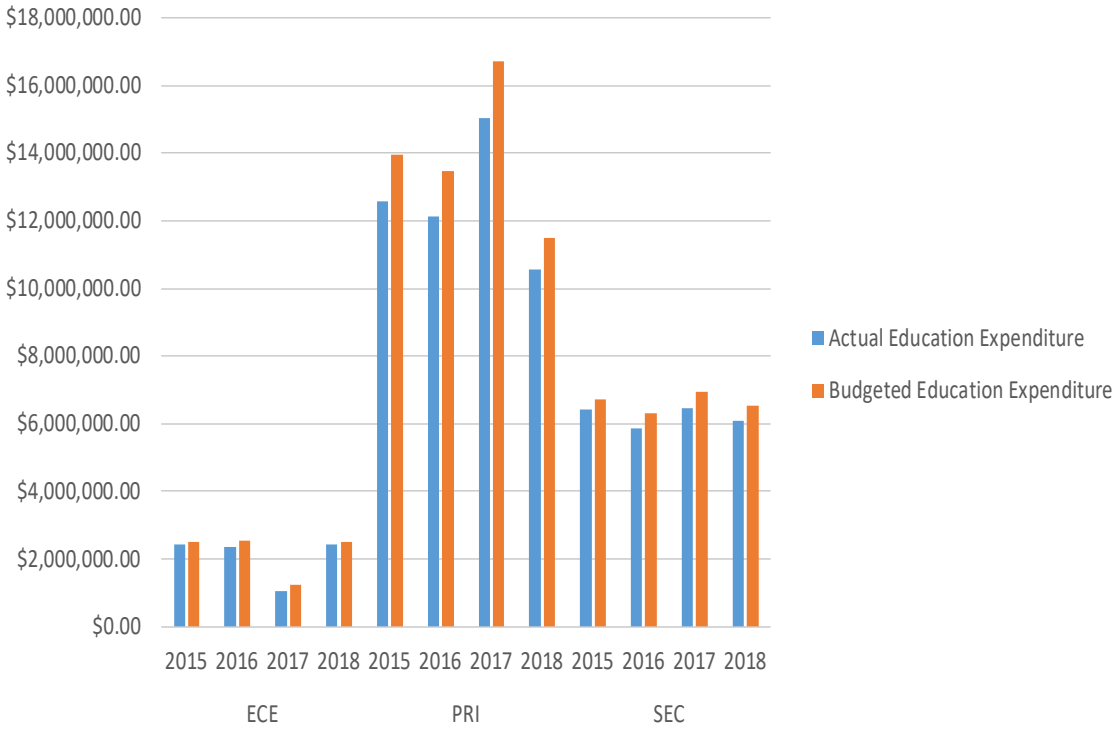

Figure 2.3: Actual and Budgeted Expenditure by Sector and Year

Public Current Expenditure per Pupil as % of Gross National Income (GNI aka. GNP) per Capita

RMI maintain itself in the range of 30-40% of public expenditure per pupil as % of the GNP per capita. The world has an average of 15% for this indicator and with the current data RMI is well above average when it comes to this indicator.

	Expenditure per Pupil	GNP per Capita	Expenditure Per Head as % of GNP per Capita
2015	$1,645	$4,319	38%
2016	$1,464	$4,548	32%
2017	$1,766	$4,711	37%
2018	$1,420	$4,838	29%

Figure 2.4: Expenditure per Pupil as % of GNP per Capita

CHAPTER 3: SCHOOLS

This chapter includes both basic statistics on the schools in RMI as well has enrolments by schools and other types of disaggregation.

Background

Data Source

The primary data source for the data herein is the MIEMIS web portal and annual school census.

Limitations

The only true limitation here is the precision with which the annual census data is submitted by schools.

Schools Distribution

Definition and Purpose

Schools in the RMI are managed either by the government or by non-government agencies such as the Church and other private sector organizations. All public and non-public schools are required to go through the annual accreditation certification. These basic statistics enables a better understanding of our school distribution.

Methods of Calculation

Each school in the MIEMIS is assigned its geographical location (i.e. Atoll and/or Island, national/local electorate, Island/municipality, GPS coordinates), its managing authority (i.e. Public/Private). Producing the statistics in the table below is simply an automated count and processing of data on schools.

Analysis and Discussions

There are 112 active schools in the RMI in 2020. Majuro, Arno and Kwajalein make up nearly half of all schools with 55 out of 112 (Figure 3.1.) The remaining schools are dispersed over the remaining atolls and islands making up a hard to cover geographical area with little to no Internet connectivity though there is a undergoing project to improve this.

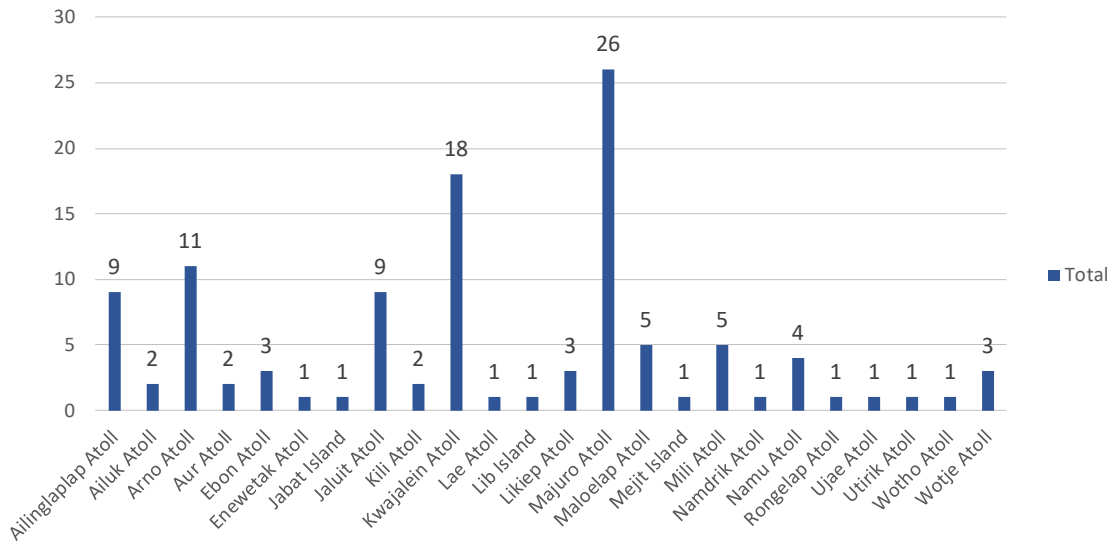

Figure 3.1: Distribution schools by Atolls and Islands

PSS manages most schools with only 26 run by mostly church organizations. The most active church organizations (i.e. running at least five schools) include the Roman Catholic Church, the Seventh Day Adventist Church and the United Church of Christ (Figure 3.2.)

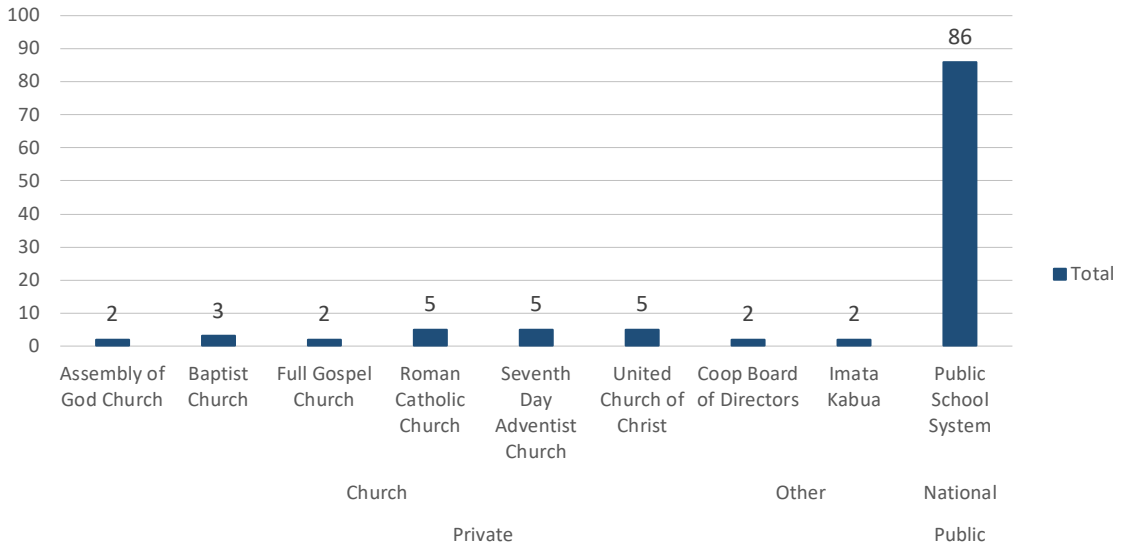

Figure 3.2: Distribution of Schools by its Managing Authority

There are 86 public schools and 25 private schools. All but one private schools are in urban area (Figure 3.3.)

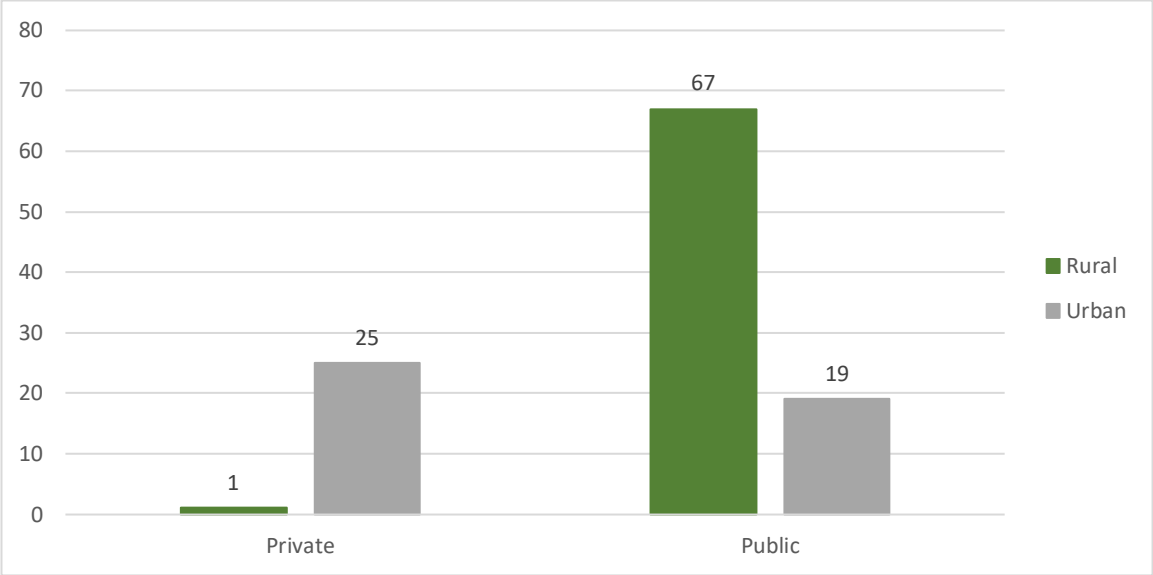

Figure 3.3: Distribution of Schools by its Region and Managing Authority

Table 3.1 shows a detailed distribution of the RMI schools used to produce the previous statistics.

Table 3.1: Schools by Region and Managing Authority

Count of Schools	Private								Private Total	Public	Public Total	Grand Total
	Assembly of God Church	Baptist Church	Coop Board of Directors	Full Gospel Church	Imata Kabua	Roman Catholic Church	Seventh Day Adventist Church	United Church of Christ		Public School System		
Rural						**1**			**1**	**67**	**67**	**68**
Ailinglaplap Atoll										9	9	9
Ailuk Atoll										2	2	2
Arno Atoll										11	11	11
Aur Atoll										2	2	2
Ebon Atoll										3	3	3
Enewetak Atoll										1	1	1
Jabat Island										1	1	1
Jaluit Atoll						1			1	8	8	9
Kili Atoll										2	2	2
Lae Atoll										1	1	1
Lib Island										1	1	1
Likiep Atoll										3	3	3
Maloelap Atoll										5	5	5
Mejit Island										1	1	1
Mili Atoll										5	5	5
Namdrik Atoll										1	1	1
Namu Atoll										4	4	4
Rongelap Atoll										1	1	1
Ujae Atoll										1	1	1
Utirik Atoll										1	1	1
Wotho Atoll										1	1	1
Wotje Atoll										3	3	3
Urban	**2**	**3**	**2**	**2**	**2**	**4**	**5**	**5**	**25**	**19**	**19**	**44**
Kwajalein Atoll	2			2	2	2	2	1	11	7	7	18
Majuro Atoll		3	2			2	3	4	14	12	12	26
Grand Total	**2**	**3**	**2**	**2**	**2**	**5**	**5**	**5**	**26**	**86**	**86**	**112**

Schools Enrolments

Definition and Purpose

Total enrolments is the mostly used indicator for planning. We can present enrolments by many types of disaggregation including by Atolls and Islands, Local/National Electorate, Managing Authority (i.e. Public/Private, Organizations), Region (Island, Rural/Urban).

Knowing how many enrolments nationwide is important but not enough for detailed planning. Statistics on enrolment by various types of disaggregation is also useful tp plan expenditures.

Methods of Calculation

Each school in the MIEMIS can assign its geographical location (i.e. Atoll and Island, national/local electorate, Island/municipality, GPS coordinate), its managing authority (i.e. Government run, Non-government). That said, any data that is correctly assigned tied to a school in MIEMIS can be analyzed by all the supported types of disaggregation; whether this is enrolments from the annual census, school accreditation or WASH surveys, exams performance, locations of teachers, etc. The focus herein is enrolments as there are dedicated chapters for other type of data.

Analysis and Discussions

Most of the enrolments are in Majuro Atoll followed by Kwajalein and Jaluit. Together they make up ~77% of all enrolments in the country. But they are also the atolls where the enrolments are on the decline while atolls and islands with less enrolment have been more steady in the past few years.

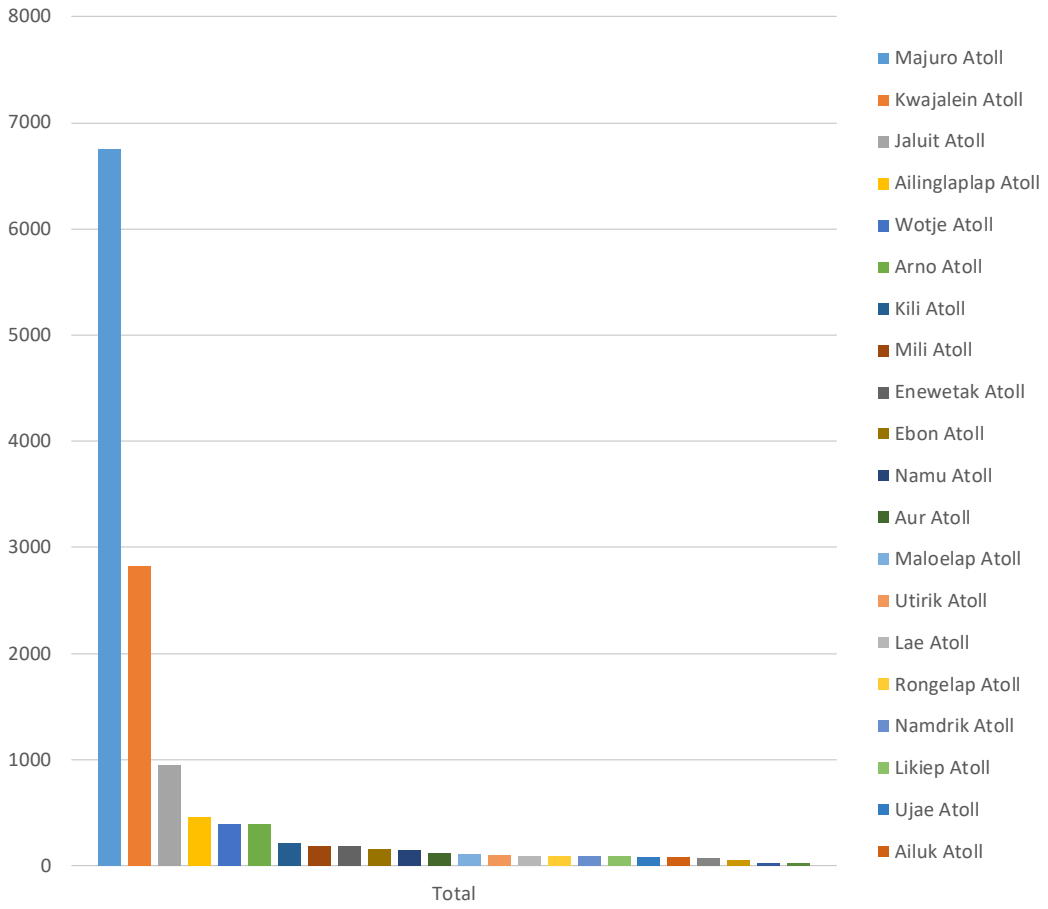

Figure 3.4: Schools Enrolment by Atolls and Islands

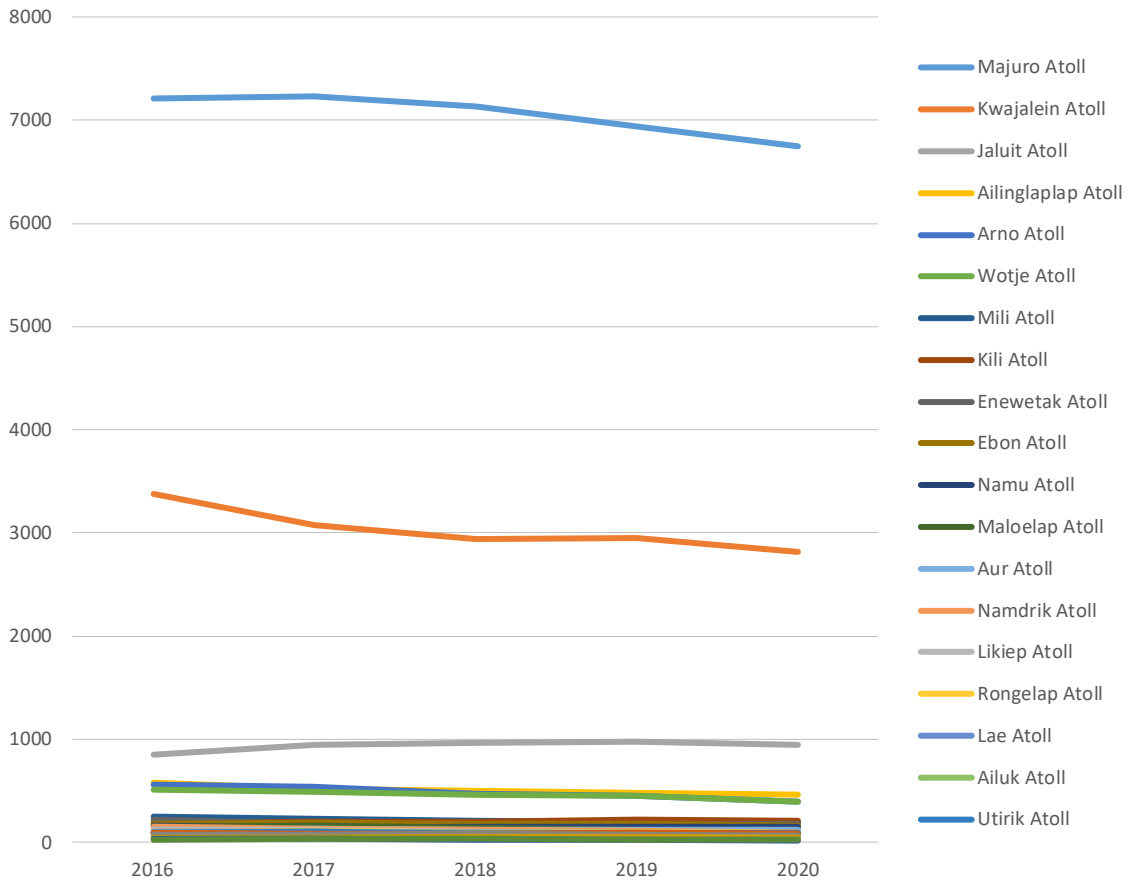

Figure 3.5: School Enrolments by Atolls Trend

Similarly, the Public School Systems handles most of the enrolments (10706) (Figure 3.6) followed by 751 enrolled in SDA church run schools and 604 in Roman Catholic Church run schools. The Public School System enrolments are also the most in decline with the other authority reporting even slight increases (Figure 3.7).

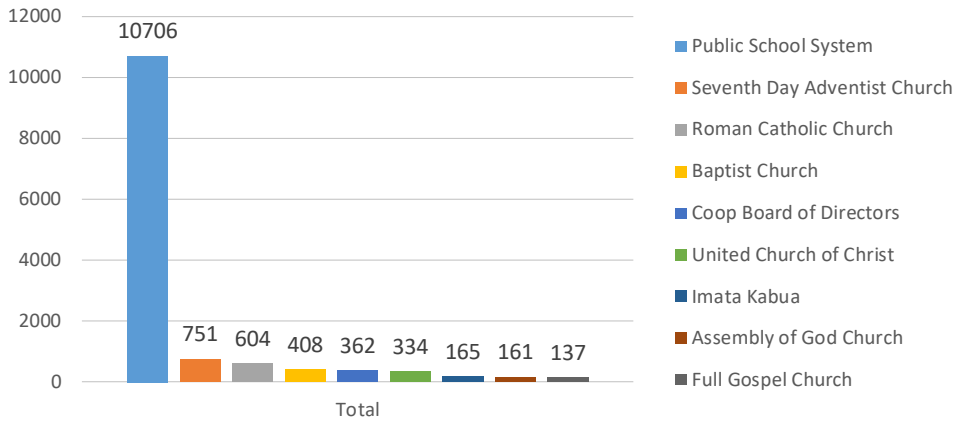

Figure 3.6: Schools Enrolment by Managing Authority

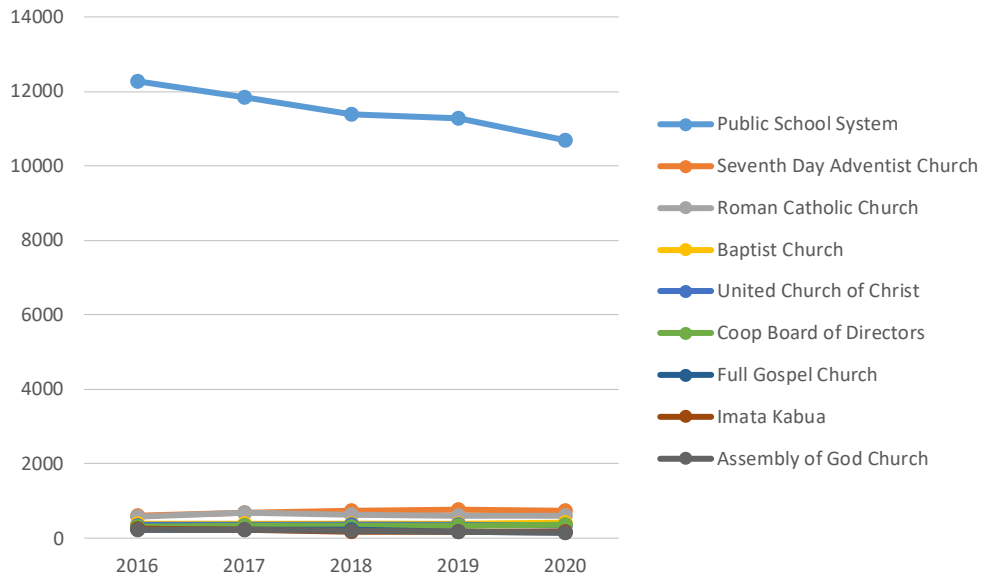

Figure 3.7: Schools Enrolments by Managing Authority Trend

Urban schools account for 9564 enrolled students while rural schools account for 4064 (Figure 3.8) and both urban and rural have declining rates of enrolments in the past 5 years (Figure 3.9.)

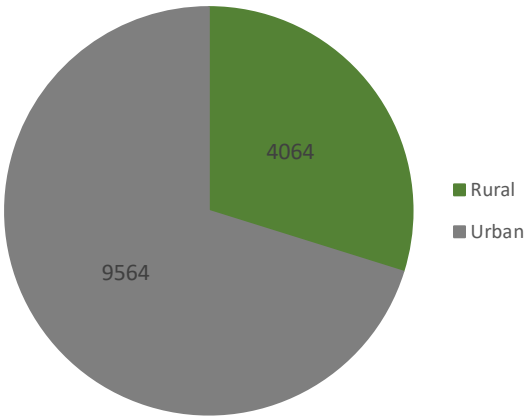

Figure 3.8: Schools Enrolment by Region

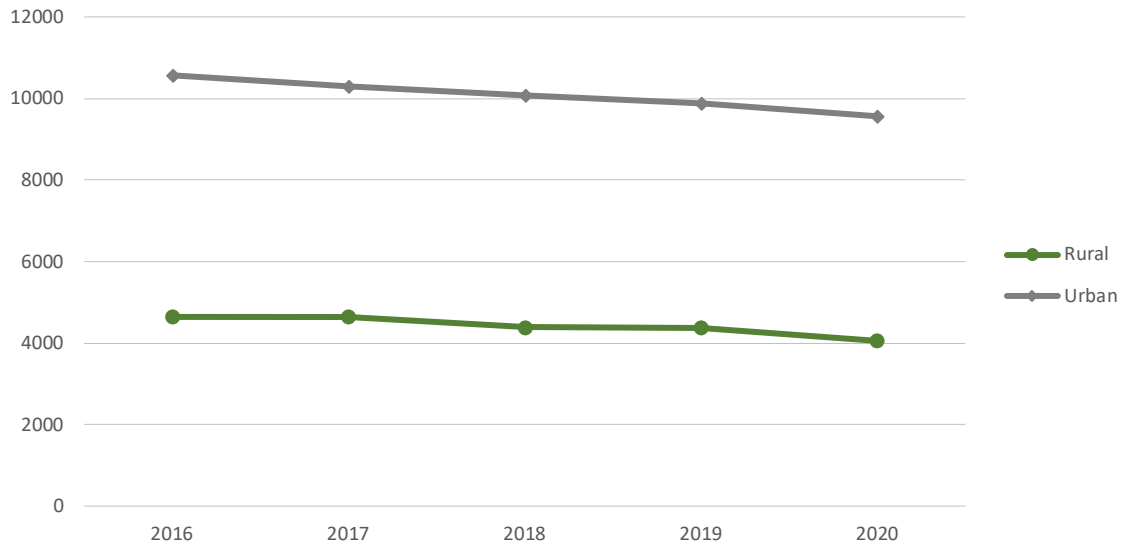

Figure 3.9: Schools Enrolments by Region Trend

CHAPTER 4: TEACHERS

Pupil-Teacher Ratio

Definition and Purpose

Average number of pupils per teacher at a specific level of education in a given school year. We can also compute this more precisely by Grade. To measure the level of human resources input in terms of the number of teachers in relation to the size of the pupil population.

Methods of Calculation

Allocation of teacher is based on data provided in the MIEMIS Annual School Census. Those teachers for whom no activities (Grades) are recorded are classified based on their Employment Status and Job Title. Those identified as teaching staff but with no provided Grades are classified as "Teaching (Unspecified)". Staff may perform multiple activities, such as teaching at different grade levels, or sharing time between Teaching and Admin/Other duties. There is extensive data validation in the census upload process that check for a strict defined set of rules to improve quality of teacher and their duties. For purposes of more accurately representing Pupil Teacher Ratio at the Grade level, the contribution of each teacher to each of their multiple duties (Grade taught) is evenly divided (e.g. teacher with duties in Grade 1 and Grade 2 have 50% in Grade 1 and 50% in Grade 2.) The sum of these "Full Time Equivalent" allocations for each teacher is 1 (i.e. 100% as teachers are considered full time); therefore, the sum of all FTE allocations equals the number of teachers.

Analysis and Discussions

A high student-teacher ratio suggest the teachers are responsible for larger groups of students hindering their ability to focus on individual students needs and learning abilities. The PTR for ECE is not included as the primary and secondary level disaggregation is based on the school level and there are no strictly ECE schools this year. When looking at it from a "zoomed out" perspective as in Figure 4.1 the PTR for primary and secondary is similar 10 and 8 respectively for all teachers and 16 and 12 for PTR (qualified teachers) and 22 and 12 PTR (certified teachers). The PTR increases from 8-10 range for teachers regardless of their qualifications to 12-16 range for teachers with qualifications.

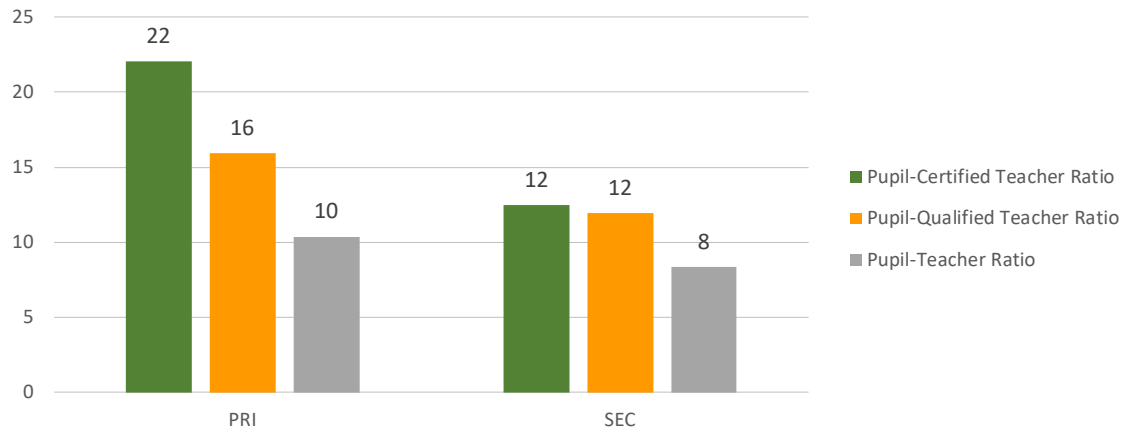

Figure 4.1: Pupil-Teacher Ratios by Education Levels

The PTR by grade can also be done provided the teachers were loaded with their grades taught specified. The PTR for primary grades is in general much better than in secondary. On average, there is an available teacher for 15-16 students for Grade 1 to 7 (Figure 4.2) while the availability of teachers "seemingly" quickly deteriorates beyond Grade 8. However, the much higher PTR for secondary grades is at least partially explained by many teachers in secondary did not have their grades specified when loaded into the system.

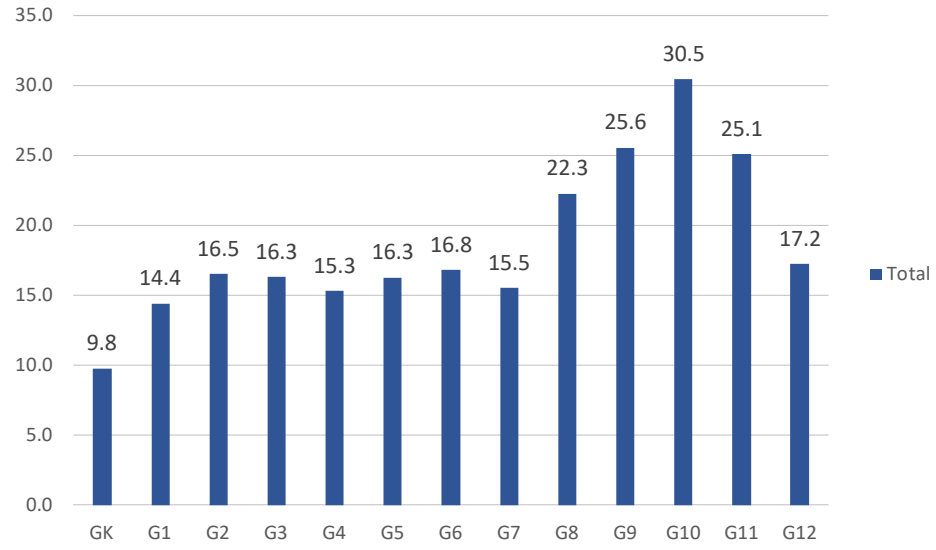

Figure 4.2: Pupil-Teacher Ratio by Grade (using more precise Full Time Equivalent)

Digging down further we can retrieve the following list of schools that have teachers with unspecified grades. Improve that and the data instantly become much better.

Table 4.1: Schools loaded with Teachers with unspecified grades

	Total Staff	Unspecified Staff
Aerok Elementary School	4	3
Ailuk Elementary School	5	2
Airok Elementary School	6	1
Ajeltake Elementary School	22	16
Aur Elementary School	7	1
Carlos Elementary School	4	2
Ebadon Elementary School	3	1
Ebeye Public Middle School	15	12
Ebon Elementary School	7	1
Ejit Elementary School	5	1
Enejelar Elementary School	3	1
Enejet Elementary School	5	1
Enewetak Elementary School	14	4
Enniburr Elementary School	9	2
Imroj Elementary School	6	6
Jabat Elementary School	5	1
Jabor Elementary School	13	1
Jah Elementary School	3	1
Jaluit Elementary School	9	2
Jaluit High School	45	26
Jang Elementary School	3	1
Japo Elementary School	3	3
Jeh Elementary School	8	2
Katiej Elementary School	2	1
Kaven Elementary School	4	1
Kilange Elementary School	5	1
Kwajalein Atoll High School	38	20
Lae Elementary School	8	1
Laura High School	28	21
Laura SDA Elementary School	7	1
Lib Elementary School	2	2
Life Skills Academy	21	20
Likiep Elementary School	7	3
Long Island Elementary School	14	4
Longar Elementary School	4	4
Lukoj Elementary School	2	2
Lukonwod Elementary School	4	2
Majkin Elementary School	9	2
Majuro Baptist Elementary School	15	1
Majuro Coop Elementary School	33	9
Majuro Middle School	36	2
Namdrik Elementary School	11	1
Northern Islands High School	36	19
Rairok Elementary School	18	4
Rita Christian High School	9	1
Rita Elementary School	53	7
Woja Elementary School (Majuro)	14	10
Grand Total	**584**	**230**

Finally, the PTR can be produced also by schools (and their authority and level). Table 4.3 below was computed with a previous snapshot of the data back in July. It is included in this version but will be revised as soon as possible and updated if needed into a subsequent revision of this document.

Table 4.2: Summary of School Enrollments, Teachers, PTR and Accreditation Level

	Public Primary Schools	*Students*	*Teachers*	*S/T Ratio (PTR)*	*Accreditation Level*
	Ailinglaplap Atoll	*460*	*42*	*11:1*	
1	Airok A	60	5	12:1	Level 3
2	Buoj	61	6	12:1	Level 3
3	Enewa	39	3	13:1	Level 2
4	Jah	29	3	10:1	Level 3
5	Jeh	67	7	11:1	Level 2
6	Jobwan	24	4	6:1	Level 2
7	Katiej	15	3	5:1	Level 2
8	Mejel	31	3	10:1	Level 2
9	Woja A.	134	8	17:1	Level 3
	Ailuk Atoll	*78*	*9*	*9:1*	
10	Ailuk	61	6	10:1	Level 2
11	Enejelar	17	3	6:1	Level 3
	Arno Atoll	*395*	*49*	*8:1*	
12	Arno	37	7	5:1	Level 2
13	Bikarej	39	5	8:1	Level 2
14	Ine	58	5	12:1	Level 3
15	Japo	18	3	6:1	Level 2
16	Kilange	51	4	13:1	Level 2
17	Longar	36	5	13:1	Level 3
18	Lukoj	29	3	10:1	Level 2
19	Matolen	41	4	7:1	Level 3
20	Tinak	41	4	10:1	Level 2
21	Tutu	21	3	7:1	Level 2
22	Ulien	36	6	6:1	Level 3
	Aur Atoll	*118*	*10*	*12:1*	
23	Aur	61	5	12:1	Level 3
24	Tobal	57	5	11:1	Level 3
	Ebon Atoll	*156*	*13*	*12:1*	
25	Ebon	90	7	13:1	Level 2
26	Enekoion	19	3	6:1	Level 3
27	Toka	47	7	7:1	Level 3
28	*Enewetak Atoll (Enewetak)*	182	7	26:1	Level 3
29	*Jabat (Jabat Island)*	23	4	6:1	Level 3
	Jaluit Atoll	*306*	*33*	*9:1*	
30	Imiej	39	3	13:1	Level 2
31	Imroj	51	7	10:1	Level 3
32	Jabnodren	N/A	N/A	N/A	Level 2
33	Jabor	80	11	7:1	Level 4
34	Jaluit	74	7	11:1	Level 3
35	Mejrirok	27	4	7:1	Level 2
36	Narmej	35	3	12:1	Level 3
37	*Kili (Kili Island)*	162	3	12:1	Level 3
	Kwajalein Atoll	*1,611*	*65*	*18:1*	
38	Carlos	20	3	7:1	Level 2

39	Ebadon	17	3	6:1	Level 2
40	Ebeye Middle	387	18	22:1	Level 3
41	Ebeye Public	737	41	18:1	Level 3
42	Enniburr	N/A	N/A	N/A	Level 3
43	***Lae (Lae Atoll)***	**92**	**10**	**9:1**	**Level 3**
44	*Lib (Lib Island)*	47	4	1:1	Level 2
	Likiep Atoll	*88*	*15*	*6:1*	
45	Jepal	24	3	8:1	Level 3
46	Likiep	57	8	7:1	Level 3
47	Melang	7	4	2:1	Level 2
	Majuro Atoll	*3567*	*240*	*15:1*	
48	**Ajeltake**	**220**	**17**	**13:1**	**Level 2**
49	Delap	602	43	14:1	WASC
50	**Ejit**	**47**	**5**	**9:1**	**Level 3**
51	**Laura**	**411**	**24**	**9:1**	**Level 3**
52	**Long Island**	**306**	**15**	**20:1**	**Level 3**
53	Majuro Middle School	588	32	18:1	WASC
54	**North Delap**	**318**	**31**	**14:1**	**Level 3**
55	**Rairok**	**211**	**15**	**14:1**	**Level 3**
56	Rita	728	47	15:1	WASC
57	**Woja, Majuro**	**135**	**11**	**12:1**	**Level 2**
	Maloelap Atoll	*99*	*15*	*7:1*	
58	Aerok M.	12	3	4:1	Level 2
59	Jang	N/A	N/A	N/A	Level 2
60	Kaven	20	3	7:1	Level 3
61	Ollet	21	4	5:1	Level 3
62	Tarawa	46	5	9:1	Level 2
63	***Mejit Island (Mejit)***	**67**	**8**	**8:1**	**Level 2**
	Mili Atoll	*186*	*25*	*7:1*	
64	Enejet	37	4	9:1	Level 2
65	Lukonwod	25	3	8:1	Level 2
66	Mili	51	9	6:1	Level 3
67	Nallo	51	6	9:1	Level 3
68	Tokewa	22	3	7:1	Level 3
69	***Namdrik Island (Namdrik)***	**90**	**11**	**8:1**	**Level 3**
	Namu Atoll	*146*	*20*	*7:1*	
70	Loen	32	4	9:1	Level 2
71	Mae	39	4	10:1	Level 2
72	Majken	48	9	10:1	Level 2
73	Namu	27	3	9:1	Level 3
74	*Mejatto (Rongelap Atoll)*	90	6	15:1	Level 3
75	***Ujae(Ujae Atoll)***	**80**	**6**	**13:1**	**Level 3**
77	*Utrik (Utrik Atoll)*	94	7	13:1	Level 3
77	***Wotto (Wotto Atoll)***	**20**	**4**	**5:1**	**Level 2**
	Wotje Atoll	*162*	*16*	*10:1*	
79	Wodmej	36	4	9:1	Level 3
79	Wotje	126	12	11:1	Level 3

Private Primary		***Students***	***Teachers***	***S/T Ratio***	
80	St. Joseph	63	7	9:1	Level 3

81	Ebeye Calvary	91	8	11:1	Level 3
82	Ebeye Christian	64	9	7:1	Level 3
83	Ebeye SDA	254	12	21:1	SDA
84	GEM Christian School	110	8	14:1	Level 4
85	Jebro	95	8	12:1	Level 2
86	Queen of Peace	211	14	12:1	Level 3
87	**Ajeltake Christian**	**62**	**8**	**8:1**	**Level 4**
88	Assumption	225	21	8:1	WASC
89	Delap SDA	310	14	22:1	SDA
90	Laura SDA	62	5	12:1	SDA
91	Majuro Baptist	276	10	28:1	Level 3
92	Majuro Coop	283	30	9:1	WASC
93	Rita Christian	44	9	5:1	Level 2
94	Rongrong Christian				NA

Public Secondary		***Students***	***Teachers***	***S/T Ratio***	
95	Enniburr High School				
96	Jaluit High School	556	25	22:1	Level 4
97	Kwajalein Atoll High School	375	19	20:1	WASC
98	Laura High School	289	18	16:1	WASC
99	Marshall Islands High School	1,071	58	18:1	WASC
100	Northern Islands High School	233	21	11:1	Level 3
101	Life Skills Academy	88	11	8:1	Level 3
Private Secondary		***Students***	***Teachers***	***S/T Ratio***	
102	Ebeye Calvary High School	70	4	18:1	Level 3
103	Ebeye Gem High School	27	*4*	7:1	Level 4
104	Ebeye SDA High School	55	6	9:1	SDA
105	Jabro High School	70	9	8:1	Level 2
106	Father Hacker High School	48	7	7:1	Level 3
107	Assumption High School	73	5	15:1	WASC
108	Delap SDA High School	70	11	6:1	SDA
109	Majuro Baptist Christian Academy	70	7	10:1	Level 3
110	Majuro Coop High School	79	9	9:1	WASC
111	Marshall Christian High School	172	8	22:1	Level 2
112	Rita Christian High School	40	4	10:1	Level 2

Teacher Qualifications and Certifications

Definition and Purpose

Qualified Teachers

The percentage of teachers that are considered qualified to teach in the RMI. This means at least an Associate of Arts.

Certified Teachers

The percentage of teachers that are considered certified to teach in the RMI. This means to have pass one of the certification below. When a teacher's certification is expired it must be renewed.

- Administrator I
- Administrator II
- Provisional Certificate
- Provisional Certificate for Head Teacher
- Professional Certificate I
- Professional Certificate I for Head Teacher
- Professional Certificate II
- Professional Certificate III
- Professional I

Methods of Calculation

Qualifications and Certifications records are managed directly in the MIEMIS. This is merely a count of records meeting the criteria.

Analysis and Discussions

Interestingly, in primary there are slightly more males qualified (and certified) while in secondary there are slightly more females qualified (and certified.) There is a higher percentage of qualified teachers in secondary compared to primary though not significantly.

In primary, qualified teacher for all age groups is around 60%. In secondary, the most qualified age group is the one nearer retirement (60+) followed by the 30-39 age group (Figure 4.4.) There is just over 20% more qualified teachers in the 60+ age group then most other age groups, which is cause for concern. Closer examination of the data is require here as teachers in that age group are closer to retirement.

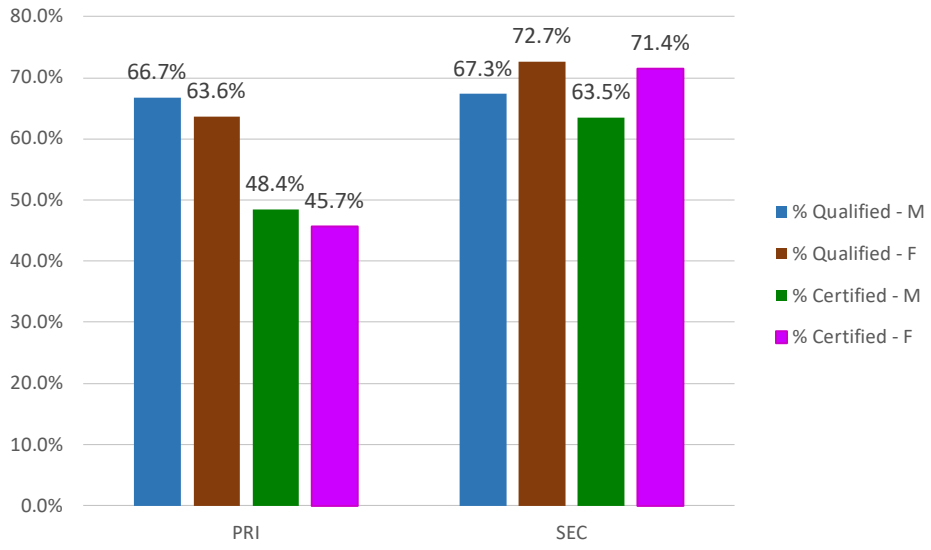

Figure 4.3: % of qualified and certified teachers for the nation by education level and gender

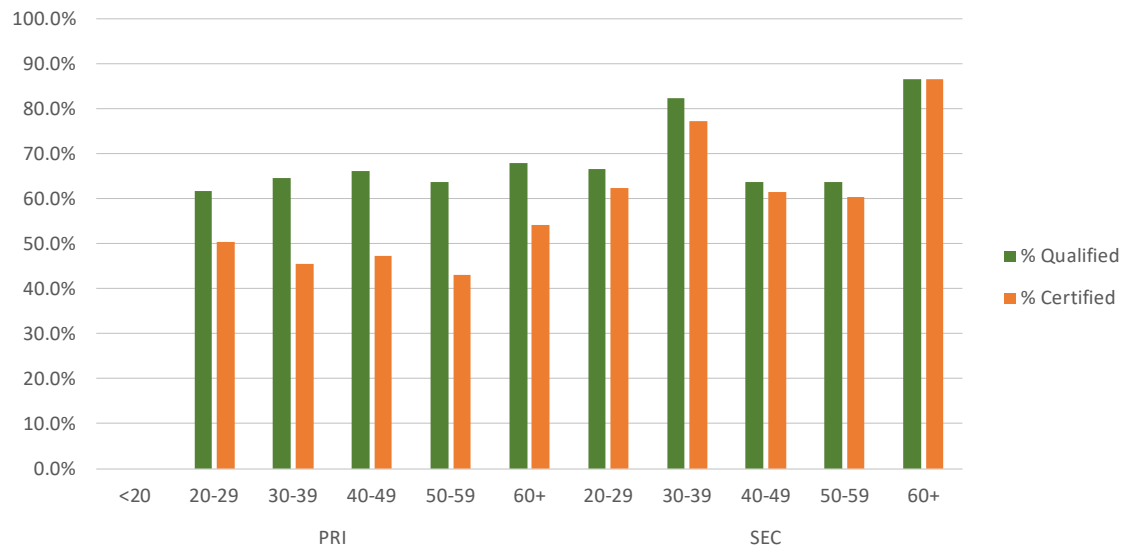

Figure 4.4: % of qualified and certified teachers for the nation by education level and age group

Table 4.3: Teachers Qualification and Certification by Education Level and Gender

	PRI						PRI Total	SEC					SEC Total	Total
	<20	20-29	30-39	40-49	50-59	60+		20-29	30-39	40-49	50-59	60+		
Teachers														
F		55	120	205	72	34	486	13	25	71	28	24	161	647
M	1	42	114	147	73	38	415	11	32	114	30	21	208	623
N/A			1	1	1		3							3
Certified Teachers														
F		29	52	92	29	20	222	9	20	46	19	21	115	337
M	0	20	54	75	33	19	201	6	24	68	16	18	132	333
N/A			1	0	1		2							2
Qualified Teachers														
F		33	76	134	44	22	309	9	20	46	21	21	117	426
M	0	27	75	100	48	27	277	7	27	72	16	18	140	417
N/A			1	0	1		2							2
Certified and Qualified														
F		29	52	92	29	20	222	9	20	45	19	21	114	336
M	0	20	53	75	33	19	200	6	24	67	16	18	131	331
N/A			1	0	1		2							2
Total Teachers	**1**	**97**	**235**	**353**	**146**	**72**	**904**	**24**	**57**	**185**	**58**	**45**	**369**	**1273**
Total Certified Teachers	**0**	**49**	**107**	**167**	**63**	**39**	**425**	**15**	**44**	**114**	**35**	**39**	**247**	**672**
Total Qualified Teachers	**0**	**60**	**152**	**234**	**93**	**49**	**588**	**16**	**47**	**118**	**37**	**39**	**257**	**845**
Total Certified and Qualified	**0**	**49**	**106**	**167**	**63**	**39**	**424**	**15**	**44**	**112**	**35**	**39**	**245**	**669**

Teacher Attrition Rate

Definition and Purpose

The percentage of teachers leaving the profession in a given school year is measured by the teacher attrition rate. Anything above 10% is considered high and disruptive to students.

Methods of Calculation

This is estimated based on the data from the MIEMIS Annual School Census for two consecutive years. In the data warehouse, we consolidate data for each year disaggregated by education sector, gender, atolls and islands for total number of teachers, new teacher entrants, and existing teachers. Teacher attrition of then computed following the standard UNESCO Teacher Attrition.

Analysis and Discussions

This is the first year we publish teacher attrition using increasingly high quality data. We can produce the teacher attrition by education sector as recommended by UNESCO and SDG indicators but we can also produce the same figures for total teachers, certified teachers and qualified teachers.

For 2020 we have an acceptable teacher attrition for secondary teachers but a little too high for primary (Figure 4.5.) This means teachers in primary tend to leave the profession more than their peers in secondary. Furthermore, the teacher attrition for certified teachers (10% for secondary, 12% for primary) and qualified teachers (10% for secondary, 18% for primary) is lower indicating that the more qualified teachers tend to remain in the education system.

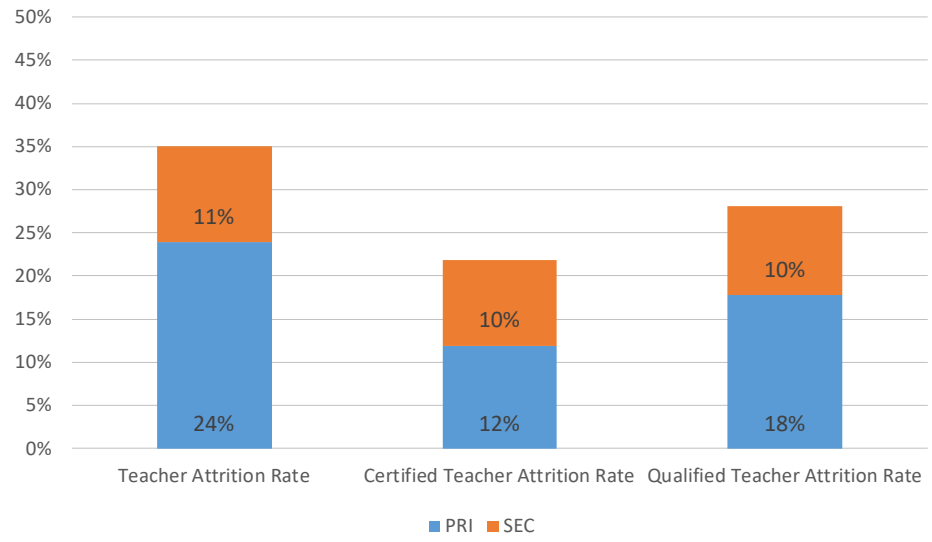

Figure 4.5: Teacher Attrition by Education Sector 2020

While the situation over the last 5 years has been acceptable it has seen a sharp increase in 2020 with the world pandemic at least a partial factor in this (Figure 4.6.) But while the teacher attrition has increased significantly in 2020 it is mostly for teachers without recorded qualifications and certification meaning we have still retained an acceptable percentage of our qualified teachers. The should definitely aim to keep this no higher than 10% going forward.

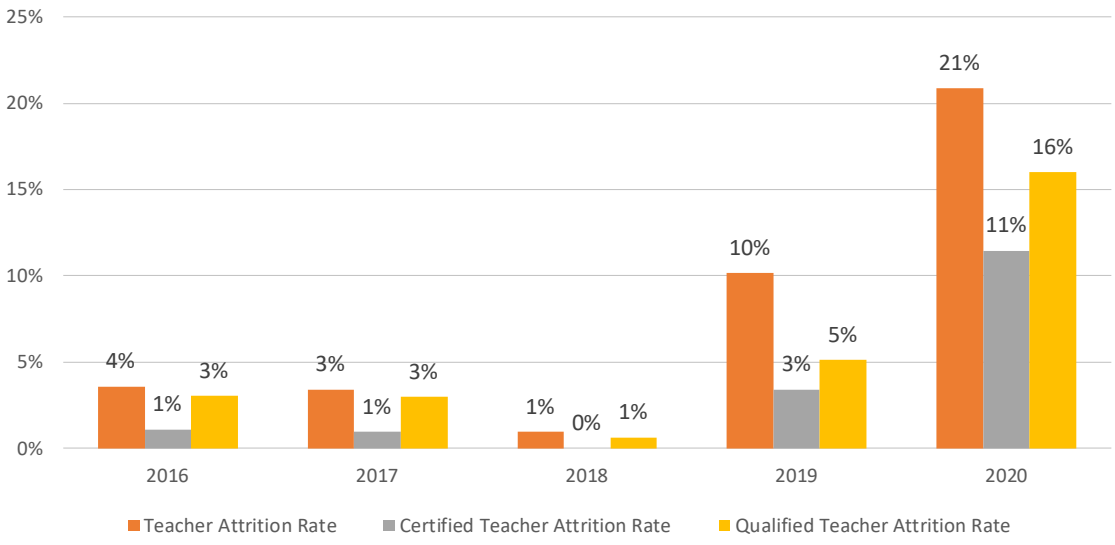

Figure 4.6: Teacher Attrition

Teacher Academic Degrees, Certifications and Trainings

Definition and Purpose

Teacher qualifications in the MIEMIS are either:

- **Academic Qualification:** those degrees acquired in higher level education institution (universities, colleges, vocational schools)
- **Certifications**: RMI trainings and test to certify teachers to teacher. These certification include concepts like curriculum, pedagogical concepts, leadership, etc.
- **Trainings**: Other types of specific training (e.g. workshops for Improving Quality of Basic Education (IQBE), principal leadership, overseas trainings)

The purpose of recording and reporting on those is to monitor and evaluate the progress of qualified teachers, certified teachers and teachers that have received the required training (e.g. IQBE trainings.)

Methods of Calculation

All teacher qualifications are recorded to different places in MIEMIS

- MIEMIS Online: Directly in the teacher's profiles each qualification can be added with detailed information
- MIEMIS Annual School Census: schools report the highest achieved qualification and certification. This is can be used as a verification of central data completeness

All these qualification are added together taking care to select only the "best" qualification in cases it is the same information (e.g. a school reporting a teacher with an associate of art that is already fully documented in the MIEMIS.) Then, it is merely a simple count with full support for various disaggregations.

Analysis and Discussions

High school is the most common recorded academic degree for teachers (Figure 4.7.). This is definitely something that needs to be addressed. It is followed by teachers with Associate of Science the minimum requirement for a teacher to be considered qualified.

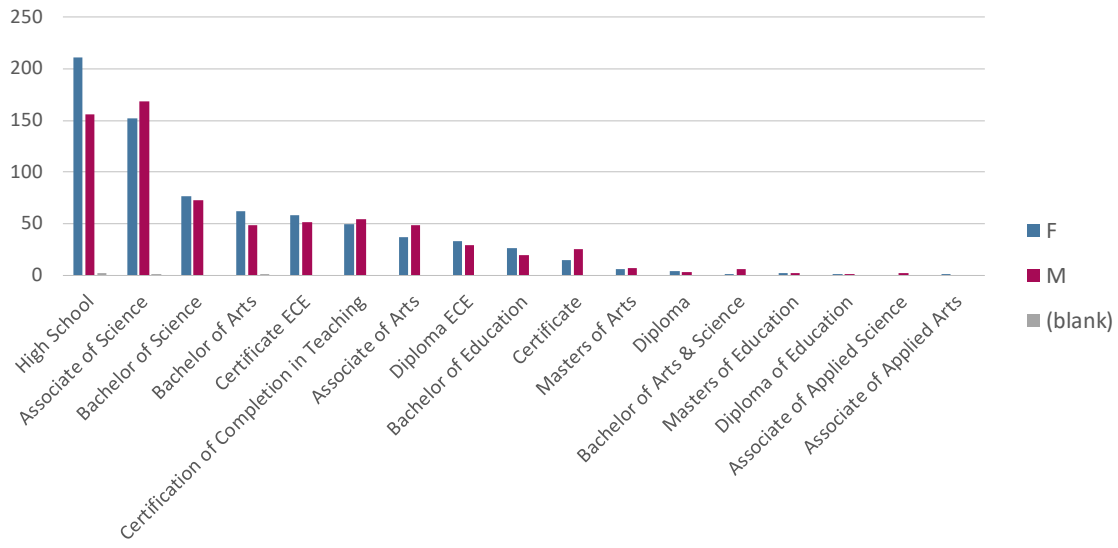

Figure 4.7: Total Teachers by Academic Degrees and Gender

In general, there are more qualified teachers in urban schools compared to the rural schools. This is not surprising considering there are generally more teachers in urban schools (Figure 4.8.). A look at the percentage of teachers by region in the next publication will be more meaningful.

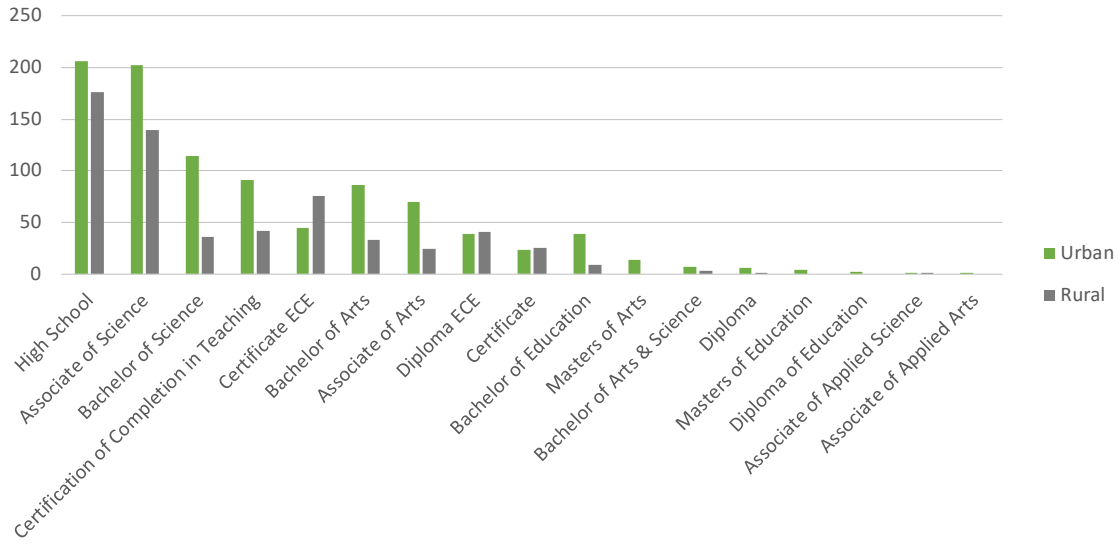

Figure 4.8: Total Teachers by Academic Degrees and Region

A count of teachers with RMI certification is shown in Figure 4.9. The most common certification given to teachers is the provisional certificate followed by the professional certificate I and II. Very few teachers have acquired Professional Certificate III and Administrator certifications.

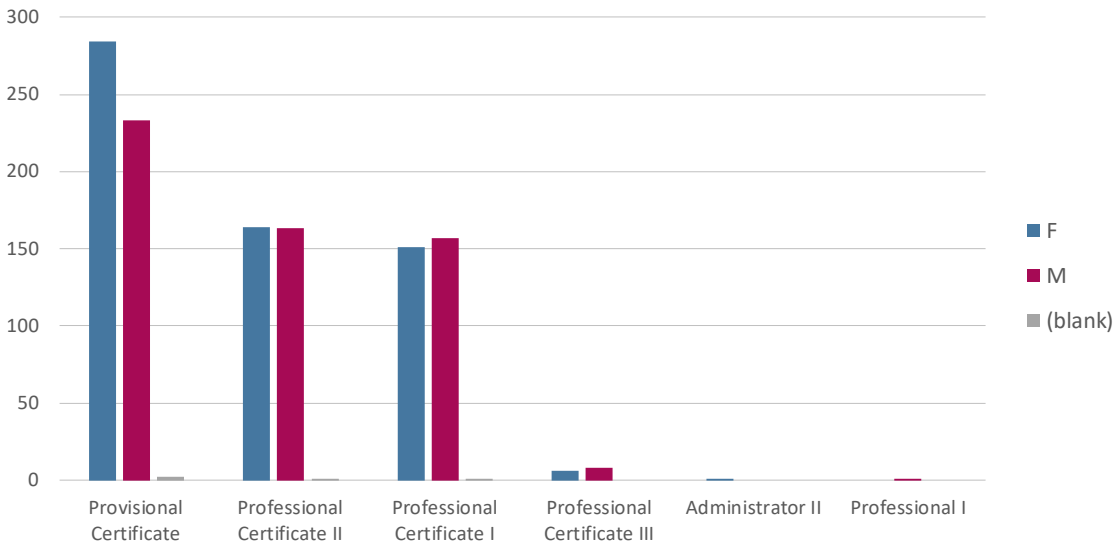

Figure 4.9: Total Teachers by RMI Certification and Gender

The situation is similar in rural vs urban setting with rural having no teacher with certification higher than Professional Certificate II (Figure 4.10.)

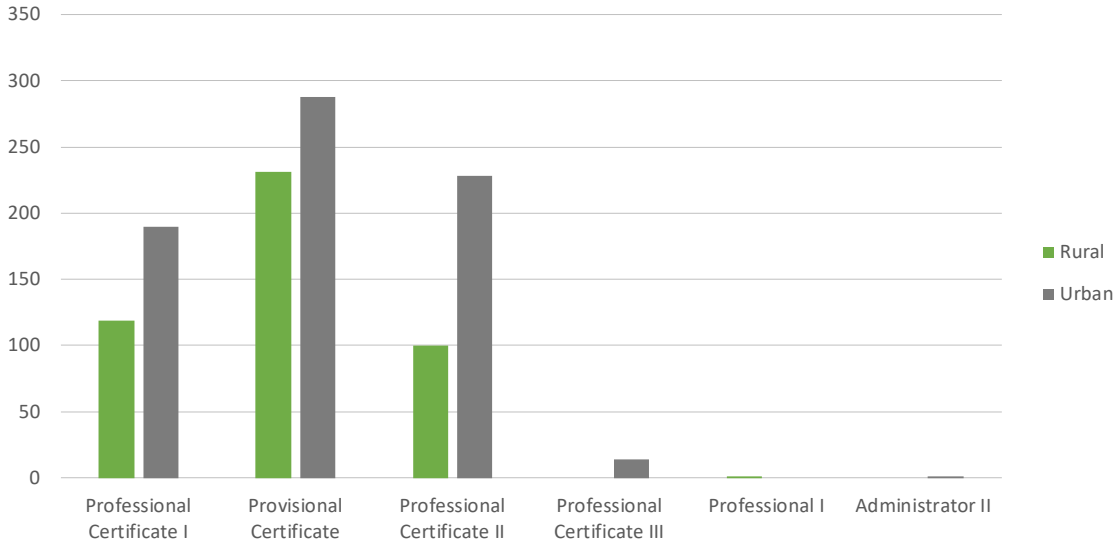

Figure 4.10: Total Teachers by RMI Certification and Region

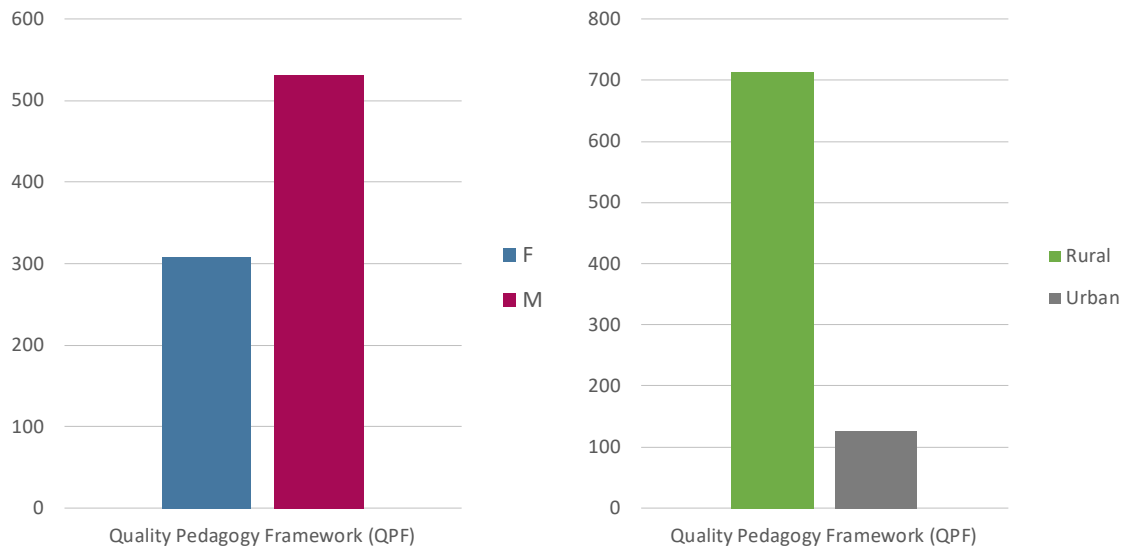

Figure 4.11: Total Teachers Trained as part of IQBE by Gender and Region

As part of the IQBE project, specific pedagogical training is on-going. Attendance to those trainings are recorded in MIEMIS with the total counts of teachers having attended those trainings shown in Figure 4.11. The participation to those trainings have been higher with males from rural schools.

The relevant raw data of those teacher qualifications is provided in Table 4.4. It shows the count of teachers by academic degrees, RMI certification and IQBE trainings by region (rural/urban) and gender with totals. Note that the total at the bottom of Table 4.4 does not mean total teachers since teachers can have more than one qualifications (e.g. one academic degree, one certification and one IQBE training). The Table 4.5 shows the same data but disaggregate by the school authority group (Private/Public).

Table 4.4: Teachers by Qualification Region and Gender

Teachers by Qualifications	Rural		Rural Total	Urban		Urban Total	Grand Total
	F	M		F	M		
Academic Degree	**231**	**318**	**549**	**502**	**374**	**876**	**1425**
High School	83	92	175	128	64	192	367
Associate of Science	51	78	129	101	90	191	320
Bachelor of Science	12	22	34	64	51	115	149
Bachelor of Arts	15	14	29	47	34	81	110
Certificate ECE	29	38	67	29	13	42	109
Certification of Completion in Teaching	16	14	30	33	40	73	103
Associate of Arts	6	16	22	31	32	63	85
Diploma ECE	10	22	32	23	7	30	62
Bachelor of Education	2	5	7	24	14	38	45
Certificate	7	14	21	7	11	18	39
Masters of Arts				6	7	13	13
Diploma		1	1	4	2	6	7
Bachelor of Arts & Science		1	1	1	5	6	7
Masters of Education				2	2	4	4
Diploma of Education				1	1	2	2
Associate of Applied Science		1	1		1	1	2
Associate of Applied Arts				1		1	1
RMI Certification	**185**	**266**	**451**	**421**	**296**	**717**	**1168**
Provisional Certificate	99	132	231	185	101	286	517
Professional Certificate II	38	62	100	126	101	227	327
Professional Certificate I	48	71	119	103	86	189	308
Professional Certificate III				6	8	14	14
Administrator II				1		1	1
Professional I		1	1				1
IQBE Training	**24**	**50**	**74**	**5**	**12**	**17**	**91**
Quality Pedagogy Framework (QPF)	24	50	74	5	12	17	91
Grand Total	**440**	**634**	**1074**	**928**	**682**	**1610**	**2684**

Table 4.5: Teachers by Qualification School Authority Group and Gender

Teachers by Qualifications	Private		Private Total	Public		Public Total	Grand Total
	F	M		F	M		
Academic Degree	**169**	**78**	**247**	**564**	**614**	**1178**	**1425**
High School	77	31	108	134	125	259	367
Associate of Science	7	8	15	145	160	305	320
Bachelor of Science	11	5	16	65	68	133	149
Bachelor of Arts	22	11	33	40	37	77	110
Certificate ECE	10	2	12	48	49	97	109
Certification of Completion in Teaching	1	2	3	48	52	100	103
Associate of Arts	8	5	13	29	43	72	85
Diploma ECE	9	2	11	24	27	51	62
Bachelor of Education	10	3	13	16	16	32	45
Certificate	3	3	6	11	22	33	39
Masters of Arts	5	4	9	1	3	4	13
Diploma	4	1	5		2	2	7
Bachelor of Arts & Science				1	6	7	7
Masters of Education	1		1	1	2	3	4
Diploma of Education	1	1	2				2
Associate of Applied Science					2	2	2
Associate of Applied Arts				1		1	1
RMI Certification	**160**	**70**	**230**	**446**	**492**	**938**	**1168**
Provisional Certificate	96	38	134	188	195	383	517
Professional Certificate II	42	18	60	122	145	267	327
Professional Certificate I	16	10	26	135	147	282	308
Professional Certificate III	5	4	9	1	4	5	14
Administrator II	1		1				1
Professional I					1	1	1
IQBE Training				**29**	**62**	**91**	**91**
Quality Pedagogy Framework (QPF)				29	62	91	91
Grand Total	**329**	**148**	**477**	**1039**	**1168**	**2207**	**2684**

CHAPTER 5: EXAMS

This 2020 annual report on the Marshall Islands Standards Assessment Test (MISAT) summarizes student performance on the test series for the school year 2020.

Background

MISAT

The MISAT is a battery of standards based assessment tests used as the main summative assessment tools at the end of the school year for grades 3, 6, 8, 10, and 12. At grades 3 and 6, it consists of tests in English Reading, Marshallese Reading, and Mathematics. At grade 8, the test is called the High School Entrance Test because it is used also as a placement test for students entering the public high schools, and it consists of subtests in English Reading, Marshallese Reading, Mathematics, Science, and Social Studies. At grades 10 and 12, students are tested in English and Mathematics.

Scoring

Assessment and scoring on the MISAT is done at the benchmark level. Students receive one of the scores shown in Table 5.1 on each individual benchmarks being assessed.

Table 5.1: Performance Levels

Performance Level	Description
Advanced	Students working above expectation for specific grade benchmarks
Proficient	Students are meeting the expectation for the grade level
Developing	Students are learning but do not meet the expectation for the grade level
Beginning	Students do not understand the concepts being measured

Students' overall score consists of their performance levels on each of the benchmarks and the final percentage of benchmarks for which they performed at proficient or advanced. Schools' performance in turn is an aggregate of their students' performance on the curriculum benchmarks being assessed, and consists of percent of benchmarks students performed at advanced, proficient, developing, and beginning. Finally, regional and national performance is also calculated for the percent of benchmarks students performed at the four performance levels.

Assessed Subjects

The MISAT assesses student performance at selected curriculum standards from selected subject areas for grades 3, 6, 8, 10 and 12. The areas assessed are:

Table 5.2: Subject Areas Assessed

Grade Level	Subject Areas
Grade 3	English Reading, Marshallese Reading, & Math
Grade 6	English Reading, Marshallese Reading, & Math
Grade 8	English Reading, English Writing, Marshallese Reading, Math, Science, & Social Studies
Grade 10	English Language Arts & Math
Grade 12	English Language Arts & Math

Subjects Standards

Selection of standards and benchmarks is made on what is considered important and critical for student progress. The curriculum standards selected for assessment by the MISAT are shown in the following table. Based on the curriculum standards listed below, curriculum benchmarks associated with the standards were selected and items constructed to assess student mastery. These curriculum benchmarks are spelled out at the Results section under each graph depicting student performance at the benchmark level.

Table 5.3: MISAT Standard

Grade Level	Curriculum Standard	Description
Grade 3, 6, 8, 10 & 12	English Language Arts Standard 2	Students will read fluently and with comprehension.
Grade 8 & 10	English Language Arts Standard 3	Students write fluently for a variety of purposes and audiences.
Grade 3, 6 & 8	Marshallese Language Arts Standard 2	Students will read fluently and with understanding.
Grade 3,6, 8 & 10	Mathematics Standard 1	Number sense, operations, mental computations and estimation. Students will develop number sense and an understanding of numbers and operations.
Grade 3,6,8, 10 & 12	Mathematics Standard 2	Geometry and measurement concepts. Students will name, describe, measure and compare geometric shapes and their properties.
Grade 3,6,8, 10 & 12	Mathematics Standard 3	Patterns, functions, and algebra concepts. Students will describe patterns and represent them with tables, graphs, equations, and verbal rules.
Grade 3,6, 8, & 12	Mathematics Standard 4	Statistics and probability concepts. Students will use data analysis, statistics and probability to analyze situations.
Grade 3, 6 & 8	Science Standard 1	Scientific inquiry and habits of mind. Students will use the processes of scientific inquiry while applying values, attitudes, and ways of thinking that will help them become better thinkers and problem solvers.
Grade 3, 6 & 8	Science Standard 2	Safety. Students will know and apply safety skills, rules and procedures (including traditional knowledge and practices) at school (inside and outside the classroom) and in everyday life.
Grade 3, 6 & 8	Science Standard 5	Physical science and technology. Students will understand the concepts of matter, energy and motion and how technology is related to science.
Grade 8	Social Studies Standard 1	Culture
Grade 8	Social Studies Standard 2	History and Economics
Grade 8	Social Studies Standard 3	Geography

Data Source

The data source for MISAT remains the SOE Assessment excel workbooks. Work is underway to migrate to a more modern system with integration with MIEMIS.

Methodology

The MISAT is administered annually at all public and private schools, during March to May of the school year beginning August to end of May. The testing period of three months is necessary in order to reach the 112 private and public primary and secondary schools scattered over the 22 inhabited atolls and islands in the Marshall Islands.

Limitations

During the 2019 - 2020 school year, the Public School System made the decision that only the 8th grade MISAT III: High School Entrance Test was to be administered. This was due to Covid19 uncertainties and the possibility of a nationwide lockdown. The

number of students who sat the MISAT during the 2019-2020 school year and participation rates are provided in the table below.

Table 5.4: MISAT Participation Rate 2020

Level	Subject Area	No. Tested	SpEd Tested	Total Tested	Enrollment	Participation Rate
Grade 8	All Subjects	1140	46	1186	1194	99%

Analysis and Discussions

The following table and graph show how students performed on the grade 8 test by subject areas. It shows English Reading, Marshallese Reading & English Writing with students performing at over 40% proficient & advanced (Table 5.5 and Figure 5.1.) On the other hand, for math, science and social studies, students showed mastery (proficient & advanced) at 15% or less on these subjects (Table 5.5 and Figure 5.1.) . This indicates that for English and Marshallese, students are getting close to adequate instruction, while for Math, science, & social studies, they are not receiving adequate instruction in the curriculum benchmarks in these three subject areas. They scored at over 60% beginning or developing for these subjects.

Table 5.5: MISAT III Performance Levels Percentages by Subject Areas 2020

Subject area	Beginning	Developing	Proficient	Advanced
English Reading	35%	22%	22%	21%
English Writing	33%	22%	28%	17%
Marshallese Reading	31%	22%	25%	22%
Math	57%	28%	12%	3%
Science	58%	29%	11%	2%
Social Studies	63%	25%	10%	2%

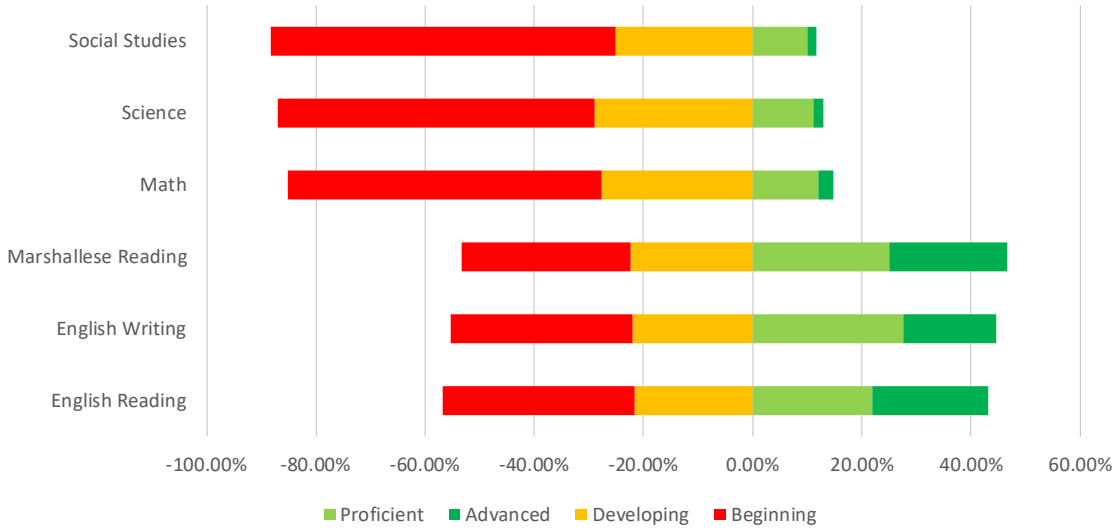

Figure 5.1: MISAT III Proficiency percentages for Subject Areas 2020

The graph below displays how students performed in individual benchmark indicators in the subject areas tested in the 8th grade test. The benchmarks with the highest percentage of students at proficient or advanced levels were C.8.2.4 "Marshallese Reading comprehension and understanding," at 49% mastery (Table 5.6, Figure 5.2.) All the other benchmarks for English Reading, English Writing and Marshallese Reading showed proficient or advanced at over 40%. For Math, Science, and Social Studies, they scored at below proficient on over 60% of the benchmarks. At the low end, students struggled most physical science at 7% proficiency and in culture at 7% also.

Table 5.6: MISAT III Percent Proficiency by Atolls/Islands 2020

	A.8.2.4	A.8.2.5	B.8.3.3	C.8.2.4	C.8.2.5	M.8.1.1	M.8.1.3	M.8.2.1	M.8.3.1	S.8.1.1	S.8.1.2	S.8.1.5	T.8.1.1	T.8.1.2	T.8.1.3
Proficient	19%	25%	28%	23%	27%	25%	0%	11%	9%	13%	14%	6%	7%	16%	7%
Advanced	23%	20%	17%	26%	17%	8%	22%	3%	1%	2%	2%	1%	0%	4%	1%
Developing	-19%	-24%	-22%	-18%	-26%	-39%	-78%	-35%	-28%	-31%	-27%	-28%	-25%	-28%	-23%
Beginning	-39%	-31%	-33%	-32%	-30%	-27%	0%	-50%	-62%	-53%	-57%	-64%	-67%	-53%	-69%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

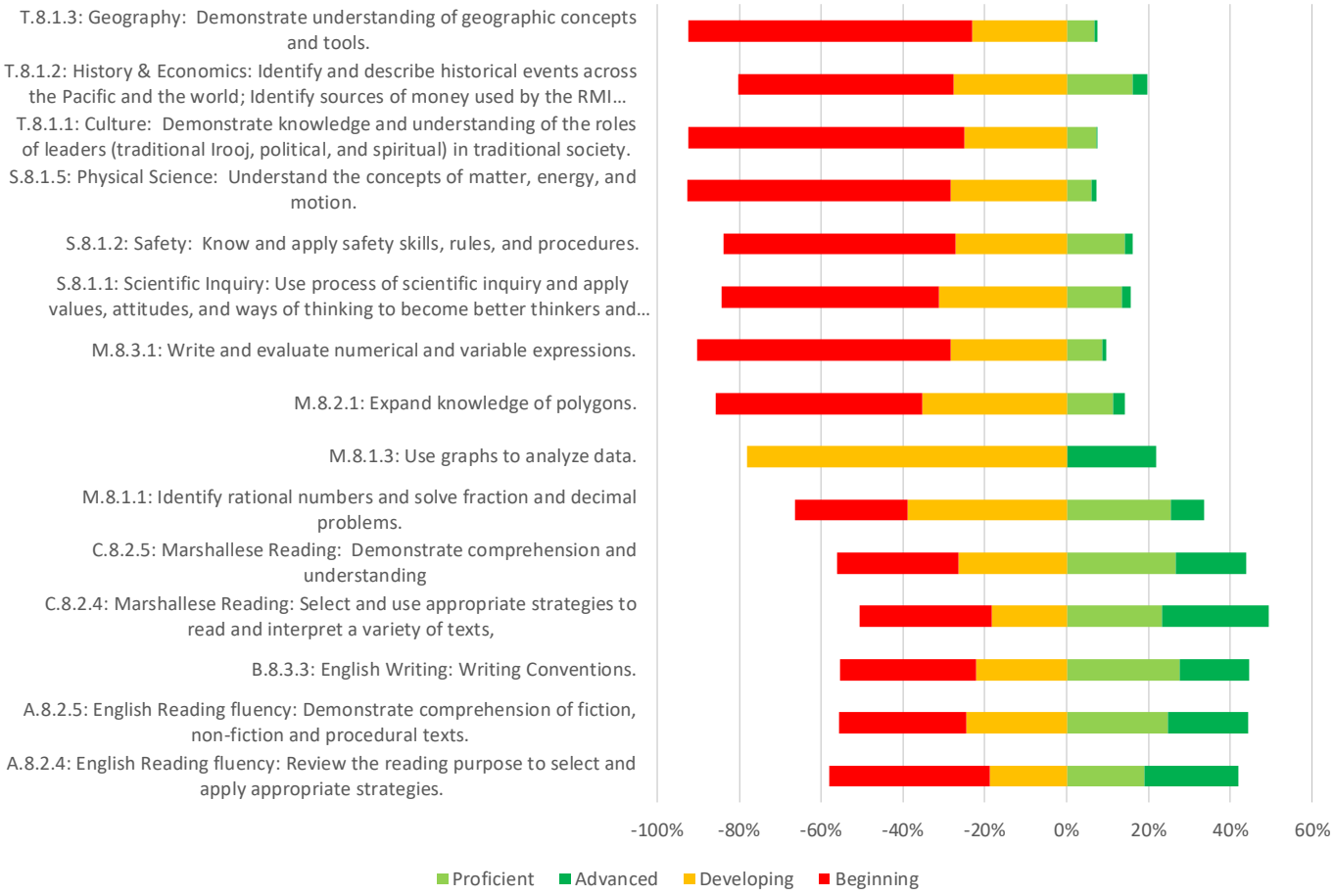

Figure 5.2: MISAT III Proficiency percentages for curriculum benchmarks 2020

The Figure 5.3 below shows the percentages of benchmarks students scored at proficient or advanced by region[1]. This is the percent of 8th grade curriculum benchmarks mastered by the regions of the Marshall Islands. As can be seen, students from the Central atolls and islands of Ailinglaplap, Namu, & Jabat had the highest mastery of benchmarks at 38%, while students from the Eastern atolls of Arno & Mili had the lowest at 13%.

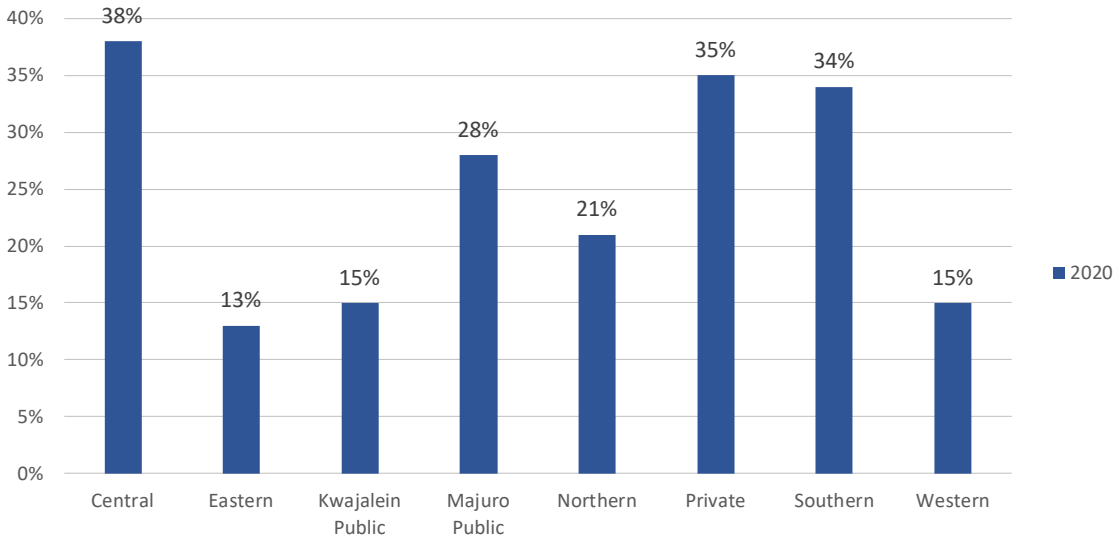

Figure 5.3: MISAT III Percent Proficiency by Regions 2020

The Figure 5.4 below show the percentages of benchmarks students performed at proficient or advanced by atolls and islands in 2020. The highest performing Atolls are Kili, Ailinglaplap and Jaluit with 5 more atolls following not too far behind.

[1] The Central Region consists of Ailinglaplap, Jabat & Namu; Eastern is Arno & Mili; Northern is Aur, Maloelap, Wotje, Likiep, Ailuk, Utrik, & Mejit, Southern is Ebon, Namdrik, Kili, & Jaluit; Western is Lib, Ujae, Lae, Wotto, Enewetak, & Mejatto, Majuro is for all public schools in Majuro atoll; Kwajalein is all public schools in Kwajalein atoll; and Private consists of all the private schools in Majuro, Kwajalein, and one in Jaluit Atoll.

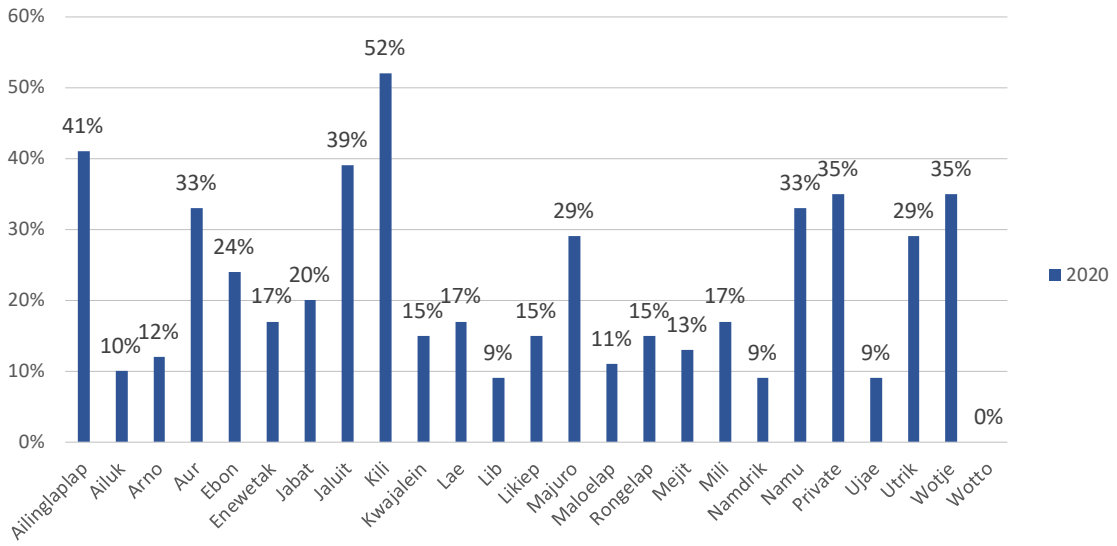

Figure 5.4: MISAT III Percent Proficiency by Atolls/Islands 2020

Student performance on the grade 8 high school entrance test has been showing improvement over the years from 2013 to 2019. The Figure 5.5 below displays the percent of benchmarks students performed at proficient or advanced from 2013 and 2020, showing the gradual improvement from 36% in 2013 to 44% in 2019, and then th abrupt drop to 26% in 2020. This is the first time over these years that the percent proficient plus has sunk this low.

This is a high-stake test for students seeking to enter regular nine grade in the public high schools. It also provides an impression on the capability of principals, head teachers, and classroom teachers and strongly effects their reputation in the community. The number and percent of students passing into regular nine grade from a school provides an instant snapshot of a school's performance. Therefore, both teachers and students take the test very seriously and try to do their best in preparation.

Factors that have likely contributed to the lower performance are due to the world health crisis and include:

- Fast-tracking of end of school year which resulted in limited time for teachers to cover the school year curriculum;
- MISAT administration conducted at the beginning of 2020 - 2021 school year instead of its normal end of school year routine during March- May; and,

- COVID19 uncertainties that affected the learning environment and teachers and students focus.

The results shown here further emphasize what the world already knows. The current world health crisis is affecting millions of children around the world—a whole generation—even in the most remote small Island countries in the world. Furthermore, this shows the urgency of adapting to the challenge. We need immediate effort to better prepare for the continuity of the education of our children now but also in the future.

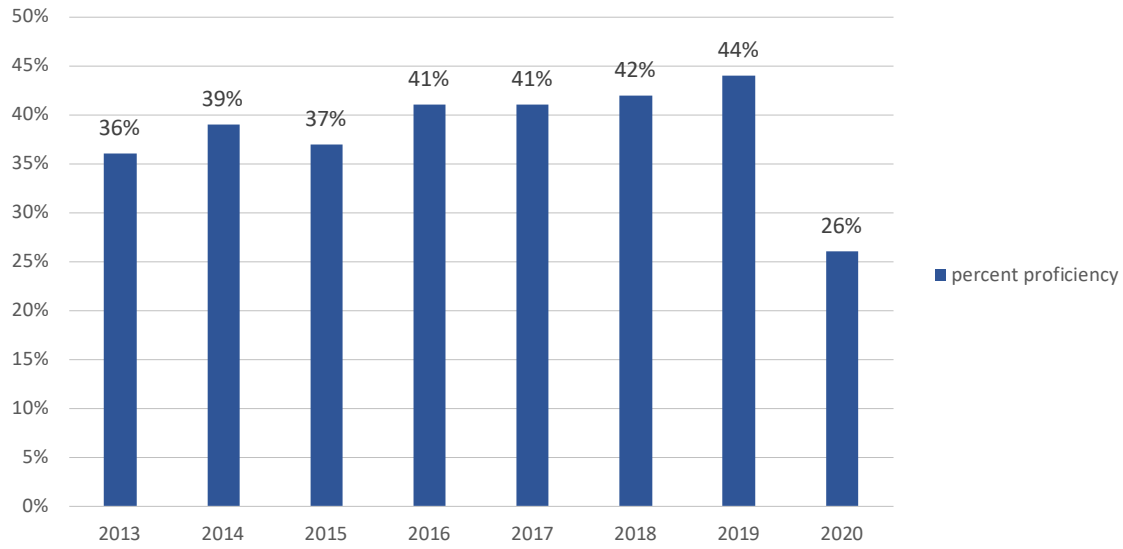

Figure 5.5: MISAT III Percent Proficiency and above 2013 - 2020

CHAPTER 6: STUDENTS

This chapters reports more students enrollments data but from a different angle. It also reports on other students data such as attendance.

Background

Data Source

There are two primary data sources for the production of all the following student related data: the MIEMIS annual school census and the 9-week report.

Limitations

Limitations of the annual school census were already discussed. The data from the 9-week report is only as good as the data submitted by schools in the end of each quarter. The PSS support the schools in correctly submitted this report in due time.

Student Enrollment by Age Distribution

The following analysis shows the age distribution of students by grades for this school year and past 5 years.

Definition and Purpose

Age distribution takes a closer look at the percentage of students enrolled of official age versus that of under and over age. This helps in assessment if students are effectively following the grades at their official age.

Methods of Calculation

This is merely a count on the number of students of official age (i.e. 6 years of age before December 31 in grade 1, etc.) and a count of the students that are either over or under that age.

Analysis and Discussions

Distribution of over, under and official age students by grade provides some enriching information about student characteristics (Figure 6.1). While majority of students in all grades including ECE are at the official ages, quite a number of them are over and underage at the ECE Grades, Grade 1 AND Grades >7. This is quite normal but it does suggest a number of kids are either repeating or starting late.

The over age found in Grades 7 and could suggest two things: older students are coming back to complete higher grades or repeating students later in the education system. The latter can easily be further examined by producing repeaters by grades (Figure 6.2). There is not significantly more percentage of repeaters in higher grades (Figure 6.2), in fact there is less than in primary grades. This could suggest that some of the over age in higher grades could actually be returning dropouts.

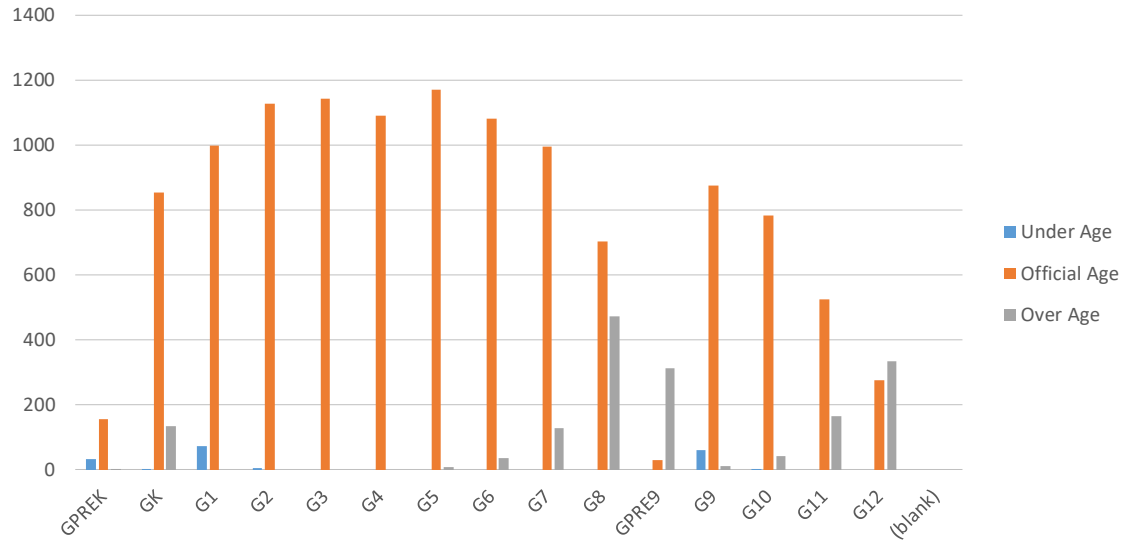

Figure 6.1: Age Distribution for 2018

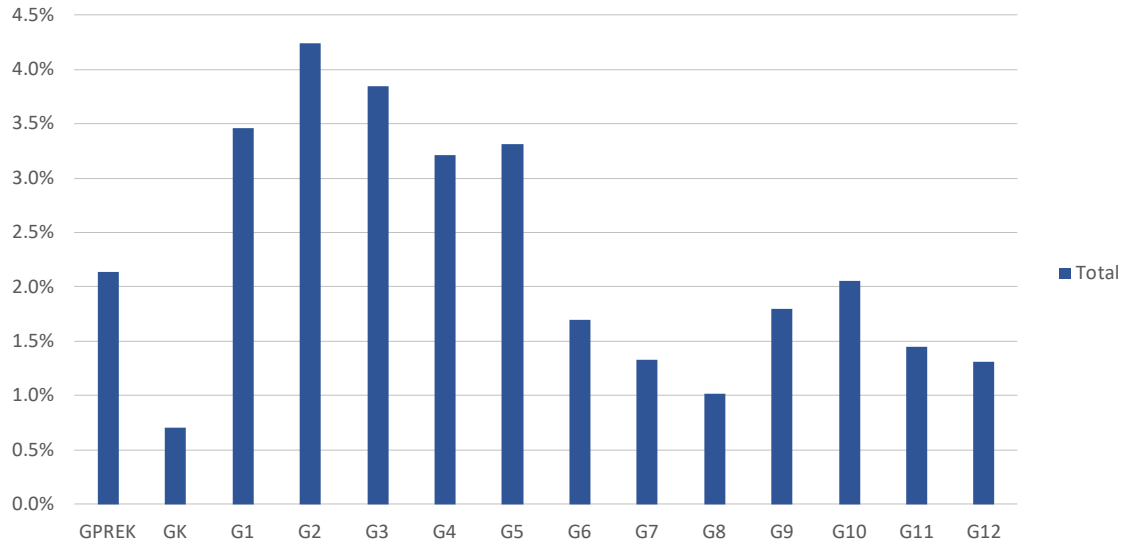

Figure 6.2: Percentages of Repeaters by Grades

The presence of under age children in some higher grades especially at grade 9 (Figure 6.1) is suspect and outlines an area worthy of further data drill down and scrutiny.

Aside from the already known declining enrollments observed mainly in official age, the trend of over and underage enrollments have followed mostly consistent patterns over the last five years (Figure 6.2.)

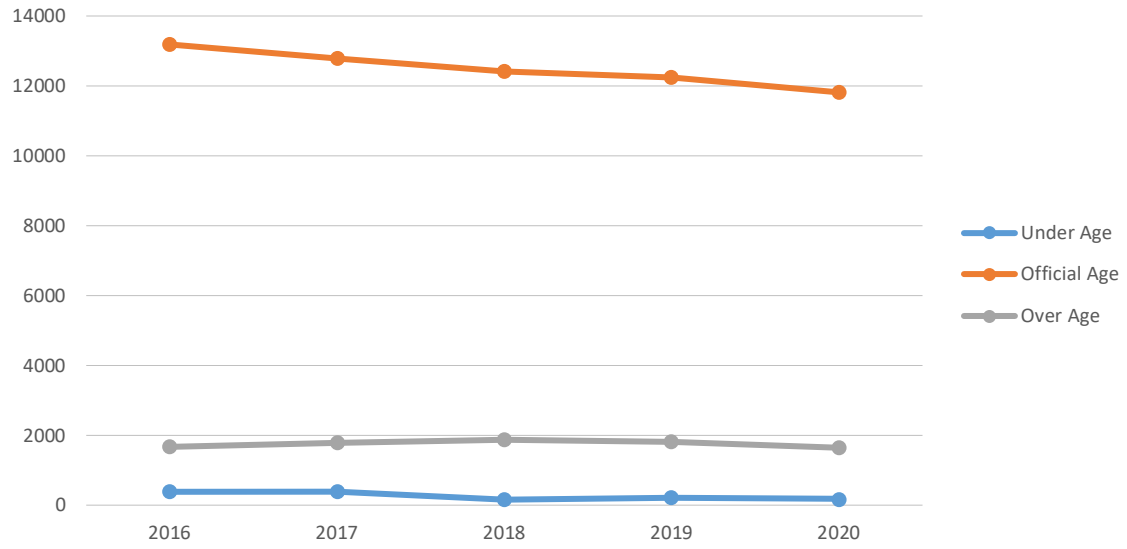

Figure 6.3: Age Distribution Trend

It is interesting to have a look at this data by Atolls and Islands (Figure 6.4). Some atolls do seem to have a slight tendency to have under age students, presumably starting ECE or Primary before the official age. Notably these Atolls include Kili, Maloelap, Namdrik, Namu, Ujae. It is worth examining this with some principals of those schools to validate whether this is an actual phenomenon or a higher rate of minor errors in birthdate (and age) reporting.

Several Atolls also seem to have a higher percentage of over age students: Ailinglaplap, Jaluit, Kwajalein Atoll, Likiep, Majuro, Mili and Wotje (Figure 6.4.) The over age students make up an important part of the whole enrollments, in the range of roughly ~10-18%. It is worth having a look at those atolls in isolation to see if this is trending anyhow in the past 5 years (Figure 6.5.) While there are expected fluctuation throughout suggesting mostly steady patterns Mili and Ailinglaplap Atolls do have increasing trends of over age (Figure 6.5) which is definitely something to further investigate.

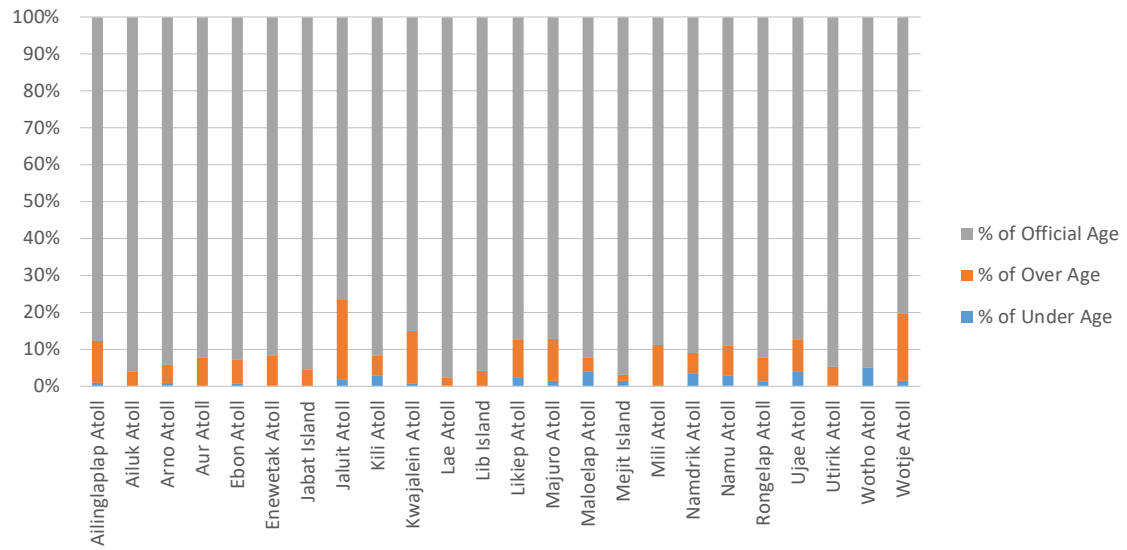

Figure 6.4: Age Distribution by Atolls and Islands in Percentages

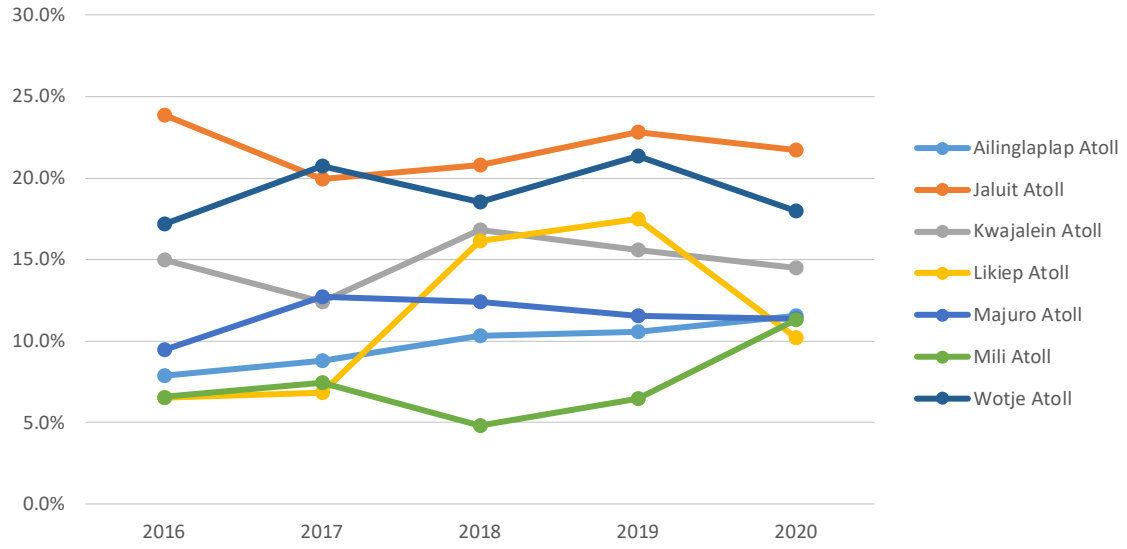

Figure 6.5: Age Distribution for Atolls with many over age trend

For Under-age, Over-age and Official-age percentages of enrollments by Atolls, the ready can refer to Table 6.1. Detailed age distribution data by year, education level, grade and gender is compiled in Table 6.2.

Table 6.1: Age Distribution by Atolls and Islands in Percentages

	% of Under Age	% of Over Age	% of Official Age
Ailinglaplap Atoll	0.9%	11.5%	87.6%
Ailuk Atoll	0.0%	3.8%	96.2%
Arno Atoll	1.0%	4.8%	94.2%
Aur Atoll	0.0%	7.6%	92.4%
Ebon Atoll	0.6%	6.4%	92.9%
Enewetak Atoll	0.0%	8.2%	91.8%
Jabat Island	0.0%	4.3%	95.7%
Jaluit Atoll	1.6%	21.7%	76.7%
Kili Atoll	2.9%	5.3%	91.9%
Kwajalein Atoll	0.5%	14.5%	85.0%
Lae Atoll	0.0%	2.2%	97.8%
Lib Island	0.0%	4.3%	95.7%
Likiep Atoll	2.3%	10.2%	87.5%
Majuro Atoll	1.5%	11.3%	87.2%
Maloelap Atoll	3.8%	3.8%	92.4%
Mejit Island	1.5%	1.5%	97.0%
Mili Atoll	0.0%	11.3%	88.7%
Namdrik Atoll	3.3%	5.6%	91.1%
Namu Atoll	2.7%	8.2%	89.0%
Rongelap Atoll	1.1%	6.7%	92.2%
Ujae Atoll	3.8%	8.8%	87.5%
Utirik Atoll	0.0%	5.3%	94.7%
Wotho Atoll	5.0%	0.0%	95.0%
Wotje Atoll	1.5%	18.0%	80.5%
Grand Total	**1.3%**	**12.1%**	**86.7%**

Table 6.2: Age Distribution by Education Level, Grade and Gender

	Under Age		Official Age		Over Age		Enrolled		Total Under Age	Total Official Age	Total Over Age	Total Enrolled
	F	M	F	M	F	M	F	M				
2013	**23**	**28**	**5561**	**5550**	**999**	**1307**	**6583**	**6885**	**51**	**11111**	**2306**	**13468**
Early Childhood	**1**	**2**	**368**	**354**	**262**	**321**	**631**	**677**	**3**	**722**	**583**	**1308**
GK	1	2	368	354	262	321	631	677	3	722	583	1308
Primary	**8**	**11**	**4180**	**4346**	**458**	**611**	**4646**	**4968**	**19**	**8526**	**1069**	**9614**
G1	7	8	703	723			710	731	15	1426		1441
G2	0	1	656	676			656	677	1	1332		1333
G3	0	1	621	673			621	674	1	1294		1295
G4			556	646	1	4	557	650		1202	5	1207
G5	1	0	558	622	13	24	572	646	1	1180	37	1218
G6			501	500	41	73	542	573		1001	114	1115
G7	0	1	433	414	134	209	567	624	1	847	343	1191
G8			152	92	269	301	421	393		244	570	814
Secondary	**14**	**15**	**1013**	**850**	**279**	**375**	**1306**	**1240**	**29**	**1863**	**654**	**2546**
G9	10	11	354	332	11	17	375	360	21	686	28	735
G10	3	2	321	275	35	66	359	343	5	596	101	702
G11	0	1	223	189	67	104	290	294	1	412	171	584
G12	1	1	115	54	166	188	282	243	2	169	354	525
2014	**25**	**14**	**5580**	**5565**	**1039**	**1240**	**6644**	**6819**	**39**	**11145**	**2279**	**13463**
Early Childhood			**387**	**397**	**298**	**307**	**685**	**704**		**784**	**605**	**1389**
GPREK												
GK			387	397	298	307	685	704		784	605	1389
Primary	**14**	**8**	**4121**	**4229**	**435**	**558**	**4570**	**4795**	**22**	**8350**	**993**	**9365**
G1	13	5	690	684			703	689	18	1374		1392
G2	0	1	658	636			658	637	1	1294		1295
G3	0	1	623	641	1	1	624	643	1	1264	2	1267
G4	0	1	598	656	0	3	598	660	1	1254	3	1258
G5			530	610	10	14	540	624		1140	24	1164
G6	1	0	488	518	37	62	526	580	1	1006	99	1106
G7			384	350	124	172	508	522		734	296	1030
G8			150	134	263	306	413	440		284	569	853
Secondary	**11**	**6**	**1072**	**939**	**306**	**375**	**1389**	**1320**	**17**	**2011**	**681**	**2709**
G9	11	5	452	427	22	17	485	449	16	879	39	934
G10			309	267	36	51	345	318		576	87	663
G11	0	1	210	171	75	101	285	273	1	381	176	558
G12			101	74	173	206	274	280		175	379	554
2015	**116**	**72**	**6201**	**6196**	**664**	**913**	**6981**	**7181**	**188**	**12397**	**1577**	**14162**
Early Childhood	**6**	**2**	**531**	**524**	**45**	**76**	**582**	**602**	**8**	**1055**	**121**	**1184**
GPREK	4	2	25	32	0	2	29	36	6	57	2	65
GK	2	0	506	492	45	74	553	566	2	998	119	1119
Primary	**62**	**34**	**4359**	**4510**	**372**	**516**	**4793**	**5060**	**96**	**8869**	**888**	**9853**

G1	54	32	522	627			576	659	86	1149		1235
G2	5	1	671	652			676	653	6	1323		1329
G3	1	0	700	702	1	4	702	706	1	1402	5	1408
G4	0	1	626	656	2	2	628	659	1	1282	4	1287
G5	1	0	614	651	4	12	619	663	1	1265	16	1282
G6			534	587	19	36	553	623		1121	55	1176
G7	1	0	407	406	74	117	482	523	1	813	191	1005
G8			278	226	223	285	501	511		504	508	1012
GPRE9			7	3	49	60	56	63		10	109	119
Secondary	**48**	**36**	**1311**	**1162**	**247**	**321**	**1606**	**1519**	**84**	**2473**	**568**	**3125**
G9	41	34	473	481	6	10	520	525	75	954	16	1045
G10	7	1	407	341	34	43	448	385	8	748	77	833
G11			261	218	69	79	330	297		479	148	627
G12	0	1	170	122	138	189	308	312	1	292	327	620
2016	**189**	**189**	**6582**	**6602**	**716**	**965**	**7487**	**7756**	**378**	**13184**	**1681**	**15243**
Early Childhood	**27**	**21**	**564**	**600**	**55**	**89**	**646**	**710**	**48**	**1164**	**144**	**1356**
GPREK	12	9	72	57	1	2	85	68	21	129	3	153
GK	15	12	492	543	54	87	561	642	27	1035	141	1203
Primary	**108**	**126**	**4663**	**4806**	**431**	**578**	**5202**	**5510**	**234**	**9469**	**1009**	**10712**
G1	72	74	633	625	1	1	706	700	146	1258	2	1406
G2	15	22	660	712	1	1	676	735	37	1372	2	1411
G3	19	30	682	737	1	1	702	768	49	1419	2	1470
G4			660	685	9	12	669	697		1345	21	1366
G5	1		653	699	5	17	659	716	1	1352	22	1375
G6			563	553	18	35	581	588		1116	53	1169
G7			475	492	80	113	555	605		967	193	1160
G8			324	293	217	276	541	569		617	493	1110
GPRE9	1		13	10	99	122	113	132	1	23	221	245
Secondary	**54**	**42**	**1355**	**1196**	**230**	**298**	**1639**	**1536**	**96**	**2551**	**528**	**3175**
G9	44	38	469	462	9	16	522	516	82	931	25	1038
G10	4	2	423	362	27	34	454	398	6	785	61	852
G11	5	1	309	241	84	102	398	344	6	550	186	742
G12	1	1	154	131	110	146	265	278	2	285	256	543
2017	**212**	**175**	**6360**	**6427**	**787**	**998**	**7359**	**7600**	**387**	**12787**	**1785**	**14959**
Early Childhood	**15**	**7**	**589**	**622**	**65**	**78**	**669**	**707**	**22**	**1211**	**143**	**1376**
GPREK	15	6	86	80	4		105	86	21	166	4	191
GK		1	503	542	61	78	564	621	1	1045	139	1185
Primary	**100**	**93**	**4533**	**4704**	**468**	**613**	**5101**	**5410**	**193**	**9237**	**1081**	**10511**
G1	57	62	532	608			589	670	119	1140		1259
G2	1	2	685	685			686	687	3	1370		1373
G3			618	680	9	4	627	684		1298	13	1311
G4			631	685	12	10	643	695		1316	22	1338
G5	15	5	632	674	3	10	650	689	20	1306	13	1339
G6	10	13	595	595	18	42	623	650	23	1190	60	1273
G7	6	8	505	458	73	116	584	582	14	963	189	1166

G8	11	3	327	312	200	267	538	582	14	639	467	1120
GPRE9			8	7	153	164	161	171		15	317	332
Secondary	**97**	**75**	**1238**	**1101**	**254**	**307**	**1589**	**1483**	**172**	**2339**	**561**	**3072**
G9	44	33	431	422	7	11	482	466	77	853	18	948
G10	18	20	339	339	28	37	385	396	38	678	65	781
G11	21	13	322	238	73	87	416	338	34	560	160	754
G12	14	9	146	102	146	172	306	283	23	248	318	589
2018	**89**	**71**	**6230**	**6186**	**900**	**989**	**7219**	**7246**	**160**	**12416**	**1889**	**14465**
Early Childhood	**11**	**11**	**546**	**524**	**78**	**97**	**635**	**632**	**22**	**1070**	**175**	**1267**
GPREK	10	11	77	46	1	4	88	61	21	123	5	149
GK	1		469	478	77	93	547	571	1	947	170	1118
Primary	**40**	**39**	**4470**	**4509**	**528**	**599**	**5038**	**5147**	**79**	**8979**	**1127**	**10185**
G1	39	37	564	656	1		604	693	76	1220	1	1297
G2	1	1	568	652	3		572	653	2	1220	3	1225
G3			676	631			676	631		1307		1307
G4			602	622	1		603	622		1224	1	1225
G5			606	642	8	13	614	655		1248	21	1269
G6			619	583	18	37	637	620		1202	55	1257
G7		1	504	449	84	123	588	573	1	953	207	1161
G8			309	255	234	248	543	503		564	482	1046
GPRE9			22	19	179	178	201	197		41	357	398
Secondary	**38**	**21**	**1214**	**1153**	**294**	**293**	**1546**	**1467**	**59**	**2367**	**587**	**3013**
G9	36	21	394	448	15	16	445	485	57	842	31	930
G10	1		392	333	23	28	416	361	1	725	51	777
G11	1		249	237	80	93	330	330	1	486	173	660
G12			179	135	176	156	355	291		314	332	646
Grand Total	**654**	**549**	**36514**	**36526**	**5105**	**6412**	**42273**	**43487**	**1203**	**73040**	**11517**	**85760**

Student Attendance

The data for student attendance comes from a quarterly report referred to as the 9th week report submitted by each school. This report as the name implies is done after every nine weeks, which totals to 45 days of school for each reporting period.

Definition and Purpose

Whether or not the students are attending to class. This is meant to measure the participation of students to the education system on a daily basis. Attendance is important because students are more likely to succeed in their academic studies when they are in school every day.

Methods of Calculation

Calculation of the daily attendance is done by taking the average daily attendance for each level (Primary & Secondary) for a given year.

Analysis and Discussions

The attendance trend for the past five years as shown in the figures below show a picture the daily attendance for the schools in the RMI. Most of the data for the past years only captured public schools as non-public schools were not strictly required to submit a 9th week report. Data shows that students in the primary level tend to attend classes on a regular basis compared to secondary level students. Year 2017 showed that more primary students attend classes while secondary level students had poor attendance compared to the previous year and remain on the 91% for the following year.

When comparing gender attendance, generally female students tend to be present on a daily basis compared to the male students. Both genders had a slight drop in percentage from 2017 to 2018 but females were able to improve their daily attendance unlike the male students who had a downward trend to 2020. Prior to 2017, daily attendance was could not be disaggregated by gender but rather just in general. PSS saw the need to capture more data on gender attendance so starting from 2017 daily attendance disaggregated by gender is a requirement for all schools to submit.

The data for student attendance comes from a quarterly report referred to as the 9th week report submitted by each school. This report as the name implies is done after every nine weeks, which totals to 45 days of school for each reporting period.

Definition and Purpose

Whether or not the students are attending to class. This is meant to measure the participation of students to the education system on a daily basis. Attendance is important because students are more likely to succeed in their academic studies when they are in school every day.

Methods of Calculation

Calculation of the daily attendance is done by taking the average daily attendance for each level (Primary & Secondary) for a given year.

Analysis and Discussions

The attendance trend for the past five years as shown in the figures below show a picture the daily attendance for the schools in the RMI. Most of the data for the past years only captured public schools as non-public schools were not strictly required to submit a 9th week report. Data shows that students in the primary level tend to attend classes on a regular basis compared to secondary level students. Year 2017 showed that more primary students attend classes while secondary level students had poor attendance compared to the previous year and remain on the 91% for the following year.

When comparing gender attendance, generally female students tend to be present on a daily basis compared to the male students. Both genders had a slight drop in percentage from 2017 to 2018 but females were able to improve their daily attendance unlike the male students who had a downward trend to 2020. Prior to 2017, daily attendance was could not be disaggregated by gender but rather just in general. PSS saw the need to capture more data on gender attendance so starting from 2017 daily attendance disaggregated by gender is a requirement for all schools to submit.

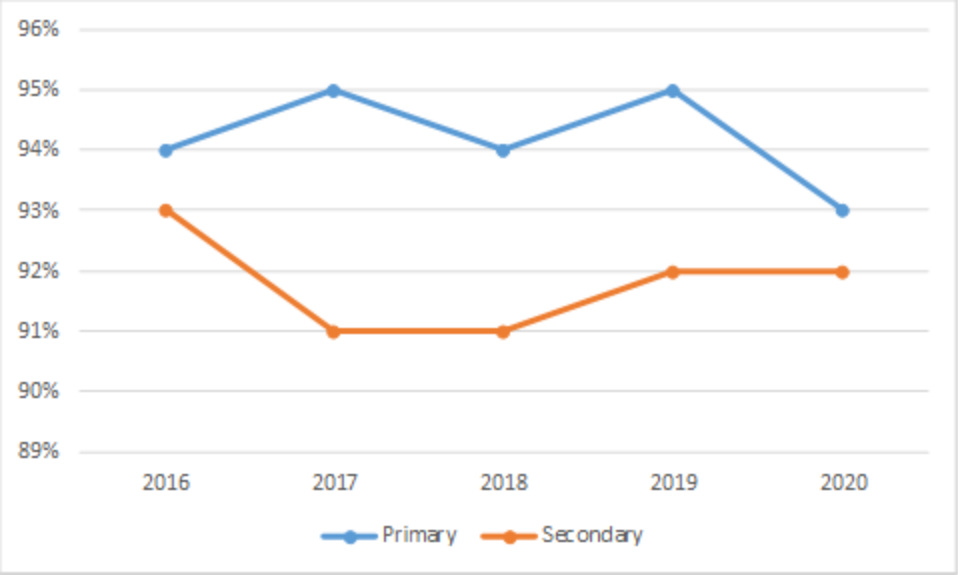

Figure 6.6: Attendance trend by education level

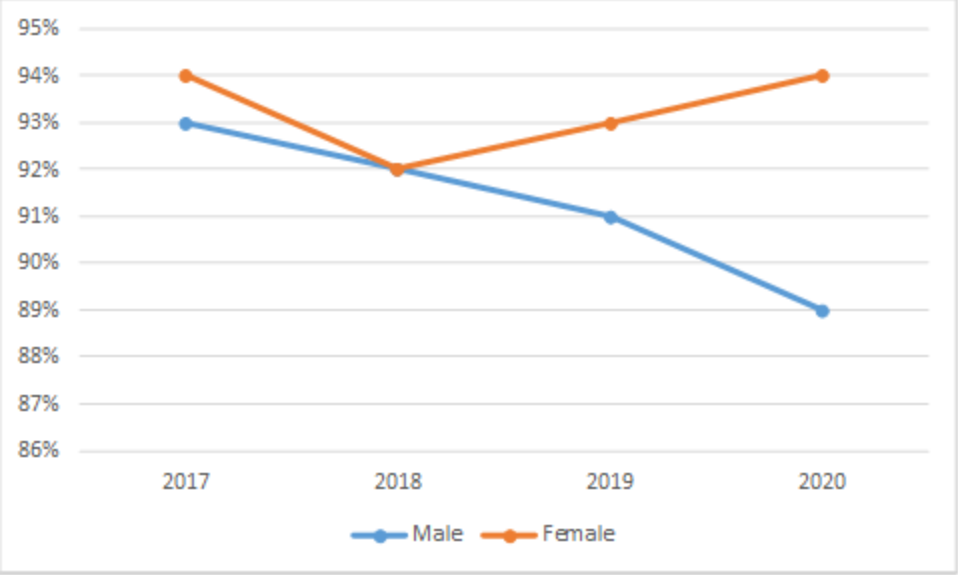

Figure 6.7: Attendance trend by gender

Student Enrollments, Intake and Population

The total enrollment of students disaggregated by year, grade, education levels and state.

Definition and Purpose

From the raw data below "Enrol" is the total enrollment (i.e. new entrants, repeaters, transfers), "Net Enrol" is the total enrollment of official age, Intake are the new entrants (i.e. no repeaters), "Net Intake" are the new entrants of official age and

Population is the total population of the relevant age group. The purpose of this data is to calculate the key indicators (refer to Indicators chapter) and also to produce some basic statistics to support decision making within the MoEST/PSS.

Methods of Calculation

There is no calculation involved here. This is merely data processed in familiar table format with disaggregation from the MEMIS data warehouse.

Analysis and Discussions

As mentioned throughout the text enrollments have declined this school year. This is partly due to the challenges the RMI has faced including a Dengue outbreak and the current Coronavirus world health crisis. The total enrollment as currently report (missing three schools) is 13,629 with an estimated population of school age of 20,016 (Figure 6.6.) Only the next population census will be able to shed more light in the accuracy of this population data. However, there seems to be an unarguable decline in enrollments for this year mostly the at the primary level (Figure 6.7) and the same decline is not seen in the current population projection data (Figure 6.8.)

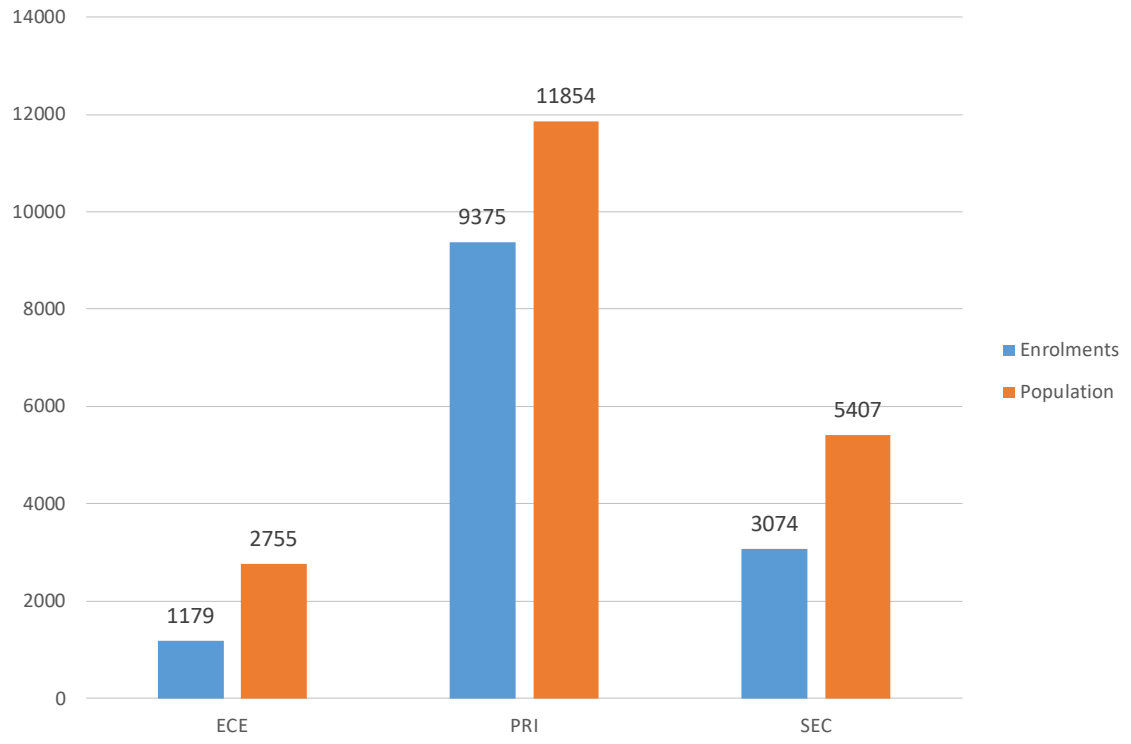

Figure 6.8: Total Enrollments and Population by Education Level Side by Side

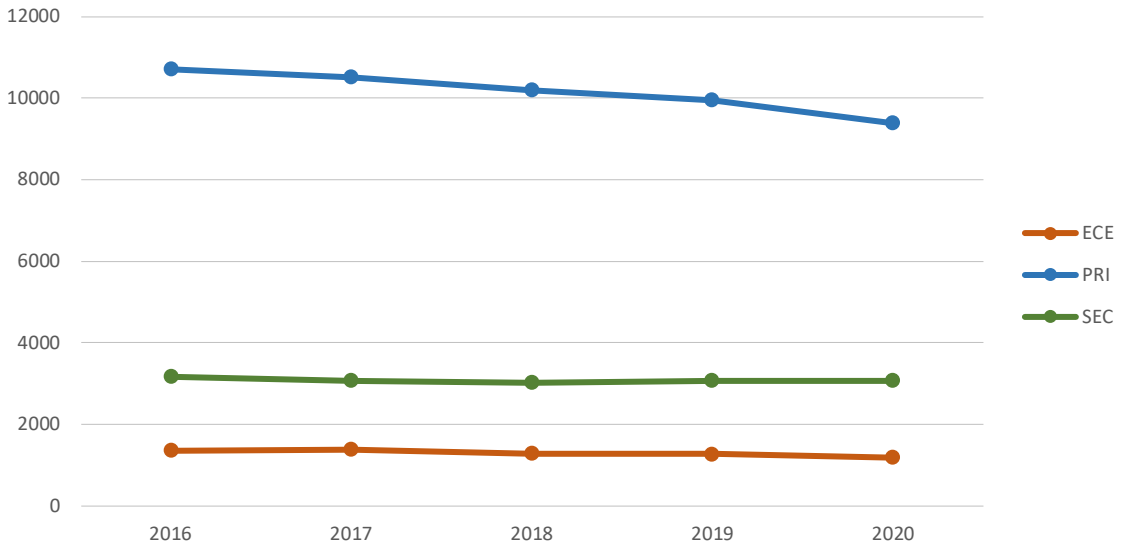

Figure 6.9: Enrollments by Education Levels Trend

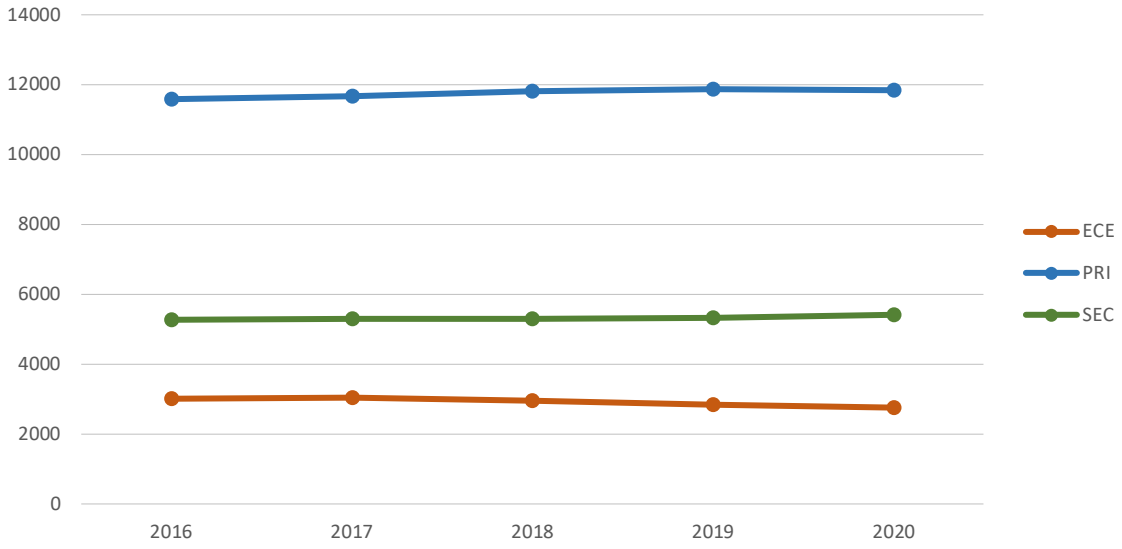

Figure 6.10: Population Projection by Education Levels

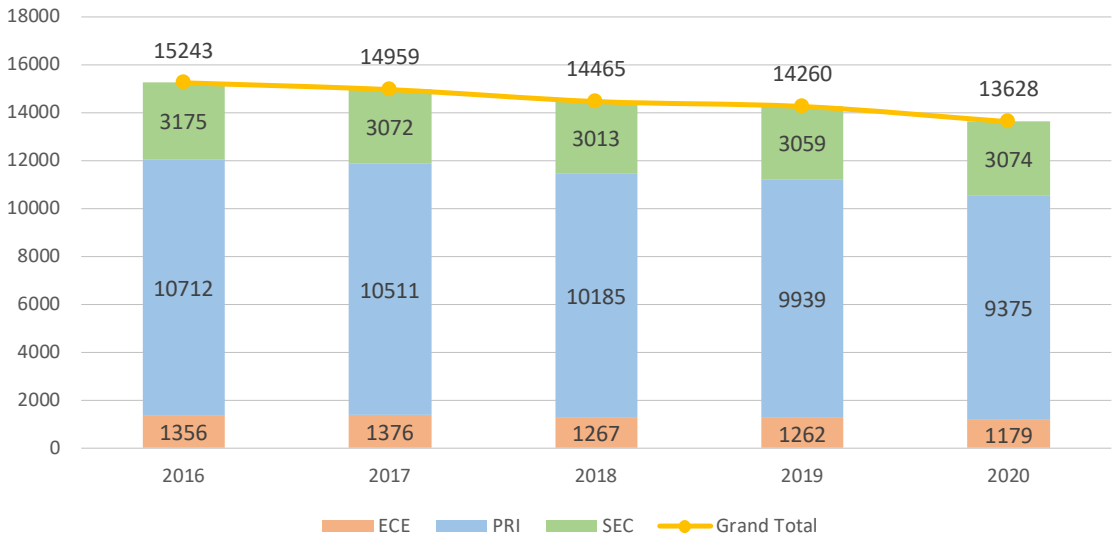

Figure 6.11: Enrollment Trend by Education Levels

Readers that are more adventurous might find the Table 5.3 of good use. It is used to produce various core indicators such as NER/GER/NIR/GIR. It provides data on enrollments, net enrollments (i.e. enrollments of official age), intakes (i.e. new entrants excluding repeaters), and net intakes (i.e. intakes of official age). All this data is presented side by side with population for the last five years at all levels of education.

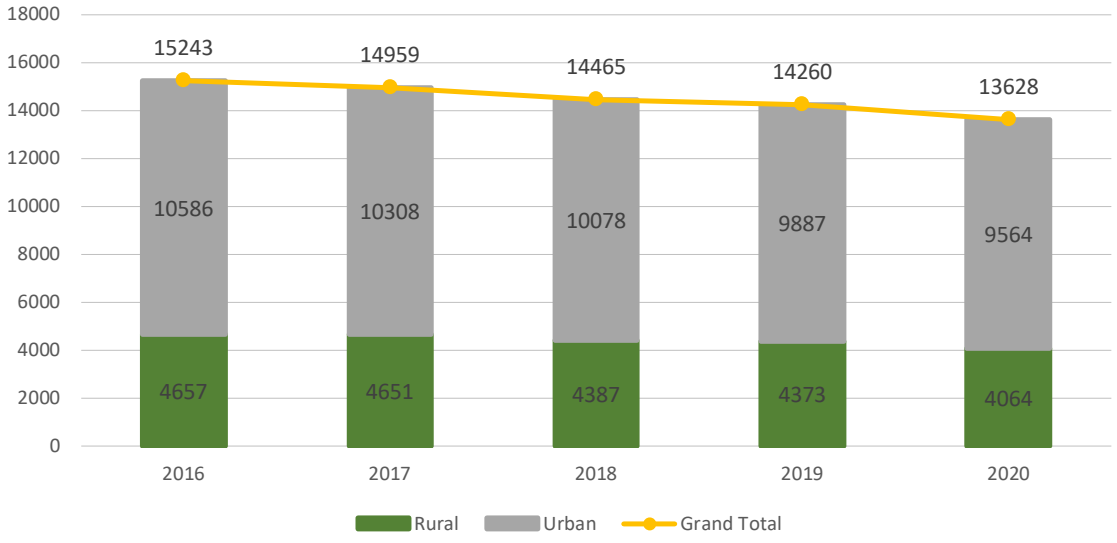

Figure 6.12: Enrollment by Region (Urban and Rural/Outer Islands)

Table 6.3: Enrollments, Intakes, Population by Year and Education Level

	Enrol Total	Enrol Male	Enrol Female	Net Enrol Total	Net Enrol Male	Net Enrol Female	Intake Total	Intake Male	Intake Female	Net Intake	Net Intake Male	Net Intake Female	Pop Total	Pop Male	Pop Female
2016	**15243**	**7756**	**7487**	**13184**	**6602**	**6582**	**2470**	**1219**	**1251**	**1447**	**675**	**772**	**19878**	**10325**	**9553**
ECE	1356	710	646	1164	600	564	153	68	85	121	51	70	3012	1563	1449
PRI	10712	5510	5202	9469	4806	4663	1355	673	682	968	461	507	11602	6015	5587
SEC	3175	1536	1639	2551	1196	1355	962	478	484	358	163	195	5264	2747	2517
2017	**14959**	**7600**	**7359**	**12787**	**6427**	**6360**	**2320**	**1178**	**1142**	**1301**	**644**	**657**	**20010**	**10382**	**9628**
ECE	1376	707	669	1211	622	589	190	86	104	135	62	73	3049	1570	1479
PRI	10511	5410	5101	9237	4704	4533	1200	640	560	849	443	406	11670	6060	5610
SEC	3072	1483	1589	2339	1101	1238	930	452	478	317	139	178	5291	2752	2539
2018	**14465**	**7246**	**7219**	**12416**	**6186**	**6230**	**2344**	**1216**	**1128**	**1341**	**672**	**669**	**20058**	**10396**	**9662**
ECE	1267	632	635	1070	524	546	149	61	88	88	32	56	2947	1518	1429
PRI	10185	5147	5038	8979	4509	4470	1271	675	596	917	474	443	11816	6134	5682
SEC	3013	1467	1546	2367	1153	1214	924	480	444	336	166	170	5295	2744	2551
2019	**14260**	**7239**	**7021**	**12250**	**6155**	**6095**	**2202**	**1093**	**1109**	**1197**	**579**	**618**	**20055**	**10387**	**9668**
ECE	1262	641	621	1062	529	533	139	55	84	65	22	43	2847	1466	1381
PRI	9939	5111	4828	8797	4488	4309	1132	584	548	805	403	402	11880	6167	5713
SEC	3059	1487	1572	2391	1138	1253	931	454	477	327	154	173	5328	2754	2574
2020	**13629**	**6902**	**6727**	**11814**	**5942**	**5872**	**2144**	**1056**	**1088**	**1290**	**615**	**675**	**20016**	**10365**	**9651**
ECE	1179	623	556	1010	532	478	183	78	105	112	46	66	2755	1419	1336
PRI	9376	4798	4578	8344	4251	4093	1032	530	502	776	385	391	11854	6152	5702
SEC	3074	1481	1593	2460	1159	1301	929	448	481	402	184	218	5407	2794	2613
Grand Total	**72556**	**36743**	**35813**	**62451**	**31312**	**31139**	**11480**	**5762**	**5718**	**6576**	**3185**	**3391**	**100017**	**51855**	**48162**

Enrollments in Grade K to Grade 7 generally have more males then females but then switches to more females than males in all subsequent years. The enrollments in Grade Pre-K is slightly on the rise from last year but generally steady for the last five years. Grades 1, 2 and 3 are all generally declining over the last five years (Figure 6.10.) Grades 4-7 are also declining enrollments though a little more stable. Grade 8 enrollments are the outlier here with a slight increase in enrollments over the last three years.

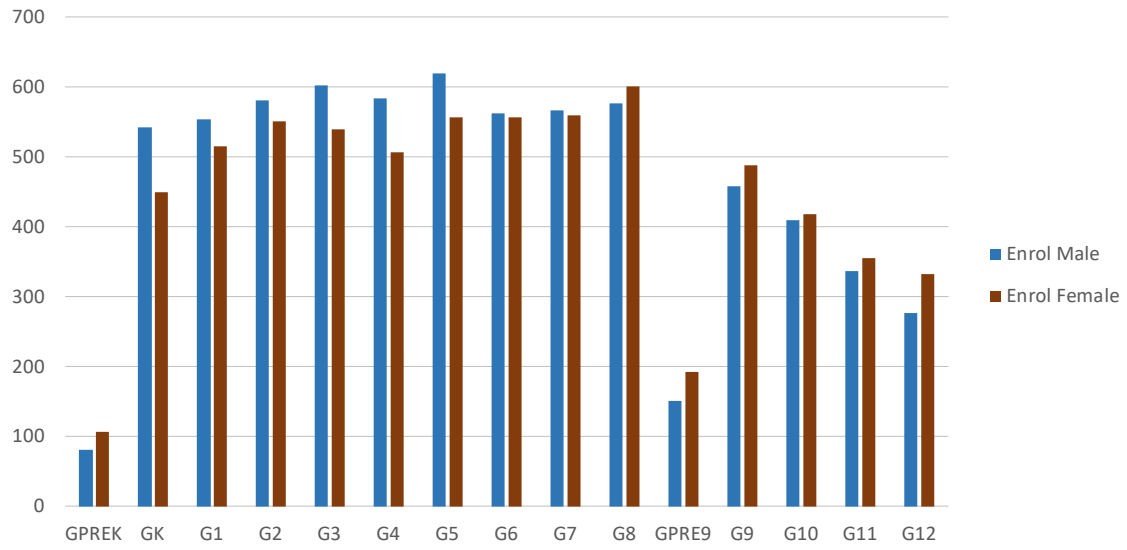

Figure 6.13: Enrollments by Grade and Gender

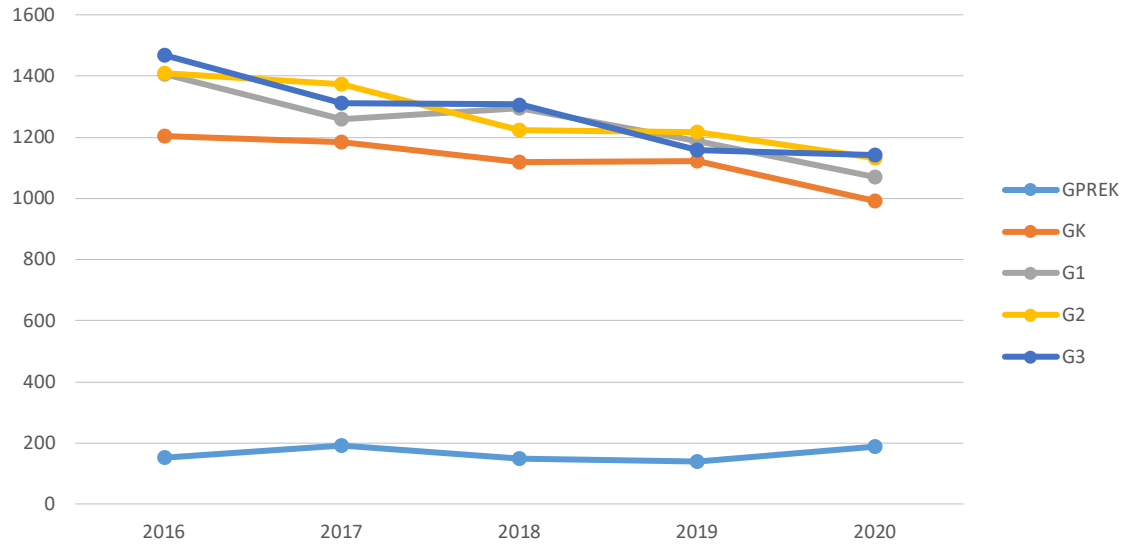

Figure 6.14: Enrollment by Grade Trend (Grade Pre-K to 3)

Enrollments in Grade 9-12 have been steadier in the past five years.

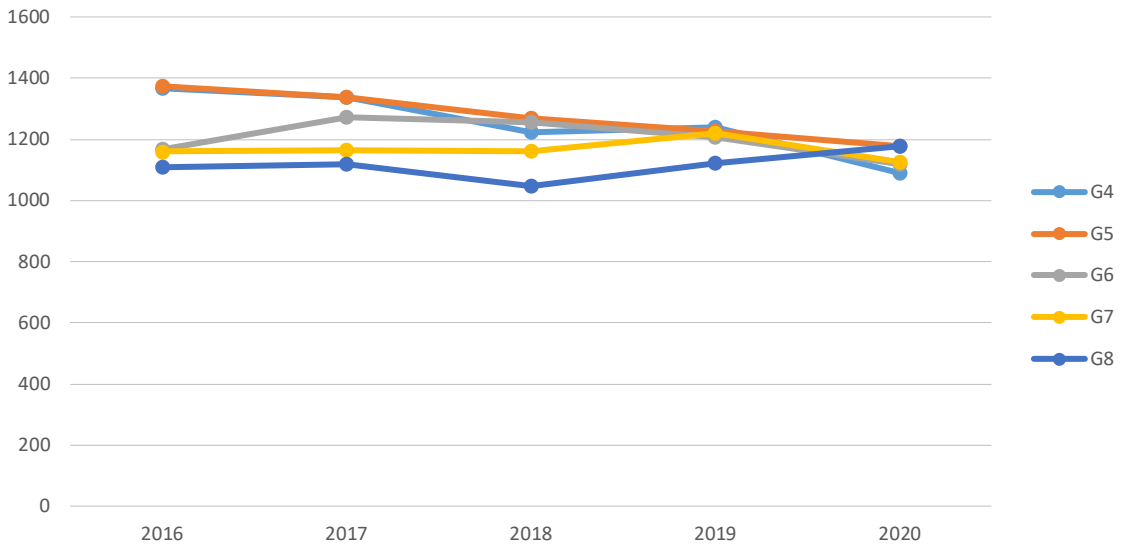

Figure 6.15: Enrollment by Grade Trend (Grade 4 to 7)

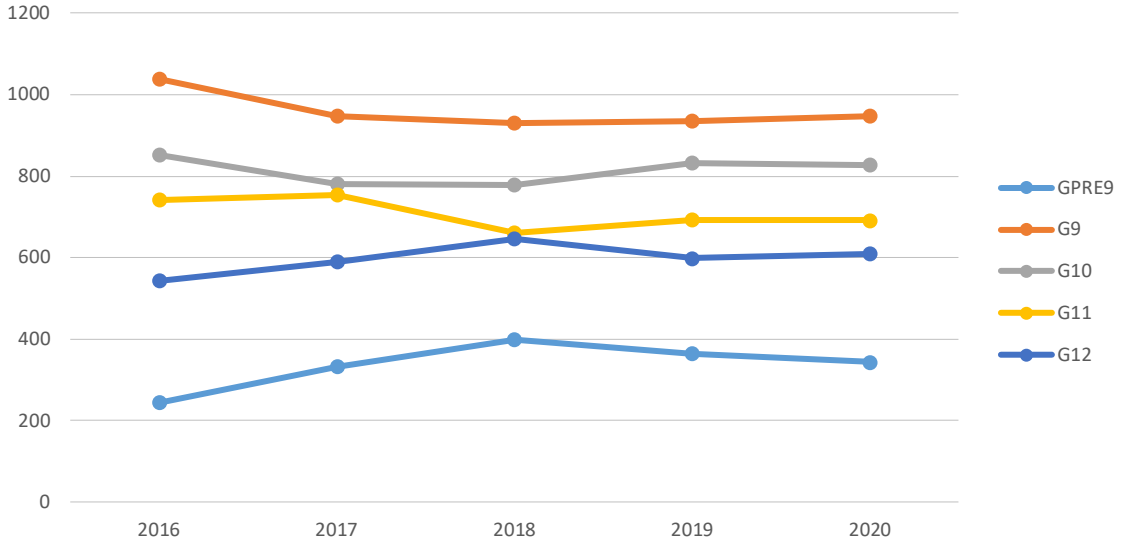

Figure 6.16: Enrollment by Grade Trend (Grade Pre-9 to 12)

Again, for the more advanced readers, the same data provided in Table 6.3 is also presented in Table 6.4 but this time instead of disaggregating by education level it is disaggregated by grades.

Table 6.4: Enrollments, Intakes and Population by Year and Grade

	Enrol Male	Enrol Female	Enrol Total	Net Enrol Male	Net Enrol Female	Net Enrol Total	Intake Male	Intake Female	Intake Total	Net Intake Male	Net Intake Female	Net Intake Total	Pop Male	Pop Female	Pop Total
2016	**7756**	**7487**	**15243**	**3773**	**4034**	**7807**	**7522**	**7302**	**14824**	**3768**	**4025**	**7793**	**11021**	**10205**	**21226**
GPREK	68	85	153	51	70	121	68	85	153	51	70	121	801	754	1555
GK	642	561	1203	468	427	895	627	556	1183	467	427	894	762	695	1457
G1	700	706	1406	461	508	969	673	682	1355	461	507	968	792	723	1515
G2	735	676	1411	455	430	885	712	659	1371	455	429	884	798	732	1530
G3	768	702	1470	411	428	839	742	687	1429	409	427	836	789	728	1517
G4	697	669	1366	329	381	710	676	657	1333	329	381	710	770	715	1485
G5	716	659	1375	336	341	677	699	646	1345	335	339	674	745	697	1442
G6	588	581	1169	254	301	555	571	569	1140	254	300	554	721	678	1399
G7	605	555	1160	254	277	531	596	545	1141	254	277	531	704	662	1366
G8	569	541	1110	235	254	489	562	537	1099	235	254	489	696	652	1348
G9	516	522	1038	164	197	361	478	484	962	163	195	358	697	648	1345
G10	398	454	852	139	165	304	380	440	820	139	165	304	698	642	1340
G11	344	398	742	97	134	231	335	378	713	97	133	230	689	627	1316
G12	278	265	543	110	110	220	275	264	539	110	110	220	663	600	1263
GPRE9	132	113	245	9	11	20	128	113	241	9	11	20	696	652	1348
2017	**7600**	**7359**	**14959**	**3733**	**3964**	**7697**	**7366**	**7229**	**14595**	**3698**	**3946**	**7644**	**11083**	**10287**	**21370**
GPREK	86	105	191	62	74	136	86	104	190	62	73	135	774	729	1503
GK	621	564	1185	509	468	977	610	554	1164	504	464	968	796	750	1546
G1	670	589	1259	449	409	858	640	560	1200	443	406	849	760	692	1452
G2	687	686	1373	394	452	846	650	666	1316	389	449	838	789	721	1510
G3	684	627	1311	375	371	746	660	612	1272	373	368	741	795	730	1525
G4	695	643	1338	346	355	701	664	632	1296	339	354	693	786	725	1511
G5	689	650	1339	349	376	725	665	642	1307	348	375	723	767	713	1480
G6	650	623	1273	286	324	610	629	616	1245	282	323	605	743	695	1438
G7	582	584	1166	242	266	508	562	580	1142	238	266	504	719	675	1394
G8	582	538	1120	251	267	518	573	532	1105	250	267	517	701	659	1360

G9	466	482	948	139	178	317	452	478	930	139	178	317	694	650	1344
G10	396	385	781	120	140	260	391	383	774	120	140	260	691	642	1333
G11	338	416	754	125	161	286	330	403	733	125	160	285	688	631	1319
G12	283	306	589	79	116	195	283	306	589	79	116	195	679	616	1295
GPRE9	171	161	332	7	7	14	171	161	332	7	7	14	701	659	1360
2018	**7246**	**7219**	**14465**	**3645**	**3950**	**7595**	**7081**	**7125**	**14206**	**3620**	**3937**	**7557**	**11113**	**10335**	**21448**
GPREK	61	88	149	32	56	88	61	88	149	32	56	88	748	704	1452
GK	571	547	1118	425	414	839	556	537	1093	423	411	834	770	725	1495
G1	693	604	1297	478	445	923	675	596	1271	474	443	917	793	747	1540
G2	653	572	1225	375	357	732	624	555	1179	372	356	728	757	690	1447
G3	631	676	1307	351	433	784	607	667	1274	346	432	778	786	718	1504
G4	622	603	1225	349	354	703	601	599	1200	347	354	701	792	727	1519
G5	655	614	1269	321	348	669	643	602	1245	317	346	663	783	723	1506
G6	620	637	1257	285	355	640	606	629	1235	284	355	639	765	711	1476
G7	573	588	1161	264	308	572	565	580	1145	264	306	570	741	693	1434
G8	503	543	1046	218	243	461	490	535	1025	217	243	460	717	673	1390
G9	485	445	930	167	171	338	480	444	924	166	170	336	699	657	1356
G10	361	416	777	124	163	287	358	413	771	123	163	286	687	643	1330
G11	330	330	660	120	133	253	328	326	654	120	133	253	681	631	1312
G12	291	355	646	117	152	269	290	353	643	116	151	267	677	620	1297
GPRE9	197	201	398	19	18	37	197	201	398	19	18	37	717	673	1390
2019	**7239**	**7021**	**14260**	**3704**	**3886**	**7590**	**7090**	**6930**	**14020**	**3687**	**3876**	**7563**	**11126**	**10359**	**21485**
GPREK	55	84	139	22	43	65	55	84	139	22	43	65	723	681	1404
GK	586	537	1123	446	423	869	575	528	1103	444	420	864	743	700	1443
G1	620	567	1187	405	402	807	584	548	1132	403	402	805	767	722	1489
G2	641	576	1217	417	394	811	618	566	1184	410	393	803	790	744	1534
G3	612	546	1158	339	322	661	597	537	1134	339	321	660	754	687	1441
G4	632	607	1239	363	398	761	618	597	1215	362	395	757	783	715	1498
G5	637	590	1227	338	340	678	623	575	1198	336	339	675	790	724	1514
G6	618	588	1206	325	333	658	611	583	1194	325	333	658	781	721	1502
G7	618	601	1219	285	348	633	606	597	1203	284	347	631	763	709	1472

G8	555	566	1121	265	285	550	549	563	1112	265	285	550	739	691	1430
G9	456	480	936	154	173	327	454	477	931	154	173	327	714	671	1385
G10	421	412	833	132	150	282	416	411	827	131	150	281	693	651	1344
G11	318	374	692	101	139	240	316	373	689	100	139	239	677	632	1309
G12	292	306	598	100	124	224	292	306	598	100	124	224	670	620	1290
GPRE9	178	187	365	12	12	24	176	185	361	12	12	24	739	691	1430
2020	**6902**	**6727**	**13629**	**3641**	**3896**	**7537**	**6707**	**6610**	**13317**	**3615**	**3875**	**7490**	**11125**	**10357**	**21482**
GPREK	80	107	187	47	68	115	78	105	183	46	66	112	700	659	1359
GK	543	449	992	415	359	774	540	445	985	415	357	772	719	677	1396
G1	554	515	1069	388	395	783	530	502	1032	385	391	776	741	697	1438
G2	581	551	1132	356	379	735	551	533	1084	352	374	726	764	719	1483
G3	603	540	1143	365	370	735	575	524	1099	361	369	730	788	742	1530
G4	584	506	1090	308	296	604	562	493	1055	307	296	603	751	684	1435
G5	621	557	1178	331	355	686	594	545	1139	328	352	680	781	713	1494
G6	562	556	1118	302	326	628	551	548	1099	299	324	623	788	722	1510
G7	566	560	1126	293	328	621	553	558	1111	292	328	620	779	719	1498
G8	576	601	1177	273	348	621	570	595	1165	272	347	619	760	706	1466
G9	458	488	946	184	218	402	448	481	929	184	218	402	736	688	1424
G10	410	418	828	145	165	310	397	414	811	143	165	308	708	664	1372
G11	336	355	691	125	138	263	330	351	681	122	138	260	683	640	1323
G12	277	332	609	99	132	231	277	324	601	99	131	230	667	621	1288
GPRE9	151	192	343	10	19	29	151	192	343	10	19	29	760	706	1466
Grand Total	**36743**	**35813**	**72556**	**18496**	**19730**	**38226**	**35766**	**35196**	**70962**	**18388**	**19659**	**38047**	**55468**	**51543**	**107011**

CHAPTER 7: SPECIAL EDUCATION

The Special Education data is collected in compliance with the United States' Individuals with Disabilities Education Act (IDEA).

Background

Data Source

The data source is an legacy FoxPro database. The data was extracted an loaded into MIEMIS for cleanup and analysis. While some work remains most of the current data has been loaded.

Limitations

The legacy FoxPro database did not correctly record historical data, in particular special education yearly enrollment. It is mostly a flat single snapshot in time. MIEMIS addresses this shortcoming but the transition still need some more effort.

Disability

Definition and Purpose

Disability data enables us to implement programs designed to improve results for infants, toddlers, children, and youth with disabilities. Having good statistics on the more common disabilities and where they are enables more efficient planning of the SpEd programs.

Methods of Calculation

Direct basic aggregation of data (such as summing/counting).

Analysis and Discussions

The most commonly reported disability is "Specific learning disability" with nearly two thirds of those males (Figure 7.1.) A distant second is the group of students with "Developmental delay". In general males. The situation is similar for most Atolls with the larger atolls reporting more students with other disabilities such as Hearing, Speech or Visual Impairment. While this could mean there are less or no students with such disabilities in smaller remote atolls it could also be a sign they are not reported to be in the education system.

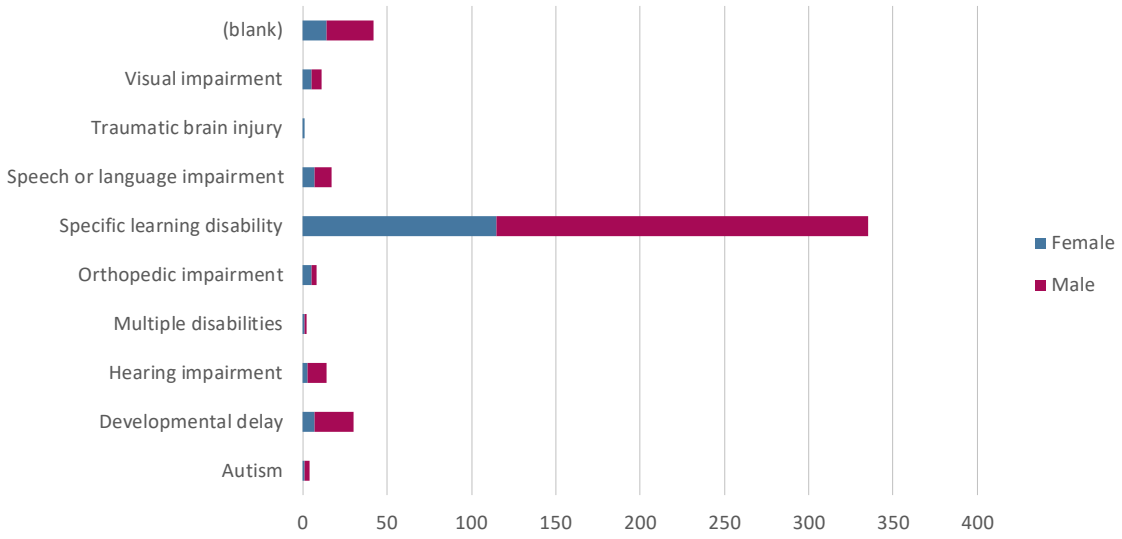

Figure 7.1: Disability Distribution

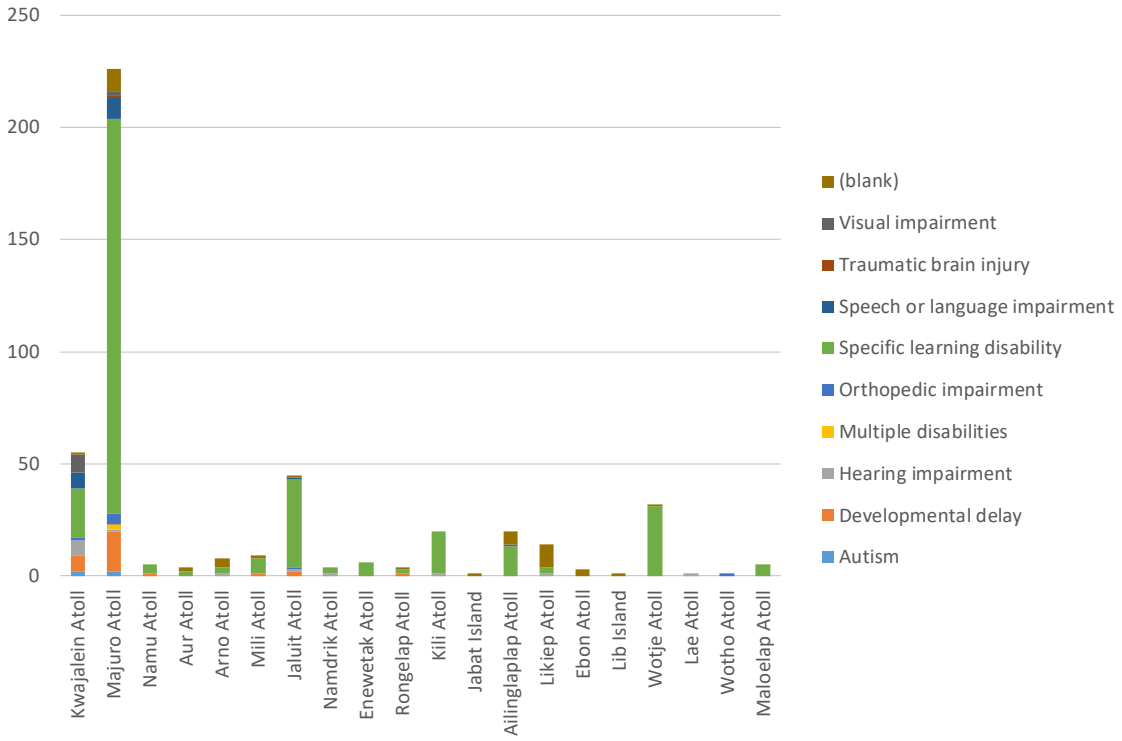

Figure 7.2: Cohort Distribution for Disbility by Atolls and Islands

Table 7.1: Disability by Atolls and Islands and Gender

Disbilities											
	Autism	Developmental delay	Hearing impairment	Multiple disabilities	Orthopedic impairment	Specific learning disability	Speech or language impairment	Traumatic brain injury	Visual impairment	(blank)	Grand Total
Female	**1**	**7**	**3**	**1**	**5**	**115**	**7**	**1**	**5**	**14**	**159**
Kwajalein Atoll		1	2			6	5		5		19
Majuro Atoll	1	5		1	4	57	1	1		3	73
Namu Atoll						3					3
Aur Atoll										1	1
Arno Atoll						1				2	3
Mili Atoll						4				1	5
Jaluit Atoll		1				14	1				16
Namdrik Atoll			1			1					2
Enewetak Atoll						1					1
Rongelap Atoll						1					1
Kili Atoll						3					3
Ailinglaplap Atoll						9				3	12
Likiep Atoll										3	3
Ebon Atoll										1	1
Wotje Atoll						15					15
Wotho Atoll					1						1
Male	**3**	**23**	**11**	**1**	**3**	**220**	**10**		**6**	**28**	**305**
Kwajalein Atoll	2	6	5		1	16	2		3	1	36
Majuro Atoll	1	13	1	1	1	119	8		2	7	153
Namu Atoll		1				1					2
Aur Atoll						2				1	3
Arno Atoll			1			2				2	5
Mili Atoll		1				3					4
Jaluit Atoll		1	1		1	25				1	29
Namdrik Atoll						2					2
Enewetak Atoll						5					5
Rongelap Atoll		1				1				1	3
Kili Atoll			1			16					17
Jabat Island										1	1
Ailinglaplap Atoll						4			1	3	8
Likiep Atoll			1			3				7	11
Ebon Atoll										2	2
Lib Island										1	1
Wotje Atoll						16				1	17
Lae Atoll			1								1
Maloelap Atoll						5					5
Grand Total	**4**	**30**	**14**	**2**	**8**	**335**	**17**	**1**	**11**	**42**	**464**

Special Education Environment

Definition and Purpose

The special education environment is the type of environment the special education children and youth are learning in. The purpose of this data is to monitor whether children and youth with disabilities are learning in an appropriate environment capable of catering to their needs.

Methods of Calculation

Direct basic aggregation of data (such as summing/counting).

Analysis and Discussions

Most special education students learn "Inside regular class 80% or more of the day" (Figure 7.3.) This is followed by "Inside regular class 40% through 79% of the day" as distant second. Nearly 50 special education students do not have this data specified, something we need to address.

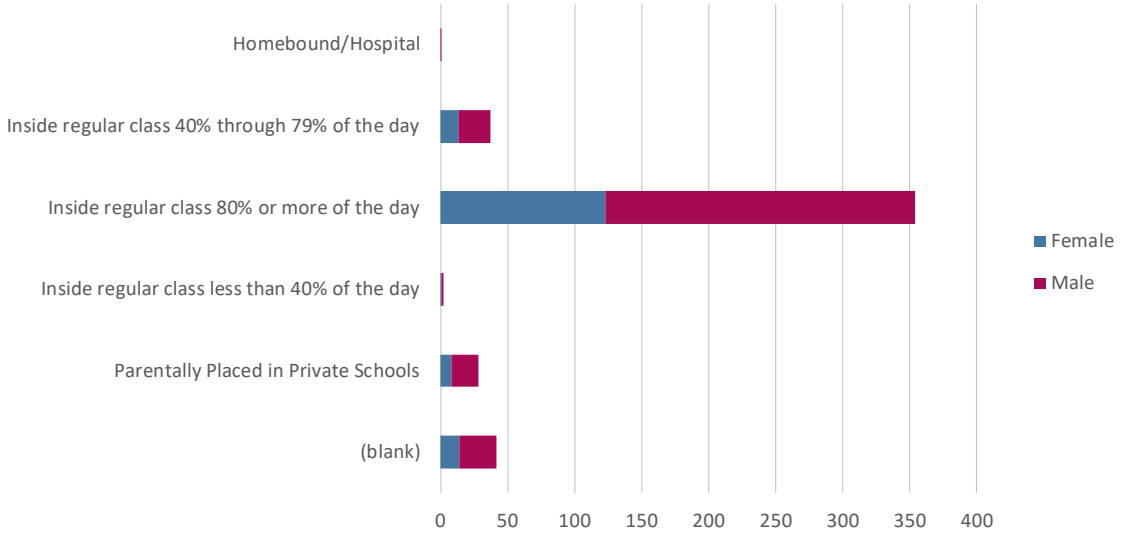

Figure 7.3: Special Education Environment Distribution

In the Atolls more students are inside regular classes either 80% or 40-79% of the time. Only on Majuro are children parentally placed in private schools (Figure 7.4). Kwajaleine special education student spend less time in class generally than others in most other atolls where students are generally reported to spend at least 80% of the time in class.

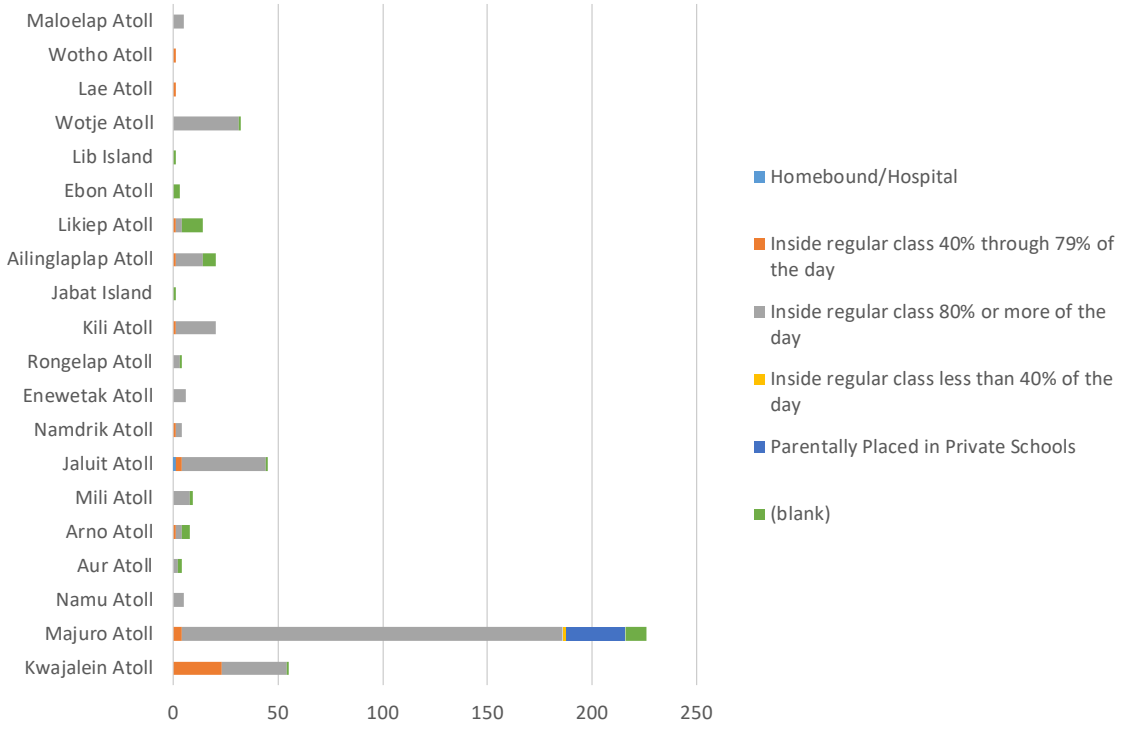

Figure 7.4: Cohort Distribution for Special Education Environment by Atolls and Islands

Table 7.2: Special Education Learning Environment by Atolls and Islands and Gender

Learning Environments	Homebound/ Hospital	Inside regular class 40% through 79% of the day	Inside regular class 80% or more of the day	Inside regular class less than 40% of the day	Parentally Placed in Private Schools	(blank)	Grand Total
Female		**13**	**123**	**1**	**8**	**14**	**159**
Kwajalein Atoll		9	10				19
Majuro Atoll		1	60	1	8	3	73
Namu Atoll			3				3
Aur Atoll						1	1
Arno Atoll			1			2	3
Mili Atoll			4			1	5
Jaluit Atoll		1	15				16
Namdrik Atoll		1	1				2
Enewetak Atoll			1				1
Rongelap Atoll			1				1
Kili Atoll			3				3
Ailinglaplap Atoll			9			3	12
Likiep Atoll						3	3
Ebon Atoll						1	1
Wotje Atoll			15				15
Wotho Atoll		1					1
Male	**1**	**24**	**231**	**1**	**20**	**28**	**305**
Kwajalein Atoll		14	21			1	36
Majuro Atoll		3	122	1	20	7	153
Namu Atoll			2				2
Aur Atoll			2			1	3
Arno Atoll		1	2			2	5
Mili Atoll			4				4
Jaluit Atoll	1	2	25			1	29
Namdrik Atoll			2				2
Enewetak Atoll			5				5
Rongelap Atoll			2			1	3
Kili Atoll		1	16				17
Jabat Island						1	1
Ailinglaplap Atoll		1	4			3	8
Likiep Atoll		1	3			7	11
Ebon Atoll						2	2
Lib Island						1	1
Wotje Atoll			16			1	17
Lae Atoll		1					1
Maloelap Atoll			5				5
Grand Total	**1**	**37**	**354**	**2**	**28**	**42**	**464**

English Learner Status

Definition and Purpose

To track progress of English learners in schools of the students with disability cohorts.

Methods of Calculation

Direct basic aggregation of data (such as summing/counting).

Analysis and Discussions

Most of the special education students in the RMI are learning English. The blanks are student with unavailable English learner status data as oppose to not being English learners.

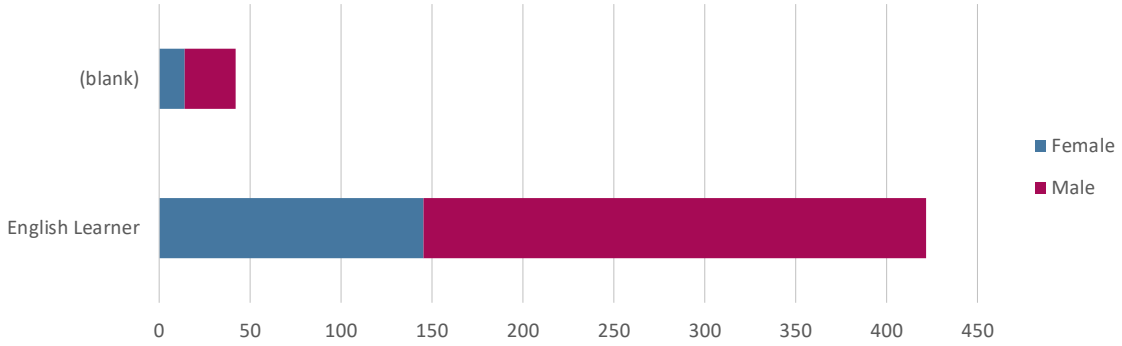

Figure 7.5: English Learner Distribution

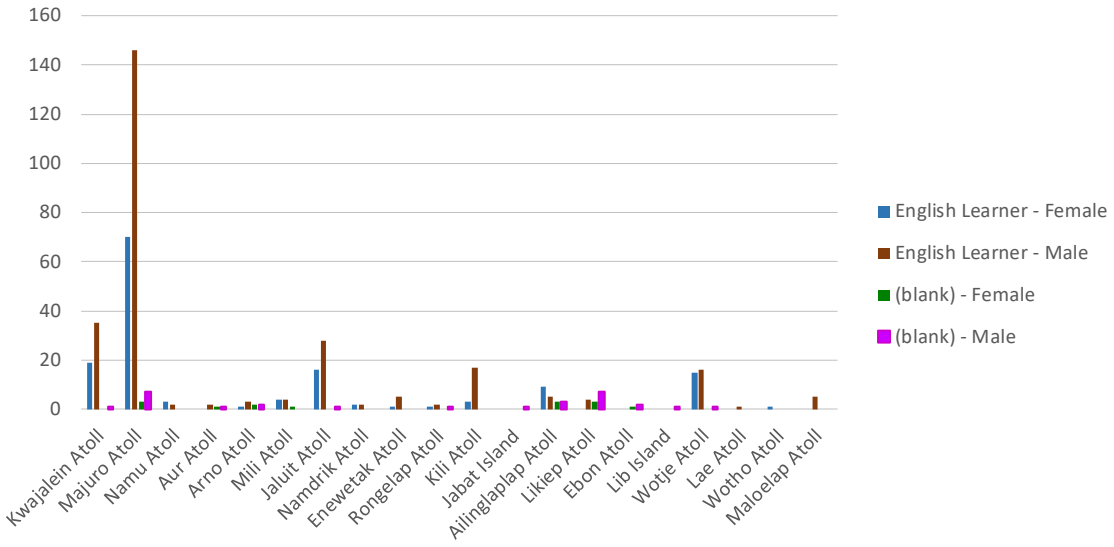

Figure 7.6: Cohort Distribution for English Learner by Atolls and Islands

Table 7.3: English Learners by Atolls and Islands and Gender

English Learners	English Learner		(blank)		Grand Total
	Female	Male	Female	Male	
Kwajalein Atoll	19	35		1	55
Majuro Atoll	70	146	3	7	226
Namu Atoll	3	2			5
Aur Atoll		2	1	1	4
Arno Atoll	1	3	2	2	8
Mili Atoll	4	4	1		9
Jaluit Atoll	16	28		1	45
Namdrik Atoll	2	2			4
Enewetak Atoll	1	5			6
Rongelap Atoll	1	2		1	4
Kili Atoll	3	17			20
Jabat Island				1	1
Ailinglaplap Atoll	9	5	3	3	20
Likiep Atoll		4	3	7	14
Ebon Atoll			1	2	3
Lib Island				1	1
Wotje Atoll	15	16		1	32
Lae Atoll		1			1
Wotho Atoll	1				1
Maloelap Atoll		5			5
Grand Total	**145**	**277**	**14**	**28**	**464**

CHAPTER 7: SCHOOL ACCREDITATIONS

We are still in the process of producing a chapter with statistics and analysis on our schools accreditation framework. While it is not currently ready for inclusion it will be added to this publication in a revised edition as soon as possible.

CHAPTER 9: WATER SANITATION AND HYGIENE

Recently a comprehensive Water Sanitation and Hygiene (WASH) survey was designed in collaboration with UNICEF. This WASH survey was then developed into the MIEMIS Education Survey Tool providing a streamlined data collection, data processing, analysis and reporting pipeline.

WASH data is of the utmost importance in the fight against the coronavirus. While we had WASH data before, the quality was not as good as it should be and not comprehensive in its coverage. The WASH Survey following the comprehensive UNICEF framework has just started and we are working hard to complete a baseline for all schools in the RMI. Data from this UNICEF WASH framework is what will be presented in the digest.

Including all the data we can now produce for WASH would quickly become unwieldy even for this comprehensive digest. Therefore, we only include a very brief selection of all the information we can now produce. For information on more than a hundred WASH criteria, the reader would be referred to the Pacific Open Education Data app which will contain all available data in the next upgrade.

Note the surveys are in progress (as shown in Figure 9.1, 9.2). This Chapter will be updated with the new data in following releases of this document as surveys progress.

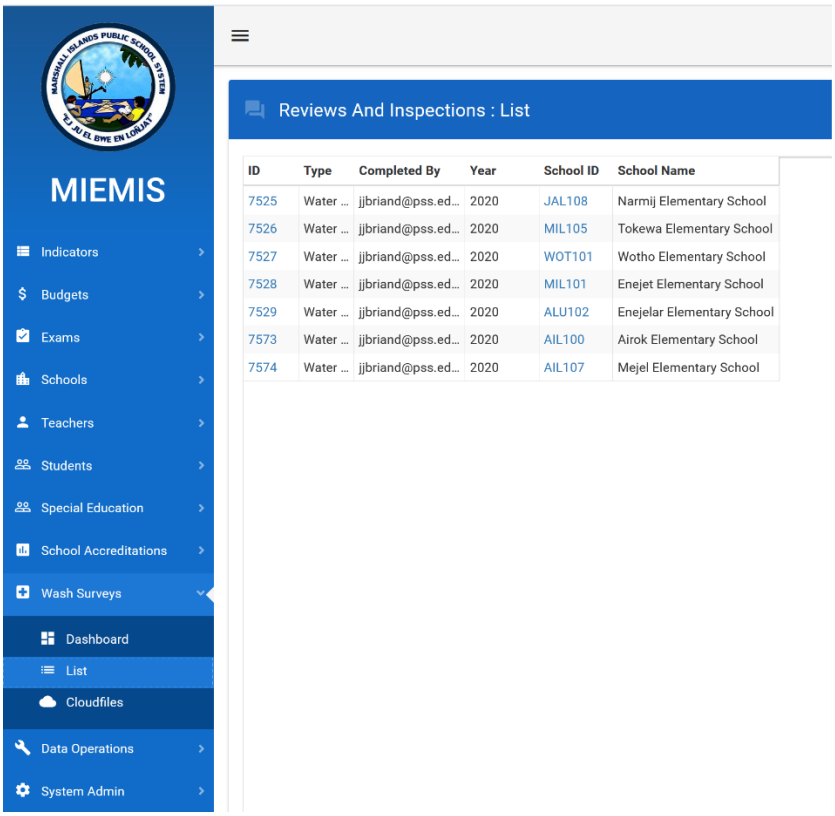

Figure 9.1: First two WASH Surveys completed and loaded into MIEMIS

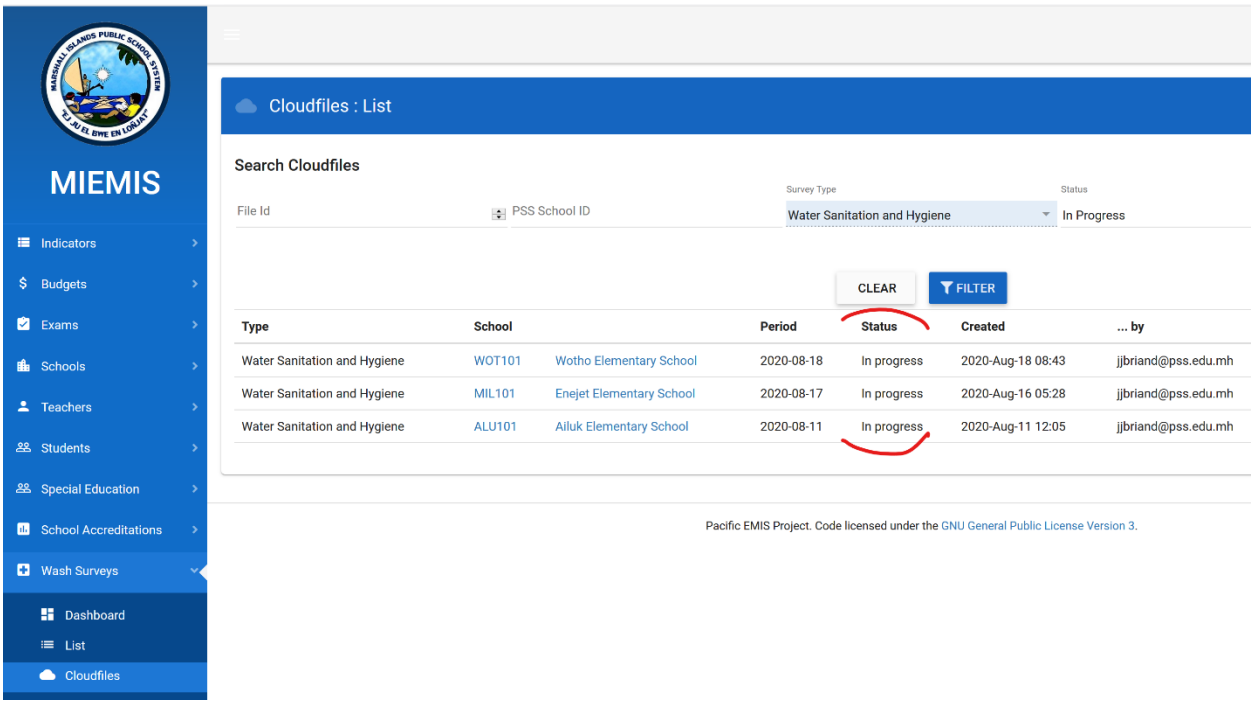

Figure 9.2: Three more WASH Surveys in progress currently

Background

Data Source

A comprehensive survey conducted on the MIEMIS Education Survey Tool tablet app. Data is automatically synchronized to MIEMIS for approval, processing, monitoring and reporting.

Methods of Calculation

The calculation are generally simple aggregates on the numerous questions on the survey.

Limitations

Comprehensive surveys such as these take time to complete. They are only needed every three to five years. The biggest limitation currently is the world crisis significantly hindering travels and forcing the staff to conduct surveys remotely including through HF radio for remote schools. As such, the available feature to take photos to support the data can not be used currently.

Analysis of all following sections is based on currently surveyed schools that provide a "preview" and will possibly change as we survey more schools.

Water

Here is a short selection of water related data for the currently surveyed schools

Analysis and Discussions

Water is available in most schools with the majority with rainwater harvesting (tank). Only one school so far is piped into the building (Figure 9.3.) However, a little more than half schools surveyed have water available all the time every day with the other half left without water certain times of the day (Figure 9.4.) The most common usage of water for drinking and hand washing with Ailinglaplap and Mili atolls making more diverse usage of water (Figure 9.5.)

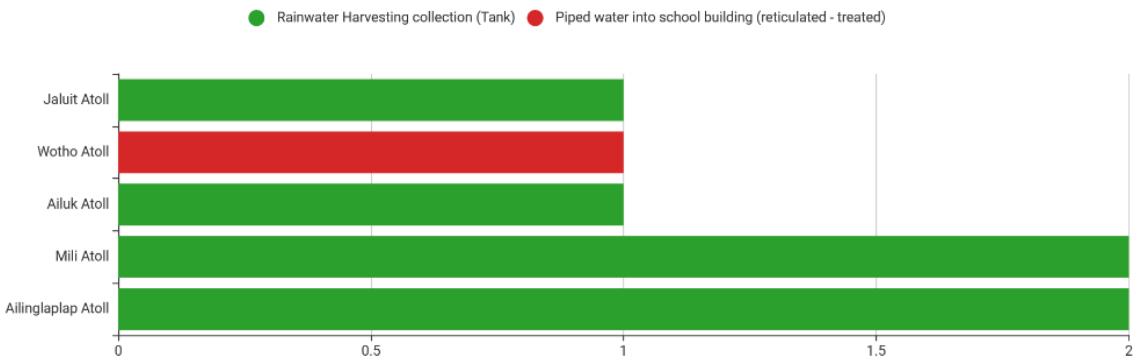

Figure 9.3: Primary Water Source

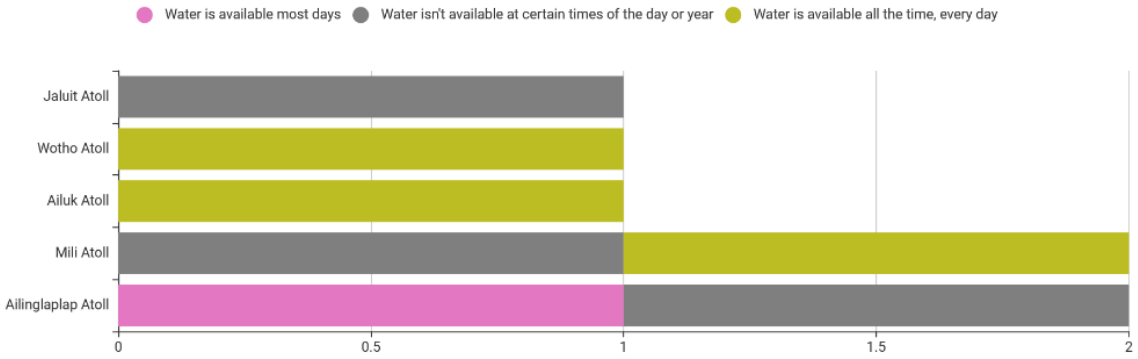

Figure 9.4: Water Source Reliability

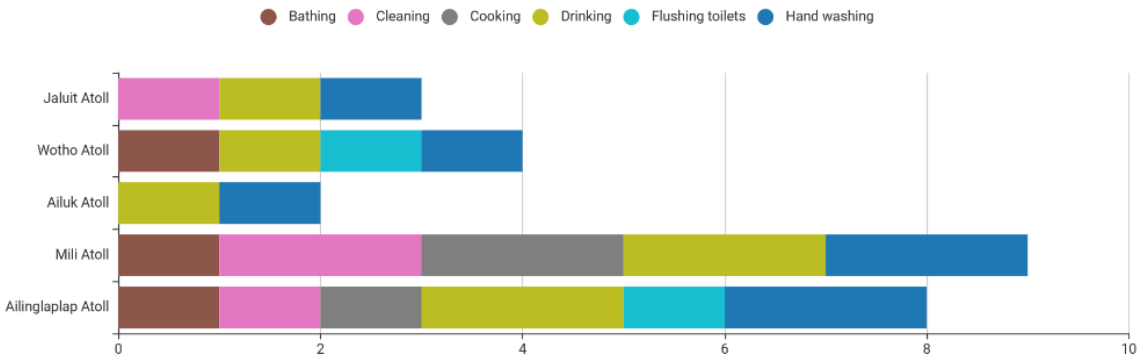

Figure 9.5: Water Source Purposes

In general the water sources of fairly new having been installed in the past 2 years or within 5-10 years (Figure 9.6). Mili is the "oldest" water source and it would be worth digging further into maintenance of schools with older installation of water. While most have water source it is not always easily accessible by students without

assistance by teachers (Figure 9.7.) This would be something to improve to provided added flexibility for increase hand washing. That said, most schools surveyed do have regular group hand washing activities.

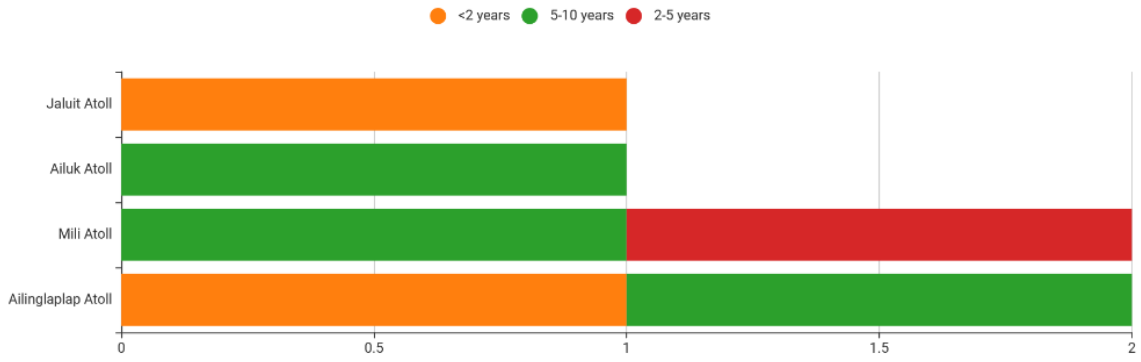

Figure 9.6: Water Source Installed When

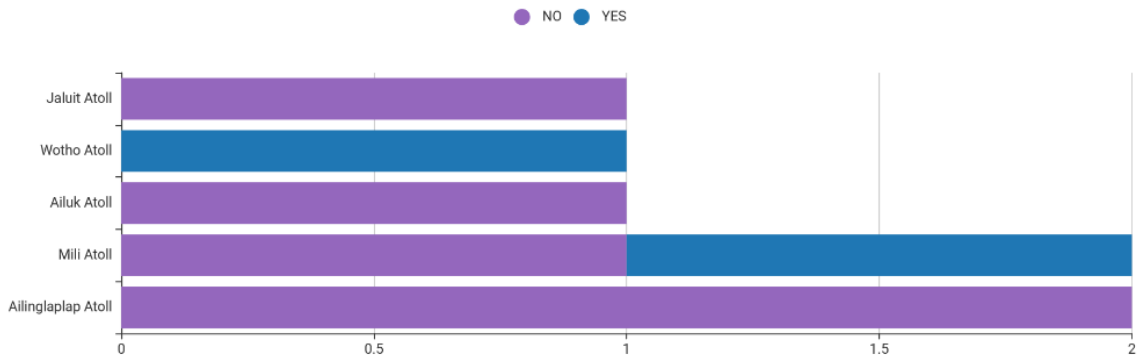

Figure 9.7: Water Source accessed by students without teacher assistance

Sanitation

A similar short selection of this growing comprehensive data is included here.

Analysis and Discussions

The toilets are available and cleaned on a regular basis in most schools (Figure 9.8.) When toilets are not working, most students will go home and use their toilet though one school on Mili atoll reported Open defecate outside the school grounds. Two out of four atolls that answered the question do not possess facilities accessible to children with disabilities (Figure 9.10.). Similarly, two out of four atolls reported having no girls toilet that are lockable from the inside and only a single school so far have all their girl toilets lockable from the inside (Figure 9.11.)

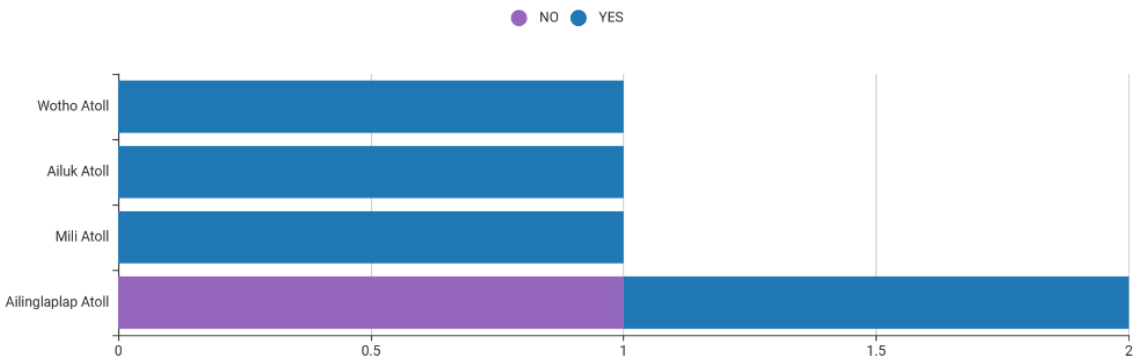

Figure 9.8: Toilets cleaned on regular basis

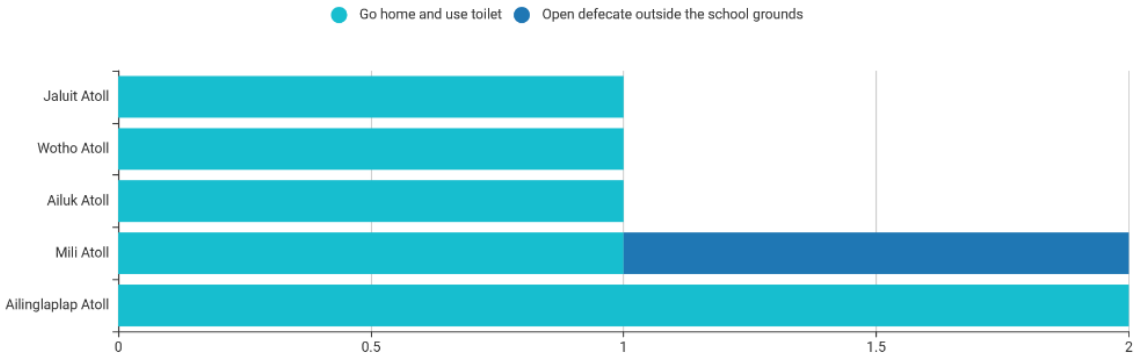

Figure 9.9: What students do when toilets do not work

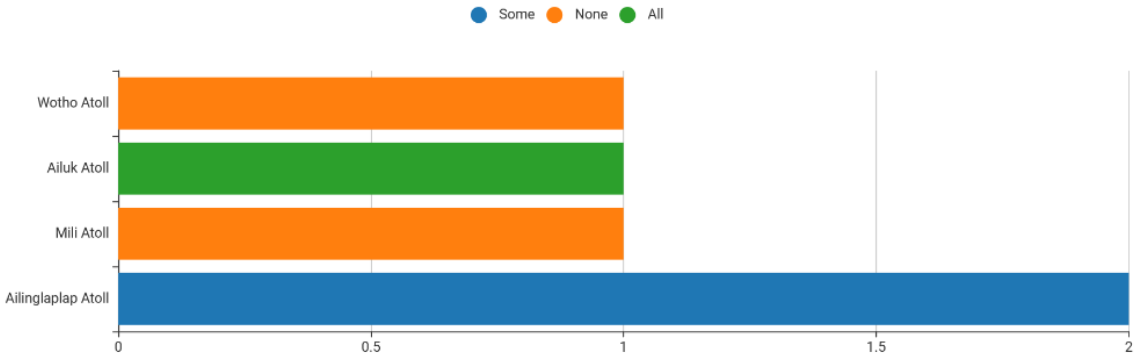

Figure 9.10: Toilet facilities accessible to children with disabilities

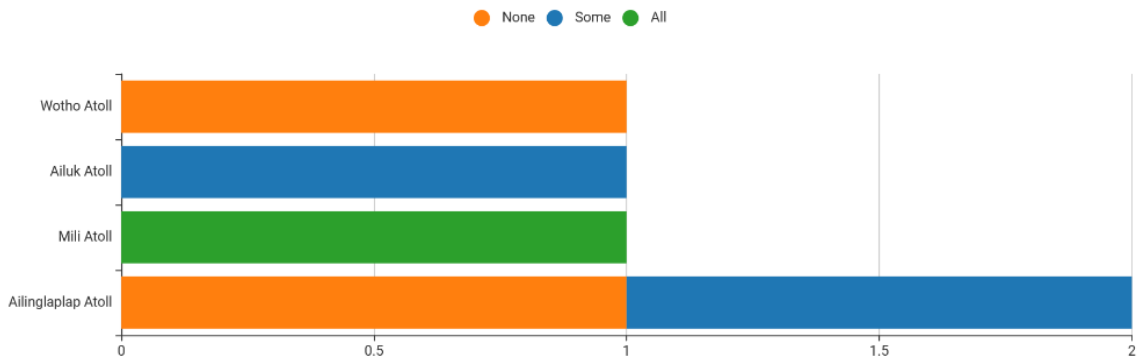

Figure 9.11: Girls locked toilets from inside

Hygiene

Analysis and Discussions

All schools surveyed had hand-washing facilities (Figure 9.12.) with soap (Figure 9.13.) Some schools use running water but most use a bucket for hand-washing (Figure 9.14.)

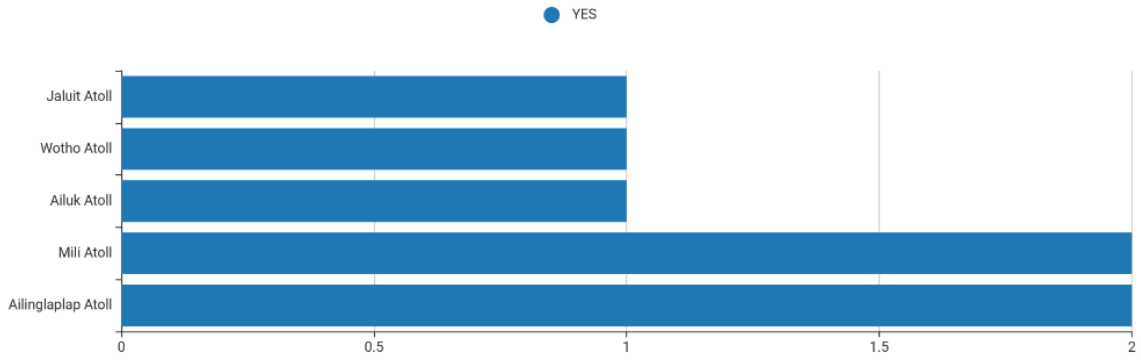

Figure 9.12: Girls locked toilets from inside

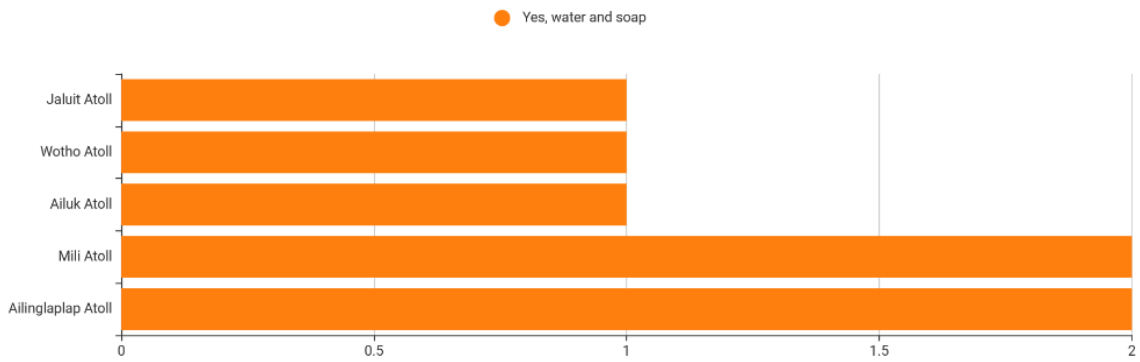

Figure 9.13: Hand washing facilities with soap

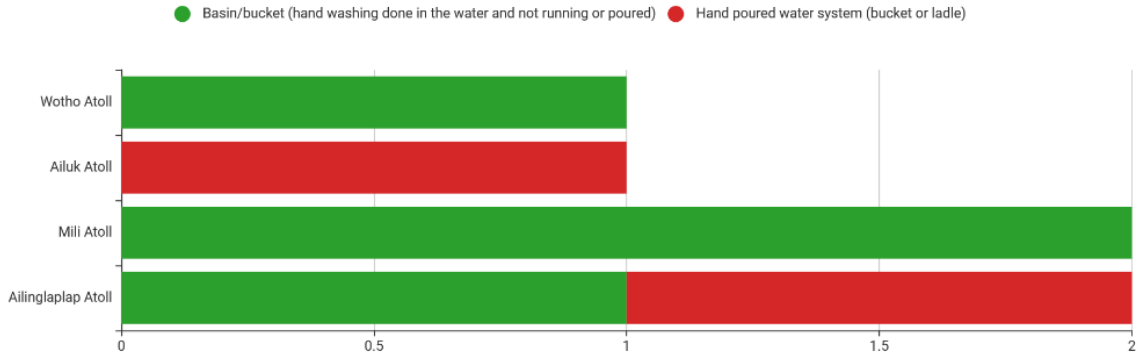

Figure 9.14: Hand washing primary mode

All schools reported hand washing for all classes (Figure 9.15.) In general, girls do not always have access to disposable bags for napkins (Figure 9.15.) Almost half the schools do not provide cleansing material for children (Figure 9.17.)

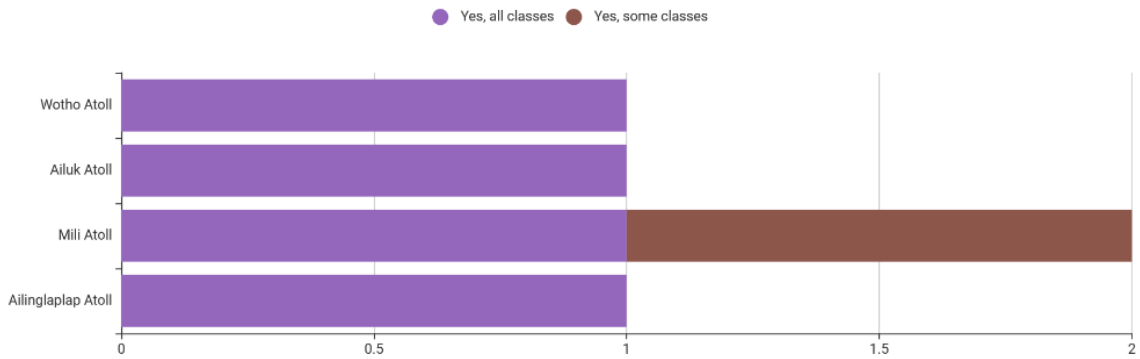

Figure 9.15: Hand washing daily practice

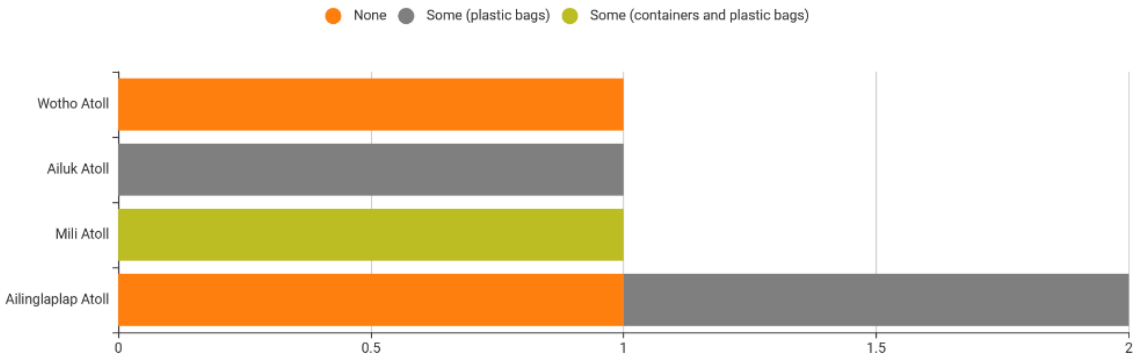

Figure 9.16: Girls access to disposable bag for napkins

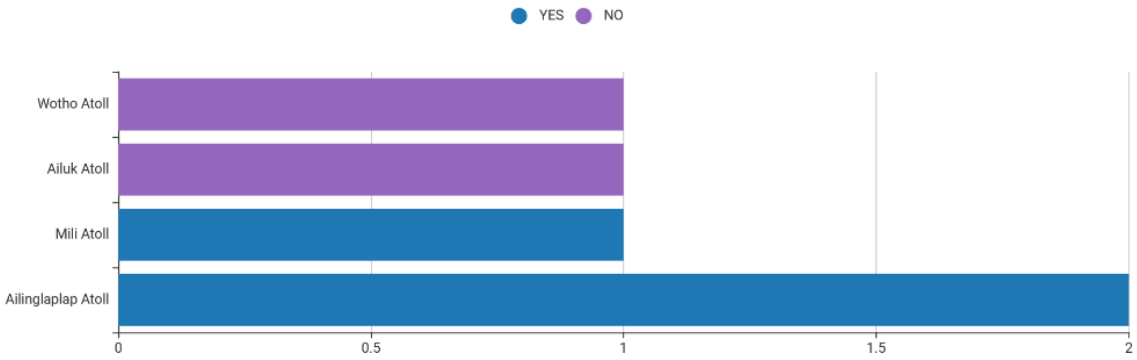

Figure 9.17: School provides cleansing material for students