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FOR
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PACIFIC ISLANDS LITERACY AND
NUMERACY ASSESSMENT (PILNA)

2012



REGIONAL REPORT

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1 INTRODUCTION

Background Information

- 1.1 The right to Literacy and Numeracy is an inherent part of the right of every child to have access to quality education regardless of their gender, ethnicity, background, the school they go to or their family background or socio-economic situation. Yet the provision of such basic skills that form the foundation for the future of our children remains a huge challenge especially in the developing world including the Pacific. Studies throughout the world have shown that achievement in Literacy and Numeracy is a key determinant of student's educational achievements with those at the higher end of the Literacy and Numeracy achievement spectrum throughout the compulsory years of schooling likely to do better in further studies than those with lower Literacy and Numeracy achievements (Marks, et al., 2001). Furthermore studies internationally have shown strong relationship between achievements in Literacy and Numeracy and employment opportunities beyond schooling (Green & Riddell, 2001; Lamb & McKenzie, 2001; McMillan & Marks, 2003; Tyler, et al., 2000).
- 1.2 The changing situation in our society today, as influenced by such factors as globalization, technological advancement, and changes in employment and work organization, continue to put Literacy and Numeracy on the development agenda of many countries with the recognition that they are essential ingredients for effective communication and participation in adult life (OECD & Statistics Canada, 2000). In spite of the international recognition of the crucial influence Literacy and Numeracy has in our lives, evidence of the situation, especially from the developing world including the Pacific, remains a huge concern.
- 1.3 While the influence of low level Literacy and Numeracy skills on people's lives is not straightforward, there have been associations made between the Literacy and Numeracy skills of a country and social situations such as employment opportunities, and social, emotional and behavioural difficulties. The general indication is that those with low level Literacy and Numeracy skills are more likely to be unemployed as well as exhibit behaviour problems than those with high Literacy and Numeracy skills.

The Pacific Islands Literacy and Numeracy Assessment

- 1.4 The Pacific Islands Literacy and Numeracy Assessment (PILNA) was administered across 14 Pacific Island countries in 2012 for the purpose of setting the regional baseline as well as country positions for Literacy and Numeracy achievement of Year 4 and Year 6 pupils in the Pacific region. The mandate for PILNA was set by the Pacific Island Forum Ministers of Education as well as the Pacific Heads of Education Systems. The fourteen countries included Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tuvalu, and Vanuatu.

Purposes of PILNA results

- 1.5 The results of the 2012 PILNA will be used in line with the assessment's three main purposes. These are:
 - i. to provide reliable and valid baseline data on the achievement levels of the Literacy and Numeracy skills of pupils in schools who have completed Years 4 and 6;
 - ii. to promote the effective use of data in formulating national policy, in monitoring, and in designing appropriate intervention programmes to improve Literacy and Numeracy levels;

- iii. to promote within every Pacific country the importance of Literacy and Numeracy skills both as building blocks for future achievement and as a means of empowering citizens to take control of their future.

Literacy and Numeracy definitions and components

- 1.6 The learning outcomes specified in the Pacific Regional Benchmarks for Literacy and Numeracy document (henceforth referred to as the regional benchmarks document; for a copy, refer to Appendix 5.1) formed the basis of the PILNA tests. Literacy is defined within the regional benchmarks document as “knowledge and skills necessary to empower a person to communicate through any form of language of their society, with respect to everyday life”. Numeracy is defined in the regional benchmarks document as “knowledge and skills necessary to empower a person to be able to use numbers in mathematical processes, as well as the language of mathematics, for a variety of purposes, with respect to everyday life”.
- 1.7 In consideration of the definitions of Literacy and Numeracy espoused in the regional benchmarks document, countries were given the option of having PILNA instruments translated into the national ‘preferred language’ for Year 4 where this is in line with the national language policy. Translations were carried out for Samoa, Vanuatu, Tokelau, and Cook Islands. These translations were facilitated by SPBEA. Literacy and Numeracy achievements are reported on a common scale whether pupils responded to the English or translated instrument.
- 1.8 The Literacy domain comprises four components – Reading, Writing, Speaking, and Listening. Only Reading and Writing components were assessed in PILNA 2012, in the form of Reading Comprehension and Writing. The Numeracy domain comprises the components Numbers, Operations, Data, Time, Money, and Measurement. These Literacy and Numeracy components are organised into elements. Each element contains learning outcomes that serve as indicators of the expected level of performance for that element at that year level.

Literacy and Numeracy assessment instruments

- 1.9 Literacy and Numeracy assessment instruments were designed and constructed to reflect the emphasis of the regional benchmarks and the accompanying assessment framework. The instruments comprised Year 4 Writing, Year 4 Reading Comprehension, Year 6 Writing, Year 6 Reading Comprehension, Year 4 Numeracy, and Year 6 Numeracy as well as student questionnaires and instructions to teachers. Items in the instruments were organised by elements and were written to reflect the developmental continuum of learning towards achievement of the full learning outcome within each element. Draft instruments were reviewed internally as well as externally by ACER (Australian Council of Education Research). The draft instruments were trialled in six of the 14 countries that participated. These included Fiji, Cook Islands, Samoa, Kiribati, Palau and Solomon islands. Recommendations from the analyses of pupil responses from the trial were incorporated into the finalisation of the instruments.
- 1.10 Levels of achievement on the learning continuum are labelled as Levels 0 – 4, with Level 4 being the highest level (the learning outcome is fully achieved) and Level 0 the lowest level. Level 0 indicates that the very basic skill in the development of learning towards the achievement of the full learning outcome

is not being demonstrated. The Literacy and Numeracy skills associated with each level are described in detail in Appendix 5.2.

PILNA administration

1.11 There were four tasks designed for each pupil over a one day or two day administration of PILNA. These included the Literacy Writing task, Literacy Reading Comprehension task, Numeracy task, and the Pupil Questionnaire. Each task had specified time allocations; the maximum for which was forty minutes. Assessment supervision was carried out by a teacher not teaching in the class being supervised. All task booklets as well as administrative documents were sent to schools identified for PILNA by SPBEA, through the country national coordinator who is a senior officer of the Curriculum and Assessment unit of the country.

Sampling

1.12 To accommodate the main purpose of PILNA as well as budgetary constraints, all schools in the six small countries (Niue, Tokelau, Nauru, Cook Islands, Palau, and Tuvalu) were selected for assessment; while a two stage stratified cluster random sampling method was used to select about 2000 students each from the bigger countries. Using sampling specifications from Ross (1978), 93 clusters of about 25 students were randomly selected to allow for 95% confidence limits.

1.13 A total of over 27,000 Year 4 and Year 6 (Year 5 and Year 7 in Northern Pacific countries) pupils from over 1,400 schools participated in the assessment. SPBEA extends its appreciation to all pupils, teachers, school administrators, assessment officers and curriculum officers who participated in the regional implementation of 2012 PILNA.

Scoring of pupil responses

1.14 Scoring of pupil responses was carried out in-country by trained country panels, except for Niue and Tokelau. Niue scripts were scored by the Fiji panel while the Tokelau scripts were scored by the Samoa panel. Some FSM scripts were also scored by the Fiji panel. Scoring was done through the use of carefully selected model answers, scoring guides, and levelling rubrics. Members of scoring panels were trained on how to determine the validity of student responses and how to use the levelling rubric to determine the level of achievement of the pupil for each element based on the combination of valid and invalid responses that the pupil has given. Information from each pupil's script was then transferred on to specially designed capture forms.

Data capture and analysis

1.15 Capture forms were scanned in SPBEA to provide data for analysis, after careful verification and checking. Skills hierarchies for literacy and numeracy for each year level (4 and 6) were developed through the use of skills scores and item difficulty values. Professional judgements were used to determine the cut-off points on the skills hierarchy that determined the skill sets for each level, from Level 0 to Level 4. Computer programming of linking rules between items within each level enabled the determination of the level of achievement for each pupil based on the combination of valid and invalid responses in the pupil's script. Final results are computed as percentages of pupils for each level, Level 0 to Level 4, for overall Literacy and Numeracy as well as the components of Literacy and Numeracy and

the accompanying disaggregations by gender, education authority and school locality. These results are calculated for each individual country, for the sub-regional group of the six small island states (Cook Islands, Palau, Tokelau, Niue, Nauru and Tuvalu) and for the Pacific region (all 14 countries) as a whole.

Reporting

1.16 For ease of reporting, PILNA results are reported in three categories:

- (i) 'Performing at the expected level' (pupils who have satisfactorily demonstrated the skills expected at the year level, that is performing at Levels 3 and 4);
- (ii) 'Working towards the expected level' (pupils who have partially demonstrated the skills expected at the year level, that is performing at Level 2); and
- (iii) 'Not yet working towards the expected level' (pupils who have not been able to demonstrate the minimum skills expected hence critically underperforming at the year level, that is performing at Levels 1 and 0).

The descriptions for each category are provided in Appendix 5.3.

1.17 As in any assessment that is based on a sample of pupils rather than on the whole regional population, there is always an element of uncertainty within the results due to random sampling error. The data presented in this report is drawn from the sample of Pacific Island pupils that presented for the 2012 PILNA. The pupil sample is a sub-set of the country cohorts for the primary school year 4 and year 6. For the seven smaller countries (Tokelau, Niue, Tuvalu, Cook Islands, Nauru, Palau and RMI), 100% of its student population was intended for PILNA. For various administrative reasons within most of these countries, this was not possible, and the final numbers that took part in PILNA were slightly lower.

1.18 For the seven larger countries (Fiji, Kiribati, Vanuatu, Solomon Islands, PNG, Samoa, and FSM), random sampling was used to select about 2000 pupils from 92 or 93 units of about 25 pupils each. This resulted in the selection of the participating schools and in some cases the clusters of students in selected schools. Again, administrative reasons prevented the inclusion of all selected schools in some countries. Two or three countries were able to include all selected schools. The total number of students in the final sample for the region is large enough for meaningful interpretations. However, at the individual country level, particularly for those countries that were not able to include all selected schools, there are possible limitations placed upon the representative nature of the sample and therefore caution should be followed when viewing the results from a country perspective. Where tests of statistical significance were required, these have been carried out using the Chi-square test at 5% level of significance.

1.19 Three sets of reports are produced for PILNA: The Regional Report, The Sub-Regional Report and The Country report. Each of the six smaller states/countries will receive The Regional Report, The Sub-Regional Report and The Country Report, while the eight larger countries will receive The Regional Report and The Country report.

An example of information available in the reports

1.20 The following information can be found as part of the Year 6 Regional report: *The survey conducted in 2012 of the Literacy and Numeracy situation in fourteen of the fifteen Pacific Island Countries (PICs) shows a low level of Literacy and Numeracy, considering their importance as the basic foundation for*

studies in later years. Results collected based on a stratified regional sample from the Pacific using the PILNA (Pacific Islands Literacy and Numeracy Assessment) instrument show a dire situation with **three in every ten students (29%) completing six years of formal primary schooling performing at satisfactory and expected level according to the Pacific Benchmarks for Literacy compared to almost five in every ten students (48%) for Numeracy**. In contrast, in Literacy over four in every ten students (42%) were working towards the expected level compared to two in every ten students in Numeracy, while about three in every ten students in both Literacy (29%) and Numeracy (30%) were at the critical level and were not yet working towards expected level (Figure 1).

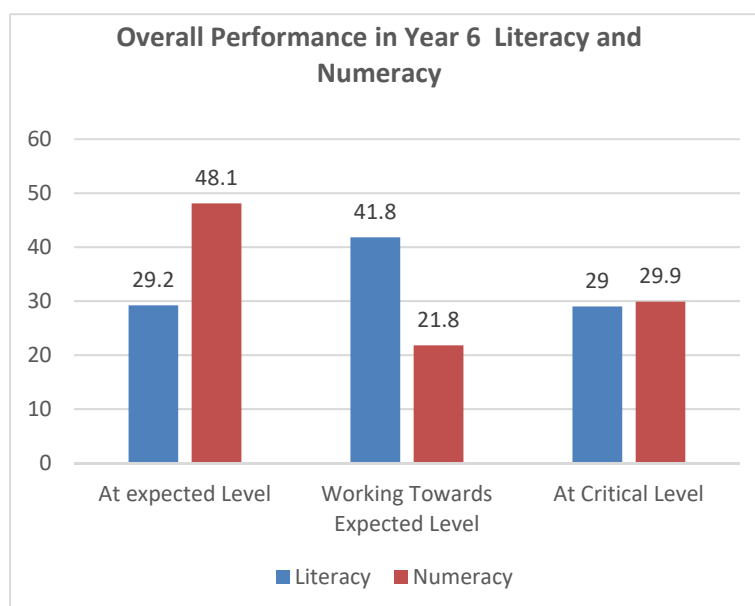


Figure 1

With such significant differences in the level of Literacy and Numeracy throughout the Pacific, and with no evidence yet available to provide explanation for such differences, it would be timely for education authorities in Pacific island countries to carry out an investigation as to the cause(s) of such difference as well as such level of achievement in an effort to determine the most appropriate and relevant interventions and programs that would best address the situation. Considering the important influence that both Literacy and Numeracy have on the future of children, the education authorities in each country throughout the Pacific should take immediate actions to determine how best to address this situation.

- 1.21 Countries are encouraged to study the reports with appreciation of the purposes for which they are intended, and to note the comparisons made in the country reports between the regional baselines and the country positions for overall literacy and numeracy, the components of literacy and numeracy and the various disaggregations. Countries are also encouraged to make further comparisons and interpretations accordingly. This is the beginning of the benchmarking aspect of PILNA towards effective monitoring and subsequent intervention towards improvement in literacy and numeracy levels of pupils.

2 THE YEAR 6 REGIONAL REPORT

Literacy and Numeracy Situation in Pacific Island Countries: A Tale of Mixed Success

2.1 KEY MESSAGES

1. Literacy and Numeracy achievement in Pacific Island countries are in a dire situation and need immediate intervention by Ministries of Education countries.
2. Pupils performed significantly better in Numeracy than Literacy especially for those that performed at expected level as well as those working towards expected level.
3. Disparity in students' Literacy and Numeracy performance throughout the Pacific should be a major concern.
4. Girls performed significantly better than boys in both Literacy and Numeracy especially for those that performed at satisfactory and expected level.
5. Pupils in urban schools performed significantly better than those in non-urban schools in both Literacy and Numeracy.
6. Pupils in non-government schools performed significantly better than those in government schools but only in Literacy.
7. Disparity existed in the distribution of skills at the component level in both Literacy and Numeracy.
8. Pupils performed significantly better in Reading Comprehension than in Writing especially those that performed at satisfactory and expected level
9. Different factors influence distribution of Writing skills among student cohort differently although same message emerges.
10. Different factors influence distribution of reading comprehension skills among student cohort differently
11. Gender, school location and school authority are related to student performance in the various numeracy components.

2.2 GENERAL INFORMATION

Number of Year 6 students that participated in PILNA 2012 from across the region

Domain	Gender		School Locality		Education Authority		Total number
	Boys	Girls	Non-Urban	Urban	Govt	Non-Govt	
Literacy	6815	6850	8270	5405	9296	4369	13665
Numeracy	6868	6908	8293	5483	9360	4416	13776

Govt: Government

Non-Govt: Non-Government

2.3 PERFORMANCE SUMMARY

2.3.1 Overall Literacy and Numeracy

Literacy and Numeracy Achievement in Pacific Island Countries in a Dire Situation and Needs Immediate Intervention by Education Authorities in All Countries; and Pupils Performed Significantly Better in Numeracy Than in Literacy Especially For Those At Expected Level As Well As Those Working Towards Expected Level

The PILNA survey, conducted in 2012, of the Literacy and Numeracy achievement of Year 4 and Year 6 pupils in fourteen of the fifteen Pacific Island Countries (PICs) shows a low level of Literacy and Numeracy in spite of their importance as the basic foundation for studies in later years. Results collected based on a stratified regional sample from the Pacific using the PILNA instrument show a dire situation with **three in every ten pupils (29%) completing six years of formal primary schooling performing at a satisfactory and expected level according to the Pacific Benchmarks for Literacy compared to almost five in every ten pupils (48%) for Numeracy**. In contrast, over four in every ten pupils (42%) were working towards the expected level in Literacy compared to two in every ten pupils (22%) in Numeracy while about three in every ten pupils in both Literacy (29%) and Numeracy (30%) were at the critical level and not yet working towards the expected level (*Figure 1*).

With such significant differences in the level of Literacy and Numeracy throughout the Pacific, and with no evidence yet available to provide explanation for such differences, it would be timely for education authorities in Pacific island countries to investigate the cause(s) of such difference as well as such levels of achievement in an effort to determine the most appropriate and relevant interventions and programs that would best address the situation. Considering the important influence that both Literacy and Numeracy have on the future of children, the education authorities in each country throughout the Pacific should take immediate actions to determine how best to address this situation.

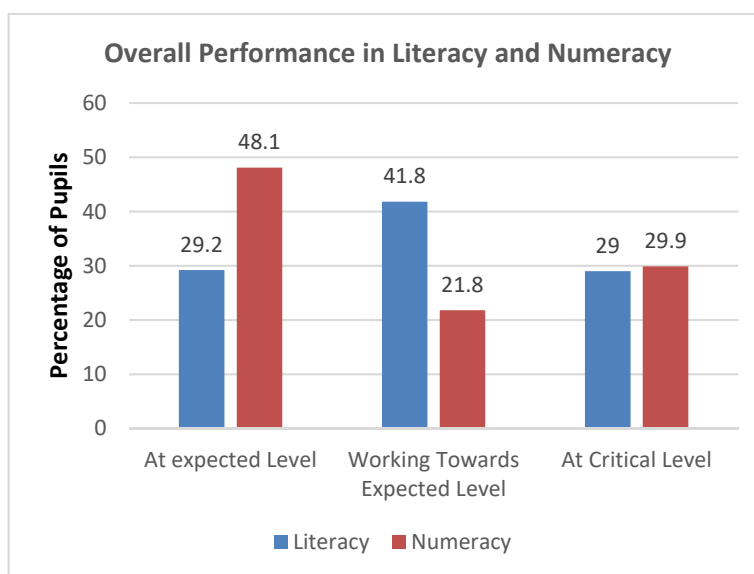


Figure 1: Overall Literacy & Numeracy Situation for the Pacific at the end of Six Years of Schooling

Results of the PILNA sample survey show more than five (5) in every ten (10) pupils (52%) complete six years of formal schooling throughout the Pacific but have yet to acquire the set of Numeracy skills expected and are either working towards the expected level or performing at the critical level and acquiring hardly any of the Numeracy skills expected. This is in comparison with seven in every ten pupils for Literacy (71%). (*Figure 1*)

Factors that may have contributed to such a situation need to be identified and appropriate strategies put in place to remove barriers that may have led to this situation. But overall, the situation with both Literacy and Numeracy in the Pacific is a concern and serious questions need to be asked as to why this situation has prevailed in the Pacific over the years, even up to now.

2.3.2 Literacy and Numeracy disaggregated by Gender

Girls Performing Significantly Better Than Boys in Both Literacy And Numeracy Especially Those Performing At Satisfactory and Expected Level

The long-held perception in the Pacific that girls are doing better than boys in terms of academic achievements is substantiated with evidence from the Literacy and Numeracy survey in 2012 (PILNA) which shows a higher proportion of girls than boys demonstrating satisfactory performance or performing at the expected level. However the achievement gap between the boys and the girls appear to be much bigger for Literacy than for Numeracy

PILNA survey results show a higher proportion of girls demonstrating Literacy and Numeracy skills at the higher end of the Literacy and Numeracy continuum than the boys, with one in every three girls demonstrating satisfactory and performing at the expected level (34%) in Literacy compared to one in every four boys (25%). In Numeracy, five in every ten girls demonstrating satisfactory and performing at the expected level (50%) compared to four in every ten boys (46%). For those found to be working towards the expected level, there was higher proportion of girls than boys for Literacy but the opposite for Numeracy (*Figure 2*).

For Literacy, a significantly higher proportion of boys (35%) than girls (23%) were performing at the critical level and yet to work towards the expected level. Such difference in performance at the critical level was not observed in Numeracy with almost the same proportion of boys (31%) and girls (29%). For Numeracy, the situation is much brighter than Literacy although girls were still outperforming the boys especially those that are either working towards the expected level or demonstrating satisfactory performance and at the expected level.

The gender disparity for Numeracy was more prominent in pupil performance at the satisfactory and expected level (50% for girls, 46% for boys) compared to the performance of those at the critical level and yet to work towards the expected level (29% for girls and 31% for boys).

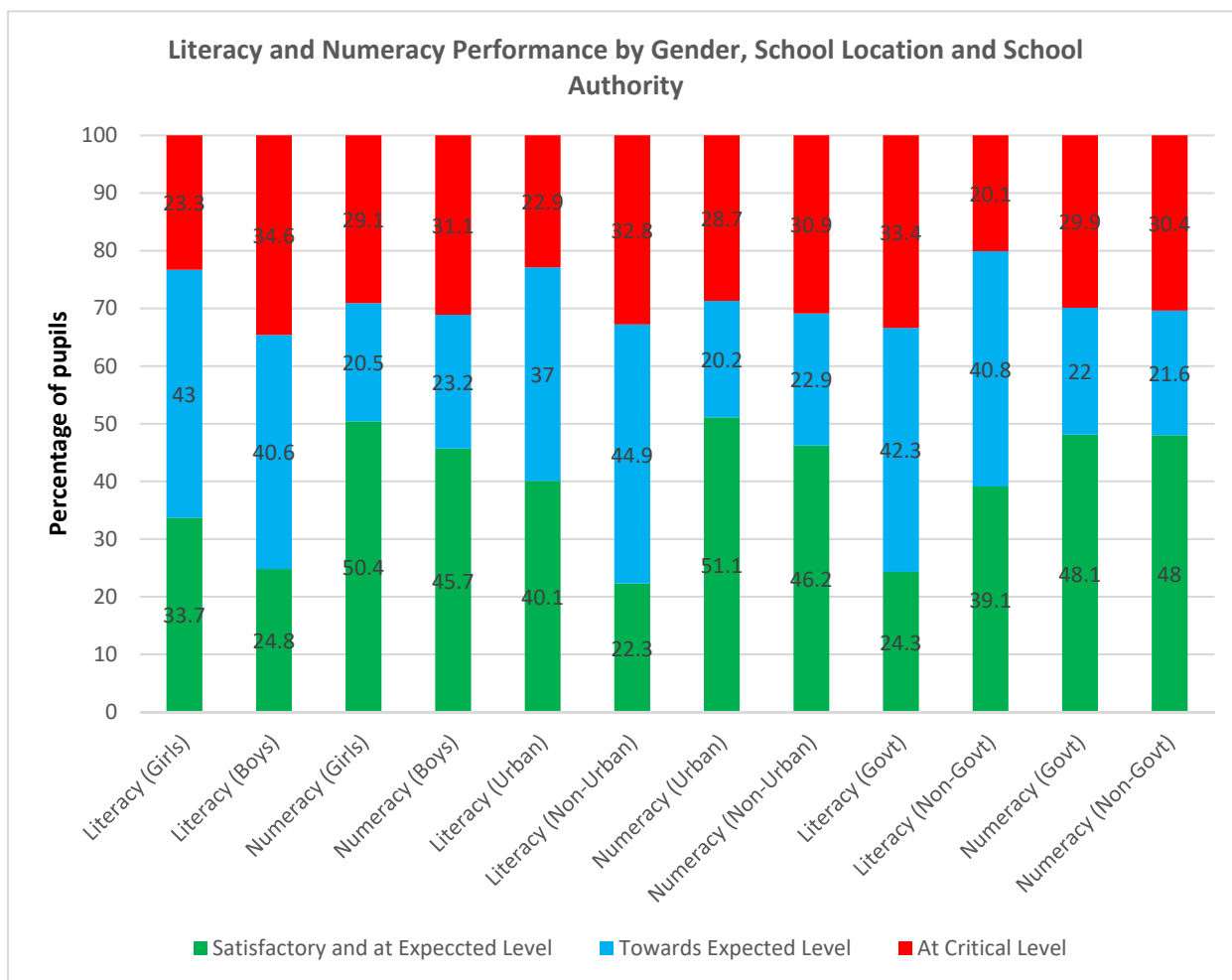


Figure 2: Overall Literacy and Numeracy Achievement of Pupils at End of Six Years of Schooling by Gender, School Location and School Authority.

2.3.3 Literacy and Numeracy disaggregated by School Locality

Pupils in Urban Schools Performed Significantly Better Than Those in Non-Urban Schools For Both Literacy And Numeracy

The location of schools pupils attend, whether urban or non-urban locations, does have an influence in the Literacy and Numeracy performance of pupils. Results from the PILNA sample survey confirm this with pupils in urban schools performing significantly better than those in non-urban schools for both Literacy and Numeracy.

The difference in the performance of pupils in urban and non-urban schools was more prominent in Literacy than Numeracy and especially for those performing at satisfactory and at expected level with four in every ten

pupils (40%) in urban schools compared to two in every ten pupils (22%) in non-urban schools demonstrating satisfactory performance and at expected level in Literacy. This compares with five in every ten pupils (51%) from urban schools compared to four in every ten pupils (46%) from non-urban schools for Numeracy.

A similar picture was observed at the lower end of the Literacy and Numeracy continuum. For Literacy, approximately two in every ten pupils from schools in urban locations (23%) compared to three in every ten pupils (33%) for those in schools in non-urban locations were performing at the critical level and have yet to work towards the expected level. For Numeracy the difference was not as obvious as in Literacy with over three in every ten pupils from non-urban schools (31%) compared to under three in every ten pupils from urban schools (29%) performing at the critical level.

Overall however, pupils attending schools in urban locations appear to have acquired higher level skills in both Literacy and Numeracy compared to those attending schools in non-urban locations. As school location appears to have a significant influence on pupil Literacy achievement, education authorities throughout the Pacific should further investigate this situation to determine the extent of the influence of the geographical location of schools pupils go to on their achievement in order to put in place appropriate interventions and programs to address the situation.

2.3.4 Literacy and Numeracy disaggregated by School Authority

Pupils in Non-Government Schools Performing Significantly Better Than Those in Government Schools But Only in Literacy

The issue of the school authority and the extent of its influence on the achievement of pupils is one that has not been given enough discussion in the Pacific resulting in no clear data on the situation. Consequently various groups have come up with their own perception of the influence of school authority on the achievement of pupils. While the issue of equity in the provision of education in the Pacific has been on the discussion board over many years, no firm evidence has so far been made available to justify arguments favouring either side. Results of the PILNA survey however show significant differences in the Literacy performance of pupils from schools under different administration, with pupils from government schools demonstrating significantly lower Literacy performance compared to those from non-government schools. In Literacy almost four in every ten pupils from non-government schools (39%) compared to just over two in every ten pupils from government schools (24%) demonstrated satisfactory performance and at expected level. In contrast, over three in every ten pupils from government schools (33%) compared to two in every ten from non-government schools (20%) were found to perform at the critical level and yet to work towards the expected level. For Numeracy, no significant difference was observed in the performance of those in government schools compared to those in non-government schools.

2.3.5 Literacy and Numeracy components

Disparity Exists in the Distribution of Skills at the Component Level in Both Literacy and Numeracy

As in the overall domains of Literacy and Numeracy, disparity also exists at the various component levels in both domains. For Literacy, this includes pupil achievements in the two key components where data was collected, namely Reading Comprehension and Writing. For Numeracy, it includes achievements in the key components of Numbers, Operations, Measurements, Money, Time and Data. For Literacy, Reading Comprehension and Writing comprise a fundamental set of skills that all pupils need to acquire if they are to be able to cope with the complexities of today’s world, in particular the academic demands of further studies. However the situation with these two skills in the Pacific is of grave concern especially when one considers their importance not only for further studies but also for transition to everyday life after school.

Pupils Performing Significantly Better in Reading Comprehension than in Writing Especially for Those Performing at Satisfactory and Expected Level

Results of the 2012 PILNA sample survey show significant differences in the distribution of skills among the pupil cohort with a far worse situation in pupil Writing skills compared to their Reading Comprehension skills. A similar situation was observed in the various components for Numeracy although not as serious compared to the Literacy situation. Analysis of the PILNA results for the two Literacy components, Writing and Reading Comprehension, show significant differences in the proportion of pupils performing at satisfactory and expected level, with five (5) in every ten pupils (52%) performing at satisfactory and expected level in Reading Comprehension compared to one or two in every ten for Writing (15%). In contrast, five in every ten pupils (50%) in Writing compared to under two in every ten pupils (18%) for Reading Comprehension were found to be at the critical level and yet to work towards the expected level.

Such low level performance in both Reading Comprehension and especially in Writing should be of great concern to all countries. As both Reading Comprehension and Writing skills are considered to have significant influence on the future academic performance of every pupil, countries whose results show similar patterns should take this result seriously and investigate the cause(s) of such low level performance in order to put in place the most appropriate intervention programs that would ultimately remove the barriers creating such low level performance.

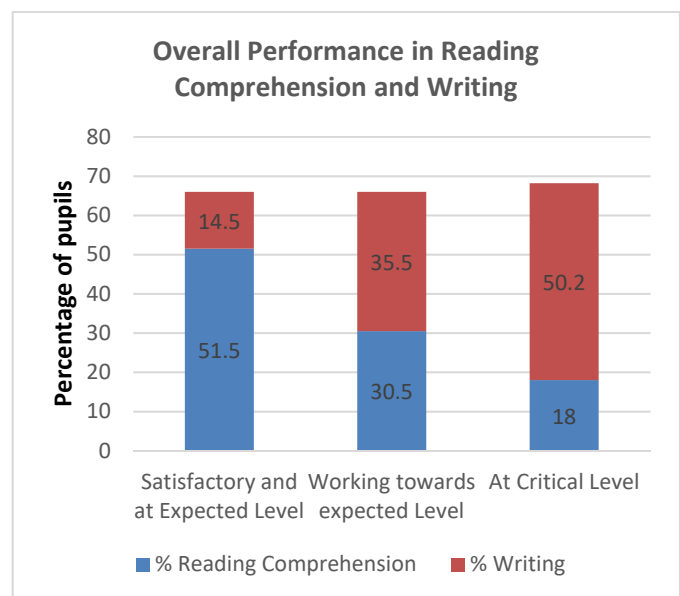


Figure 3: Overall Achievement in Reading Comprehension and Writing Skills at End of Six Years of Schooling

For Numeracy, pupils show significant differences in their performance in the various components ranging from the component Money, where six in every ten pupils (64%) demonstrated a level of performance considered to be satisfactory and at the expected level to two or three (19%) in every ten pupils in the component, Operations. However part of the reasons for such disparity in the level of performance of pupils in the various components is the number of opportunities where pupils are required to demonstrate their skills. While

Operations for example comprises several skill areas such as addition, subtraction, multiplication and division in whole numbers as well as in fractions and decimals, money only focused simple money problems involving addition and subtraction.

Of great concerns are the proportion of pupils who are at the critical level and have yet to work towards the expected level especially for the component – Numbers (46%) and – Operations (55%). Such high percentage of pupils at the critical level in these crucial areas in Numeracy pose serious concern especially when one considers the importance of such basic skills in everyday life and in further studies.

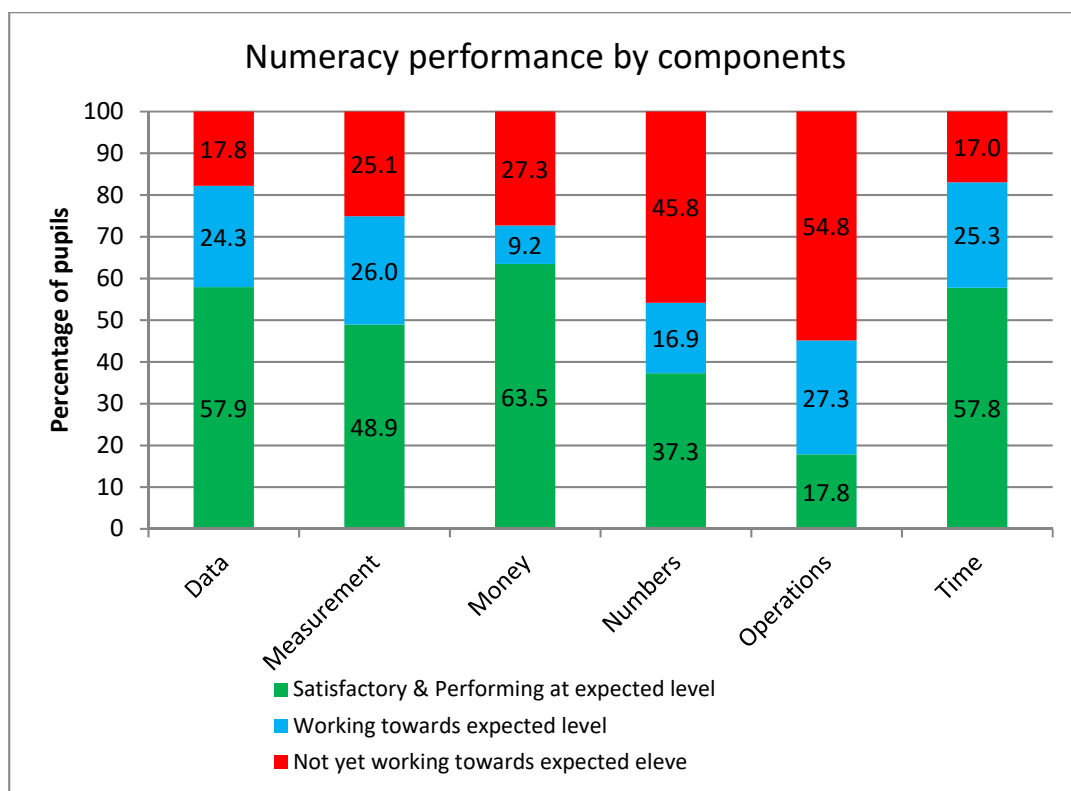


Figure 4: Overall Achievement in Numeracy by component (Numbers, Operations, Measurement, Money, Time & Data)

Different Factors Influence Distribution of Writing Skills among Pupil Cohorts Differently Although Same Messages Emerge

Although results of the PILNA survey show significant differences in the influence of such factors as gender, school location, school authority on the overall Literacy achievement of pupils, the influence of each factor on the specific Writing skills of pupils vary. In spite of this, the message that is emerging from the analysis of the influence of each factor on pupils Writing skills is the same, that is, that a significant proportion of pupils whether boy/girl (gender), attending urban/non-urban schools (location), in government/non-government schools (authority), complete six years of schooling lack basic Writing skills.

While overall girls showed better performance than boys, the majority of both boys and girls still lack basic Writing skills with more than five in every ten boys (54%) compared to under five in every ten girls (49%) at the critical level and yet to move towards the expected level for Writing. For school location, those attending

schools in urban locations showed significantly better performance than those in non-urban schools. As with gender, the majority of pupils in both urban and non-urban schools lack the basic Writing skills with 53% of those in urban schools compared to 49% of those in non-urban schools performing at the critical level and yet to move towards the expected level. For school authority, those in non-government schools showed significantly higher performance especially at the satisfactory and expected level (20%) compared to those in government schools (12%). A significant difference also exists at the lower end of the continuum with 53% of those in government schools compared to 44% of those in non-government schools considered to be at the critical level and yet to work towards the expected level.

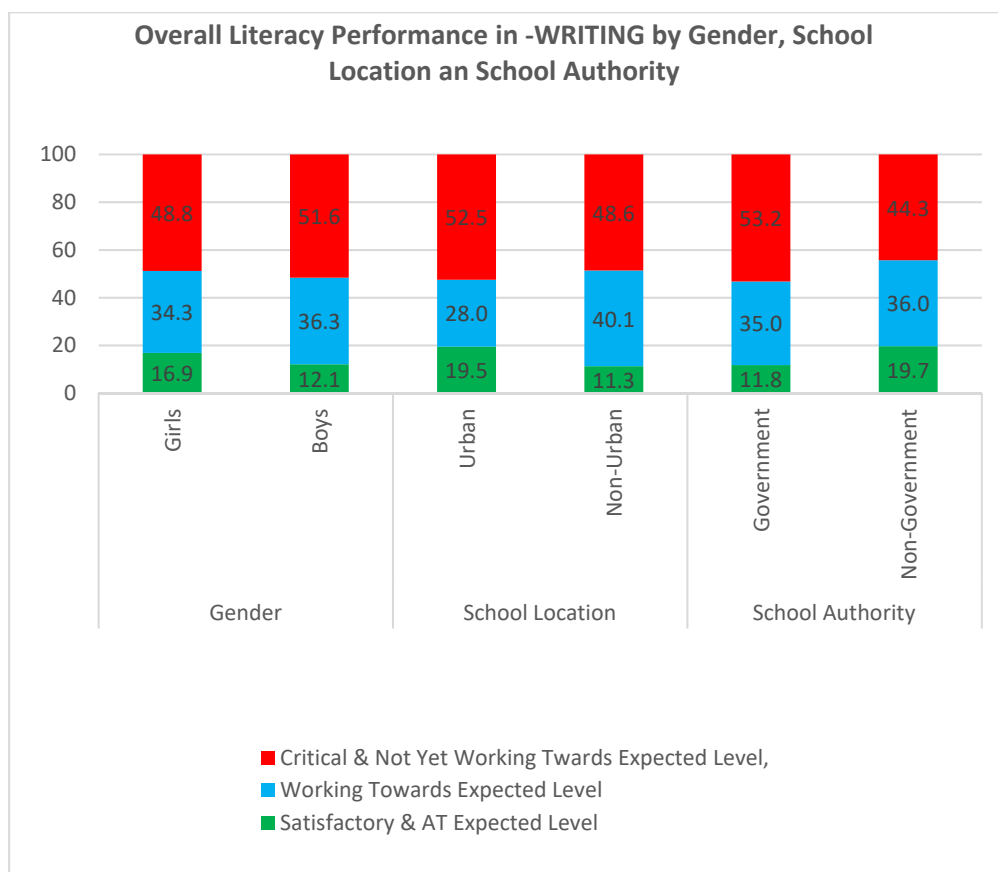


Figure 5: Performance in the Literacy Component –WRITING by gender, school location and school authority.

Different Factors Influence Distribution of Reading Comprehension Skills among Pupil Cohorts Differently

Achievement in the Reading Comprehension component remains a concern for pupils throughout the Pacific although not as serious as their achievement in Writing. The factors that have significantly influenced pupils’ Writing skills were also found to influence pupils’ Reading Comprehension skills and in a similar way. As with Writing, the results of the PILNA survey show girls performing significantly better than boys. Pupils attending schools in urban locations were also found to be performing significantly better in Reading Comprehension than those in non-urban schools. As with Writing, pupils attending non-government schools were found to show significantly better performance in Reading Comprehension than those in government administration.

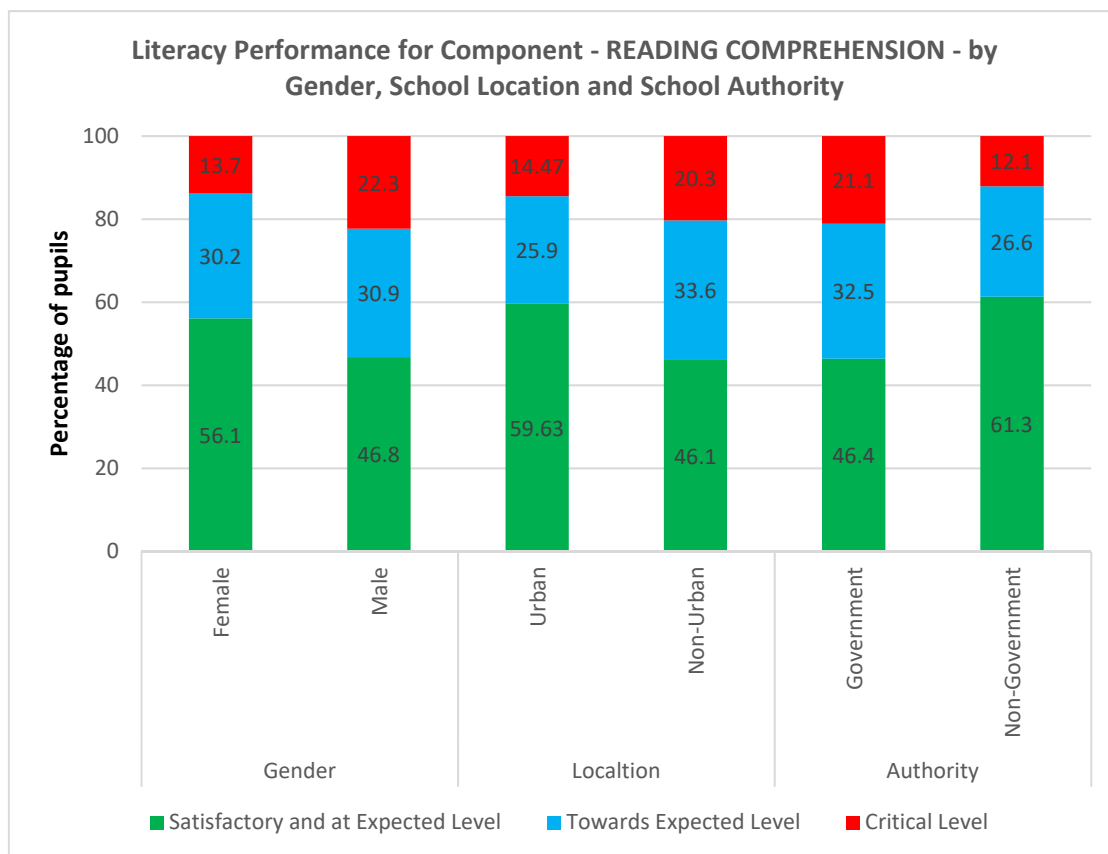


Figure 6: Pupil Achievement in READING COMPREHENSION by Gender, School Location, School Authority.

The influence gender, school location and school authority have on the achievement of pupils, especially in their Writing as well as their Reading Comprehension skills, needs to be urgently investigated in order to identify the root cause(s) of such low level performance throughout the Pacific. This would enable countries to consider what appropriate intervention needs to be put in place to resolve the situation. At the same time it would inform donors and development partners so they can focus their support on programs that would address the barriers causing such performance.

While the PILNA survey found that gender, school location and school authority have significant influence in the Writing and Reading Comprehension achievement of pupils, one should be cautious in interpreting such results as there may be other hidden factors that are causing the disparity in pupil achievement.

Gender, School Location and School Authority Are Major Factors in Pupil Performance in Various Numeracy Components

As with the Literacy situation, wide disparities also exist in Numeracy resulting in many pupils lacking the basic Numeracy skills. While the figures for the overall Numeracy situation in each country are useful, they often hide the wide disparity that exists especially between the various sub-groupings within the community as well as within the various components of Numeracy. It is crucial to identify such disparities as targeted interventions may be the best approach for addressing the situation. However the factors that are influencing achievement

in Literacy are more than likely to be the same as those factors influencing pupil achievement in Numeracy although not necessarily in the same way.

As in other parts of the world, the pressure on governments is mounting to ensure that young people do acquire the basic skills that would enhance their chances of making it in life. But with the increasing demand for more specialized skills in the job market, pupils as well as governments face a daunting task of ensuring that pupils leave school with sufficient skills to keep up with changes brought about by such factors as urbanization, globalization, and especially the technological advancement. Despite the changes and advancement in other social sectors, many of our children are still leaving schools without even the basic skills necessary for successful transition and flexible adaptation into everyday life. Rigorous analysis and investigation of available evidence need to be carried out to determine the main reasons for such prevailing situation in countries in order to determine how best to address the situation.

Evidence from the PILNA study conducted on the Literacy and Numeracy situation in schools throughout the Pacific, based on a sample from the sixth year of schooling, show significant differences in the level achieved by pupils in the various Numeracy components.

As in Literacy, the PILNA survey showed that throughout the Pacific, girls out-performed the boys in Numeracy. Similarly, pupils in urban schools outperformed those in non-urban schools. However no such difference was observed in the performance of those in government schools compared to those in non-government schools. While the situation for Numeracy in the Pacific is significantly better than that for Literacy, the fact remains that the majority of the pupils, whether in urban/non-urban schools, government/non-government schools, are either still working towards the expected level or at a critical level and yet to work towards the expected level.

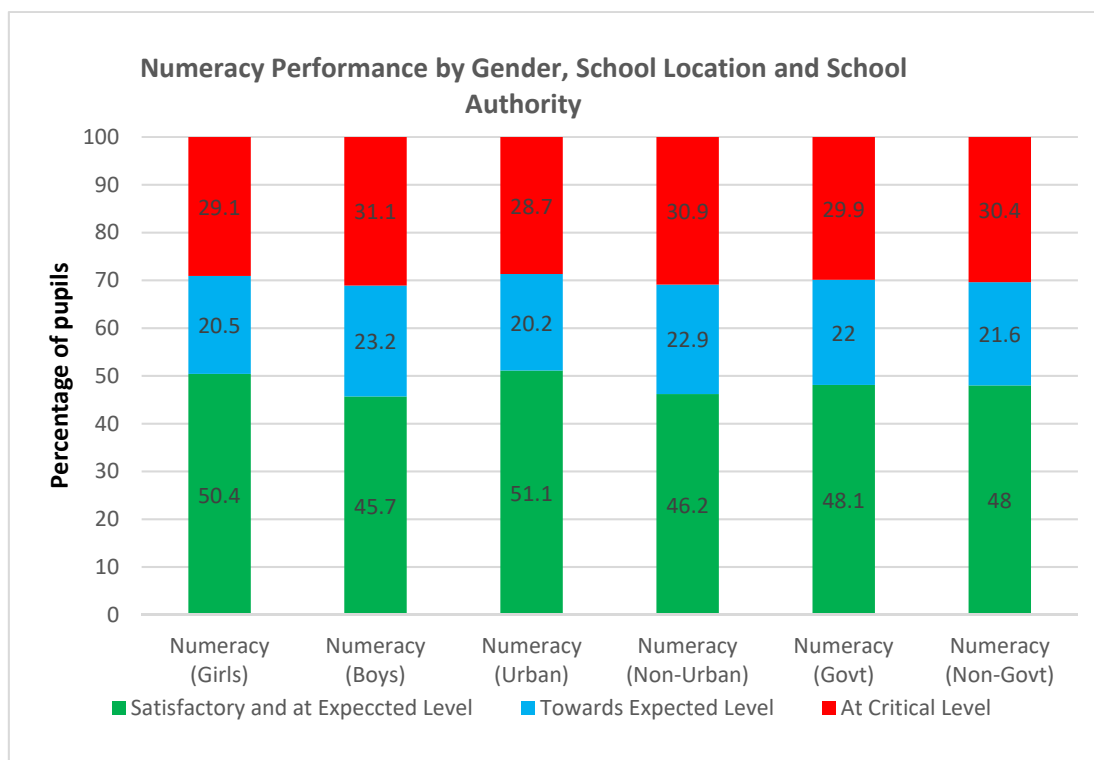


Figure 7: Numeracy Achievements by gender, school location and school authority.

2.4 SUMMARY DATA TABLES FOR YEAR 6

Table 1

Achievement Levels for Year 6 Literacy and Numeracy

Domains	Performing at the expected level (L3 + L4)	Working towards the expected level (L2)	Not yet working towards the expected level (L0 + L1)
Literacy	29.2	41.8	29.0
Numeracy	48.2	21.8	30.0

Table 2

Achievement Levels for Year 6 Literacy and Numeracy for Girls and Boys

Domains	Gender	Performing at the expected level	Working towards the expected level	Not yet working towards the expected level
Literacy	Girls	33.7	43.0	23.3
	Boys	24.8	40.6	34.6
Numeracy	Girls	50.4	20.5	29.0
	Boys	45.7	23.2	31.1

Table 3

Achievement Levels for Year 6 Literacy and Numeracy for Pupils from Government and Non-Government Schools

Domains	Education Authority	Performing at the expected level	Working towards the expected level	Not yet working towards the expected level
Literacy	Government	24.2	42.3	33.4
	Non-Government	39.1	40.8	20.1
Numeracy	Government	48.1	22.0	29.9
	Non-Government	48.0	21.6	30.4

Table 4***Achievement Levels for Year 6 Literacy and Numeracy for Pupils from Urban and Non-Urban Schools***

Domains	School Locality	Performing at the expected level	Working towards the expected level	Not yet working towards the expected level
Literacy	Non-Urban	22.2	44.9	32.8
	Urban	40.0	37.1	10.9
Numeracy	Non-Urban	46.1	22.9	30.9
	Urban	51.0	20.3	28.7

Table 5***Achievement Levels for Year 46Literacy components***

Literacy components	Performing at the expected level	Working towards the expected level	Not yet working towards the expected level
Reading Comprehension	51.5	30.5	18.0
Writing Composition	14.5	35.3	50.2

Table 6***Achievement Levels for Year 6 Numeracy components***

Numeracy components	Performing at the expected level	Working towards the expected level	Not yet working towards the expected level
Data	57.9	24.3	17.8
Measurement	48.9	26.0	25.1
Money	60.5	9.2	27.3
Numbers	37.2	16.9	45.8
Operations	17.8	27.3	54.9
Time	47.8	25.3	17.0

Table 7

Proportion of pupils at year 4 still working towards the expected achievement level for Year 4 Literacy and Numeracy

Domains	Overall and Components	Still working towards the expected level
Literacy	Overall Literacy	41.8
	Reading Comprehension	30.5
	Writing	35.3
Numeracy	Overall Numeracy	21.8
	Data	24.3
	Measurement	26.0
	Money	9.2
	Numbers	16.9
	Operations	27.3
	Time	25.3

Table 8

Proportion of pupils at year 4 not yet working towards the expected achievement level for Year 4 Literacy and Numeracy components

Domains	Overall and Components	Not Yet Working towards the expected level
Literacy	Overall Literacy	29.0
	Reading Comprehension	18.0
	Writing	50.2
Numeracy	Overall Numeracy	30.0
	Data	17.8
	Measurement	25.1
	Money	27.3
	Numbers	45.8
	Operations	54.9
	Time	17.0

2.5 REGIONAL BASELINES FOR YEAR 6

2.5.1 Baselines based on Achievement Levels

Assessment	Overall and Disaggregations		Achievement Levels				
			Level 4	Level 3	Level 2	Level 1	Level 0
Literacy	Overall		1.9	27.3	41.8	15.6	13.4
Literacy by Gender	Girls		2.4	31.3	43.0	13.5	9.8
	Boys		1.4	23.4	40.6	17.6	17.0
Literacy by Education Authority	Government		1.6	22.6	42.3	17.4	16.0
	Non-Government		2.5	36.6	40.8	12.0	8.1
Literacy by School Locality	Non-Urban		1.4	20.8	44.9	17.8	15.0
	Urban		2.7	37.3	37.0	12.0	10.9
Literacy Components	Reading Comprehension		6.6	44.9	30.5	9.5	8.5
	Writing		6.6	7.9	35.3	32.8	17.4
Literacy Components by Gender	Reading Comprehension	Girls	7.9	48.2	30.2	8.2	5.5
		Boys	5.2	41.6	30.9	10.8	11.5
	Writing	Girls	8.0	8.9	34.3	35.8	13.0
		Boys	5.2	6.9	36.3	29.9	21.7
Literacy Components by Education Authority	Reading Comprehension	Government	5.7	40.7	32.5	10.8	10.2
		Non-Government	8.2	53.1	26.7	7.0	5.1
	Writing	Government	5.8	6.0	35.0	32.5	20.7
		Non-Government	8.2	11.5	36.0	33.4	10.9
Literacy Components by School Locality	Reading Comprehension	Non-Urban	4.8	41.3	33.6	10.9	9.4
		Urban	9.2	50.5	25.9	7.3	7.1
	Writing	Non-Urban	4.8	6.4	40.1	29.2	19.4
		Urban	9.4	10.1	28.0	38.3	14.2
Numeracy	Overall		2.5	45.6	21.8	26.8	3.2
Numeracy by Gender	Girls		2.5	47.9	20.5	26.6	2.4
	Boys		2.4	43.3	23.2	27.0	4.1
Numeracy by Education Authority	Government		2.9	45.2	22.0	26.3	3.6
	Non-Government		1.8	46.2	21.6	28.0	2.4
Numeracy by School Locality	Non-Urban		2.7	43.4	22.9	27.6	3.3
	Urban		2.2	48.8	20.3	25.6	3.1
Numeracy components	Data		20.1	37.8	24.3	6.0	11.8
	Measurement		27.4	21.5	26.0	16.8	8.3
	Money		33.0	30.5	9.2	15.9	11.4
	Numbers		17.2	20.1	16.9	38.5	7.3
	Operations		7.0	10.8	27.3	30.9	24.0
	Time		9.0	48.8	25.3	9.5	7.5
Numeracy Components by Gender	Data	Girls	29.9	25.5	27.2	7.0	10.5
		Boys	28.8	26.8	23.7	6.8	13.9
	Measurement	Girls	34.1	17.0	26.7	15.4	6.7
		Boys	32.1	18.2	26.8	14.2	8.7
	Money	Girls	39.4	27.4	8.3	15.4	9.6
		Boys	38.7	23.1	7.4	17.1	13.7

	Numbers	Girls	27.1	19.3	16.3	31.5	5.8
		Boys	27.6	19.7	13.9	29.7	9.1
	Operations	Girls	11.4	14.0	30.0	25.5	19.1
		Boys	10.9	12.8	25.7	25.7	24.9
	Time	Girls	11.6	46.7	25.9	9.8	6.0
		Boys	11.5	48.4	23.4	8.7	8.0
Numeracy Components by Education Authority	Data	Government	30.5	22.8	25.6	7.1	14.0
		Non-Government	25.7	36.6	24.7	6.3	6.7
	Measurement	Government	33.3	15.6	26.5	15.6	9.0
		Non-Government	32.5	23.9	27.6	12.2	3.9
	Money	Government	38.1	25.8	6.9	16.7	12.6
		Non-Government	42.0	23.4	10.7	15.1	8.9
	Numbers	Government	28.3	19.5	14.8	28.7	8.8
		Non-Government	24.4	19.7	16.1	36.5	3.3
	Operations	Government	11.3	13.8	28.0	24.2	22.8
		Non-Government	10.7	12.1	27.2	30.2	19.7
	Time	Government	11.4	45.5	24.8	9.8	8.4
		Non-Government	11.9	53.7	24.2	7.5	2.7
Numeracy Components by School Locality	Measurement	Non-Urban	27.1	27.0	25.3	7.5	13.0
		Urban	38.5	22.3	25.9	4.4	8.9
	Money	Non-Urban	31.9	18.1	27.4	14.4	8.1
		Urban	37.9	15.8	24.0	16.2	6.2
	Numbers	Non-Urban	36.7	25.7	8.0	17.0	12.6
		Urban	49.0	22.8	7.1	13.3	7.9
	Operations	Non-Urban	26.9	18.2	15.3	31.7	7.9
		Urban	29.1	25.1	14.2	26.0	5.6
	Time	Non-Urban	9.6	12.9	26.8	27.1	23.6
		Urban	17.5	15.3	31.7	19.6	15.8

3 THE YEAR 4 REGIONAL REPORT

PACIFIC REGIONAL 2012 PILNA REPORT FOR YEAR 4 LITERACY AND NUMERACY

3.1 KEY MESSAGES

1. Only 30% of Year 4 pupils (or three in every ten) performed at the expected level in Literacy and 48% (or five in every ten pupils) in Numeracy. 17% of Year 4 pupils had critically underachieved in Literacy and 14% in Numeracy. These pupils had yet to work towards the expected levels of performance in Year 4.
2. Year 4 pupils performed significantly better in Numeracy than in Literacy.
3. Girls performed better than boys in Literacy as well as in Numeracy.
4. Year 4 pupils in non-government schools performed better than those in government schools in both Literacy and Numeracy.
5. Year 4 pupils in urban schools performed significantly better in Literacy than pupils in non-urban schools; however the difference in performance levels in Numeracy is not significant.
6. The two Literacy components assessed in PILNA were Reading Comprehension and Writing. Pupils performed significantly better in Reading Comprehension than in Writing.
7. The five Numeracy components assessed in Year 4 PILNA were Measurement, Money, Numbers, Operations and Time. The proportion of pupils that performed at the expected levels in these components ranged between 41% and 57%. The best performance was in Numbers (57%) followed by Money (54%). Performances across the other three components were relatively comparable.
8. There were high proportions of pupils who were still working towards the expected levels of performance but had yet to reach them in both Literacy (53%) and Numeracy (38%). These pupils could have improved their Literacy and Numeracy skills during the year, depending on the support and remediation provided by teachers.
9. There were worrying proportions of students who had not indicated any achievement of minimum skills in Literacy (17%) and Numeracy (14%). These pupils were critically underachieving for Year 4.

The key messages above are explained in detail in Section 3 of this report. The performance summary tables are provided in **Appendix I**, and the official results are provided in **Appendix II**.

3.2 GENERAL INFORMATION

GENERAL INFORMATION ON YEAR 4 PUPIL NUMBERS IN PILNA 2012 FOR THE REGION

Number of Year 4 students that participated in PILNA 2012

Domain	Gender		School Locality		School Authority		Total number
	Boys	Girls	Non-Urban	Urban	Govt	Non-Govt	
Literacy	6600	6512	7645	5467	9037	4075	13112
Numeracy	6635	6524	7651	5508	7644	4092	13159

Govt: Government

Non-Govt: Non-Government

3.3 PERFORMANCE SUMMARY

PERFORMANCE SUMMARY FOR YEAR 4 PILNA 2012 FOR THE PACIFIC REGION

3.3.1 Overall Literacy and Numeracy

Key Messages

- Only 30% of Year 4 pupils (or three in every ten) performed at the expected level in Literacy and 48% (or five in every ten pupils) in Numeracy. 17% of Year 4 pupils had critically underachieved in Literacy and 14% in Numeracy. These pupils had yet to work towards the expected levels of performance in Year 4.
- Year 4 pupils performed significantly better in Numeracy than in Literacy.

- In Year 4 Literacy, 30% of pupils performed at the expected level while 17% were not yet able to demonstrate expected minimum Literacy skills.
- In Year 4 Numeracy, 48% of pupils performed at the expected level while 14% was not able to demonstrate minimum expected Numeracy skills.
- Pupils have performed significantly better in Numeracy than Literacy.

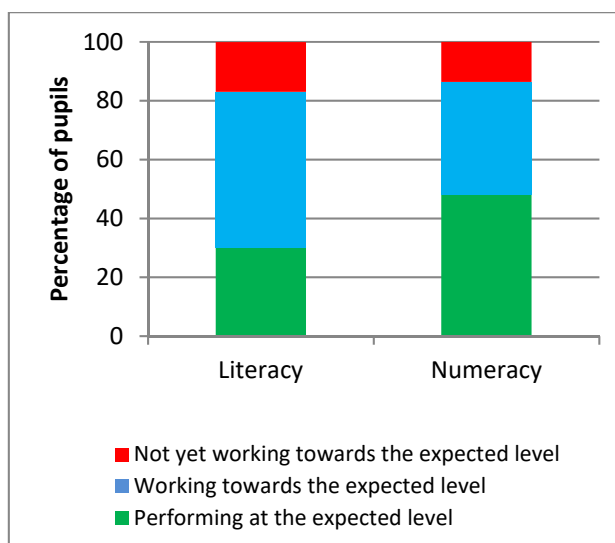


Figure 1: Performance in Literacy and Numeracy

3.3.2 Literacy and Numeracy disaggregated by Gender

Key Message 3: Girls performed better than boys in Literacy as well as in Numeracy.

- a. 35% of girls performed at expected level in Literacy compared to 25% of boys while 51% of girls performed at expected level in Numeracy compared to 45% of boys.
- b. 13% of girls were not yet working towards expected level in Literacy compared with 21% of boys while 11% of girls were not working towards expected level in Numeracy compared with 16% of boys.
- c. Girls have performed better than boys in both Literacy and Numeracy.

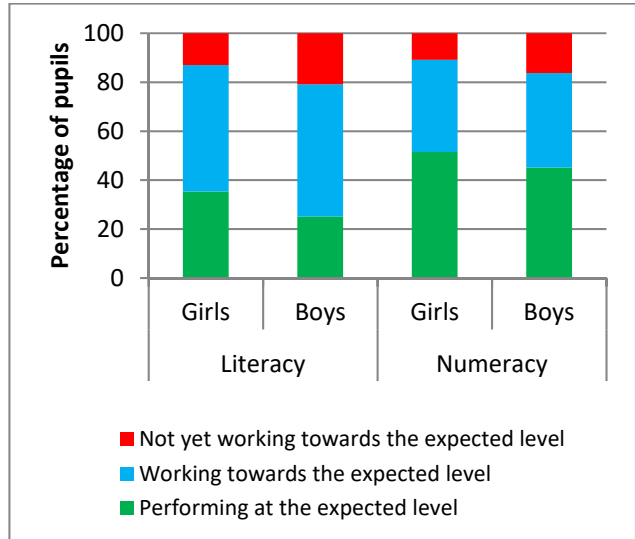


Figure 2: Performance in Literacy and Numeracy by gender

3.3.3 Literacy and Numeracy disaggregated by Education Authority

Key Message 4

Year 4 pupils in non-government schools have performed better than those in government schools in Literacy and Numeracy, but the difference in achievements in Numeracy is smaller.

- a. In Literacy, 37% of Year 4 pupils in non-government schools are performing at expected level compared to 27% in government schools.
- b. In Numeracy, 50% of pupils in non-government schools are performing at the expected level compared to 47% in government schools.
- c. Year 4 pupil performance in Literacy is related to whether the pupil attends a government school or a non-government school.

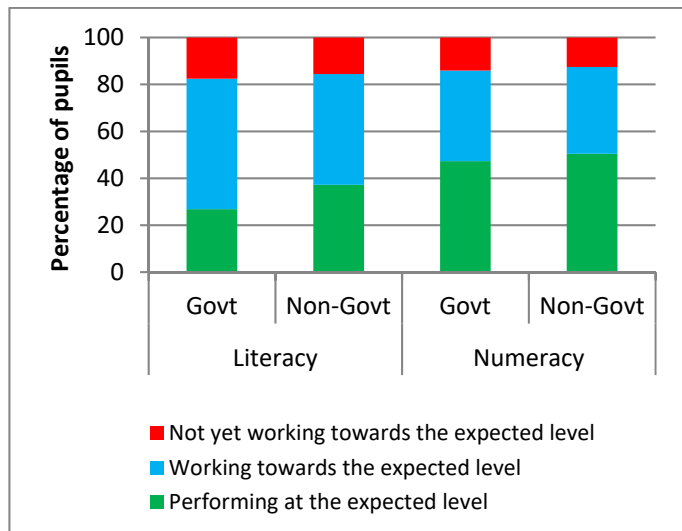


Figure 3: Performance in Literacy and Numeracy by education authority

3.3.4 Literacy and Numeracy disaggregated by School Locality

Key Message 5

Year 4 pupils in urban schools performed significantly better in Literacy than pupils in non-urban schools; however the difference in performance levels in Numeracy is not significant.

- In Literacy, 35% of Year 4 pupils in urban schools performed at the expected level compared to 26% of pupils in rural schools.
- In Numeracy, 50% of Year 4 pupils in urban schools performed at expected level compared to 47% in rural schools.
- The level of performance of a Year 4 pupil in Literacy was related to whether the pupil attends an urban school or a non-urban school.

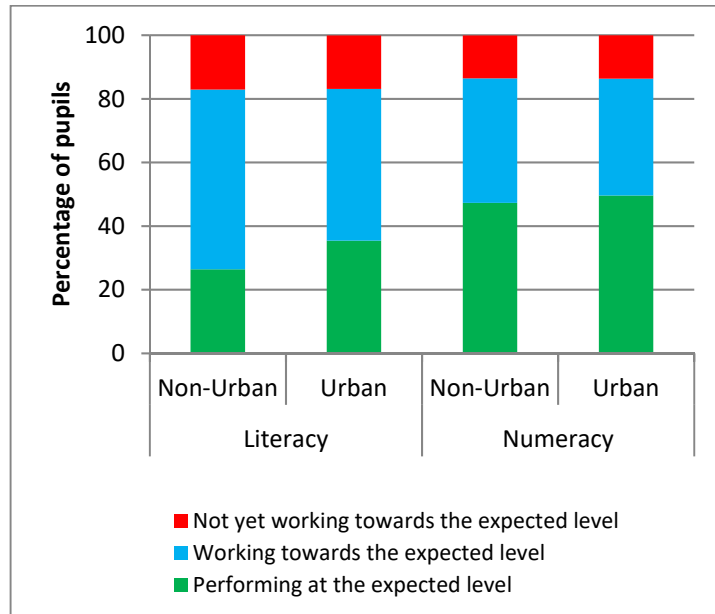


Figure 4: Performance in Literacy and Numeracy by school locality

3.3.5 Literacy components

Key Message 6

The two Literacy components that were assessed were Reading Comprehension and Writing. Pupils performed significantly better in Reading Comprehension than in Writing.

- Five in ten pupils (54%) performed at expected level in Reading Comprehension while only two in ten pupils (18%) performed at expected level in Writing.
- Three in ten pupils have not yet worked towards the expected levels in both Reading Comprehension and Writing. These pupils have not been able to demonstrate any of the minimum skills in Reading Comprehension and Writing.
- A large proportion of pupils – five in every ten (48%) were still working towards the expected Year 4 level in Writing by the end of Year 4. They had not yet reached the expected level of Writing skills by the end of the year.

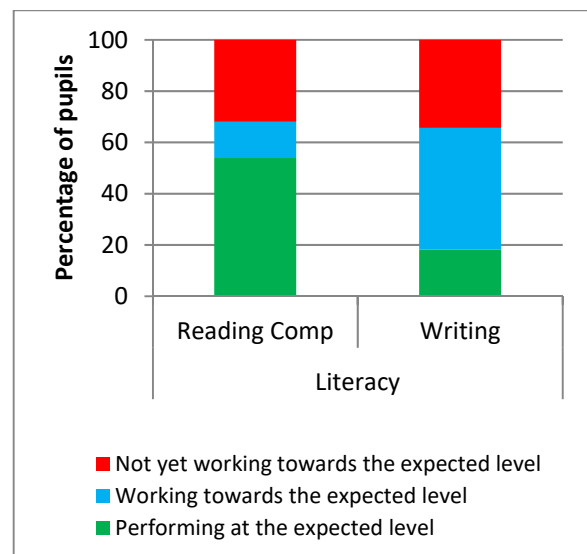


Figure 5. Performance in Literacy components in Year 4

3.3.6 Numeracy components

Key Message 7: The five Numeracy components assessed in Year 4 PILNA were Measurement, Money, Numbers, Operations and Time. The proportion of pupils that performed at the expected levels in these components ranged between 41% and 57%. The best performance was in Numbers (57%) followed by Money (54%). Performances across the other three components were relatively comparable.

- a. The highest proportion of pupils that performed at expected level was found in the Numbers component (57%) followed by Money (54%). This is most likely indicative of the amount of emphasis on the development of number sense and the application of this into money problems in the first four years of primary schooling.
- b. Proportions performing at the expected level for the other components were comparable:
- Measurement 42%
 - Operations 44%
 - Time 41%

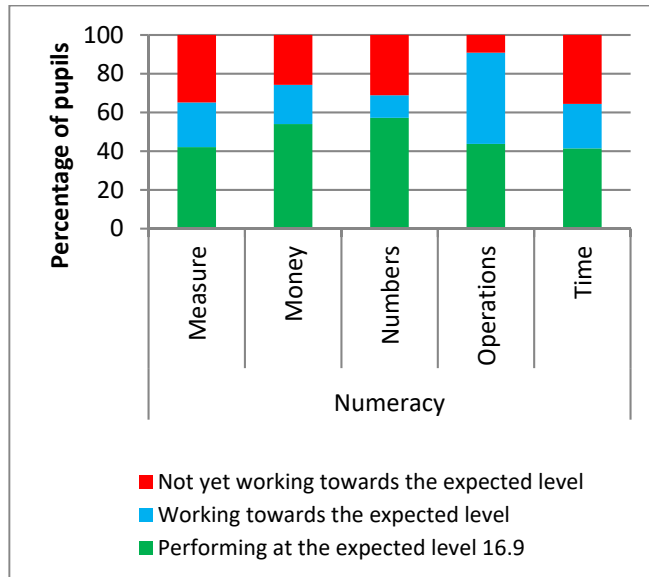


Figure 6: Performance in Numeracy components at Year 4

3.3.7 Level 2 performance (still working towards expected levels)

Key Message 7: There were high proportions of pupils who were still working towards the expected levels of performance but had yet to reach them in both Literacy (53%) and Numeracy (38%). These pupils could have improved their Literacy and Numeracy skills during the year, depending on the support and remediation provided by teachers.

- a. Proportions of pupils still performing in Level 2 in overall Literacy and Numeracy and some components that are greater than 20%:
- Overall literacy 53%
 - Writing 48%
 - Overall numeracy 38%
 - Measurement 23%
 - Money 20%
 - Operations 47%
 - Time 23%
- b. A large proportion of these pupils could have performed at expected levels had they been provided with good levels of targeted intervention by their teachers.

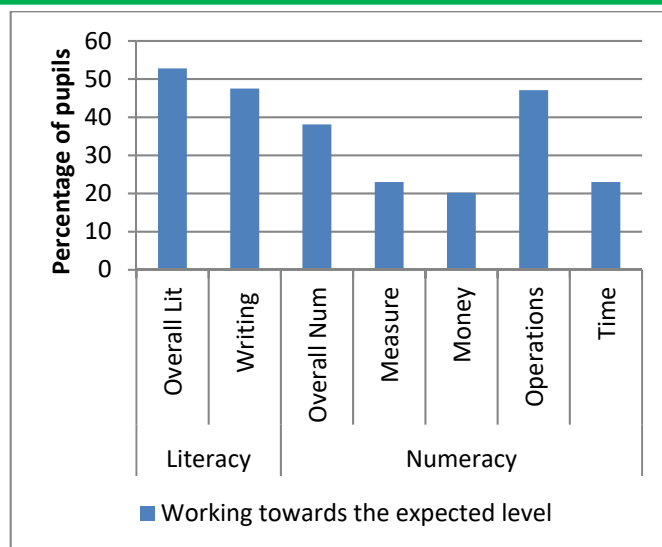


Figure 7: Proportion of pupils still working towards expected levels

3.3.8 Level 1 and Level 0 performance (yet to work towards expected levels)

Key Message 8: In both overall Literacy and Numeracy as well as in some of their components, there are worrying proportions of pupils who had performed at Level 1 and Level 0. These pupils are critically underachieving for Year 4.

a. Components in which proportions of pupils critically underachieving are greater than 20%:

- Reading Comp 32%
- Writing 34%
- Measurement 35%
- Money 26%
- Numbers 31%
- Time 36%

b. These pupils have not demonstrated the basic minimum skills in these Literacy and Numeracy components that were expected for the Year level. Future learning of these pupils would be severely inhibited unless targeted intervention is provided to them.

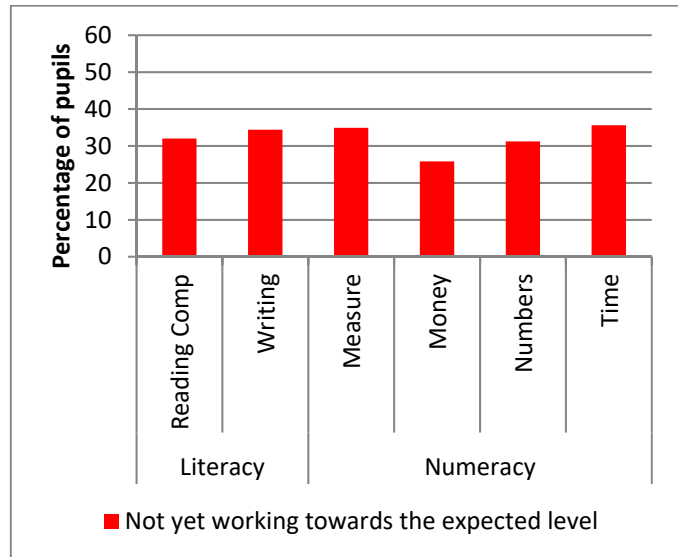


Figure 8. Proportion of pupils at Year 4 critically underachieving in Literacy and Numeracy.

3.4 SUMMARY DATA TABLES FOR YEAR 4

Table 1

Achievement Levels for Year 4 Literacy and Numeracy

Domains	Performing at the expected level (L3 + L4)	Working towards the expected level (L2)	Not yet working towards the expected level (L0 + L1)
Literacy	30.2	52.8	16.9
Numeracy	48.3	38.1	13.6

Table 2

Achievement Levels for Year 4 Literacy and Numeracy for Girls and Boys

Domains	Gender	Performing at the expected level	Working towards the expected level	Not yet working towards the expected level
Literacy	Girls	35.3	51.7	13.0
	Boys	25.1	54.0	20.9
Numeracy	Girls	51.5	37.6	10.9
	Boys	45.1	38.6	16.3

Table 3

Achievement Levels for Year 4 Literacy and Numeracy for Pupils from Government and Non-Government Schools

Domains	Education Authority	Performing at the expected level	Working towards the expected level	Not yet working towards the expected level
Literacy	Government	26.8	55.6	17.6
	Non-Government	37.2	47.2	15.6
Numeracy	Government	47.3	38.6	14.1
	Non-Government	50.4	37.0	12.6

Table 4***Achievement Levels for Year 4 Literacy and Numeracy for Pupils from Urban and Non-Urban Schools***

Domains	School Locality	Performing at the expected level	Working towards the expected level	Not yet working towards the expected level
Literacy	Non-Urban	26.4	56.5	17.1
	Urban	35.4	47.7	16.8
Numeracy	Non-Urban	47.3	39.1	13.5
	Urban	49.6	36.7	13.7

Table 5***Achievement Levels for Year 4 Literacy components***

Literacy components	Performing at the expected level	Working towards the expected level	Not yet working towards the expected level
Reading Comprehension	53.9	14.1	32.0
Writing Composition	18.1	47.5	34.4

Table 6***Achievement Levels for Year 4 Numeracy components***

Numeracy components	Performing at the expected level	Working towards the expected level	Not yet working towards the expected level
Measurement	42.1	23.0	34.9
Money	54.0	20.2	25.8
Numbers	57.2	11.6	31.2
Operations	43.7	47.1	9.2
Time	41.4	23.0	35.6

Table 7***Proportion of pupils at year 4 still working towards the expected achievement level for Year 4 Literacy and Numeracy***

Domains	Overall and Components	Working towards the expected level
Literacy	Overall Literacy	52.8
	Reading Comprehension	14.1
	Writing composition	47.5
Numeracy	Overall Numeracy	38.1
	Measurement	23.0
	Money	20.2
	Numbers	11.6
	Operations	47.1
	Time	23.0

Table 8***Proportion of pupils at year 4 not yet working towards the expected achievement level for Year 4 Literacy and Numeracy components***

Domains	Overall and components	Not yet working towards the expected level
Literacy	Reading Comprehension	32.0
	Writing	34.4
Numeracy	Measurement	34.9
	Money	25.8
	Numbers	31.2
	Operations	9.2
	Time	35.6

3.5 REGIONAL BASELINES FOR YEAR 4

3.5.1 Baselines based on three performance categories

(numbers are percentages of pupils)

Domain or component	Disaggregation	REGIONAL BASELINES FOR YEAR 4		
		Performing at expected level	Working towards expected level	Not yet working towards expected level
Overall Literacy		30.2	52.8	16.9
Literacy by gender	Boys	25.1	54.0	20.9
	Girls	35.3	51.7	13.0
Literacy by education authority	Government	26.8	55.6	17.6
	Non-Government	37.2	47.2	15.6
Literacy by School locality	Urban	35.4	47.7	16.8
	Non-urban	26.4	56.5	17.1
Overall Numeracy		48.3	38.1	13.6
Numeracy by gender	Boys	45.1	38.6	16.3
	Girls	51.5	37.6	10.9
Numeracy by education authority	Government	47.3	38.6	14.1
	Non-Government	50.4	37.0	12.6
Numeracy by School locality	Urban	49.6	36.7	13.7
	Non-urban	47.3	39.1	13.5
Literacy components	Reading Comprehension	53.9	14.1	32.0
	Writing	18.1	47.5	34.4
Numeracy components	Measurement	42.1	23.0	34.9
	Money	54.0	20.2	25.8
	Numbers	57.2	11.6	31.2
	Operations	43.7	47.1	9.2
	Time	41.4	23.0	35.6

3.5.2 Baselines based on achievement levels

Assessment	Overall and Disaggregations	Achievement Levels				
		Level 4	Level 3	Level 2	Level 1	Level 0
Literacy	Overall	3.3	26.9	52.8	13.2	3.7
Literacy by Gender	Girls	4.3	31.0	51.7	10.4	2.6
	Boys	2.3	22.8	54.0	16.0	4.9
Literacy by Education Authority	Government	2.6	24.2	55.6	13.5	4.1
	Non-Government	4.8	32.4	47.2	12.6	3.0
Literacy by School Locality	Non-Urban	1.9	24.5	56.5	13.4	3.7
Literacy Components	Urban	5.2	30.2	47.7	13.0	3.8
	Reading Comprehension	25.0	29.0	14.1	18.6	13.4
	Writing	4.5	13.7	47.5	32.6	1.8

Literacy Components by Gender	Reading	Girls	28.8	31.3	12.8	17.7	9.3
	Comprehension	Boys	21.2	26.6	15.3	19.5	17.4
	Writing	Girls	5.7	14.9	50.8	27.7	1.0
		Boys	3.2	12.5	44.2	37.5	2.6
Literacy Components by Education Authority	Reading	Government	24.5	29.0	14.4	18.0	14.2
	Comprehension	Non-Government	25.9	28.9	13.4	20.0	11.7
	Writing	Government	3.6	12.7	48.4	33.5	1.9
		Non-Government	6.2	15.7	45.6	30.9	1.6
Literacy Components by School Locality	Reading	Non-Urban	23.2	29.5	15.2	19.4	12.8
	Comprehension	Urban	27.5	28.3	12.5	17.5	14.2
	Writing	Non-Urban	2.9	13.3	48.2	34.0	1.7
		Urban	6.7	14.2	46.4	30.7	1.9
Numeracy	Overall		3.3	45.0	38.1	11.4	2.2
Numeracy by Gender	Girls		3.9	47.6	37.6	9.4	1.5
	Boys		2.8	42.3	38.6	13.3	3.0
Numeracy by Education Authority	Government		3.4	43.9	38.6	11.6	2.5
	Non-Government		3.2	47.2	37.0	11.0	1.6
Numeracy by School Locality	Non-Urban		4.4	42.9	39.1	11.4	2.1
	Urban		1.8	47.8	36.7	11.3	2.4
Numeracy components	Measurement			42.1	23.0	19.1	15.8
	Money		34.4	19.6	20.2	21.2	4.7
	Numbers		9.8	47.3	11.6	24.4	6.8
	Operations		11.6	32.1	47.1	3.5	5.6
	Time			41.4	23.0	16.1	19.5
Numeracy Components by Gender	Measurement	Girls		41.8	23.7	19.7	14.8
		Boys		42.4	22.4	18.4	16.8
	Money	Girls	36.8	21.2	19.4	19.0	3.6
		Boys	32.0	18.0	21.0	23.3	5.8
	Numbers	Girls	10.9	48.4	12.2	23.7	4.8
		Boys	8.8	46.3	11.1	25.0	8.8
	Operations	Girls	12.5	34.0	46.3	2.8	4.4
		Boys	10.7	30.3	48.0	4.2	6.9
	Time	Girls		43.5	23.6	16.8	16.1
		Boys		39.4	22.5	15.4	22.8
Numeracy Components by Education Authority	Measurement	Government		41.3	21.1	20.1	17.5
		Non-Government		43.6	27.1	17.1	12.2
	Money	Government	34.0	18.5	19.6	23.0	5.0
		Non-Government	35.1	21.9	21.4	17.6	4.0
	Numbers	Government	10.9	48.5	10.2	23.6	6.8
		Non-Government	7.7	44.8	14.6	26.0	6.9
	Operations	Government	10.8	31.3	48.5	3.5	5.9
		Non-Government	13.3	33.8	44.4	3.4	5.1
	Time	Government		39.3	22.4	17.4	21.0
		Non-Government		45.8	24.4	13.3	16.4
Numeracy Components by School Locality	Measurement	Urban		39.1	22.5	22.5	15.9
		Non-Urban		44.2	23.4	16.7	15.7
	Money	Urban	34.5	19.8	19.1	22.4	4.2
		Non-Urban	34.3	19.4	20.9	20.4	5.0

Numbers	Urban	5.4	47.6	13.6	26.0	7.4
	Non-Urban	13.1	47.1	10.2	23.2	6.4
Operations	Urban	12.7	33.6	45.2	3.5	5.0
	Non-Urban	10.8	31.1	48.5	3.4	6.1
Time	Urban		46.0	20.6	15.0	18.4
	Non-Urban		38.1	24.8	16.8	20.2

The shading indicates that these components were not assessed at Level4, meaning that the skill encapsulated in the learning outcomes in these components did not match the demands of Level4 skills hence there were no Level 4 items item for these components.

4 CONCLUSION AND RECOMMENDATIONS

The PILNA sample survey results have confirmed speculation that has been around for some time now regarding the real Literacy and Numeracy situation in the Pacific; that both are in a dire situation and need immediate and urgent intervention. With seven in every ten pupils (71%) throughout the Pacific failing to meet the Literacy skills expected at the end of six years of schooling and five in every ten failing to meet the Numeracy skills expected (52%), this raises doubts regarding the quality of basic education countries provide to their children. Considering the importance of Literacy and Numeracy as the basic foundation for further academic studies, especially in secondary and tertiary, education stakeholders throughout the Pacific need to work closely together in trying to determine firstly the causes for such low achievement in order to identify the most effective intervention strategy that would eliminate the barriers that are preventing the majority of pupils from acquiring such basic skills as Literacy and Numeracy.

Factors that evidence from the PILNA survey, as well as from studies elsewhere, have shown to influence the achievement of pupils such as gender, geographical location, school governance, as well as other factors that studies in other parts of the world have shown to have an influence such as socio-economic status of families, language background, attitude and aspirations of pupils as well as school climate, need further investigation. Such investigations need to look at the extent of the influence of each factor, whether positive or negative, as well as the causes so that intervention strategy is put in place to promote those factors that have positive influence and remove or mitigate those that have negative influence.

Key Recommendation:

Considering the dire situation that functional Literacy and Numeracy throughout the Pacific is currently in, education authorities in each country, with support from donors and development partners, should take immediate action to identify the cause(s) of such low level performance in order to put in place the most appropriate interventions needed to address the situation.

Implementing this recommendation would require undertaking research at the schools and their community to investigate the factors that cause such low level performance. Donors and development partners would be needed to support any initiative by countries, or by regional organisations, aimed at addressing the Literacy and Numeracy situation in the Pacific. This would require monitoring the effectiveness of current as well as future initiatives in addressing the Literacy and Numeracy situation throughout the Pacific. One option for countries is to adopt an evidenced-based approach towards benchmarking the situation in one country against another or against regional benchmarks as well as against international norms. This is the approach that the initiative Pacific Benchmarking for Education Results (PaBER) has adopted, and all countries should seriously consider adopting the PaBER Approach so that they can share their situation with one another and benchmark each country's situation against the region as well as against international norms.

Specific Recommendation:

Considering the significant influence that gender, school location and school authority have on the performance of pupils, Ministries of Education, with support from donors and development partners, should carry out an investigation to determine the real cause(s) for the influence each factor has on the Literacy and Numeracy performance of pupils. Results from such investigation should provide the evidence that would drive intervention programs countries put in place to address the Literacy and Numeracy situation in each country.

Implementing this recommendation would require carrying out research on the various issues that are causing the influence each factor has on Literacy and Numeracy performance of pupils. For example, what are the issues that are causing girls to do better in both Literacy and Numeracy than boys? What are the issues that cause pupils in urban schools to do better than those in non-urban schools? What are the issues that are causing pupils from non-government schools to do better than those from government schools?

It is crucial that these issues are identified, so that the most appropriate intervention programs are put in place to target the specific issues identified. Failure to identify the specific issues would make it difficult to identify the appropriate intervention to be put in place thus making it difficult to improve the situation.

The data appearing in this report provides a snapshot of the state of the regional Literacy and Numeracy performance in Year 4 and 6. The achievements, expressed as percentages of pupils acquiring skills in the domains, and domain components, reveal the level of success that is apparent in developing important Literacy and Numeracy skills. There is evidence that unacceptable levels of underachievement are to be found in a number of skill areas covered by the data. The data provides the evidence but does not provide the reasons for the underachievement. It is only when the reasons are revealed that it will be possible to set about correcting the situation.

Specific Recommendation:

Teacher intervention has been often referred to in the body of the report. However, intervention can be successful only if the conditions within which teachers and pupils are expected to interact are conducive to effective learning. Those conditions may be outside the teacher's control, and therefore the whole support structure given by the education system to the classroom should be included when determining the best way for skill acquisition in Literacy and Numeracy to be improved.

Care had been taken during the PILNA process to protect the integrity of the 2012 results in order to provide reliable and valid baseline data on the achievement levels of the Literacy and Numeracy skills of pupils in Pacific Island schools who have completed Years 4 and 6. This report carries the detailed results for Year 4 pupils and these results have formed the Pacific-wide regional baselines for Year 4. Some comparisons have been made

within the report. These are intended to promote the effective use of data in formulating national policy, in monitoring, and in designing appropriate intervention programmes to improve Literacy and Numeracy levels.

It is hoped that the PILNA process and the information contained in these PILNA reports will serve to engender within the Pacific Island countries constructive dialogues and actions that will directly lead to improvements in the Literacy and Numeracy skills of Pacific Island children, both as building blocks for future achievement and as means of empowering Pacific Island citizens to take control of their future.

5 APPENDIX

5.1 THE PACIFIC REGIONAL BENCHMARKS FOR LITERACY AND NUMERACY

PACIFIC DEFINITION OF LITERACY:

“Knowledge and skills necessary to empower a person to communicate through any form of language of their society, with respect to everyday life”

A person is considered to be functionally literate if she/he has acquired the necessary knowledge and skills to be able to communicate effectively through any form of language of their society, with respect to everyday life.

The literacy status of a person between the ages of 6 to 14 years will be determined nationally and regionally (if required) by referencing his/her literacy skills to the indicator outlined below. However, a person is considered to be functionally literate if he/she has completed four years of formal education and has met the indicator outlined for Year 4.

Skill Component	Year 4 Indicators (9 – 10 yrs)	Year 6 Indicators (11 – 12 yrs)
Listening	Listen, understand, respond and question texts	Listen, understand, respond and critically question texts/genre
Speaking	Understand, speak, question and respond in various genres/texts	Understand, speak, critically question and respond in various genres/texts
Writing	Write and present ideas in a variety of genres/texts that demonstrate the basic use of writing mechanics	Writing and presenting ideas including critical analysis in a variety of genres/texts that uses writing mechanics (appropriately).
Reading	Read, understand, question and respond to a variety of genres/texts	Read, understand, question and respond critically to a variety of genres/texts

PACIFIC DEFINITION OF NUMERACY:

“Knowledge and skills necessary to empower a person to be able to use numbers in mathematical processes, as well as the language of mathematics, for a variety of purposes, with respect to everyday life”

A person considered to be functionally numerate is therefore someone who has acquired the necessary knowledge and skills to be able to use numbers effectively in mathematical processes, as well as the language of mathematics, for a variety of purposes in everyday life not only within the society he/she lives but beyond.

The numeracy status of a person between the ages of 6 to 14 years will be determined nationally and regionally (if necessary) by referencing his/her numeracy skills to the benchmarks outlined below. However, a person is considered to be functionally numerate if he/she has completed four years of formal education and has met the numeracy benchmark outlined for Year 4.

Skill Component	Elements	Year 4 Indicators (9 – 10 yrs)	Year 6 Indicators (11 – 12 yrs)
NUMBERS	Counting Objects	Represent numbers using numerals from 1 to 999	
	Recognizing Numbers	Identify and write numbers in numerals and in words up to 999;	Identify and write numbers in numerals and in words up to 9999;
	Place value	Identify and write 3-digit whole numbers and decimal numbers up to 2 decimal places;	Identify and write 4-digit whole numbers and decimal numbers up to 3 decimal places; Round off numbers up to 2 significant figures and 2 decimal places;
	Fractions & Percentages	Relate parts of an object to the whole; Identify denominator & numerator in a fraction; Illustrate part of a whole as a fraction and as a %;	Convert simple fractions to % ;
	Relations	Read and write sentences involving greater than, less than and equal to using numbers up to 999;	Read, write and compare numbers using <, > and =; Identify, write and describe simple number patterns for factors and multiples;
	Measurement	Measure; length and height of objects; 2. use appropriate units in measurement above;	Measure; length, mass, area, perimeter, angle
OPERATIONS	Addition	Add up to three 1- to 2-digit whole numbers with multiple regroup; Solve simple problems on everyday use of addition;	Add up to three 1- to 4-digit whole numbers with and without regroup; Add proper fractions with 1- or 2-digit denominators that are equal or are multiples; Add decimal numbers with up to 2 decimal places; Know how to add '0' in both whole and decimal numbers Solve simple problems on everyday use of addition
	Subtraction	Subtract up to 2-digit from up to 3-digit whole numbers with and without regroup;	Subtract two 1- to 4-digit whole numbers with multiple regroup; Subtract proper fractions with 1- or 2-digit denominators that are

		Solve simple problems on everyday use of subtraction;	equal or are multiples; Subtract decimal numbers with up to 2 decimal places Subtract numbers involving '0' in both whole and decimal numbers with 2 decimal places; Solve simple problems on everyday use of subtraction;
	Multiplication	Multiply 2-digit by 1-digit whole numbers with and without regroup,	Multiply up to 3-digit by 1- or 2-digit whole numbers with and without regroup;
	Division		Divide 2-digit whole numbers by 1-digit factor; Use order of operations to simplify expressions involving 2 operations; 3. solve simple problems on everyday use of the four operations
MONEY	Recognize and use money	Recognize the money value of items in shops, market, etc; Calculate costs of shopping with 2 items (in whole value only); Calculate changes from shopping;	Calculate total costs of shopping with 3 different items (include decimals); Calculate the change from shopping; Calculate the unit cost of items in shopping;
TIME	Time	Identify short/long hand or 1 st /2 nd number (digital) with hour/minute; Understand am/pm in relation to time of day; Tell time from clock face or diagram (but limit to o'clock, quarter past/to and half past);	Tell time from clock face or diagram; Calculate time difference from clock; Solve simple everyday problems on time and duration;
DATA	Data		Tally given sets of discrete data; Represent data on graph (bar or picture); Interpret data on graph based on heights of bars (bar graph) and number of pictures (pictograph); Know and calculate the average of discrete data;

5.2 LITERACY AND NUMERACY SKILLS DESCRIPTIONS

Literacy and Numeracy Skills Descriptions for Achievement Level 4 – Level 0

LITERACY SKILLS DESCRIPTIONS FOR ACHIEVEMENT LEVELS		
LEVELS	YEAR 6	YEAR 4
Level 4	Is able to compose a piece of writing expected at Year 6 level with sufficient content, coherence and distinctive style in a given text type; is able to respond critically to information given in any two text types; and is able to demonstrate use of superior language skills of reporting a given speech and parts of speech that are considered complex at Year 6 level (e.g. prepositions, conjunctions).	Is able to compose a piece of writing expected at Year 4 level with sufficient content, coherence and basic style in the given text type, is able to extend information given in any two text types, and is able to demonstrate skills of changing verbs between tenses for words considered complex for Year 4.
Level 3	Is able to compose a piece of writing with sufficient content and appropriate use of language features but weak in coherence and distinctive style; is able to respond to information within a given text; and is able to demonstrate use of language skills in punctuations and synonyms common to the Year 6 level.	Is able to compose a piece of writing with sufficient content and appropriate use of language features but weak in coherence and style, is able to respond to information within a given text, and is able to demonstrate use of language skills in punctuations and changing verbs between tenses for regular words at Year 4 level.
Level 2	Is able to compose a piece of writing but not of sufficient content, language features, coherence or style; is able to identify and retrieve explicitly stated information from within the body of a given text; and is able to demonstrate limited language skills in changing simple verbs between tenses and spelling simple/regular words expected for Year 6 level.	Is able to compose a piece of writing but not with sufficient content or language features and weak in coherence and style; is able to respond to textual information by identifying and retrieving stated information within the body of the text; and is able to demonstrate limited language skills in identifying synonyms and spell regular words at Year 4 level.
Level 1	Is able to write phrases or few sentences but ideas are not linked and language skills and writing style expected at this Year level are poor; is able to identify and retrieve only explicitly stated and explicitly positioned information in a given text of Year 6 level; is able to spell simple words only; not yet able to change verbs between tenses to the expectation of Year 6 level.	Is able to write phrases or few sentences but ideas are not linked and language skills and writing style expected at this Year level are poor; is able to identify and retrieve only explicitly stated and explicitly positioned information in a given text of Year 4 level; is able to spell very simple words only; not yet able to change verbs between tenses to the expectation of Year 4 level.
Level 0	Is not able to sufficiently demonstrate any of the basic literacy skills itemised in Level 1 above or any of the other higher levels.	Is not able to sufficiently demonstrate any of the basic literacy skills itemised in Level 1 above or any of the other higher levels.

NUMERACY SKILLS DESCRIPTIONS FOR ACHIEVEMENT LEVELS




LEVELS	YEAR 6	YEAR 4
Level 4	A pupil at this level is able to round numbers to the nearest tenths and hundredths; is able to do sums using the four operations individually to the extent of division with remainder and multiplication of 2-digit and 3-digit numbers with regrouping as well as do sums involving combinations of operations that include subtraction and division; is able to interpret and solve word problems involving simple forms of the four operations to the extent of division; is able to change simple fractions to percentages; is able to measure and determine the perimeter of a 2D figure; is able to calculate time duration required in word problems; and is able to calculate the average of a given data common to Year 6 level.	A pupil at this level is able to interpret and solve Year 4 level word problems that involve more than one operation including addition, multiplication and subtraction but not division; is able to multiply 3-digit with 2-digit numbers with multiple regrouping; is able to subtract 3 digits and 2 digit numbers with multiple regrouping; and is able to represent shaded proportions as fractions as well as percentages.
Level3	A pupil at this level is able to round numbers to the nearest hundred; is able to do sums that use the four operations individually to the extent of multiplying 2-digit and 3-digit numbers without regrouping and division of numbers in hundreds without remainders as well as a combination of the operations involving addition and multiplication; is able to interpret and solve word problems involving simple forms of basic operations to the extent of subtraction; is able to add and subtract fractions with different denominators and decimals of different number of decimal places; is able to tell any time from an analog clock face; and is able to graphically represent a given set of data common to Year 6 level.	A pupil at this level is able to add up to three 2-digit numbers with regrouping; is able to solve word problem that involve addition of whole numbers, is able to multiply 2-digit with 1-digit numbers; subtract 2-digit from 3-digit numbers with regrouping; is able to represent shaded proportions as a fraction; and is able to tell time up to quarter to, quarter past and half past from an analog clock face.
Level2	A pupil at this level is able to show relationships between numbers; is able to round numbers to the nearest tens; is able interpret simple word problems that involve addition, or more than one simple operation involving brackets; is able to divide only small numbers without remainder; is able to add and subtract numbers in hundreds and decimals with same number of decimals places and fractions with same denominators; and is able to measure and draw simple dimensions.	A pupil at this level is able to add two 2-digit numbers with regrouping as well as subtract 2-digit number from 3-digit number without regrouping; is able to solve word problem that involve simple addition and subtraction; is able to recognise numbers that involve a zero in words and numerals, recognise numerator and denominator in a fraction; and is able to measure lengths and heights of figures.
Level1	A pupil at this level is able to perform operations that involve only simple addition and subtraction; is able to identify patterns in simple relations and from a graph; and is able to recognise numbers in words and numerals.	A pupil at this level is able to tell the time but to the hour only; is able to recognise numbers but not those that include zeros; is able to read a length from a measure given to a whole cm; and is able to add and subtract up to 2-digit numbers without regrouping.
Level0	Is not able to sufficiently demonstrate any of the basic numeracy skills itemised in Level 1 or any of	Is not able to sufficiently demonstrate any of the basic numeracy skills itemised in Level 1 or any of the levels

the levels above.

above.

5.3 CATEGORIES OF PERFORMANCE FOR REPORTING

Three categories of performance for reporting and description of each level

Category	Level or Levels from which category is derived	Category Label and Colour coding	Description of pupil performance
Category I or Highest Category	Level 4 + level 3	Performing at Expected Level 	<p>Pupils at this level have demonstrated performance that is expected at Year 4 or Year 6, in terms of having satisfactorily achieved the stipulated learning outcomes in Literacy and Numeracy that are indicated in the regional benchmarks document.</p> <p>On the skills hierarchy, these pupils have demonstrated Levels 3 and 4 skills by providing valid responses to all items that were bundled to form the skill set for Level 4 as well as all items that were bundled to form the skill set for Level 3.</p>
Category II or Middle Category	Level 2	Working Towards Expected Level 	<p>Pupils at this level have demonstrated some relevant skills but not yet of the level indicated in the learning outcomes stipulated in the regional benchmarks document for Year 4 or Year 6. On the skills hierarchy, these pupils have demonstrated some Levels 3 skills as well as all Level 2 skills. They provided valid responses to some items that were bundled to form the skill set for Levels 3 and all items that were bundled to form the skill set for level 2.</p> <p>These pupils are possibly operating at one level lower than Year 4 and Year 6 respectively. Appropriate intervention would move them up to the expected level.</p>
Category III or Low Category	Level 1 + Level 0	Not Yet Working Towards Expected Level 	<p>Pupils at this level have not demonstrated the basic skills that lead up to the learning outcomes stipulated in the regional benchmarks document, for Year 4 or Year 6. On the skills hierarchy they have provided valid responses for items that form the bundle of skills for Level 1. The absence of these skills in a pupil, which automatically includes the absence of skills in any of the higher levels relegates a pupil to Level 0. These pupils are critically underachieving for their respective year levels, and they are possibly operating at two levels lower than Year 4 and Year 6 respectively.</p> <p>This lack of basic skills must mean that further learning will be severely affected for these pupils, unless sustained and targeted intervention is provided to them.</p>

5.4 REGIONAL GENERAL INFORMATION FOR YEAR 4 AND YEAR 6

5.4.1 Numbers of students by Gender (Boys/Girls)

Country		Number of students that participated in PILNA											
		Year 4						Year 6					
		Literacy			Numeracy			Literacy			Numeracy		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Cook Is	116	106	222	112	126	238	104	111	215	108	107	215
2	Fiji	1197	1186	2383	1206	1192	2398	1109	1058	2167	1158	1123	2281
3	FSM	699	718	1417	704	723	1427	708	725	1433	704	726	1430
4	Kiribati	746	801	1547	764	817	1581	691	843	1534	724	873	1597
5	Nauru	78	75	153	66	71	137	54	75	129	51	69	120
6	Niue	12	23	35	11	23	34	8	12	20	11	13	24
7	Palau	101	87	188	97	90	187	91	92	183	94	92	186
8	PNG	NA	NA	NA	NA	NA	NA	697	562	1259	693	530	1223
9	RMI	334	326	660	339	316	655	294	311	605	306	317	623
10	Samoa	957	1014	1971	949	998	1947	977	972	1949	964	975	1939
11	Solomon Is	1312	1246	2558	1311	1243	2554	1141	1170	2311	1135	1168	2303
12	Tokelau	10	17	27	11	16	27	7	10	17	6	8	14
13	Tuvalu	40	51	91	38	43	81	42	58	100	30	53	83
14	Vanuatu	998	862	1860	1027	866	1893	892	851	1743	884	854	1738
	Totals	6600	6512	13112	6635	6524	13159	6815	6850	13665	6868	6908	13776

5.4.2 Numbers of students by School Location (Urban/Non-Urban)

Country		Number of students that participated in PILNA											
		Year 4						Year 6					
		Literacy			Numeracy			Literacy			Numeracy		
		Non-Urban	Urban	Total	Non-Urban	Urban	Total	Non-Urban	Urban	Total	Non-Urban	Urban	Total
1	Cook Islands	73	149	222	71	167	238	71	144	215	73	142	215
2	Fiji	1049	1334	2383	1054	1344	2398	960	1207	2167	999	1282	2281
3	FSM	453	964	1417	440	987	1427	418	1015	1433	393	1037	1430
4	Kiribati	811	736	1547	821	760	1581	827	707	1534	858	739	1597
5	Nauru	NA	153	153	NA	137	137	NA	129	129	NA	120	120
6	Niue	NA	35	35	NA	34	34	NA	20	20	NA	24	24
7	Palau	125	63	188	126	61	187	115	68	183	118	68	186
8	PNG	NA	NA	NA	NA	NA	NA	1071	188	1259	1072	151	1223
9	RMI	60	600	660	61	594	655	28	577	605	28	595	623
10	Samoa	1511	460	1971	1487	460	1947	1489	460	1949	1482	457	1939
11	Solomon Is	2062	496	2558	2058	496	2554	1865	446	2311	1855	448	2303
12	Tokelau	27	NA	27	27	NA	27	17	NA	17	14	NA	14
13	Tuvalu	NA	91	91	NA	81	81	NA	100	100	NA	83	83
14	Vanuatu	1474	386	1860	1506	387	1893	1409	344	1743	1401	337	1738
	Totals	7645	5467	13112	7651	5508	13159	8270	5405	13665	8293	5483	13776

5.4.3 Numbers of students by School Education Authority (Govt/Non-Govt)

Country		Number of students that participated in PILNA											
		Year 4						Year 6					
		Literacy			Numeracy			Literacy			Numeracy		
		Govt	Non-Govt	Tot	Govt	Non-Govt	Tot	Govt	Non-Govt	Tot	Govt	Non-Govt	Tot
1	Cook Is	175	47	222	192	46	238	166	49	215	164	51	215
2	Fiji	NA	2383	2383	NA	2398	2398	NA	2167	2167	NA	2281	2281
3	FSM	1362	55	1417	1370	57	1427	1366	67	1433	1364	66	1430
4	Kiribati	1547	NA	1547	158	NA	1581	1534	NA	1534	1597	NA	1597
5	Nauru	153	NA	153	137	NA	137	129	NA	129	120	NA	120
6	Niue	35	NA	35	34	NA	34	20	NA	20	24	NA	24
7	Palau	188	NA	188	187	NA	187	183	NA	183	186	NA	186
8	PNG	NA	NA	NA	NA	NA	NA	613	646	1259	622	601	1223
9	RMI	500	160	660	511	144	655	435	170	605	450	173	623
10	Samoa	1682	289	1971	1660	287	1947	1693	256	1949	1682	257	1939
11	Solomon	2063	495	2558	2053	501	2554	1846	465	2311	1839	464	2303
12	Tokelau	27	NA	27	27	NA	27	17	NA	17	14	NA	14
13	Tuvalu	76	15	91	67	14	81	83	17	100	68	15	83
14	Vanuatu	1229	631	1860	1248	645	1893	1211	532	1743	1230	508	1738
	Totals	9037	4075	13112	7644	4092	13159	9296	4369	13665	9360	4416	13776

Gov: Government

Non-Govt: Non-Government

6 BIBLIOGRAPHY

- Buckingham, J. (2000), *The truth about private schools in Australia, Issue Analysis*, No.13, Centre for Independent Studies, Sydney.
- Green, D.A. & Riddell, W.C. (2001). *Literacy, Numeracy and labor market outcomes in Canada*. Ottawa: Statistics Canada.
- Graetz, B. (1995), *Socio-economic status in education research and policy* in John Ainley et al., *Socio-economic Status and School Education* DEET/ACER, Canberra.
- Lamb, S. & McKenzie, P. (2001). *Patterns of success and failure in the transition from school to work in Australia*. LSAY Research Report 18. Melbourne: Australian Council for Educational Research.
- Marks, G.N., McMillan, J. & Hillman, K. (2001). *Tertiary entrance performance: The role of pupil background and school factors*. LSAY Research Report 22. Melbourne: Australian Council for Educational Research.
- McMillan, J. & Marks, G.N. (2003). *School leavers in Australia: Profiles and pathways*. LSAY Research Report 31. Melbourne: Australian Council for Educational Research.
- McMillan, J. & Rothman, S. (2003). *Longitudinal Survey of Australian Youth (Research Report 36), Influences on achievements in Literacy and Numeracy*. ACER.
- Sparkes, J. (1999), *Schools, Education and Social Exclusion*, CASE Paper 29, Centre for Analysis of Social Exclusion, London School of Economics, London.
- Tyler, J.H., Murnane, R.J. & Willett, J.B. (2000). *Do the cognitive skills of school dropouts matter in the labor market?* *Journal of Human Resources*, 35(4), 748-754.
- OECD & Statistics Canada (2000) *Literacy in the information age: Final report of the International Adult Literacy Study*. Paris: OECD; and Ottawa: Statistics Canada.

