SOLOMON ISLANDS

PERFORMANCE ASSESSMENT REPORT

2010 - 2014

Ministry of Education and
Human Resources Development

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Report published by Solomon Ministry of Education and Human Resource Development

30th October 2015

Acknowledgement

The development of the Performance Assessment Report (PAR) 2014 is the outcome of efforts by the Solomon Island Education Management Information System (SIEMIS) Team in the Ministry of Education and Human Resources Development (MEHRD). The indicators included in this report were extracted from SIEMIS and have been verified by the South Pacific Community (SPC) and key Donor Partners such as DFAT (AusAid) and MFAT (NZAid). Most of the education statistics and indicators are aligned with the National Education Action Plan (NEAP), 2013-2015 and the regional and international goals.

I would like to express my deepest gratitude to all the MEHRD staff who developed this report as well as to all the technical experts and donors who helped to finalize it.

I would like to express especial thanks to the SIEMIS data entry team who made sure that all the school data were recorded in SIEMIS on time. Above all, I would like to thank all the ECE teachers for their time and cooperation in filling in their SEIMIS questionnaires in 2014. Thank you also to all the primary and secondary school principals who completed and submitted their SIEMIS questionnaires in 2014 despite their busy schedules in schools. Without your collective collaboration and support, MHERD would not have been able to produce this report

Thank you to all the Education Authorities and the school inspectorate team who played important roles in the 2014 SIEMIS data collection. Thank you also to all the MEHRD staff who participated in the SIEMIS data validation efforts. This exercise is very much crucial since it helps MEHRD.

Finally, I would like to thank everyone who proofread this report. Without your insights and feedback this report would not be fully accomplished. I genuinely want to thank our development partners, particularly DFAT and the SPC, for their continuous technical support in strengthening SIEMIS, in the analysis of the PAR and for sharing knowledge of education statistics.

I look forward to ongoing support in the future in the development of the 2015 Performance Assessment Report. May I take this opportunity to invite all key education stakeholders to make good use of the education statistics and indicators, provided in this report, to benefit education in the Solomon Islands.

Dr. Franco Rodie

Permanent Secretary

Key Messages of the Performance Assessment Report (PAR), 2010 - 2014

The following key messages detail issues that need to be considered when formulating the NEAP 2016-2020. These messages are based on a review of the progress made in achieving the Strategic objective of the NEAP 2013-2015, mainly based on data in the Solomon Island Education Management Information System (SIEMIS).

Strategic Outcome 1: Improve equal access to all levels of education

Early Childhood Education (ECE) level

Boys and girls took part in ECE to the same degree in 2014. That said, the trend in children participating in ECE has only increased very slightly. Furthermore, children of the official age (4 to 5 years old) are participating in ECE as poorly as they were in 2010. It is apparent that around two-thirds of children of the official ECE age group are out of school. Moreover, the planned targets for all children participating in ECE are unlikely to be achieved, so MEHRD will need to consider the most appropriate activities when formulating the next NEAP.

It is worth highlighting that to improve management of this sector, a process to register the ECE centres is very much required to enhance the accuracy of information and the decision-making process.

Primary level

Boys and girls equally participated in primary education in 2014. Future gender interventions could, therefore, have a stronger emphasis on improving girls' learning outcomes rather than improving access.

Worryingly, the number of out-of-school children who are of the official age to attend primary school has risen from 8 in every 100 to 12 in every 100. This statistic means that the country is unlikely to achieve the NEAP enrolment targets for this sector by 2015. Therefore, it would be advisable for the MEHRD to consider appropriate activities to reduce the number of out-of-school children when drafting the NEAP 2016–2020.

Secondary Level

It is estimated that there were 10 fewer girls participating in secondary education for every 100 boys in 2014. Paradoxically, when secondary data relating to students of the official age group (13 years old to 19 years old) is analysed, it can be seen that 9 more girls participated in education for every 100 boys. This may be because boys are more likely to repeat a year than girls. One of the major issues in secondary education is that there is the lack of places available in Forms 4 and 6. Furthermore, a proportionately smaller number of places are provided to females than males in the later Forms. The MEHRD will need to prioritise increasing capacity for both boys and girls in these forms in the next NEAP.

Strategic Outcome 2: Improve the quality for all levels of education

Early Childhood Education (ECE) level

Since 2010, an extra 268 ECE teachers (a 23% increase) are now employed in the sector, which has meant a 14% improvement in the proportion of ECE teachers who are certified to teach. As there are a very limited number of ECE centres in the country, it will be essential to undertake further in-service and pre-service training for ECE teachers if the ECE national curriculum is to be effectively delivered.

Primary level

In primary education, small improvements in the quality of teaching and services are evident based on the data processed in SIEMIS. The proportion of certified teachers has risen slightly from 58.7% to 64.4%% since 2010. There also are now 38.8 pupils for each certified teacher, which is an improvement on 2010 and is closer to the MEHRD standard of 35 pupils to one teacher. However, the quality and quantity of teaching resources in primary schools does not seem to have improved since 2010.

Secondary Level

The number and proportion of qualified and certified teachers have risen in secondary schools, which is an encouraging sign that the quality of teaching may have improved. Moreover, as there is a ratio of 30.7 pupils for each certified teacher, this would indicate that teachers have sufficient time to attend to each pupil. However, this ratio is much lower than the MEHRD standard of 40 pupils to 1 teacher, so it can also be argued that this statistic indicates the system is inefficient. On average there are only 2.1 textbooks per pupil in the secondary sector. Although, there is some evidence that the quality of these textbooks has improved, it is clear that secondary schools are very poorly resourced. As a priority, the MEHRD will need to identify how appropriate textbooks can be distributed to the correct grades and schools.

Strategic Outcome 3: Improve management of sector-wide education program

In 2014, the consolidated education budget was about SI$1,029.3 million. The overall, SIG-funded recurrent and development budget allocated to MEHRD in 2014 amounted to SI$914.3 million, compared to SI$115 million of sector support financing. Spending on education as a percentage of Gross Domestic Product (GDP) increased from 7.6% in 2010 to 12.3%. However, the recurrent budget was overspent by 12.9%, but the development budget was underspent by 16.1%.

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Acronyms and Abbreviations

ASER	Age Specific Enrolment Rate
CHS	Community High Schools
DR	Dropout Rate
ECE	Early Childhood Education
EFA	Education for All
ESF	Solomon Island Education Strategic Framework, 2007 – 2015
FBEAP	Forum Basic Education Action Plan
GDP	Gross Domestic Product
GEN	General
GER	Gross Enrolment Ratio
GIR	Gross Intake Rate
GPI	Gender Parity Index
JSS	Junior Secondary School, Form 1 to Form 3
LANG	Language
MDG	Millennium Development Goals
MDPAC	Ministry of Development Planning and Aid Coordination
MEHRD	Ministry of Education and Human Resources Development
MoFT	Ministry of Finance and Treasury
MQS	Minimum Quality Standards
NER	Net Enrolment Ratio
PEO	Provincial Education Office
PRIM	Primary Education, Prep to Year 6
PCR	Pupil-to-Certified Teacher Ratio
PTR	Pupil-toTeacher Ratio
PQR	Pupil-to-Qualified-Teacher Ratio
RR	Repetition Rate
SIEMIS	Solomon Island Education Management Information System
SINU	Solomon Islands National University
SPC	Secretary to the Pacific Communities
SR	Survival Rate
SS	Senior Secondary, Form 4 to Form 7
TR	Transition Rate
UIS-AIMS	UNESCO Institute for Statistics- Assessment, Information Systems, Monitoring and Statistics

1   Introduction

The Performance Assessment Report 2010-2014 (PAR) provides the national progress in correlation with the international agreements to achieve the Education For All (EFA) and Millennium Development Goals (MDG's, 2 and 3) and to identify the areas of improvement in the Solomon Islands Education Sector to offer good and relevant learning opportunities for all children, youths and adults in the Solomon Islands.

The purpose for developing the PAR is to facilitate the monitoring of the general progress of the National Education Action Plans (NEAP) and the Sector Wide Approach education programmes as incorporated in the longer term plan, the National Education Strategic Framework 2007-2015. The PAR was developed on the basis of a comprehensive set of agreed indicators related to all the main expected outputs and outcomes of the three overarching goals of the Education Sector. Access, Quality and Management in accordance to the Education For All and Millennium Development goals.

The PAR aims to give a 'quick scan' of the education sector progress towards the level of achievements of the three main goals in the medium term plans, the National Education Action Plans. It also helps the Ministry to identify and locate existing gaps and challenges related to planning, decision making and policy areas in access, quality and equity and management, and to focus on disadvantaged and underserved areas in the Solomon Islands.

The data captured in the school census forms for sub-sector levels ranges from general information about school; statistical data about student enrolment that includes repeaters, drop outs, transfers and grade progression; teacher and teacher training; statistical data about schools and classroom facilities and other education resources. The PAR 2010 – 2014 is using the SPC 2009 population census data as the baseline for Gross Enrolment Rate (GER), Net Enrolment Rate (NER), Gross Intake Rate (GIR) and Net Intake Rate (NIR) indicators.

We also realise that the PAR (as a summary report of data) and Solomon Island Education Management Information System (SIEMIS) as statistic tools, are not sufficient to understand all details of the progress and challenges in the education sector. Analysis of the quality of education is very much needed. In order to provide more data and information on the quality of teaching and learning in the schools, more classroom observations, assessments and research is needed. It is appreciated that the PAR can be still improved in terms of data quality, and some corrections of assumptions are highly likely to impact on future reporting of SIEMIS data. The 2014 performance assessments still include prep as the first year in the Primary Education level.

We hope that this PAR 2010-2014 will be used by all Ministry staff and other stakeholders to measure general progress. We also hope that it will encourage staff to utilise data for more result oriented reporting and planning. In the meantime we will make an effort to ensure that all important indicators that report the MEHRD progress are incorporated in this report and are factored in the newly revised school census form which will be used at a later stage in the near future.

The MEHRD has set up a NEAP Design Team that will draft the NEAP 2016-2020. Part of this work will involve undertaking a situational analysis. With this work in mind, an additional section has been added using the indicators detailed in this report, which reviews the progress made with achieving current planning targets. We also hope that this new section will improve the process of setting realistic and achievable targets for the next round of planning.

2   Outline of Report

The report has been laid out in two sections.

- Section 1, titled, 'Review of Progress made in achieving NEAP (2013–15) Strategic Outcomes', describes the progress the country has made in recent years. It also suggests areas that the MEHRD could consider focussing on when designing the NEAP (2016–20). This section refers to the indicator tables detailed in Section 2 of the report to support the analysis. Throughout this section, summaries are given in grey boxes to help communicate key issues using the minimum amount of terminology and statistics.
- Section 2, titled 'SIEMIS Monitoring and Evaluation Indicators', details the tables and supporting information produced from data in the annual school survey through the SIEMIS.

The annexes provide background information about the SIEMIS, the survey process and raw enrolment data.

3 Review of Progress made in achieving NEAP (2013–15) Strategic Outcomes

This section reviews the country's progress in achieving the strategic outcomes of the NEAP (2013–15) using data collected mainly from the annual school survey.

- Strategic Outcome 1: Improve equal access to all levels of education
- Strategic Outcome 2: Improve the quality for all levels of education
- Strategic Outcome 3: Improve management of sector-wide education program

Data from the annual school survey are collated and stored in the MEHRD's SIEMIS. This report uses indicators produced by the SIEMIS to examine each NEAP (2013–15) strategic outcome in the early-childhood, primary and secondary sectors. As the tertiary sectors, are not part of the annual school survey, these sectors are not included in this section.

3.1 Strategic Outcome 1: Improve equal access to all levels of education

3.1.1 Do boys and girls have equal access to ECE?

Yes, boys and girls took part in ECE to the same degree in 2014. That said, the trend in children participating in ECE has only increased very slightly (2%). Furthermore, nearly two-thirds of children (65.7%) of the official age group for ECE are out of school, and this has not improved since 2010. The planned targets for all children participating in ECE are unlikely to be achieved, so MEHRD will need to consider the most appropriate activities when formulating the next NEAP. To improve management of this sector, a process to register the ECE centres is very much required to enhance the accuracy of information used in the decision-making process.

Figure 1 shows the GER in ECE is only 49%, which may indicate that there are not enough ECE centres to accommodate all children who are of the official age. Furthermore, the low GER stems from the fact that many children in this age group would need to walk long distances to reach the nearest kindergarten school. Worryingly, there has been no improvement in the NER in ECE over the past five years. Therefore, it may be assumed that the country has made no apparent progress in achieving the 43.3% target set in the NEAP (2013–15). The official age group used to calculate the Net Enrolment Rate (NER) for ECE is 3 to 5 years old. It is also a concern that 12% of those enroled in ECE are over-aged in the 7 to 10 years age group as late enrolment in ECE and prep also contribute to over-age enrolments in primary and secondary sector as well. Therefore, to reduce the number of the over-age enrolments in primary and secondary, action initially must be taken in the ECE sector; otherwise it will not be possible to achieve a NER of 100% in primary.

Figure 1: GER and NER in ECE, 2010-2014
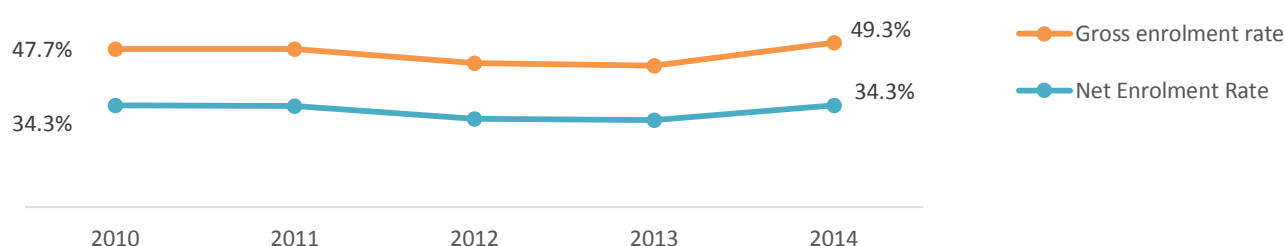
Source: SIEMIS, 2014

Two major issues that need to be considered relate to the lack of funding and ECE centres. Firstly, the registered ECE centres only received a minimal grant, and the operational management of the ECE centres relies nearly entirely on communities. Secondly, in rural areas, the majority of children would have to walk long distances to attend ECE centres.

Table 1 in Appendix 1 shows that the gender-parity rate for ECED is 1.00, which indicates that boys and girls participated in ECE to the same degree in 2014.

At this point, it is worth noting that it is difficult to measure activity in ECE as there are inadequate statistics about the number of ECE centres that exist throughout the country. Therefore, a process to register the ECE centres is very much required to improve the process of data collection, which will assist in education management and planning. Furthermore, many ECE centres have recorded their enrolments in the primary preparatory grade during the annual school survey.

> **Note: Definition of all indicators are provided in Annex 2**

3.1.2 Do boys and girls have equal access to primary education?

Yes, boys and girls equally participated in primary education in 2014. Future gender interventions could have a stronger emphasis on improving girls' learning outcomes. Worryingly, the number of out-of-school children has risen from 8 in every 100 to 12 in every 100. This statistic means that the country is unlikely to achieve the NEAP enrolment targets by 2015. Therefore, it would be advisable for the MEHRD to consider appropriate activities to reduce the number of out-of-school children when drafting the NEAP 2016–20.

Primary education covers prep level to Year 6. Pupils aged 5 to 18 years old are allowed to participate in primary education, although the official age group is 6 to 12 years old. Figure 2 shows that the Gross Enrolment Rate (GER) in primary education has been exceeding 100% each year, though there has been a large decrease from 124.5% in 2013 to 113% in 2014. That said, in 2014, the SIEMIS data indicate that 18.8% of students are over-aged (13 years or older). To reduce the number of over-aged students in primary education, a policy decision is needed to support this objective.

Figure 2: GER and NER - Primary Prep to Grade 6
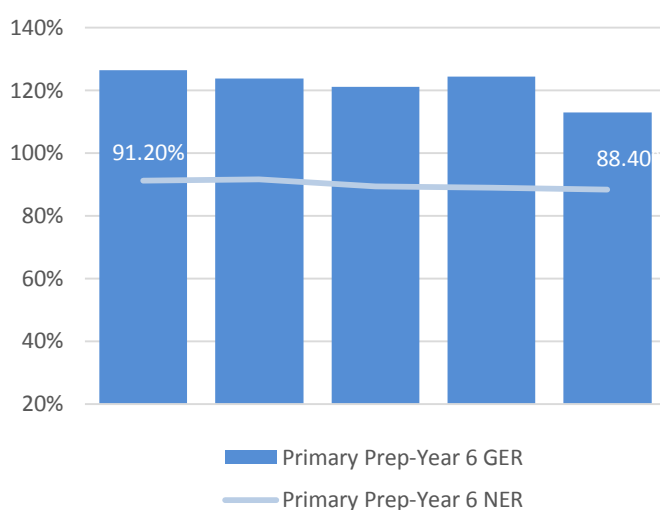
Source: SIEMIS, 2014

Worryingly, the NER in primary education from prep to Year 6 is gradually decreasing each year from 91.2% in 2010 to 88.4% in 2014. This indicates that the number of out-of-school children has increased from 9 in every 100 to 12 in every 100. In Year 1 of primary, the Gross Intake Rate (GIR) was 112.9%, while the Net Intake Rate (NIR) was 27.6% in 2014. The official age to enter Primary Year 1 is 7 years old[1]. The huge gap between both indicators indicates that the proportion of over-aged students is very high at 68.6%. Many children enter Primary Year 1 without going through any ECE due to the lack of ECE centres. An emerging pattern in Table 1 that the MEHRD will need to monitor is that although the proportion of repeaters dropped to 3%, there is an indication that these repeating students are dropping out. Furthermore, Figure 3 shows that only 67% of pupils who enter prep (Year 0) reach Year 6 without repeating or dropping out, using an indicator called the survival rate.

Figure 3: Survival Rate- Expected chance of pupil lasting from Prep to Year 6 - Primary

	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6
SR	90%	84%	82%	77%	72%	63%
SR Boys	92%	87%	85%	81%	76%	67%
SR Girls	88%	81%	78%	73%	68%	60%
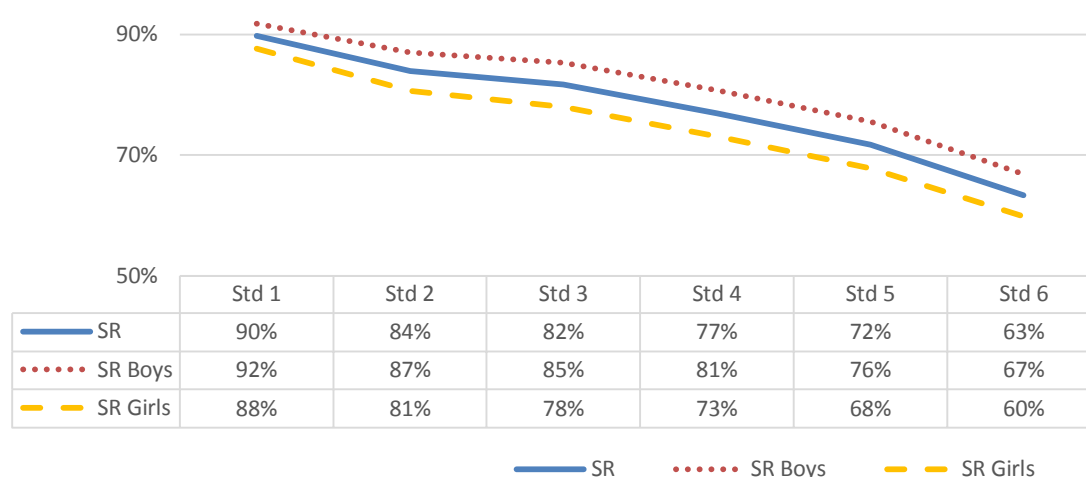
Source: 2013 SIEMIS data
Note: *In Figure 3 Std 1 =Grade 1*

A simplified explanation of this indicator is that it tells us the chances of a child who enrols in prep reaching Year 6 without dropping out. As a priority, the MEHRD will need to monitor the repetition and dropout rates generated from the 2015 annual school survey data to ensure this is not an emerging trend. The NEAP design team will need to consider these issues and formulate activities which will maximise pupil retention to reverse the downward trend seen in Figure 2.

On a positive note, the Gender Parity Index (GPI) was 0.97 (for the NER) in 2014, which indicates that there are 3 fewer girls for every 100 boys of the official age group participating in primary education. It is suggested that when the MEHRD consider interventions to improve gender equality, they consider focusing on bridging gaps in education outcomes as well as improving access to education.

3.1.3 Do boys and girls have equal access to secondary education?

No, in 2014, there were 10 fewer girls participating in secondary education for every 100 boys. When we examine the number of pupils placed in Forms 1, 4 and 6, it can be seen this maybe because there are fewer females placed in Forms 4 and 6. Paradoxically, when secondary pupils in the official age group are analysed, it can be seen that 9 more girls participated in education for every 100 boys. This may be because boys are more likely to repeat a year than

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[1] The official age to attend Prep (Year 0) of Primary is 6 years old

girls. One of the major issues in secondary education is that there is a lack of places available in Forms 4 and 6. The MEHRD will need to prioritise increasing capacity for both boys and girls in these forms in the next NEAP.

Figure 4 shows that at the secondary level, the GER for Forms 1 to 3 (Junior secondary) was 77.2% in 2014. The NER was 42% in 2014. The gap between the GER and NER in this sector denotes a high proportion of over-aged pupils in the existing junior-secondary schools in 2014.

Figure 4: GER and NER in Secondary Education, Junior & Senior
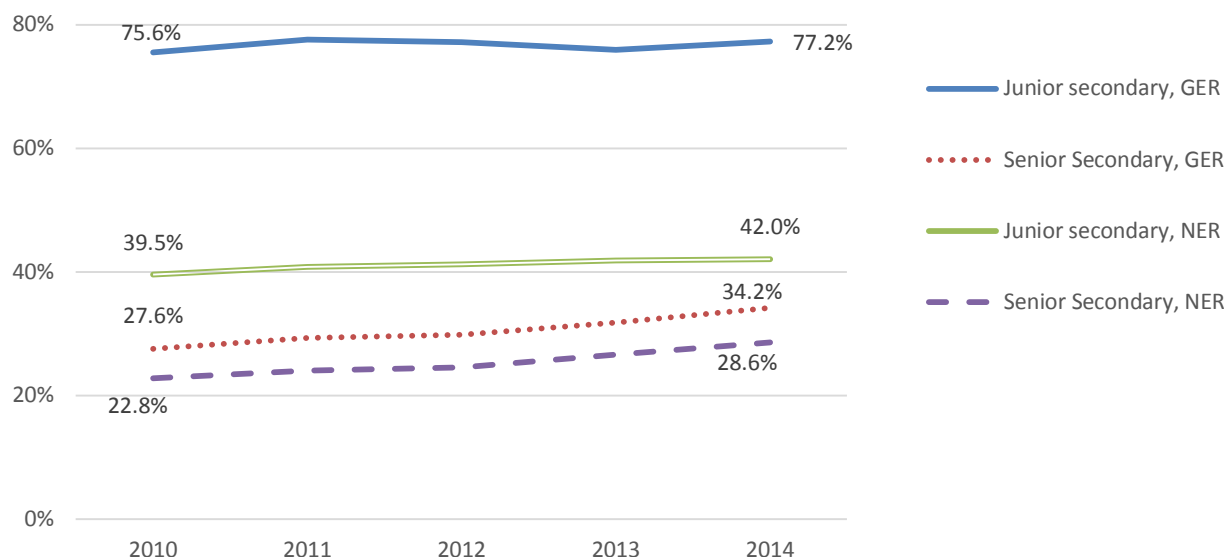
Source: SIEMIS 2014

The Gender Parity Index (GPI) value for GER in secondary education is at 1, which indicates girls and boys are participating equally at junior-secondary schools. In contrast, the GPI for the NER is at 1.1, which indicates there are 10 *more* girls *of the official age group* for every 100 boys participating in secondary education. This may be a result of a number of factors, one of which is that the girls' repetition rate has been lower than boys' in nearly every grade since 2012. This fact alone would contribute to a higher proportion of girls of the official age participating in secondary education.

Figure 4 also shows that the GER for Senior Secondary was 34.2% in 2014. The NER was 28.6% in 2014. Interestingly, the gap between the GER and NER in this sector denotes that the proportion of over-aged pupils in the existing senior-secondary schools is much lower than at the junior-secondary schools.

The GPI value for GER in senior secondary education is at 0.9, which indicates there are 10 fewer girls participating in education for every 100 boys. To have gender parity, ideally boys and girls should be participating equally. In contrast, the GPI for the Senior Secondary NER is at 1.0, which indicates girls and boys participating equally in secondary education.

Figure 5 shows the proportion of pupils who are placed in Forms 1, 4 and 6 in comparison to the previous grade. MEHRD determine placement by a number of factors such as choices of the pupils, scores, space availability and gender equity. For example, a National Secondary School (NSS) entrance score is higher than Provincial Secondary Schools (PSS) and Community High Schools. Therefore, where a pupils' first choice is a NSS and the second choice is a PSS, the pupil may be placed in the PSS if their score is below the mark required for the pupil's first choice.

Figure 5: Percentage of Pupils Place and the % Female to % Male Placed Ratio
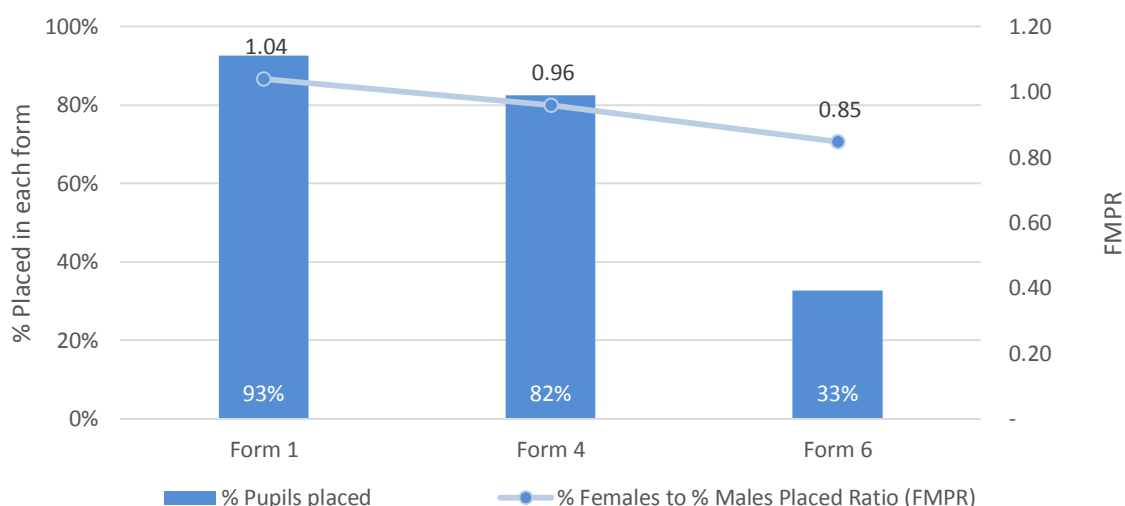
Worryingly, although 93% of year 6 pupils are placed in Form 1, only 33% of Form 5 pupils are placed in Form 6. To identify gender disparity, we can compare the percentage of Females to the percentage of Males Placed Ratio (FMPR). Using this indicator for Form 1, we can see the FMPR is 1.04. This effectively means there are 4 more girls who are placed in Form 1 who were in the previous grade for every 100 boys. Disturbingly, the FMPR goes down to 0.85 in Form 6, meaning that there are 15 fewer girls placed in Form 6 who were in the previous grade for every 100 boys. By examining the FMPR (Table 8) at the provincial level, we can see that only in Honiara are there equal proportions of males and females placed in Form 6.

As pupils exit at the various stages of Secondary education, they do have the option of joining Technical Vocational Education and Training (TVET) or a Rural Training Centres (RTC) centre. In total, Table 9, shows that there were 2,345 students studying at this level, which in comparison is 20 times smaller than the Secondary education sector. Therefore, the MEHRD may want to consider increasing the size of this sector to provide students with options in key areas that will support Industry and Agriculture in the Solomon Islands. For more information about these areas, please review Section 4.4

Recommended further analysis
-Identify provinces where disabled pupils' and girls' participation is far worse than boys' and consider types of interventions in provincial plans by sector.
- Analyse the indicators such as the retention and dropout rates at the subnational level to understand where targeted interventions would have the highest impact in reducing dropouts and improving the retention rate.

3.2   Strategic Outcome 2: Improve the quality for all levels of education

The quality of education in the Solomon Islands becomes very crucial in the whole spectrum of education development. Teacher data and learning outcomes are the most important sources of information to be able to determine the quality of education in the Solomon Islands, so ideally, this section would analyse learning-outcome indicators. However, learning-outcome data are not available, a set of proxy indicators are employed. These proxy indicators use data to measure the recruitment of certified and qualified teachers and the ratio of pupils to qualified teachers.

3.2.1 Has quality improved in ECE?

Yes, since 2010, an extra 268 ECE teachers are now employed in the sector, and this has meant nearly half (48.3%) of ECE teachers are now certified to teach. As there are a very limited number of ECE centres in the country, it will be essential to undertake further in-service and pre-service training for ECE teachers if an ECE national curriculum is to be effectively delivered.

The Ministry of Education is currently reviewing its policy on ECE. This policy is an essential element to promote the rights of early-childhood learning in the Solomon Islands. With this aim in mind, the following analysis reviews the progress the country has made using education indicators. Data are very limited in this sector, which hinders the depth of this analysis.

The ECE Pupil-to-Teacher Ratio (PTR) has improved from 19.7:1 in 2010 to 16.8:1 in 2014, which is close to the standard norm of 15:1 (Table 10). Figure 6 indicates this improvement may have come from the additional 268 teachers who have been recruited since 2010. It is understood that many of these teachers are new graduates from the Solomon Island National University (SINU) and other institutions such as APTC.

Figure 6: Percentage of certified teachers and qualified teachers v total number of teachers - ECE
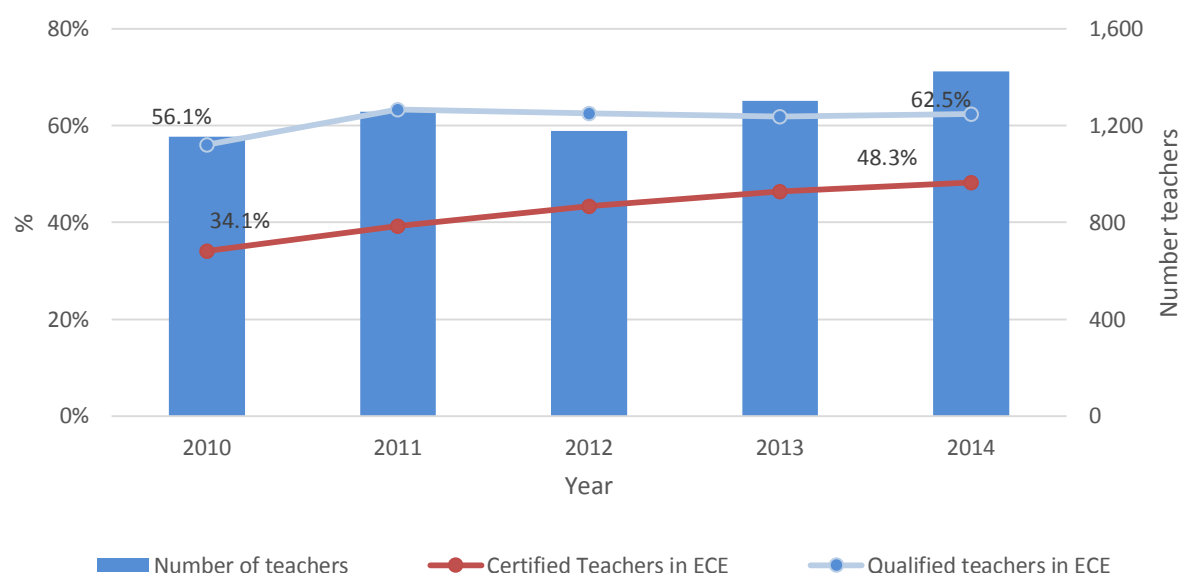
Source: SIEMIS, 2014

Through examining Figure 6, it can be seen that recruiting these new graduates means that 48.3% of ECE teachers are now certified to teach. A proportion of teachers (62.5%) have the academic qualifications to teach ECE, even though they may not be certified teachers. Although the proportion of certified teachers showed an improvement of 14% since 2010, it is essential that the MEHRD run more in-service and pre-service training to reduce the number of uncertified teachers. This is essential if an ECE national curriculum is to be delivered effectively throughout the country. It is appreciated that improved learning outcomes also depend on good teaching performances and sufficient learning resources, but these data are not available for the ECE sector, and so they are not assessed in this report.

In regards to the proportion of female teachers in the sector, the GPI is at 1.06, which shows that there are six more females for every 100 males teaching in ECE.

Recommended further analysis
Identify provinces where teachers require in-service training to support developing NEAP.

3.2.2 Has quality improved in primary education?

Some minor improvements in the quality of teaching and services are evident based on the data processed in SIEMIS. The proportion of certified teachers has risen slightly from 58.7% to 64.4% since 2010, although, the ratio of pupils to certified teachers has improved so it is closer to the MEHRD standard. Furthermore, the quality or quantity of teaching resources in primary schools does not seem to have improved since 2010.

The Ministry of Education has attempted to improve the quality of teaching in primary education since 2010. The following short analysis reviews the outcomes of these efforts with regards to the proportion of certified teachers, the ratio of pupils to teachers with different categories of qualifications and teaching resources.

Table 11 shows that in 2014, there are 5,0252 primary-school teachers, of which 42.8% are female who are working in community, private, church and government schools. However, among the total number of primary-school teachers, only 64.4% of them are certified to teach (Figure 7). As with the ECE sector, there are a number of non-certified teachers who possess non-teaching qualifications that allow them to enter the profession. An opportunity should be created for this group of teachers to become certified as a priority, and appropriate interventions should be considered in the next NEAP.

Figure 7: Percentage of Certified teachers, Primary Education, 2010-2014
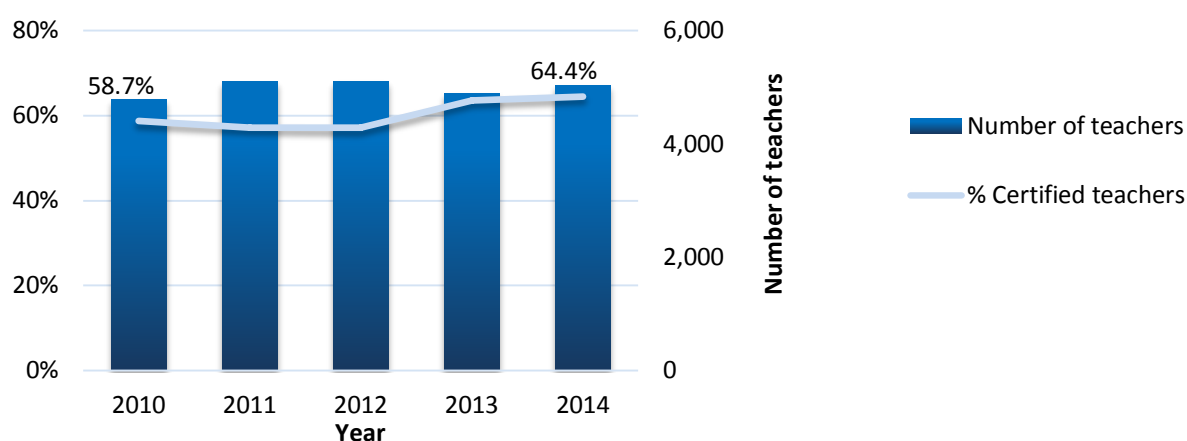
Source: SIEMIS

Figure 8: Pupil to Teacher Ratio (PTR) by category of teacher - primary
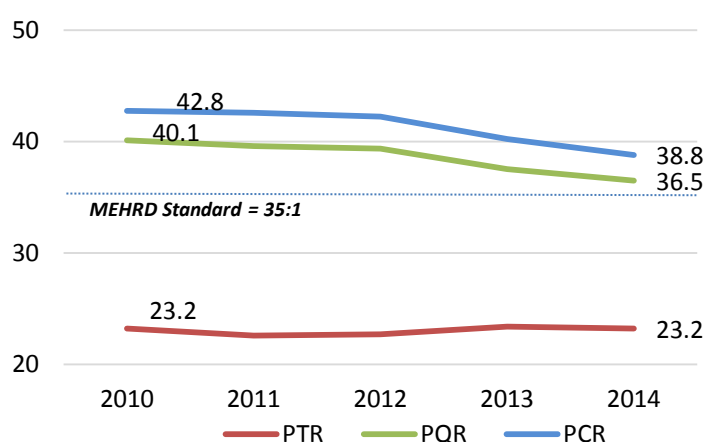
Source: SIEMIS

Figure 8, illustrates the PTR, the Pupil-to-Certified Teacher Ratio (PCR) and the pupil-to-qualified-teacher ratio PQR. In theory, a high PTR indicates that the system is more cost efficient than one with a low PTR. That said, a high PTR will probably have a detrimental effect on teaching quality. In Primary Education, the PTR is 23.2:1, which is well below the MEHRD standard of 35:1[3], so this implies that the system is very inefficient.

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[2] This figure differs from the number of teachers in the payroll system, as the payroll system only captured information on teachers who were appointed by the National Teaching Service Commission.

[3] The Teaching norm is detailed in the Teachers Services Hand Book. It is 35:1 for the primary sector and 40:1 for secondary sector.

It can be seen that the PCR is declining positively from 42.8:1 to 38.8:1, but this ratio is a little high compared to the MEHRD standard, which is 35:1. Likewise, the (PQR) has been declining at the same rate as the PCR. Therefore, the MEHRD has been successful in recruiting a more qualified workforce, but it is apparent that the MEHRD has to consider how these efforts can be continued with some urgency. It could be argued that if the MEHRD reduced the number of non-certified teachers, it would improve efficiency, through increasing the PTR to the MEHRD 35:1 standard. Furthermore, as less non-certified teachers would be in the system, pupils would have a greater likelihood of being taught by a certified teacher, although they would be sitting in larger classes. It has to be highlighted at this point that a great deal of consideration would have to be made before pursuing this strategy.

The national average of pupils per class room in primary is 23.6 (Table 16). Central, Malaita, Makira and Ulawa, Guadalcanal and Honiara Provinces have the five highest averages, with Honiara having an average of 60.4 pupils per classroom.

Overall, Table 10 shows that in 2014, there were 0.4 pupils per textbook in primary schools nationally, and this has not improved since 2010. This effectively means there are only 2.5 textbooks for each child, so it can be concluded that there are not enough textbooks for each pupil in every subject.

However, Figure 9 shows that head teachers only rate 65% of their limited learning materials as 'good quality'. This rating has been fairly constant since 2010, so it could be concluded that there is also some dissatisfaction with the materials they do have. Further analysis is required to identify the textbooks that need to be targeted by the MEHRD, as these figures do not tell us whether the textbooks are appropriate or what condition they are in.

Figure 9: Quality of learning materials - Primary
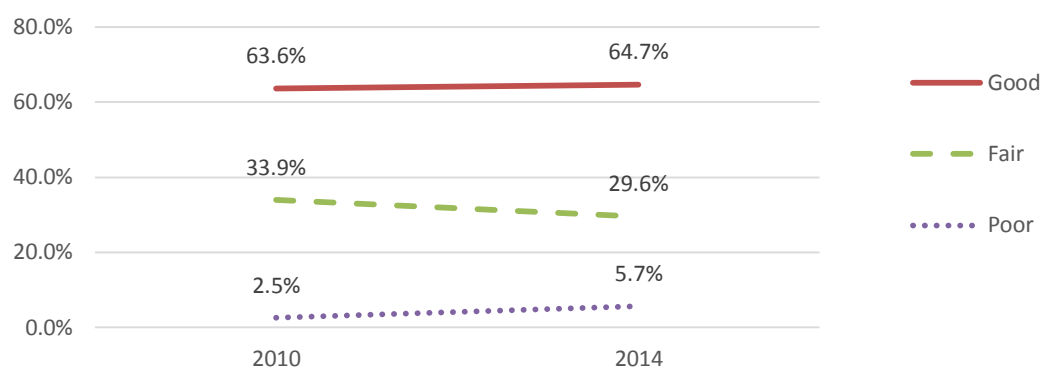
Source: SIEMIS 2014

At this point, it is also pertinent to highlight that the need for textbooks is greatest (Table 14) in Central, Guadalcanal, Honiara, Malaita, and Temotu. In Honiara, there are over 32.7 pupils per textbook primary schools.

Another measure of quality that can be used is the repetition rate, which indicates the percentage of pupils who repeat a year. Encouragingly, Table 17 shows that the repetition rate has more than halved since 2011 across the Primary grades, and now ranges between 4.5% in Prep to 1% in Grade 6. The table also shows that boys have a slightly higher likelihood of repeating than girls.

Recommended further analysis:
-Identify the type of textbooks required and schools where there is a shortage.
-Review primary-education learning outcomes and identify provinces and schools where targeted interventions are required

3.2.3 Has quality improved in secondary education?

Yes, the number and proportion of qualified and certified teachers has risen in secondary schools. Although the number of pupils to certified teachers (30.7:1) is now much lower than the MEHRD standard of 40 pupils to 1 teacher, it can be argued that this indicates the system is inefficient. The number of textbooks is limited to 2.1 per pupil, but there is evidence that the quality of these textbooks has improved. As a priority, the MEHRD will need to identify how appropriate textbooks can be distributed to the correct grades and schools.

The MEHRD has made efforts to improve the quality of teaching in primary education in the last five years. The following analysis reviews the outcome of this work with regards to the proportion of certified teachers, the ratio of pupils to teachers with different categories of qualifications and teaching resources.

Further areas of study are then identified, and it would be advantageous for the NEAP design team to consider undertaking this work as part of their situational analysis.

Table 11 shows that at the secondary level, there are 2,329 teachers across community high schools, provincial secondary schools and national secondary schools, of which 33.3% are female. Figure 9 illustrates that the proportion of certified teachers has increased from 68.7% in 2010 to 77.1% in 2014. As in primary education, a proportion of teachers (82.4%) have the academic qualifications to teach, even though they may be non-certified. In terms of the teachers' academic qualifications, 30% of teachers have a certificate in teaching, 37% have a diploma in teaching and 19% of teachers did not record their qualification when the annual school survey was conducted.

Figure 10 illustrates the PTR, the PCR and the PQR. In secondary education, the PTR is 20.2:1, which is well below the MEHRD standard of 40:1, which implies that the system is extremely inefficient. It can be seen that the PCR is declining positively from 35.7:1 to 30:7, and this ratio is much lower than the MEHRD standard of 40:1.

Figure 10: Number of teachers and percentages of certified and qualified teachers - Secondary education
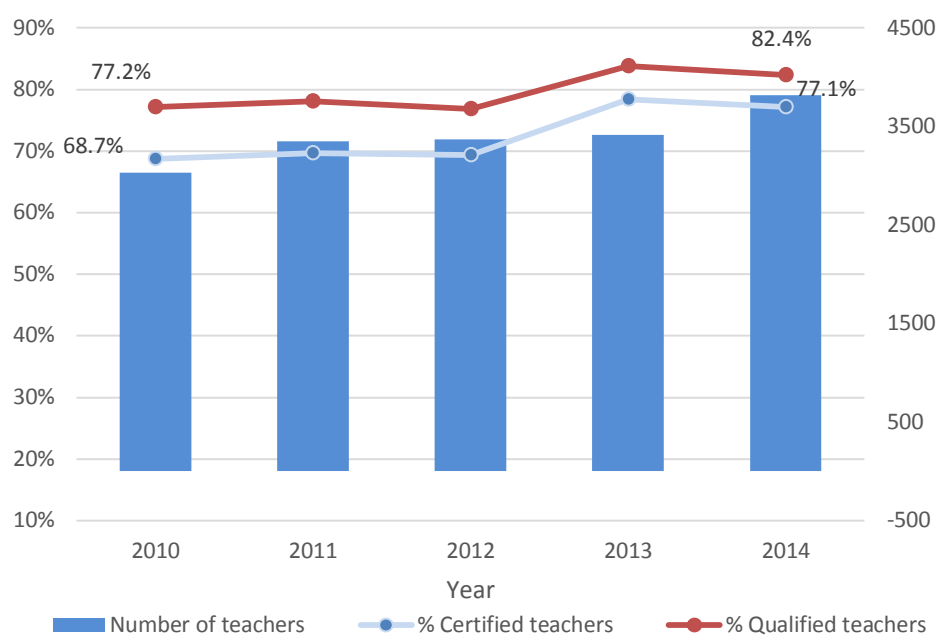
Source: SIEMIS, 2014

Interestinglly, the national average of pupils per class room in secondary is 39.6 (Table 16). When we compare this figure with the PTR, it shows that teachers are not being utilised effectively as they could, and schools should consider splitting classes to improve the educational experience. When we examine this data at the subnational level, Guadalcanal, Isabel, Malaita, Western and Honiara Provinces have the five highest averages, with Honiara having an average of 60.4 pupils per classroom.

Therefore, the MEHRD has been successful in recruiting a more qualified workforce. As in primary education, the MEHRD could consider reducing the number of non-certified teachers, to improve efficiency, through increasing the PTR towards the MEHRD 40:1 standard.

Other options would be to reset the MEHRD standard PTR for secondary education with the aim of maintaining the level of quality provided by having the current low PTR. In the next planning cycle, a great deal of consideration will have to be made regarding the strategic direction the MEHRD wishes to go in here.

Table 14 shows that there are only 2.1 textbooks per pupil in the secondary-education sector. This statistic highlights how poorly resourced schools are with teaching and learning materials. Encouragingly, the proportion of the limited teaching resources which head teachers reported that they would rate as 'good quality', improved from 25% in 2010 to 46% in 2014 (Figure 11). That said, the Ministry needs to significantly improve the provision of textbooks to secondary schools. It is a suggestion that further analysis be conducted to identify the textbooks, schools and grades, which the MEHRD should target.

Figure 12: Pupil to Teacher Ratio (PTR) by category of teacher - Secondary
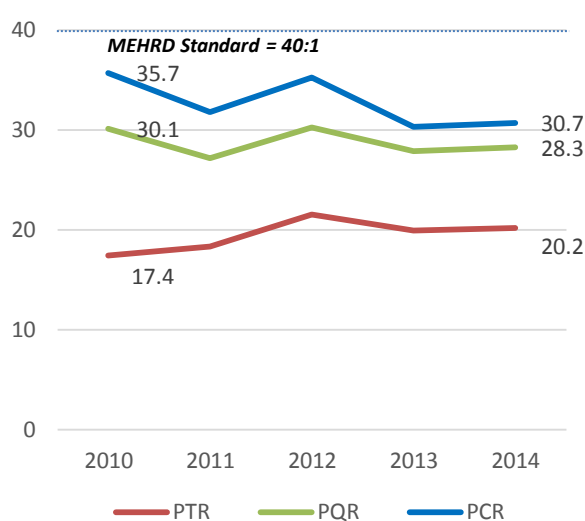
Source: SIEMIS, 2014

Figure 11: Quality of learning materials- Secondary
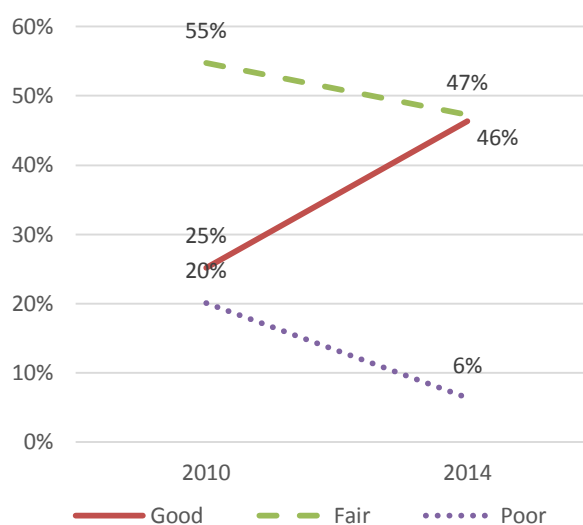
Source: SIEMIS 2014

It is noted (Table 17) that the repetition rate is less than 1.1% across Forms 1 to Form 7, and that there has been a slight improvement since 2011.

Recommended further analysis:
- Assess the effect limited qualified teachers and teaching and learning resources have had on the learning outcomes once Atlas exams system and EMIS are connected.
- Review education learning outcomes by sector and identify provinces and schools where targeted interventions are required.
- Identify the grades and schools where textbooks are required by sector at provincial, school and grade level.

3.3   Strategic Outcome 3: Improve management of sector-wide education program

In 2014, the consolidated education budget was about SI$1,029.3 million. The overall, SIG-funded recurrent and development budget and allocations to MEHRD in 2014 amount to SI$914.3 million, compared to SI$115 million of sector support financing. Spending on education as a percentage of Gross Domestic Product (GDP) increased from 7.6% in 2010 to 12.3%. However, the recurrent budget was overspent by 12.9%, whilst the development budget was underspent by 16.1%.

As EMIS stores little data on finance, this section summarises findings of MEHRD Line Ministry Expenditure Analysis (2014).

Figure 13: Gross Domestic Product (GDP) for Education Sector

Source: MEHRD Finance
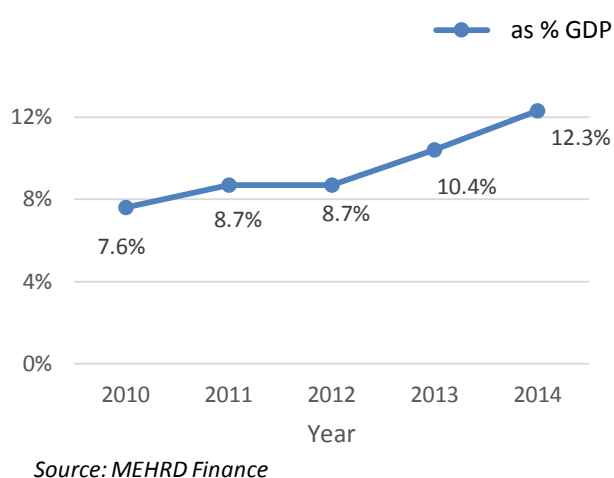
Figure 13 highlights that spending on education as a percentage of Gross Domestic Product (GDP) increased from 7.6% in 2010 to 12.3% in 2014. The actual spending on education has been higher than what was originally allocated in the Solomon Island Government (SIG) budget in the last three years. When examining the budget in detail, it can be seen that the recurrent budget was overspent by 12.9%, but the development budget was underspent by 16.1%. This situation means the total expenditures in 2014 as a percentage of GDP are likely to be lower.

The 2014 consolidated education budget was SI$1,029.3 million, an overall increase of 1.3% in comparison to the 2013 allocations. The 2014 MEHRD consolidated budget comprises a SIG-funded recurrent budget of SI$695.3 million (an increase of 22.4% from 2013), a budget support envelope of SI$115 million (a 34.5% decrease from 2013), an appropriated development budget of SI$94 million (a decrease of 15.8% from 2013) and non-appropriated donor funds in the development budget amounting to SI$125 million (a decrease of 22.4% from 2013).

Total SIG-funded expenditure on education in Solomon Islands accounted for 24.5% of the SIG-funded consolidated budget between the years 2011-2013. Figure 13 shows that in 2014, the consolidated education budget was about SI$1,029.3 million, which was 29.6% of the SIG-funded consolidated budget.

Figure 14: Consolidated MEHRD Budget as % of SIG Nominal GDP - 2010-2014

Source: MEHRD Finance
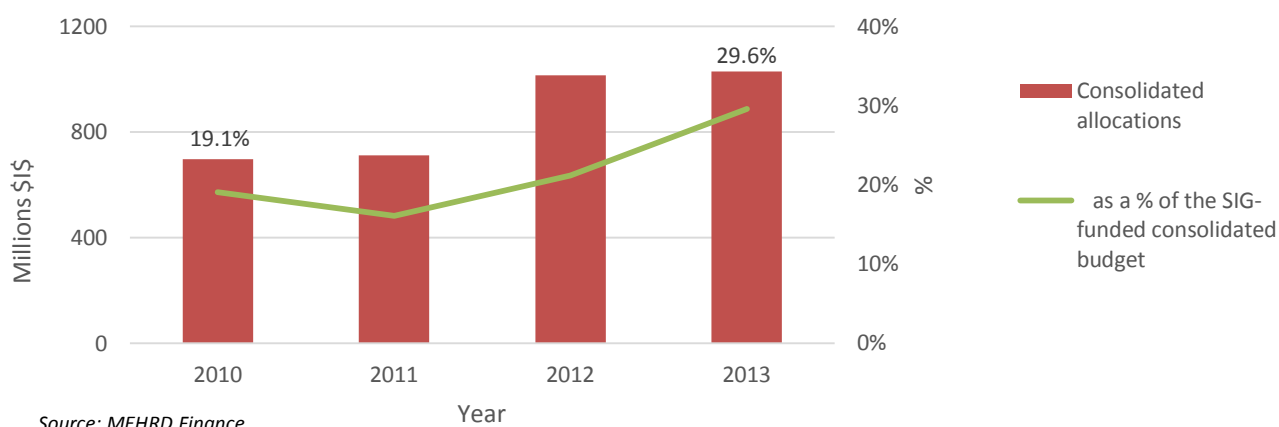
Table 20 highlights that the overall, SIG-funded recurrent and development budget and allocations to MEHRD in 2014 amount to SI$914.3 million, compared to SI$115 million of sector support financing. In 2013, 21.2% of the SIG-funded consolidated budget was spent on education and this rose to 29.6% in the next year.

It has also noted that there has been a 47.7% increase in the consolidated allocations (Figure 13) from SI$696 million in 2010, to SI$1,029 million in 2014. The MEHRD Line Ministry Expenditure Analysis (2014) highlights that there has been a "significant increase particularly in 'other' allowances as percentage of total allowances in the Ministry. In 2013 other allowances accounted for 96% of total allowances in the MEHRD payroll budget. This continues to raise concerns on the quality of expenditures however the current review of the payroll expenditure is expected to share more information about the allowances. Generally, other allowances include, charge, hard touring and induction allowances paid to teachers teaching in remote areas of the country." Other reasons for the increase in allocations relate to activities such as the introduction of the tertiary scholarship scheme.

In 2014, the government reversed the policy decision for universal domestic scholarships (for SINU) and to fund only domestic teacher trainees only. Through assistance from the Australian Government, MEHRD is also in the process of upgrading its Student Management Information System, which includes validating data on existing students, as well as recording data for 2015 scholarship awards. In parallel, tighter controls over the award process for new scholarships in 2014, including sign-off at the Permanent Secretary level, has led to the total number of approved scholarships falling below the annual budget allocation.

For a more comprehensive review of financial management information in education, the reader is encouraged to read the MEHRD Line Ministry Expenditure Analysis (2014).

4   Education Performance Indicator tables

4.1   Indicators to measure Access and Participation in Education

Table 1: Indicators to measure Access and Participation in Education

Indicator	*2010*	*2011*	*2012*	*2013*	*2014*
Gross enrolment Rate (GER)					
ECE	47.7%	47.7%	44.4%	43.8%	49.3%
Primary Prep-Year 6	126.5%	123.9%	121.2%	124.5%	113.0%
Junior secondary, Year 7 to 9	75.6%	77.6%	77.2%	75.9%	77.2%
Senior Secondary, Year 10 to 13	27.6%	29.3%	29.8%	31.7%	34.2%
GPI:GER in ECE	1.00	1.00	1.00	1.00	1.00
Net Enrolment Rate (NER)					
ECE	34.3%	34.1%	31.1%	30.7%	34.3%
Primary Prep-Year 6	91.2%	91.6%	89.5%	88.9%	88.4%
Junior secondary, Year 7 to 9	39.5%	40.8%	41.3%	41.8%	42.0%
Senior Secondary, Year 10 to 13	22.8%	24.0%	24.6%	26.6%	28.6%
GPI:NER in ECE	1.00	1.00	1.00	1.00	1.00
Age specific Enrolment Rate for age 3	**28.1%**	**28.2%**	**26.5%**	**25.1%**	**28.7%**
Male	27.7%	28.6%	26.1%	25.0%	29.0$
Female	28.5%	27.7%	26.8%	25.1%	28.4%
Age specific enrolment rate for age 5	**62.2%**	**60.9%**	**58.0%**	**57.5%**	**61.3%**
Male	61%	60%	58%	57%	61%
Female	63%	62%	58%	58%	62%
Gross Intake Rate (GIR)	**118.70%**	**113.80%**	**112.30%**	**116%**	**112.90%**
Male	119.6%	115.4%	114.0%	116.2%	116.1%
Female	117.8%	112.0%	110.6%%	115.9%	109.7%
Net Intake Rate (NIR)	**30.1%**	**28.5%**	**28.7%**	**28.4%**	**27.6%**
Male	29.0%	28.2%	28.7%	27.4%	27.4%
Female	31.2%	28.7%	28.6%	29.4%	27.8%
Total average of Repetition Rate (RR) in Prep to Year 6	**8.6%**	**7.9%**	**7.5%**	**7.4%**	**3.3%**
Total average of Dropout Rate (DR) in Prep to Year 6	**7.2%**	**8.9%**	**6.3%**	**6.6%**	**9.1%**
Transition Rate (TR) to Year 1 of Primary Education	**94.9%**	**92.7%**	**95.2%**	**93.5%**	**91.1%**
Transition Rate (TR) from Year 6 to Form 1	**95.7%**	**92.3%**	**90.0%**	**93.7%**	**91.4%**
Transition Rate (TR) from Form 3 to From 4	**93.3%**	**89.1%**	**87.4%**	**92.6%**	**89.1%**
Survival Rate (SR) to Year 6	**62.4%**	**54.8%**	**65.7%**	**63.4%**	**54.8%**
Survival Rate (SR) to Form 7	**7.7%**	**3.8%**	**5.2%**	**5.7%**	**3.8%**

Source: *2014 SIEMIS Data*

Most of the indicators in the above table were extracted from the SIEMIS system. Some of these indictors could be used to support all levels of planning and to report progress on national, regional and international policy goals.

4.2   Information about ECE, Primary and Secondary Schools

Only schools that are registered in SIEMIS are recorded in the following tables.

Table 2: Number of Schools in Solomon Island by school type, 2010-2014

School Type	2010	2012	2013	2014
Kindergarten	547	492	482	455
Primary School	525	542	529	507
Community High School	163	190	203	223
National Secondary School	9	11	12	12
Provincial Secondary School	16	16	15	15
Rural Training Centre	26	42	43	43
Grand Total	**1,286**	**1293**	**1284**	**1255**

Source: 2014 SIEMIS data

Table 3: Total Number of Schools by Authority Type, 2014

School Type	Church	National	Other	Provincial	Total
Community High School	53		3	167	223
Kindergarten	93		5	357	455
National Secondary School	10	2			12
Primary School	143		3	361	507
Provincial Secondary School			1	14	15
Rural Training Centres	35		1	7	
Grand Total	**334**	**2**	**13**	**906**	**1255**

Source: 2014 SIEMIS data

Table 4: Total Number of Schools by Province, 2014

Province	Church	National	Other	Provincial	Total
Central	3			57	60
Choiseul	16			64	80
Guadalcanal	46		1	135	182
Honiara	23	1	11	43	78
Isabel	4			90	94
Makira and Ulawa	12	1		136	149
Malaita	57		1	253	311
Rennell and Bellona	5			11	16
Temotu	1			67	68
Western	167			50	217
Grand Total	**374**	**2**	**13**	**906**	**1255**

4.3 Information on School ECE, Primary and Secondary School Enrolment

The following tables include enrolment from SIEMIS and other sources.

Table 5: Total Enrolment by Sector, 2010-2014

TOTAL ENROLMENT, SOLOMON ISLAND	2010	2011	2012	2013	2014
Early Childhood Education	22,800	23,231	21,975	22,684	23,992
Primary Education	119,448	122,077	121,904	124,266	125,298
Secondary Education	37,478	40,124	41,655	43,675	47,050
Grand Total	**179,726**	**185,432**	**185,534**	**190,625**	**196,340**

Source: *2014 SIEMIS data. The total school enrolment for Secondary Education include enrolment data for national secondary, provincial secondary and community high schools.*

Table 6: Total Enrolment disaggregated by Authority Type and by Gender, 2014

SchoolType	Church			Other			Provincial			National			TOTAL		
	Male	Female	Total	Male	Female	Other	Male	Female	Total	Male	Female	Total	Male	Female	Total
Kindergarten	2,368	2,461	4,829	251	239	490	9,740	8,933	18,673				12,359	11,633	23,992
Primary Prep to Year 6	15,629	14,600	30,229	1,047	997	2,044	48,631	44,394	93,025				65,307	59,991	125,298
Secondary Form 1 +	6,876	6,545	13,421	299	284	583	16,825	15,118	31,943	601	502	1,103	24,601	22,449	47,050
Grand Total	**24,873**	**23,606**	**48,479**	**1,597**	**1,520**	**3,117**	**75,196**	**68,445**	**143,641**	**601**	**502**	**1,103**	**102,267**	**94,073**	**196,340**

Source: 2014 SIEMIS data. 2014 SIEMIS data.

Table 7: Enrolment by Sector and Province, 2014

Province	ECE Centres			Prep to Year 6			Secondary Form 1 +			Total
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Central	584	548	1132	3344	3041	6385	954	801	1755	9272
Choiseul	581	502	1083	3399	2997	6396	955	970	1925	9404
Guadalcanal	1789	1678	3467	10837	10060	20897	3869	3796	7665	32029
Honiara	2037	1924	3961	7605	7217	14822	5805	5126	10931	29714
Isabel	891	846	1737	3059	2891	5950	1320	1137	2457	10144
Makira and Ulawa	1445	1283	2728	5431	4980	10411	2083	1884	3967	17106
Malaita	3093	2959	6052	19785	17905	37690	5044	4303	9347	53089
Rennell and Bellona	61	67	128	352	382	734	152	137	289	1151
Temotu	544	488	1032	2809	2459	5268	940	842	1782	8082
Western	1334	1338	2672	8686	8059	16745	3479	3453	6932	26349
Grand Total	**12359**	**11633**	**23992**	**65307**	**59991**	**125298**	**24601**	**22449**	**47050**	**196340**

Source: 2014 SIEMIS data. The total school enrolment for Secondary Education include enrolment data for national secondary, provincial secondary and community high schools.

Table 8: Percentage Pupils Placed & Ratio of Percentage Females to Percentage Males Placed, 2015

Province	% Pupils placed			% Females to % Males Placed Ratio (FMPR)		
	Form 1	Form 4	Form 6	Form 1	Form 4	Form 6
Central	94%	84% ▼	8%	0.97	0.95	0.71
Choiseul	93%	82% ▼	7%	1.05	1.06	3.44
Guadalcanal	▼ 90%	81% ▲	44%	1.03	0.99	0.85
Honiara	93% ▼	78%	32%	1.06	0.85	1.01
Isabel	▲ 97% ▼	76%	21%	1.02	0.93	0.88
Makira/Ulawa	▲ 95% ▲	84% ▲	40%	1.04	1.03	0.80
Malaita	93% ▲	90% ▲	43%	1.00	0.98	0.87
Rennel Bellona	▼ 88% ▲	94% ▼	0%	1.05	1.03	
Temotu	▲ 98%	83%	24%	1.02	1.06	0.78
Western	▼ 90% ▼	81%	19%	1.16	0.98	0.48
Overall	**93%**	**82%**	**33%**	**1.04**	**0.96**	**0.85**

Key:

▲ Provinces with highest proportion of placements

▼ Provinces with lowest proportion of placements

⚑ Provinces where gender parity is not presently being achieved i.e. the FMPR is less than 0.98 or greater than 1.02

Source: 2015 Exam Placement Data and SIEMIS 2014

4.4 Rural Training Centers (RTC) and Technical Vocational Education and Training (TVET) centers

As mentioned previously in this report, the RTC and TVET centers should be providing key skills to support Industry and Agriculture in the Solomon Islands. As there is a total of 2,345 students (Table 9) in this sector, the MEHRD should consider meeting with stakeholders in Industry and Agriculture, to consider how this sector could be enlarged. Secondly, as only 26% of students are females, the MEHRD may want to consider what other courses could be delivered to improve female participation in TVET.

With regards to data quality, it is important to update SIEMIS with most recent data on students who enrolled in the existing rural training centers in the Solomon Islands. This would require a review of the survey instruments and improving the data collection process.

4.5 Special development centre

Table 9 provides the number of enrolments at Rural Training Centres and TVET centers by age groups. The TVET enrolment, includes 62 children (39 Male, 23 Female) who were enroled at the special development centre that caters for students with disabilities. Out of this group, 33 of the students were less than 14 years old.

Table 9: TVET and RTC Enrolment numbers by age

Age	Female	Male	Total	Percentage
<14	15	18	**33**	1%
14	5	4	**9**	0%
15	5	12	**17**	1%
16	11	11	**22**	1%
17	16	29	**45**	2%
18	36	117	**153**	7%
19	67	216	**283**	12%
20	77	223	**300**	13%
21	72	172	**244**	10%
22	65	216	**281**	12%
23	54	111	**165**	7%
24	41	155	**196**	8%
25	21	106	**127**	5%
26	16	66	**82**	3%
27	8	41	**49**	2%
28	15	40	**55**	2%
29	3	23	**26**	1%
30	4	16	**20**	1%
>30	25	77	**102**	4%
Unknown	62	74	**136**	6%
Overall	**618**	**1727**	**2345**	**100%**

4.6   Baseline Indicators to measure quality in education

Table 10: Indicators to measure quality in education

Indicator	2010	2011	2012	2013	2014
Certified Teachers in ECE	**34.1%**	**39.3%**	**43.4%**	**46.4%**	**48.3%**
Male	21.5%	28.6%	39.5%	44.3%	48.7%
Female	36.0%	40.7%	43.9%	48.5%	47.9%
Qualified teachers in ECE	**56.1%**	**63.4%**	**62.6%**	**61.9%**	**62.5%**
Male	46.3%	59.5%	58.9%	59.9%	60.3%
Female	57.5%	63.9%	63.0%	63.9%	64.7%
Certified teachers in Primary, Prep to Year 6	**58.7%**	**57.4%**	**57.1%**	**63.5%**	**64.4%**
Male	60.1%	58.5%	57.8%	64.4%	66.2%
Female	57.3%	56.3%	56.6%	62.8%	62.5%
Not Stated	0.0%	0.0%	23.5%	18.2%	33.3%
Qualified Teachers in Primary, Prep to Year 6	**62.2%**	**61.4%**	**61.1%**	**67.8%**	**68.7%**
Male	63.9%	63.1%	61.9%	68.7%	70.5%
Female	60.5%	59.8%	60.4%	67.0%	66.9%
Not Stated	0.0%	0.0%	29.4%	18.2%	33.3%
Pupil:teacher Ratio (PTR)					
ECE	19.7	18.5	18.6	17.4	16.8
Primary, Prep to Year 6	23.2	22.6	22.7	23.4	23.2
Secondary, Form 1+	17.4	18.4	21.5	20.0	20.2
Pupil: classroom ratio (PCR)					
Primary, Prep to Year 6	24.9	24.5	23.9	24.1	23.8
Secondary, Form 1+	38.8	38.3	38.1	38.8	39.6
Pupil:toilet ratio					
ECE	30.4	30.3	29.4	32.2	33.7
Primary, Prep to Year 6	85.4	81.6	76.5	62.1	73.4
Secondary, Form 1+	88.9	69.9	60.9	59.9	82.0

Source: 2014 SIEMIS data

Table 11: Total Number of Teachers by Sector, 2010-2014

Sector	2010	2011	2012	2013	2014
ECE	1,160	1,260	1,181	1,302	1,424
Primary, Prep to Year 6	4,783	5,089	5,102	4,891	5,025
Secondary, Form 1+	2,150	2,184	1,934	2,188	2,329
Grand Total	**10,103**	**10,544**	**10,229**	**10,394**	**10,792**

Source: 2014 SIEMIS data

Table 12: Total Number of Teachers by Sector, 2014

Education Authority	ECE F	ECE M	ECE Total	PRIMARY F	PRIMARY M	PRIMARY Not stated	PRIMARY Total	SECONDARY F	SECONDARY M	SECONDARY Not stated	SECONDARY Total	TVT/RTC F	TVT/RTC M	TVT/RTC Not stated	TVT/RTC Total	NOT STATED F	NOT STATED M	NOT STATED Total	Grand Total
Archdiocese of Honiara	7	1	8	11	3		14	15	22		37	16	21		37		1	1	97
Central Islands Province	49	13	62	109	164		273	41	104		145	2	3		5	1	1	2	487
Chinese Association				7	2		9												9
Choiseul Province	50	4	54	143	90		233	43	55		98								385
Christian Fellowship Church	15	3	18	32	59		91	19	38		57								166
Christian Outreach Centre	5		5	29	16		45												50
Church of Melanesia	33	5	38	37	23		60	42	78		120	19	39	4	62				280
Church of the Living Word	6		6	11	8		19	5	8		13								38
Church of the Nazarene	4		4	14	2		16	3	1		4								24
Diocese of Auki	14		14	9	18	1	28	4	12	1	17								59
Diocese of Gizo	13	2	15	3	4		7	2	2		4	5	10		15				41
Guadalcanal Province	158	33	191	303	347		650	55	114		169						4	4	1014
Honiara Town Council	119	9	128	149	64	3	216	135	143	2	280		3		3				627
Isabel Province	127	5	132	101	133		234	23	85		108								474
Kelyn Education Authority	3		3	6	2		8												11
Makira & Ulawa Province	154	31	185	157	266		423	50	115	3	168								776
Malaita Province	227	47	274	483	738	3	1224	74	232	7	313		14		14	1	3	4	1829
MEHRD								16	37		53								53
Perch	3		3	7	4		11	3	2		5								19
Red Cross	3		3									3			3				6
Rennell & Bellona	7		7	8	30		38	4	16		20						1	1	66
Salesians of Don Bosco												2	6		8				8
Seventh Day Adventist Church	37	3	40	266	233		499	55	105		160	6	13	5	24				723
South Seas Evangelical Church	35	1	36	86	48		134	39	97	1	137	17	49		66				373
Talea								4	15		19								19
Tamlan	7	2	9	12	6		18												27
Temotu Province	64	9	73	99	173		272	36	103		139								484
United Church	63	7	70	179	137		316	45	95	1	141	3	15		18				545
Western Province	37	4	41	97	70		167	44	74		118								326
Woodford	4	1	5	15	5		20	3	1		4								29
Grand Total	**1244**	**180**	**1424**	**2373**	**2645**	**7**	**5025**	**760**	**1554**	**15**	**2329**	**73**	**173**	**9**	**255**	**2**	**10**	**12**	**9045**

Source: 2014 SIEMIS Data
Note: The category School type is a different category than Sector. Teachers in the category Community High School type category include are teaching across sectors.

Table 13: Pupil: Certified Teacher Ratio (PCR) by sector in each Province, 2014

Province	Primary Education, Prep to Year 6 Pupils	Teachers	PCR	Secondary Form 1+ Pupils	Teachers	PCR
Central	6,385	197	**32.4**	1,755	97	**24.6**
Choiseul	6,396	167	**38.3**	1,925	69	**35.6**
Guadalcanal	20,897	511	**40.9**	7,665	233	**34.9**
Honiara	14,822	348	**42.6**	10,931	174	**50.5**
Isabel	5,950	215	**27.7**	2,457	118	**23.3**
Makira and Ulawa	10,411	291	**35.8**	3,967	180	**26.2**
Malaita	37,690	806	**46.8**	9,347	403	**34.7**
Rennell and Bellona	734	35	**21.0**	289	21	**13.8**
Temotu	5,268	157	**33.6**	1,782	62	**28.7**
Western	16,745	502	**33.4**	6,932	182	**38.1**
Overall	**125,298**	**3229**	**38.8**	**47,050**	**1539**	**30.6**

Source: *2014 SIEMIS data (Teachers – Worksheet PTR - EFA11)*
Note: The above table presents the number of certified teachers in Primary and Secondary sectors. This sector category is a different category than School Type used in other tables. The teachers in the category Community High School type category are divided up between primary and secondary sectors.

Table 14: Pupil: Textbook Ratio by Sector and Province, 2014

Province	Primary Education, Prep to Year 6			Secondary Education, Form 1+		
	Enrolled	Number Textbooks	Pupil Textbook	Enrolled	Number Textbooks	Pupil Textbook
Central	6,385	716	8.9	1,755	4,184	2.4
Choiseul	6,396	963	6.6	1,925	6,595	3.4
Guadalcanal	20,897	1992	10.5	7,665	12,805	1.7
Honiara	14,822	453	32.7	10,931	16,966	1.6
Isabel	5,950	728	8.2	2,457	2,179	0.9
Makira and Ulawa	10,411	1336	7.8	3,967	12,985	3.3
Malaita	37,690	3660	10.3	9,347	20,917	2.2
Rennell and Bellona	734	223	3.3	289	992	3.4
Temotu	5,268	643	8.2	1,782	3,161	1.8
Western	16,745	2407	7.0	6,932	18,436	2.7
Grand Total	**125,298**	**13121**	**9.5**	**47,050**	**99,220**	**2.1**

Source: 2014 SIEMIS data. This information refers only the primary and secondary schools that have completed the section on learning resources in the SIEMIS Survey for learning resources in the SIEMIS Survey forms.

Table 15: Pupil Textbook Ratio by province by level 2014 - Primary

Province	Prep	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Total
Central	43.6	13.2	11.8	8.3	5.9	5.8	5.0	8.9
Choiseul	33.4	7.5	7.2	6.1	4.9	4.9	4.7	6.6
Guadalcanal	32.6	13.9	12.8	9.7	7.5	7.2	5.9	10.5
Honiara	72.1	40.6	39.7	34.8	26.9	22.6	24.1	32.7
Isabel	35.0	11.6	11.6	7.4	6.3	5.2	4.3	8.2
Makira and Ulawa	37.3	11.0	10.3	7.1	5.5	4.9	4.5	7.8
Malaita	35.3	13.0	11.5	9.4	6.9	6.7	5.4	10.3
Rennell and Bellona	9.5	4.9	4.1	2.7	2.3	2.2	2.2	3.3
Temotu	60.9	12.8	11.7	8.6	5.5	5.0	3.5	8.2
Western	28.8	8.9	8.7	6.7	5.0	4.6	4.1	7.0
Grand Total	**35.8**	**12.5**	**11.6**	**8.9**	**6.8**	**6.3**	**5.5**	**9.5**

Source: 2014 SIEMIS data

Table 16: Pupil: Classroom Ratio by School type and Province, 2014

	Primary Schools			Community High and all Secondary Schools		
	Classroom	Enrolment	PCR	Classroom	Enrolment	PCR
Central	173	3,908	22.6	128	4,232	33.1
Choiseul	185	3,803	20.6	152	4,518	29.7
Malaita	769	17,853	23.2	831	29,184	35.1
Western	539	11,355	21.1	369	12,322	33.4
Makira and Ulawa	337	7,377	21.9	215	7,001	32.6
Guadalcanal	503	13,380	26.6	342	15,182	44.4
Isabel	197	4,242	21.5	84	4,165	49.6
Rennell and Bellona	39	541	13.9	22	482	21.9
Temotu	146	2,896	19.8	160	4,154	26.0
Honiara	92	5,560	60.4	257	20,193	78.6
Grand Total	**2,980**	**70,915**	**23.8**	**2,560**	**101,433**	**39.6**

Key:

Top five provinces with highest Pupil Textbook Ratio

Sixth and seventh top provinces with highest Pupil Textbook Ratio

Source: 2014 SIEMIS data

Table 17: Repetition Rates, Prep to Form 7

R		Prep	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Form 1	Form 2	Form 3	Form 4	Form 5	Form 6	Form 7
2014	M	4.6%	4.7%	3.9%	3.9%	3.3%	3.2%	.9%	.3%	.7%	.9%	.6%	1.1%	.6%	.3%
	F	4.4%	3.9%	3.4%	3.3%	2.7%	2.7%	1.1%	.3%	.7%	.8%	.6%	1.1%	.1%	.0%
	Tot	4.5%	4.3%	3.6%	3.6%	3.0%	3.0%	1.0%	.3%	.7%	.9%	.6%	1.1%	.4%	.2%
2013	M	11.0%	9.6%	8.6%	9.1%	7.6%	7.2%	2.3%	1.5%	1.9%	2.8%	1.2%	2.1%	1.0%	.0%
	F	10.8%	8.6%	7.9%	6.9%	5.9%	6.0%	2.2%	1.0%	1.4%	2.3%	.9%	2.0%	.9%	.0%
	Tot	10.9%	9.1%	8.3%	8.0%	6.8%	6.6%	2.3%	1.3%	1.7%	2.6%	1.1%	2.1%	1.0%	.0%
2012	M	10.8%	9.4%	8.5%	8.7%	7.3%	6.6%	3.4%	1.0%	1.4%	1.7%	1.3%	2.6%	1.8%	.0%
	F	10.1%	9.1%	8.1%	7.2%	6.2%	6.3%	2.4%	.9%	1.3%	1.8%	1.5%	1.8%	1.4%	.0%
	Tot	10.4%	9.3%	8.3%	8.0%	6.8%	6.4%	2.9%	.9%	1.4%	1.8%	1.3%	2.2%	1.6%	.0%
2011	M	11.5%	9.3%	8.6%	8.4%	8.6%	7.6%	3.4%	1.0%	1.8%	2.0%	1.0%	2.0%	1.5%	.0%
	F	11.1%	8.8%	7.9%	8.5%	7.0%	6.2%	3.0%	.9%	1.7%	1.9%	1.2%	1.8%	.8%	.0%
	Tot	11.3%	9.1%	8.3%	8.4%	7.8%	6.9%	3.2%	1.0%	1.8%	2.0%	1.1%	1.9%	1.2%	.0%

Source: *2014 SIEMIS data*

Table 18: Pupil: Toilet Ratio by Province, 2014

Province	Primary Schools			Community High and all Secondary Schools		
	Enrolment	Toilets	Pupil: Toilet Ratio	Enrolment	Toilets	Pupil: Toilet Ratio
Central	3,908	47	**83.1**	4,232	32	**96.9**
Choiseul	3,803	60	**63.4**	4,518	52	**86.9**
Malaita	17,853	255	**70**	29,184	300	**97.3**
Western	11,355	185	**61.4**	12,322	190	**64.9**
Makira and Ulawa	7,377	89	**82.9**	7,001	79	**88.6**
Guadalcanal	13,380	159	**84.2**	15,182	273	**55.6**
Isabel	4,242	57	**74.4**	4,165	76	**54.8**
Rennell and Bellona	541	12	**45.1**	482	8	**60.3**
Temotu	2,896	31	**93.4**	4,154	27	**89.1**
Honiara	5,560	71	**78.3**	20,193	200	**95.2**
Grand Total	**70,915**	**966**	**73.4**	**101,433**	**1,237**	**82.0**

Source: 2014 SIEMIS data

4.7 Finance Data

Table 19: Education Management Indicators

	2010	2011	2012	2013	2014
SIG Recurrent Budget incl. BS (actuals)	1,644,602,646	1,860,017,439	2,191,564,137	2,318,873,404	2,500,000,000
MEHRD RB incl. BS as % of total SIG Recurrent	**25%**	**29%**	**27%**	**26.2%**	**27.2%**
% Share of MEHRD expenditure by sector level					
Management & HR	4.4%	2.6%	2.7%	2.4%	2.3%
ECE	3.1%	3.3%	3.3%	4.0%	5.2%
Primary	42.9%	40.7%	39.6%	34.4%	37.0%
Secondary	27.6%	23.8%	25.8%	24.8%	25.2%
TVET	5.1%	3.0%	3.3%	3.3%	3.0%
Tertiary	16.8%	26.6%	25.2%	31.2%	27.3%

Source: Ministry of Education and Human Resource Development, Line Ministry Expenditure Analysis Report.

Table 20: MEHRD consolidated, recurrent and development budget allocations (SI$m)

	2011	2012	2013	2014
Consolidated allocations	**696.3**	**711.3**	**1,016.3**	**1,029.3**
as a % of the SIG-funded consolidated budget	*19.1*	*16.1*	*21.2*	*29.6*
SIG-funded recurrent budget allocations	**441.5**	**461.7**	**568.1**	**695.3**
as a % of the SIG-funded recurrent budget	*28.1*	*23.2*	*27.4*	*30.4*
Sector Budget Support	**55**	**115**	**175.5**	**115**
as a % of MEHRD total recurrent budget	*11.1*	*19.9*	*23.6*	*14.2*
Appropriated development budget allocations	**49.9**	**47.7**	**111.6**	**94**
as a % of the appropriated development budget	*10*	*5.5*	*11.9*	*14.9*
Non-appropriated development budget allocations	**150**	**86.9**	**161.1**	**125**
as a % of the non-appropriated development budget	*10.2*	*6.7*	*14.3*	*13.3*

Source: *Ministry of Education and Human Resource Development, Line Ministry Expenditure Analysis Report.*

5 Key results by Province

5.1 Graphs showing time series school's data by province, 2010-2012

The number of schools has increased across all provinces last year. At ECE level, the number of ECE centers has shown a gradual decrease in Isabel, Makira and Ulawa, Malaita, Rennell and Bellona and in Western provinces. At primary level, the number of schools has decrease in Central, Temotu, Western, Rennell and Bellona, Malaita, Makira and Ulawa provinces. On the other hand, the number of community high schools is showing an increasing pattern, or at least no decline, across all provinces.
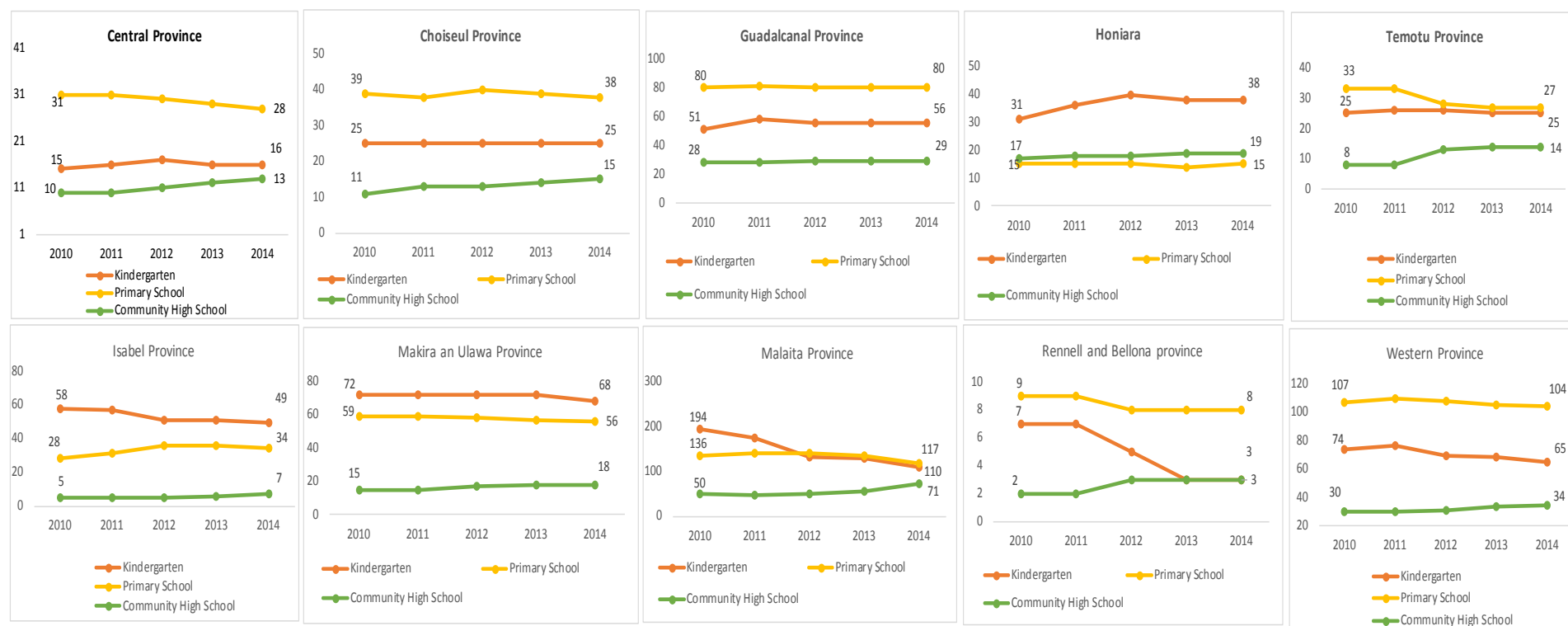
Footnote: The number of national and provincial secondary schools is not added in the above graph, the same numbers remain the same after five years across all provinces.

5.2   Graphs showing time series Enrolment data by Province, 2010-2014

School enrolment in ECE is increasing gradually in most of the provinces except in Rennell and Bellona province where the total number students is showing a severe decline between 2011 and 2013 and began to increase in 2014 again. On the hand, school enrolment for primary and secondary education is showing an increasing layer across all the provinces. Still it is important to closely monitor the retention rate in the primary schools at Isabel Province where the number of student has declined from 6,141 in 2013 to 5,950 students in 2014.
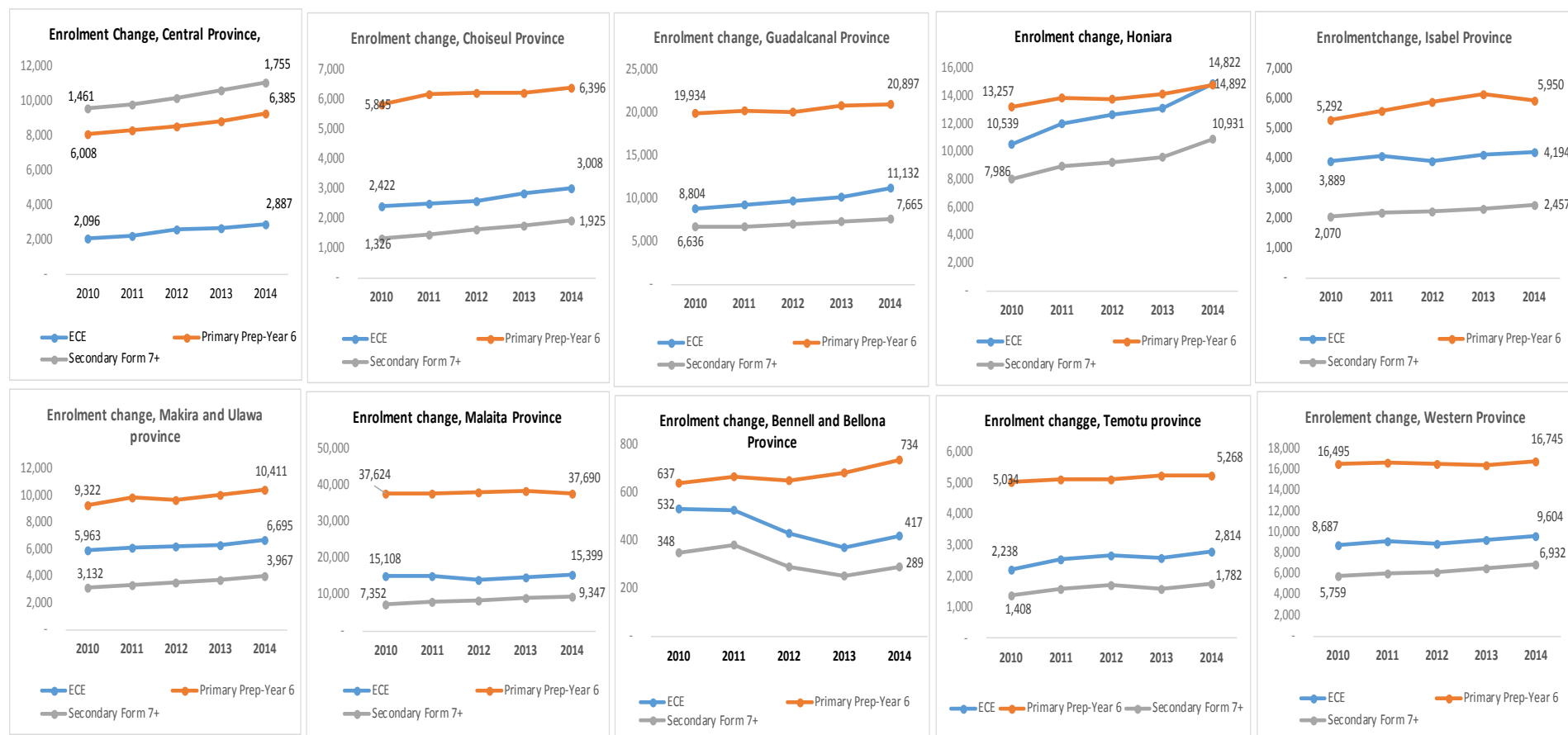
Footnote: The total enrolment for secondary include enrolment from the community high schools and from national and provincial secondary schools

5.3 Graphs showing time series teachers data by province, 2010-2014

The total number of teachers across all province is fluctuated from province to province. The number of ECE teachers is increasing in most provinces except in Malaita and in Rennell and Bellona provinces where the number of the teachers is showing a continuous decrease from 2010 to 2014. A primary level, the number of teachers is showing a big decrease in Isabel province, Makira and Ulawa province, in Malaita province and in Rennell and Bellona province. At secondary level, the number of teacher is increasing across all provinces basically between 2013 and 2014 except in Guadalcanal province, in Honiara and in the Western Province where the number of teachers is declining.
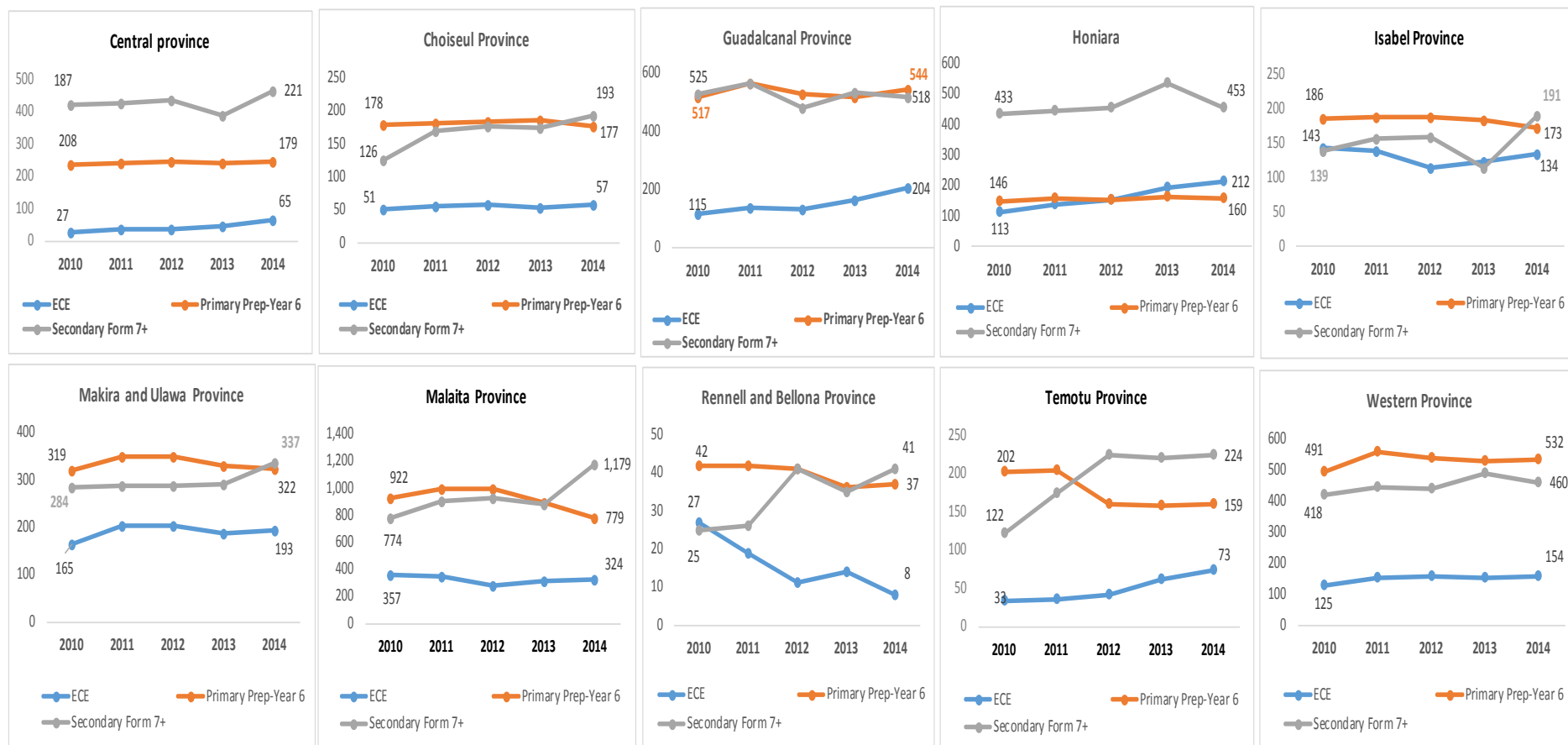
Annex 1: Survey methodology, coverage and response rate

This section briefly explains the methodology that was used to collate the Annual School Census, and then goes on to details the coverage and response rate for the survey in 2014.

5.4   SIEMIS Data Collection Process

SIEMIS data collection procedures is defined by six main processes detailed in Figure 14. These processes cover planning, collating, verifying, processing and **collection process, the data processing, the data entry and validation process, the reporting and dissemination**. MEHRD is using a standard EMIS questionnaire since 2004 which requires a review to meet the level of needs around education data.

Figure 15: Data collection process
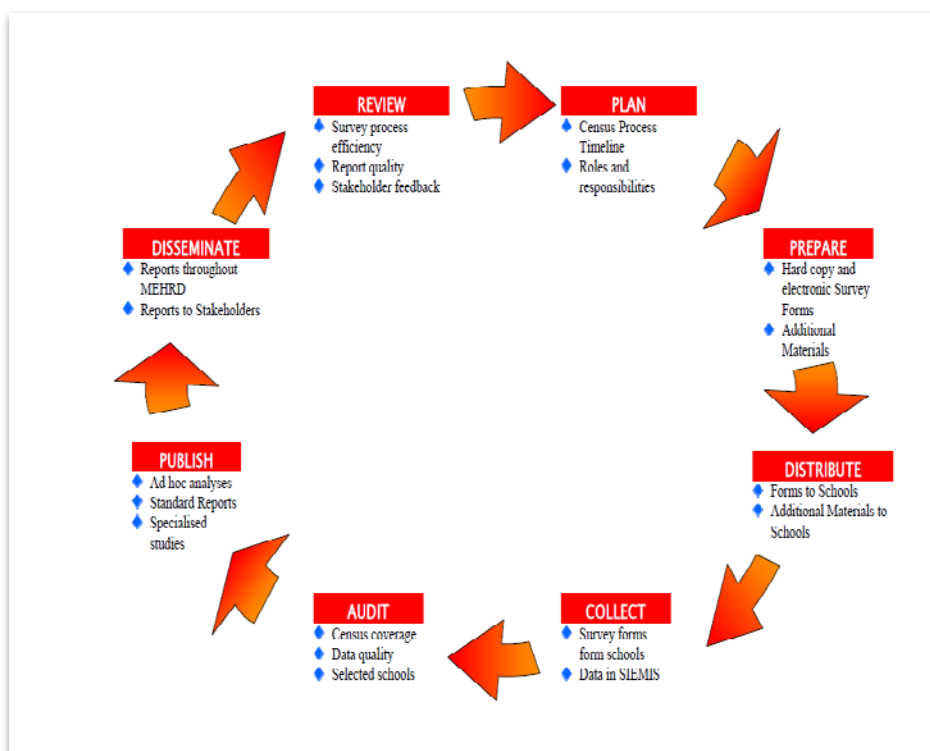
Data entry of SIEMIS data is done at the MEHRD office each year. Only two officers are doing data entry into the SIEMIS system. It is important to increase the data management workforce team in the MEHRD in order to meet the different timelines set by the Ministry of Education.

Data control and validation tasks around the SIEMIS data is very much crucial. At this point of time, the SIEMIS team is only using the XY chart analysis workbook to select schools that would require some verifications on the data. This activity is taking place once all the school data is recorded in SIEMIS. However, it is very much important to establish a strong and reliable process to validate school data in the future. This would require a

setting up of a good recording keeping system at the school level, effective mechanisms to verify the data starting after that the questionnaire is filled in by the school principal to the entry of the data into SIEMIS.

The SIEMIS survey timeline process is another crucial area. Data becomes very relevant to all levels of policy and planning, monitoring and evaluation of the program activities nowadays. It is important to set aside a good data management plan and budget to improve the whole process of data collection in the future. SIEMIS data needs to be collected, processed and analysed on time in support to the implementation of the strategic plans of the Ministry of Education and Human Resource Development. To enable this to happen, it is important to increase the number of the data entry staffs in SIEMIS section. This activity will require a review on the roles and responsibility of the data entry officers and extra budget for another four data entry officers.

5.5   Data Quality

It is believed that the SIEMIS data should now provide fairly accurate information about education in the country. The 2014 response rate was the highest to date, and although Table 21 shows that only 83.3% of schools returned their ASC forms, the majority of the non-responding schools were very small in size, and the previous year's data can be used to make estimates in most cases. Furthermore, Table 22 shows that the percentage of enrolments estimated was less than 3% in the primary and secondary sectors. In the ECE sector however, 22% of the enrolments were estimated. It is thought that the majority of these ECE centres were unregistered schools, which are not are provided with funds from the Government.

Table 21: Survey Response Rate by school type, 2014

	Received	**Not Received**
Kindergarten (ECE)	70.9%	29.1%
Primary	90.9%	9.1%
Community High School	98.2%	1.8%
Provincial Secondary School	100.0%	0.0%
National Secondary School	88.9%	11.1%
Total	**83.3%**	**16.6%**

Source: 2014 SIEMIS

Table 22: Data coverage and percentage of estimated enrolments by sector

Sector	Enrolment	
	Actual	**Estimate**
Early Childhood	78%	22%
Primary	97%	3%
Junior Secondary	99%	1%
Senior Secondary	98%	2%
Overall	**95%**	**5%**

Annex 2: Definitions of the Indicators

Age Specific Enrolment Rate (ASER): The children aged 5 to 25 years who are enrolled in the education system irrespective of the education level, expressed as a percentage of the total number of pupils/students of that age in the population.

Gender Parity Index (GPI): Ratio of total enrolment for female to total enrolment for male. It measures the relative education participation of boys and girls. A GPI of 1 reflects equal enrolment rate for boys and girls, whereas a GPI greater than 1 shows disparity in favour of girls.

Gross Enrolment Ratio (GER): Number of students enrolled per 100 population official age, years for Early Childhood, 6-12 years for primary level (this analysis include prep as the first year in primary) 13-15 years for Junior Secondary, ears for Senior Secondary

Gross Intake Rate (GIR): The total number of new entrants in the first year primary as a percentage of all children eligible for admission at the official or statutory age of 6 years in the population.

Net enrolment Ratio (NER): Number of official age student enrolled per 100 population official age 3-5 years for Early Childhood, 6-12 years for primary level (this analysis include prep as the first year in primary), 13-15 years for Junior Secondary, 16-19 years for Senior Secondary

Net Intake Rate (NIR): The ratio of new entrants in the first year primary education who are of 6 years of age expressed as the percentage of the total population of the same age. It gives a more precise measurement of the first time-access to primary education of the eligible age 6 than the GIR. It is a key parameter used for projecting school enrolment, taking into account future developments as the new entrants either progress to higher grades, repeat the same grade, or drop out of school. This analysis includes Prep as the first year in primary.

Pass Rate: The number of children who passed a given examination expressed as a percentage of the total pupils/students who sat for the examination.

Percentage of examination enrolment: The total number of pupils/students who has sat for a given examination expressed as a percentage of the total enrolment for the examination year.

Transition Rate: The proportion of pupils/students progressing from the last year of a given school cycle to the first year of the next school cycle expressed as a percentage of the number of pupils/students in the previous last year of a given school cycle. For Instance year 6 to year 7, year 9 to year 10, year 11 to year 12 and year 12 to year 13.

Annex 3: Enrolment by education level by age

Enrolment by age by level 2010

Age	Kinder	Prep	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Form 1	Form 2	Form 3	Form 4	Form 5	Form 6	Form 7	Grand Total
3	4508															4508
4	5757															5757
5	6137	3743	20													9900
6	4108	7711	1355	20												13194
7	1480	7149	4867	841	32											14369
8	462	3718	6265	3455	833	31										14764
9	213	1366	4541	5418	3022	591	11									15162
10	135	188	2235	4984	5002	2257	530	22								15353
11		19	394	2337	4539	3965	1949	270								13473
12		7	92	598	2872	4399	3646	1615	529	16	3	2				13779
13			12	159	720	3086	4106	3411	1725	488	12	3				13722
14				12	170	732	2752	3495	2765	1664	414	10	1		1	12016
15				3	27	144	606	2284	2529	2390	1426	311	9			9729
16				4	25	134	445		1344	2314	2152	1026	318			7762
17				1	5	29	130		325	1338	1967	1645	866	204		6510
18							7	40	138	313	1272	1362	1313	433	77	4955
19									24	85	293	594	1053	738	147	2934
20									3	21	92	191	672	607	253	1839
Total	22800	23901	19781	17827	17222	15235	13770	11712	9382	8629	7631	5144	4232	1982	478	179726

Enrolment by age by level 2011

Age	Kinder	Prep	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Form 1	Form 2	Form 3	Form 4	Form 5	Form 6	Form 7	Grand Total
3	4671															4671
4	5769															5769
5	6184	3660	26	1												9871
6	4187	7262	1240	15												12704
7	1589	6946	4869	932	28											14364
8	485	3987	6293	3700	754	8										15227
9	213	1809	4406	5380	3016	662	12									15498
10	133	223	2364	5035	4884	2562	563	5								15769
11		45	437	2736	4945	4228	2054	409								14854
12		3	110	596	2921	4762	3658	1757	666	8						14481
13			18	164	622	3039	4294	3279	1973	672	15					14076
14		1		10	177	577	2909	3793	2903	1509	570	10				12459
15					37	133	677	2374	2656	2661	1369	346	3	1		10257
16				6	14	97	408		1395	2397	2453	1016	286	1		8073
17				2	7	33	74		359	1342	2206	1729	878	135	1	6766
18							7	22	95	328	1257	1356	1553	448	90	5156
19									16	85	244	738	1400	738	170	3391
20									2	17	44	138	728	753	316	1998
21												1	1	8	26	36
22												2		4	2	8
23												1				1
24												1				1
25												1				1
26														1		1
Total	23231	23936	19763	18569	17392	15992	14304	12121	10065	9019	8158	5339	4849	2089	605	185432

Enrolment by age by level 2012

Age	Kinder	Prep	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Form 1	Form 2	Form 3	Form 4	Form 5	Form 6	Form 7	Grand Total
3	4326															4326
4	5337															5337
5	5750	3753	23													9526
6	4374	7471	1225	35	1											13106
7	1427	6928	4825	1062	47	1										14290
8	526	3845	6387	3950	850	23	1									15582
9	165	1734	4354	5273	3136	599	24									15285
10	70	201	2395	4426	4771	2686	534	13								15096
11		34	392	2593	4692	4154	2206	330								14401
12		20	120	652	3185	4564	4089	1825	687	22	1					15165
13		2	16	172	745	3046	4165	3456	2015	736	24	1				14378
14			1	27	155	701	2627	3762	2912	1657	663	24				12529
15			1	1	52	135	597	2209	2779	2742	1531	435	13			10495
16				1	10	25	94	346	1595	2407	2398	1229	375	9		8489
17						3	23	65	372	1370	2127	1862	1016	109	9	6956
18						3	7	28	128	329	1147	1555	1462	495	67	5221
19									37	101	299	700	1213	818	193	3361
20									6	18	62	133	743	650	340	1952
21												3	3	1	25	32
22													3	1	2	6
23													1			1
Total	21975	23988	19739	18192	17644	15940	14367	12034	10531	9382	8252	5942	4829	2083	636	185534

Enrolment by age by level 2013

Age	Kinder	Prep	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Form 1	Form 2	Form 3	Form 4	Form 5	Form 6	Form 7	Grand Total
3	4416															4416
4	5594															5594
5	5994	3628	64													9686
6	4183	6944	1650	27	1											12805
7	1668	6862	4976	1315	28	1										14850
8	533	4128	6916	3907	1127	19										16630
9	188	1608	4554	5365	3379	891	28	1								16014
10	108	175	2246	4738	4802	2789	754	13								15625
11		20	253	2682	4426	4052	2132	544								14109
12		17	65	431	3124	4706	4017	1889	809	33						15091
13		14	23	93	641	3336	4508	3432	2214	675	20	1				14957
14		12	1	17	146	583	2938	3758	3159	1960	568	21				13163
15				2	33	109	474	2328	2743	2792	1760	488	8			10737
16				2	21	90	297	1664	2420	2556	1397	384	2			8833
17					2	19	77	227	1320	2069	2098	1125	298	3		7238
18						5	11	69	240	1182	1517	1727	728	73		5552
19								19	78	215	719	1248	899	182		3360
20								5	21	46	77	744	742	272		1907
21												1	9	43		53
22													2	3		5
Total	22684	23408	20748	18577	17709	16509	14965	12350	10909	9539	8416	6318	5237	2680	576	190625

Enrolment by age by level 2014

Age	Kinder	Prep	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Form 1	Form 2	Form 3	Form 4	Form 5	Form 6	Form 7	Grand Total
3	4750															4750
4	5761															5761
5	6298	3747	28	1												10074
6	4450	6956	1561	20	2											12989
7	1813	6867	4845	1252	46											14823
8	638	3928	6558	3915	1251	33	1									16324
9	214	1522	4765	5597	3308	876	26	1								16309
10	68	231	2331	4822	5057	2922	728	27								16186
11		48	306	2701	4283	4174	2341	489								14342
12		17	90	607	3155	4391	4043	1836	878	20						15037
13		1	8	140	702	3166	4446	3634	2210	759	3					15069
14			3	19	167	734	2992	4044	3323	2030	549	17				13878
15			1		19	138	632	2178	2933	3024	1779	409	11			11124
16				1	6	28	97	336	1600	2595	2658	1391	351	8		9071
17			1		1		18	62	323	1308	2274	2174	1195	288		7644
18							7	12	75	321	1359	1788	1918	733	94	6307
19									32	90	252	925	1603	1112	207	4221
20									9	26	110	117	821	1000	295	2378
21												1	1	22	20	44
22														1	8	9
Total	23992	23317	20497	19075	17997	16462	15331	12619	11383	10173	8984	6822	5900	3164	624	196340