



Education Analytics Service (EAS)

Teacher Development Multi-Year Study Series:

Vanuatu

Interim Report 1

Final

September 2021



This document has been prepared under the management of the Department of Foreign Affairs and Trade (DFAT)'s Education Analytics Services (EAS).

Teacher Development Multi-Year Study Series. Vanuatu: Interim Report 1

The Australian Council for Educational Research Ltd
19 Prospect Hill Road
Camberwell VIC 3124
Phone: (03) 9277 5555
ABN 19 004 398 145

www.acer.org

ISBN 978-1-74286-672-7

© 2021 The Commonwealth of Australia, represented by the Department of Foreign Affairs and Trade



With the exception of any material protected by a trademark, and where otherwise noted, all material presented in this report is licensed under the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/) licence.

Recommended attribution

The Department of Foreign Affairs and Trade must be attributed as the copyright holder of this publication and Elizabeth Cassity, Jacqueline Cheng and Debbie Wong as the authors. You must also retain the copyright and licence information and provide a link to the original material.

Recommended citation (APA 7th ed)

Cassity, E., Cheng, J., & Wong, D. (2021). *Teacher development multi-year study series. Vanuatu: Interim report 1*. Australian Council for Educational Research.
<https://doi.org/10.37517/978-1-74286-672-7>

Amendment History

Version No.	Date	Brief description of change	Author
1	6 December 2019	Draft report	Elizabeth Cassity Jaqueline Cheng Debbie Wong
2	12 May 2020	Draft report	Elizabeth Cassity Jaqueline Cheng Debbie Wong
3	September 2021	Final report incorporating additional stakeholder feedback	Elizabeth Cassity Debbie Wong

Table of Contents

Amendment History	3
Table of Contents	4
Abbreviations and acronyms.....	6
Executive summary	8
1 Introduction.....	14
1.1 ‘Investing in Teachers’	14
1.2 Vanuatu context	14
1.3 Objectives and scope of study	16
1.4 Partnership and collaboration	16
2 Methodology.....	17
2.1 Overall study design	17
2.2 Quantitative	17
2.3 Qualitative	18
2.4 Study limitations	21
3 Teaching quality	22
3.1 Introduction	22
3.2 Context	22
3.3 Professional development	24
3.4 Teacher knowledge, beliefs and attitudes	24
3.5 Teaching practice	27
3.6 School leadership	30
4 New curriculum implementation	33
4.1 Introduction	33
4.2 Context	33
4.3 Language	34
4.4 Teacher support	35
5 Student learning outcomes	39
5.1 Introduction	39
5.2 Year 4 and 6 student performance under the former curriculum	39
5.3 Perceptions of student learning outcomes	47
5.4 Parent and community support	52
6 Equity.....	55
6.1 Disability	55
6.2 Gender	56
7 School and systems outcomes	57
7.1 School level outcomes	57

7.2	System level outcomes	58
8	Sustainability	60
8.1	Challenges and suggestions	60
9	Conclusion	65
9.1	Review of key findings	65
9.2	Key lessons, barriers and recommendations	66
	References.....	70
	Appendix A: Conceptual model.....	71
	Appendix B: Sample for PILNA 2015 and 2018	72
	Appendix C: Sample for VANSTA 2017	77
	Appendix D: Case study sample	78
	Appendix E: PILNA 2018 teacher questionnaire	82
	Appendix F: PILNA literacy proficiency level descriptors for 2015 and 2018	91
	Appendix G: PILNA numeracy proficiency level descriptors for 2015 and 2018	93

Abbreviations and acronyms

ACER	Australian Council for Educational Research
CDC	Curriculum Development Centre
DFAT	Department of Foreign Affairs and Trade
EAS	Education Analytics Service
EAU	Examination and Assessment Unit
EDC	Education Section (DFAT)
ELT	Effective Learning and Teaching
EAU	Examination and Assessment Unit
FGDs	Focus Group Discussions
ISU	In-service Unit
IEC	Independent Evaluation Committee (DFAT)
ODE	Office of Development Effectiveness (DFAT)
MoET	Ministry of Education and Training
M&E	Monitoring and Evaluation
PILNA	Pacific Island Literacy and Numeracy Assessment
PT	Provincial Trainer
PV	Plausible value
SIO	School Improvement Officer
UNICEF	United Nations International Children’s Emergency Fund
USAID	United States Agency for International Development
VanSBITT	Vanuatu school-based in-service teacher training
VANSTA	Vanuatu Standardised Test of Achievement
OpenVEMIS	Vanuatu Education Management Information System

VESP	Vanuatu Education Support Program
VITE	Vanuatu Institute of Teacher Education
ZCA	Zone Curriculum Advisor

Executive summary

Introduction

The Government of Vanuatu is undertaking significant primary education reforms, including major curriculum changes, to improve equitable access to and the quality of education. Since 2016, a new primary education curriculum has been introduced by stages, accompanied by a suite of in-service teacher training. The new curriculum promotes teaching practices that support new pedagogies focused on student-centred learning and community support, language transition and class-based assessment practices. These reforms are being supported by the Australian Government, through its Vanuatu Education Support Program (VESP)¹.

The Australian Government's Department of Foreign Affairs and Trade (DFAT) has commissioned a study to investigate how the VESP is making a difference to the Government of Vanuatu's ongoing primary education reforms. This research is part of a multi-year study series undertaken by DFAT's Education Analytics Service to investigate teacher and learning development initiatives in three countries: Lao PDR, Timor-Leste and Vanuatu.

The purpose of this summary is to provide a brief overview of findings and recommendations from the first year (2019) of the Vanuatu study.

Methodology

The aim of this study is to investigate the teacher professional development component, in particular: **to what extent has the investment (VESP) improved teaching quality and student learning?** The three specific questions are:

1. To what extent has the investment improved teaching quality in Vanuatu?
2. To what extent has the investment in teacher training and mentoring supported effective implementation of Vanuatu's new curriculum?
3. To what extent have teacher training and support activities led to improved learning outcomes?

The study methodology recognises the various factors associated with teaching quality in relation to the implementation of the new curriculum and associated student learning outcomes. This approach includes analysis of new qualitative case study data and existing quantitative student performance data.

During the first year (2019), case study data was collected from 12 schools in the two provinces of Malampa (Malekula) and Penama (Pentecost). A wide range of contextual factors can enable and constrain investments in teachers, teaching and school communities. The case studies allow us to explore the experience of educational stakeholders of the effectiveness of the VESP investment in relation to teaching quality, curriculum implementation and student learning outcomes, in a small sample of schools, but across a multitude of variables.

¹ The implementation of VESP is divided into Phase 1 (2013-19) and Phase 2 (2019-21 with two-year option to extend). Phase 1 focused on areas including the implementation of a new Years 1-3 curriculum, training for pre- and in-service primary teachers, and support for improved community engagement. Phase 2 is focusing on aspects such as expanding and consolidating curriculum reform to Years 4-6 and enhancing the professional development system.

Secondary analysis of data from the Vanuatu National Student Assessment (VANSTA) 2017 and the Pacific Islands Literacy and Numeracy Assessments (PILNA) 2015 and 2018 provided understanding of associated student learning outcomes under the previous curriculum². This student performance data provides a reference point for subsequent investigations into the impact of the VESP on student learning outcomes.

Summary of findings

Overall, the VESP investment has made a positive contribution to improving teaching quality and student learning in Vanuatu. Findings from the first year of the study show teachers and principals are more confident, knowledgeable and are applying new pedagogies. There are also indications of improved student participation, engagement and well-being in the classroom.

To what extent has the investment improved teaching quality?

Results from the first year of the study indicate that VESP training and support have been effective in strengthening the standard of instruction, engagement with students, understanding of content and the application of different pedagogical approaches as promoted under the new curriculum.

VESP training and support have been effective in strengthening principal and teacher knowledge on lesson planning, subject matter and pedagogical approaches. The training programs *Effective Learning and Teaching* (ELT) and *Ademap Lanwis* (language transition) have been particularly helpful.

Teachers reported that the training boosted their confidence in teaching the new curriculum. The ELT improved capacity in planning and preparing effective lessons that are more interactive with students and collaborative with other teachers. *Ademap Lanwis* helped extend teachers' knowledge on language progression and introducing a second language. Untrained and/or temporary teachers who had the opportunity to participate in VESP training said it strengthened their knowledge of effective teaching and increased their self-confidence.

VESP training and the new curriculum has supported teachers to develop and use a range of student activities and incorporate strategies to cater to different student abilities. The new curriculum enabled teachers to use Bislama or vernacular in classroom settings which facilitated communication between teacher and students. It has also guided teachers in planning and preparing classroom lessons. The use of classroom assessments has helped some teachers to identify how students are progressing and develop strategies to support a range of student abilities. However, supporting children with disabilities remains a challenge and specialist support was requested by teachers and principals to incorporate inclusive teaching practices.

Principals reported that their participation in training has been instrumental in gaining a better understanding of their role as principal and strategies to support teachers. The

² VANSTA is an assessment of the curriculum, while PILNA is a sample-based assessment of achievement in literacy and numeracy, and collects data on student, teacher and principal backgrounds. Both VANSTA and PILNA are administered to students in Year 4 and Year 6.

Instructional Leadership training and increased cooperation with teachers consolidated principals' understanding of the direction and vision of their professional leadership in managing school operations and interaction with the local community. However, a number of principals noted that more consistent and frequent support is needed.

To what extent has the investment in teacher training and mentoring supported effective implementation of Vanuatu's new curriculum?

The findings so far suggest that the professional learning support received has helped teachers and principals to improve their teaching practice and implement the new curriculum, but there was consensus on the urgent need for consistent ongoing support and quality feedback. While there was also general recognition of the benefits to student learning with the change in language policy, some school communities nevertheless harboured concerns due to uneven messaging and application of the policy. A number of respondents reported there was a lack of resources, materials and books for students, although they did note the usefulness of teachers' guides in supporting the new curriculum.

Provincial level support from Provincial Trainers (PTs) and School Improvement Officers (SIOs) on curriculum implementation, particularly for principals, was reported as helpful but needs to be sustained for more consistency across the program. However, some respondents admitted they were confused about the difference in PT and SIO roles and responsibilities, and the varying quality of feedback provided by each was raised as a concern.

A number of teachers and principals note that VESP has been positive in encouraging more collaboration within and between schools. Teachers and principals within schools support each other in implementing the new curriculum with advice, observations and peer learning. Some support activities and knowledge exchange about the curriculum between schools were reported but transport costs were identified as a key barrier for collaboration.

The use of a language most students in a school are familiar with and confident in, seems to support students' learning in the early years, but a range of opinions were expressed about the language policy and its application. Some parents and teachers support the new language policy and the use of Bislama citing better teacher and student confidence when interacting in classroom settings, while other parents were sceptical about the new language policy. Awareness campaigns (where they have taken place) have supported community understanding about the new curriculum, but messaging has been inconsistent. This parent and community support seems to be an important factor in facilitating the successful implementation of the new curriculum. Principals, teachers, PTs and SIOs noted that while the new curriculum has helped support students' learning, they reported the transition year from Bislama to English or French has not been well supported in the new curriculum.

To what extent have teacher training and support activities led to improved learning outcomes?

The extent to which the VESP investment leads to improved learning outcomes for Vanuatu students is less clear at this stage. The analysis of student performance data, following the introduction of the new curriculum, will be a feature of the study from the second year due to the timing of regional and country level assessments.

However, findings from both the earlier VANSTA 2017 and PILNA 2015/2018 indicate that there are a large portion of students in Years 4 and 6 who are not achieving learning outcomes at their expected grade levels, particularly in literacy³ and there are widespread differences relating to gender and province. Student performance may be related to teachers' professional capacity to master the curriculum and apply the necessary pedagogy to facilitate quality learning. PILNA 2018 reported that a third of teachers found aspects of teaching literacy (e.g. phonemic awareness) and numeracy (e.g. fractions) to be difficult to teach. These earlier results provide a reference point for tracking student learning outcomes – especially in subsequent years of the study, as 'new curriculum' students engage in national and regional assessments.

For now, case study data from the first year of this study do provide an indication as to the perceived impact of VESP on student learning. Generally, respondents reported that a range of VESP activities have supported improvements in students' reading and writing, speaking, attendance levels, interest in lessons, wellbeing, and particularly confidence.

The impact of VESP investments on student attendance suggests that the pedagogy of new curriculum encourages children to come to school. Some teachers suggested that students make more effort to attend school as they are more engaged in the new curriculum. Some respondents also reported that students were more talkative and expressive when using Bislama, noting improvements in students' reading and writing skills as a result of VESP interventions. However, some teachers and principals noted that students found reading and writing difficult as they adjust to the language transition year.

VESP interventions have also provided positive contribution to address student wellbeing. Teacher engagement in planning different activities and using new curriculum resources seems to have had a positive impact on student interest in school. Teachers and principals also reported that students were more willing to express themselves in class as they were more confident in speaking in a language they are familiar with.

Emerging lessons and recommendations

Investigating two different provinces through case study research provides a good opportunity to explore differences in the experience of education stakeholders of the effectiveness of the VESP investment in regards to teaching quality, curriculum implementation and student learning outcomes, as well as exploring the impact of the new curriculum on future student cohorts.

Insights gained from this first stage of the study include:

- Not all teachers delivering the new curriculum have had access to the full suite of training, and respondents have highlighted the absence of ongoing and follow-up training, both of which limit the effective long-term impact of the investment for schools. Such risks have also led to frustration of principals and teachers in delivering

³ While VANSTA and PILNA collect information about student learning outcomes, they have different objectives. VANSTA is an assessment of the curriculum, while PILNA is a sample-based assessment of achievement in literacy and numeracy, and collects data on student, teacher and principal backgrounds. Both VANSTA and PILNA are administered to students in Year 4 and Year 6.

the curriculum (particularly those in key language transition years), and confusion in communities about the curriculum.

- Parent and community support has been observed as an important factor in the success (or not) of the new curriculum implementation and learning progress.
- Inclusive education, particularly to support children with disabilities, was noted as vital and respondents reported on the challenge of hiring specialised teachers to teach students with disabilities.
- The institutional capacity and under-resourcing of PTs and SIOs places limits on their effectiveness in supporting schools to implement the new curriculum.
- Findings from both VANSTA 2017 and PILNA 2015/2018 indicate that there are a large portion of students in Years 4 and 6 who are not achieving learning outcomes at their expected grade levels, particularly in literacy.

This first phase of the research also provides several insights into the sustainability of the program. These interim findings lead to emerging lessons and recommendations focused largely on how to build a sustainable system of support for teacher professional learning. There are real opportunities for VESP's continued investment in teaching quality and professional learning in Vanuatu. Focus on sustaining and extending support of teachers to engage in the new curriculum and use new pedagogies should remain paramount to improving overall student learning outcomes.

The following points suggest some interim recommendations for policymakers to consider in the short term.

Audit which training programs teachers have participated in to ensure those who have missed out have the opportunity to participate. Offer follow-up or more extended training, particularly for untrained and temporary teachers given they are without immediate access to formal teacher training programs. Teachers, and in particular untrained and temporary teachers, found the new curriculum training helpful, especially *Effective Learning and Teaching (ELT)* and *Ademap Lanwis*. However, not all teachers participated in the training program. The provision of follow-up or more extended training for untrained and temporary teachers could boost the performance of those without immediate access to more formal teacher training programs. Audit insights may enable policymakers to prioritise those who have missed out.

Other further actions include developing strategies to support teachers in multi-grade settings, and teachers in Years 3 and 4 who are teaching students in these key language transition years. An absence of ongoing and follow-up training limits the effective long-term impact of the investment for schools, risking any learning gains made in the early years and school and community support for the curriculum.

Develop gender and disability inclusion training for principals and teachers, as well as PTs and SIOs. Topic areas could cover aspects such as identification, inclusive attitudes and values, and inclusive teaching strategies which enable the curriculum to be delivered in ways to suit the student.

Provide follow-up information sessions to communities about changes in the new curriculum. Evidence indicates that once communities and parents understood the objectives

of the new curriculum, the majority were supportive of it. This could induce parents and communities to be more engaged with teachers and principals to monitor their child's learning progress.

In the absence of a longer-term resourcing plan, develop strategies to increase the accountability of PTs and SIOs and ensure school support - when provided - is effective. PTs and SIOs can play a vital role to support teachers and principals to develop interventions to improve student learning outcomes in literacy and numeracy. Adequate resourcing to support PTs and SIOs to conduct regular observations and training activities in schools is important but challenging in a resource-constrained environment. Giving training to PTs and SIOs on effective coaching and mentoring support to schools could improve the usefulness of school visits. To reduce travel costs, PTs and SIOs could consider joint and rotated visits, and work with principals to establish teacher working groups, peer-to-peer support and school networking models. Clear accountability structures are also important. Constructive accountability measures that 'check in' with PTs and SIOs when there is an extended period between school visits or observations could also ensure schools are not missed.

Support principals and teachers in using the results from large-scale learning assessments like VANSTA and PILNA. Support could include upskilling teachers and principals to understand those results and develop interventions that are targeted in the areas needed to improve student literacy and numeracy.

1 Introduction

1.1 ‘Investing in Teachers’

In 2014, the Office of Development Effectiveness (ODE) in close consultation with the Australian Government’s Department of Foreign Affairs and Trade’s (DFAT) Education Section (EDC) conducted an evaluation of Australia’s recent and current investments in teacher development including desk reviews of 27 bilateral Australian aid investment programs. The findings of that evaluation, presented in the report *Investing in Teachers* (DFAT, 2015), found almost no data on outcomes that could be attributed to DFAT’s teacher development investments, and determined that it was impossible to judge whether teacher development has led to improved teaching practices or improved student learning outcomes.

As part of its response, DFAT committed to ‘support a multi-year study on teacher development investments in Laos and Timor-Leste to evaluate the effects of teacher development on teacher knowledge, teacher practice and student learning’ (DFAT, 2015, p. 12).

To implement that commitment, a Conceptual Framework was prepared by DFAT’s Education Analytics Service (EAS), managed by the Australian Council for Educational Research (ACER), with a view to frame and guide teacher development multi-year studies in Timor-Leste, Lao PDR and Vanuatu, and to ensure a minimum of consistency across the studies (ACER, 2017). In each of these countries, reform of the primary education curriculum is underway. The teacher development studies are investigating teaching quality and student learning through the implementation of pedagogical practices and strategies promoted in the curriculum reforms in each location. Specifically, and as agreed with various stakeholders during the scoping of each study, the focus is on investigating changes to the repertoire of teaching skills used, rather than on investigating teacher competence in core domains.

This report constitutes the first Interim Report for the multi-year study of DFAT’s investment in teacher development in Vanuatu through the Vanuatu Education Support Program (VESP).

1.2 Vanuatu context

The Republic of Vanuatu is a Pacific island country, and has a high level of cultural and linguistic diversity. Vanuatu is one of the highest language density countries in the world with over 100 languages and dialects. With a widely dispersed population over more than 80 islands, the delivery of social services including education, is challenging. Investment in provincial areas where the majority of the population lives, is also limited. Foundational literacy and numeracy skill levels indicate a need to improve the quality of teaching and learning. The number of school and university leavers seeking jobs outstrips availability.

1.2.1 An overview of primary education in Vanuatu

In Vanuatu, the Ministry of Education and Training (MoET) is responsible for education policy, and managing education infrastructure and resources at the primary and secondary levels. The MoET also works with non-governmental organisations and civil society to share some of

the responsibilities and costs of education services. Provincial level staff are present in each of Vanuatu's six provinces. A recognised weakness of the education system is the high rate of insufficiently qualified and/or trained teachers. Furthermore, there is a limited government budget for teacher training.

While levels of primary school participation have improved in recent years in Vanuatu, there remains the issues of high repetition rates and drop-out, large numbers of out-of-school children, and challenges with children enrolling at the right age. By secondary school, participation levels fall to below 50 per cent (MoET, 2018), pointing to the issue of accommodating all secondary school age children across each province. Learning achievement in the early years remains a challenge but has shown improvement in recent years. Girls are outperforming boys in both literacy and numeracy. Linguistic diversity further compounds challenges to participation and educational outcomes. Significant provincial disparities in both access to schooling and learning achievement persist.

Currently, Vanuatu is undergoing a significant education reform agenda with the introduction of a new primary curriculum alongside the National Language Policy 2012 ("the language policy"). The language policy states that Bislama or the local vernacular can be used in teaching during the first two years of primary school with either English or French introduced as a subject in Year 3. The agreed local languages may be used by teachers throughout the primary years as students make the transition to English or French (MoET, 2012). In 2019, the Year 4 curriculum was being rolled out with support of VESP.

1.2.2 The Vanuatu Education Support Program

The Government of Australia has historically been one of the most significant donors to education in Vanuatu. VESP Phase 1 (2013-19) was a joint program between Australia and New Zealand focused on literacy and numeracy in the early years, from Kindergarten through Year 3. VESP Phase 2 (2019-21 + two-year option to extend), funded by Australia, builds on the results of VESP Phase I and continues the focus on access, quality and management. This study focuses on Strategy 1 of VESP Phase 1: 'Train and support teachers to implement the new curriculum', which is to train and support teachers to implement the new primary curriculum is most relevant⁴. Activities include providing teaching and learning support materials and resources to primary schools, training teachers in effective learning and teaching methodologies, and supporting schools to effectively assess, monitor and report on student learning (VESP, 2016). At the same time, this study acknowledges the complexity of isolating a particular strategy within the whole of an education sector plan.

The new Vanuatu primary curriculum has been written in Bislama (teachers' material), whilst learning material such as the 'readers' are written in Bislama and over 50 local vernacular languages. Subject content is sequenced for each grade level to ensure content uniformity across classes (years) and schools. It also proposes new methodologies and pedagogical approaches that aim to transform teaching and learning. The new content and pedagogies included in the new national curriculum require significant change and new learning for

⁴ ACER (2017). *Evaluation plan for Vanuatu's investment in training and supporting teachers to implement the new curriculum in the Vanuatu Education Sector*, p. 8. Melbourne: ACER.

Vanuatu teachers, school leaders and school communities. The In-service Unit (ISU) has been tasked with conducting the training and professional development for the new curriculum, supported by Provincial Trainers (PTs).

1.3 Objectives and scope of study

The broad question that frames this study of Vanuatu's VESP is:

To what extent does this aid investment produce improved teaching quality and improved student learning?

Three specific questions related to this broad question are being investigated:

1. To what extent has the investment improved teaching quality in Vanuatu?
2. To what extent has the investment in teacher training and mentoring supported effective implementation of Vanuatu's new curriculum?
3. To what extent have teacher training and support activities led to improved learning outcomes?

The purpose of this report is to investigate the extent to which VESP has improved teaching quality and student learning to date through:

- presenting interim findings for each of the three above questions
- Identifying key lessons to make judgements and recommendations for the program.

1.4 Partnership and collaboration

ACER under the EAS has been commissioned to manage the teacher development multi-year study series and provide technical oversight and support as needed. ACER has worked collaboratively with DFAT Port Vila Post and EDC, MoET and the VESP project team in the design and implementation of this study. This collaborative approach began in June 2017 through a scoping mission and the development of an evaluation plan which was approved by DFAT in January 2018. Natora Consulting, a locally-based team of researchers, has provided invaluable in-country capacity to support the instrument development, translations and data collection.

The authors of this report acknowledge that the strong partnerships forged between these partners, have culminated in this first interim report.

2 Methodology

2.1 Overall study design

The *Evaluation Plan for Vanuatu's Investment in Training and Supporting Teachers to Implement the New Curriculum in the Vanuatu Education Sector* (ACER, 2018) and *EAS: Teacher Development Multi-Year Studies – Conceptual Framework* (ACER, 2017) provide the rationale and overall approach for this Vanuatu study.

A key feature of this Vanuatu study is its multi-year duration from 2018 until 2022⁵, which acknowledges the complex nature of teacher development and that sustained change in teaching practice takes time. It also recognises the scale of the VESP program investment, and enables an agile and adaptive approach that is responsive to contextual affordances and limitations (e.g. possible timeline shifts in new curriculum rollout), and can inform improvement through the next phase of the teaching investment.

The Vanuatu study uses existing and newly collected data. By using these two types of data, the scope is broadened as much as possible given the human and financial resourcing for the study, and reflects proportionality. It adopts a mixed methods approach utilising quantitative data, as well as qualitative case studies conducted by the research team over the period of the study.

The *Evaluation Plan* sets out indicative data sources and examples of evidence. It is important to note that the analysis for this first report, draws from four different sources – existing learning assessment data from 2015, 2017 and 2018, and case study data collected purposefully in 2019 for this study.

The quantitative student achievement data provides a reference point for student learning, as the data covers student cohorts who are yet to study under the new curriculum. Similarly, the corresponding questionnaire data provides insights into student, principal and teacher cohorts yet to experience the new curriculum. The case study data, on the other hand, contributes to our understanding of the impact of VESP in the three areas of teaching quality, curriculum implementation and student learning.

2.2 Quantitative

Quantitative data for this report has been drawn from three different sources:

1. Mathematics and literacy results from the 2015 and 2018 Pacific Island Literacy and Numeracy Assessment (PILNA).
2. Questionnaire data from students, teachers, and principals as part of the 2018 PILNA survey.
3. Mathematics and literacy results from the 2017 Vanuatu Standardised Test of Achievement (VANSTA).

⁵ The final reporting and steering committee meeting are scheduled to occur in the first two quarters of 2022.

These sources are described in more detail below. Given PILNA 2015 and 2018 and VANSTA 2017 were administered to students studying under the previous curriculum, they provide important Years 4 and 6 student data for literacy and numeracy, and contextual questionnaire data.

PILNA and VANSTA have different objectives. PILNA is a regional assessment of students' literacy and numeracy skills in Year 4 and Year 6, and is administered every three years. PILNA is administered to a representative sample of Year 4 and Year 6 students in all provinces of Vanuatu. VANSTA is a national assessment of Year 4 and Year 6 students' literacy and numeracy achievement within the national curriculum. VANSTA is administered as a census to all students in Years 4 and 6.

The quantitative analysis for the data used a range of methods: descriptive statistics; analysis of variance to determine if there were any significant difference between groups; and simple calculations of averages of values obtained from item response theory to express the attainment of numeracy and literacy levels in PILNA.

2.2.1 Pacific Island Literacy and Numeracy Assessment (PILNA)

PILNA is a pen- and paper-based assessment of literacy (reading and writing) and numeracy skills based on a common scale, administered regionally to Years 4 and 6 students across 15 Pacific Island countries, which includes Vanuatu (EQAP, 2016). In addition to the mathematics and literacy measurements, background questionnaires collected contextual information about students, teachers, and principals in an effort to understand the factors influencing students' achievement in PILNA. These questionnaires provide us with insights into teachers' knowledge, attitudes and practices, and the context that the students, teachers and principals operate within.

PILNA in Vanuatu is administered to a representative sample of students in Year 4 and Year 6. A detailed discussion about the PILNA sample is included in Appendix B.

2.2.2 Vanuatu Standardised Test of Achievement (VANSTA)

VANSTA, similarly to PILNA, is a reading, writing, and numeracy test for students in Years 4 and 6 to measure the proportion of students who were meeting expected outcomes for their grade level. It is administered nationally in Vanuatu. VANSTA was developed by staff from the Examination and Assessment Unit (EAU) and Curriculum Development Centre (CDC) alongside teachers in Vanuatu. The VANSTA 2017 was administered as a census with all students in Years 4 and 6 expected to undertake the VANSTA tests. However, due to the evacuation of Ambae, over 90 per cent of all primary schools took part in VANSTA 2017, comprising of 245 English-speaking, and 132 French-speaking schools. A detailed discussion about the VANSTA census is included in Appendix C.

2.3 Qualitative

Case study methodology enables rich descriptions of programs and stakeholder insights, and is ideal for the multi-perspective analysis required for the Vanuatu study. For Year 1 of the case study series, two provinces were selected. ACER liaised with DFAT Port Vila Post to select

the provinces of Malampa and Penama, with the islands of Malekula and Pentecost the focus for fieldwork. The sampling process is described in Section 2.3.1 below.

Malekula is the second-largest island in Vanuatu. It is one of the most linguistically diverse islands with over 30 different vernacular languages spoken. Schools are managed by a range of Education Authorities and the Government of Vanuatu. Pentecost is a rugged and mountainous island. There are five vernacular languages spoken in Pentecost, and like Malekula schools, schools in Pentecost are managed by a range of Education Authorities and the Government.

Stakeholder interviews and focus group discussions (FGDs) were the primary data collection methods for the case studies. ACER developed individual interview guides for teachers, principals, SIOs, and PTs, and a separate FGD guide for parents. These were adapted and translated into Bislama by Natora Consulting, a Port Vila-based research consortium. ACER and Natora piloted the interview guides over two phases, in October 2018 and December 2018, allowing for refinement and better targeted instruments.

A team of five, split into two groups by province, collected the data from 29 June to 13 July 2019. 53 semi-structured interviews and 16 parent FGDs were completed for the case studies. Interviews and FGDs were conducted in Bislama, and recorded and transcribed into English for analysis.

To conduct the analysis, the ACER team used QSR NVivo 12 Pro. Data was coded and aligned with themes identified in the Conceptual Framework (ACER, 2017). See Appendix A 'conceptual model' which illustrates the customized model for the Vanuatu study. A test of inter-rater reliability (Cohen's κ) was performed on a random sample of the qualitative data. The analysis showed, on average, a high level of agreement between two independent coders ($\kappa = 0.88, p < .0005$).

2.3.1 Case study sample

ACER reviewed data from Vanuatu's Education Management Information Systems (via OpenVEMIS) and VANSTA to purposefully select schools. The following sample selection criteria was used with a view to select four to six schools per zone within each province/island. Schools were excluded based on the following characteristics:

- schools that did not cover Years 1 to 3
- schools that were not implementing the Vanuatu Government's primary curriculum
- schools that did not participate in the 2017 VANSTA.

Schools were then selected to account for:

- VANSTA to obtain a mix of high and low performance in VANSTA 2017
- educational authority to obtain a diversity of government and church managed schools
- language of instruction to include a mix of Anglophone and Francophone schools.

Following review of the options and liaison with Port Vila Post and Natora, it was decided that given 'zones' were not fully operational, it would not make sense to select schools on the basis

of zones, but to give precedence to ensuring a range of SIOs were included as participants, and that a mix of large, medium and small schools were selected on the basis of VEMIS enrolment data.

Finally, Natora gave further advice on access and logistics, considering time, distance and cost. Eleven schools were selected for inclusion in this first year of case studies – six schools in northern and central Malekula and five across Pentecost. Due to a miscommunication at the provincial level, the team also interviewed teachers and parents from an additional school (included in Table 1) at one of the learning centres. Data from these participants have been included as part of the case studies. It should be noted that fewer schools were included as part of the Pentecost sample due to the rougher terrain on that island and the additional time it took to travel to and between schools.

Table 1 provides information about the 12 case study schools. More details about the case study sample are provided in Appendix D.

Table 1. Case studies sample

Province	School ID	Language	Authority	VANSTA Performance	VEMIS Enrolment / School Size ⁶
Malampa	A	English	Church	High	Medium
	B	English	Church	High	Small
	C	French	Government	Low	Small
	D	French	Church	Mid	Large
	E	French	Government	Mid	Large
	F	English	Government	High	Large
	G	English	Government	Mid	Large
Pentecost	H	French	Church	High	Very large
	I	French	Church	Mid	Large
	J	English	Government	High	Medium
	K	English	Church	Mid	Large
	L	English	Government	Mid	Large

Fifty-three respondents were interviewed (11 principals/head teachers, 32 teachers, 6 SIOs and 4 PTs) and 16 parent FGDs conducted. Some parent FGDs were mixed male and female, while some were single-sex FGDs. The following section describes some key characteristics of the respondents.

Principals

Case study principals (4 female, 7 male) had on average worked for 13 years as a principal, with the range from three to more than 20 years. Five of the 11 principals interviewed had been a principal for 15 years or more, and two for five years or less. Their years of teaching experience ranged from 19 to 36 years. The majority of principals were also currently teaching with two principals also teaching a multigrade class. One of the principals had a teaching diploma, with the remaining interviewed having attained a teaching certificate.

⁶ School size if based on VEMIS enrolment data. The following categories are used for this study: Small (1-50 students); Medium (51-100 students); Large (101-200 students); Very large (>200 students).

Teachers

Case study teachers (21 female, 11 male) had on average 13 years of teaching experience, ranging from one to 30 years. Only four teachers had five years or less of teaching experience. Three teachers held a teaching diploma, and 13 a teaching certificate. Thirteen teachers (41 per cent, five in Malekula and eight in Pentecost) reported they had no teaching qualification, and thus, most of these teachers also reported they were temporary teachers. In four schools (two in Malampa and two in Pentecost), all the early years teachers interviewed had no teaching qualification. Seven of the 32 teachers interviewed were teaching multigrade classes.

School Improvement Officers (SIOs)

SIO positions were introduced in 2018. Three of the six SIOs interviewed held a teaching certificate, one a diploma and two a bachelor's degree. They had all worked in various positions as teachers, principals and four previously as a Zone Curriculum Advisor (ZCA).

Provincial Trainers (PTs)

All four PTs interviewed held a teaching certificate, and each had worked in various positions as teachers, principals and three previously as ZCAs. Two PTs had worked in their positions for five years, and two for seven years.

2.4 Study limitations

There are some limitations to the Vanuatu study. First is the issue of attribution within a study investigating teaching quality and student learning outcomes. Attribution is easier to establish when there is a clear causal relationship between the outcome and any preceding outputs. Teaching itself is a 'noise-filled' context. There are a wide range of contextual factors that enable and constrain productive investments in teachers, teaching and education communities. For example, budgetary constraints and political priorities within schools and the larger national context. In addition, in developing contexts, there are often multiple donor programs providing supports to schools and systems, and it is difficult to associate particular changes directly to any single intervention. While there may be relationships between various factors associated with student learning outcomes, direct causal relationships are difficult to determine.

Second, the qualitative case studies are not intended to generalise the impact of VESP across Vanuatu. Case studies are intended to explore the experience of the investment by educational stakeholders in a small sample of schools, but across a multitude of variables. In this way, the case studies are intensive rather than extensive. The ability to extract this level of detail from the investment is an important part of the overall study design.

Finally, while the data on student learning outcomes from both PILNA and VANSTA provide insight into the literacy and numeracy achievement levels of Year 4 and Year 6 students, the cohorts have not engaged in the content and pedagogy of the new curriculum. VANSTA is an assessment of the curriculum, while PILNA is a sample-based assessment of achievement in literacy and numeracy, and collects data on student, teacher and principal backgrounds. Regardless, both assessments do provide a reference point for student learning outcomes to be analysed in future reporting.

3 Teaching quality

3.1 Introduction

This chapter addresses the research question: **to what extent has the investment improved teaching quality in Vanuatu?**

As defined in the Conceptual Framework (ACER, 2017), ‘teaching quality’ or quality teaching refers to effective instruction that promotes excellence and student learning outcomes through best-practices. Quality teaching practices are based on high standards of instruction and student engagement, deep understanding of content, and application of pedagogical principles that contribute to supporting and improving student learning.

Chapter 3 explores various aspects of teaching quality outcomes, namely teacher attributes and teaching practice, by presenting year 1 qualitative case study data from Malampa and Penama and some additional insights from the PILNA 2018 questionnaires.

‘Teacher attributes’ refers to elements of a teacher’s professional identity, including professional knowledge, beliefs about teaching, attitudes about teaching, and professionalism. ‘Teaching practice’ refers to teachers’ application of their professional knowledge, beliefs, and attitudes to provide learning experiences for students. It includes what teachers do to plan, implement, and evaluate learning experiences, and ways that teachers incorporate principles of teaching and learning (ACER, 2017).



3.2 Context

Case study respondents in Malampa and Penama identified a range of challenges that impact teaching quality, some of which are contextual but nevertheless influence the potential success of the VESP investments. Mostly these challenges were related to multigrade classes, overcrowding, the significant number of untrained and temporary teachers, and lack of resources. Other issues raised by respondents included poor mobile and internet reception affecting communication, lack of funding for SIOs and PTs to visit schools, and the limited number of textbooks and resources.



3.2.1 Multigrade teaching and overcrowding

Multiple respondents including teachers, principals, PTs and parents raised the challenge of multigrade teaching and overcrowded classrooms, and thus the need for more teachers. Several teachers mentioned that multigrade teaching is difficult because they need to prepare lesson plans for both classes at the same time, and a principal noted that teachers have other responsibilities to manage, apart from teaching. Some teachers reported difficulties in teaching and effective classroom management due to overcrowded classrooms. In the PILNA 2018 questionnaire, 49 per cent of principals reported a shortage or inadequacy of classrooms as hindering their school's capacity to provide instruction either to a large or moderate extent.

3.2.2 Teacher workforce

The PILNA 2018 questionnaire explored aspects of the teacher workforce. Nearly half (47%) of the principals reported a shortage of teachers hindered their school's capacity to provide instruction to a large or moderate extent. Also, almost half (49%) reported a lack of qualified teachers as a large or moderate issue.

Parents in Pentecost elicited concerns about the number of temporary and untrained teachers in their children's schools. One parent expressed concern that Years 1 to 3 teachers are temporary, and there needs to be more permanent teachers than untrained ones⁷. Another parent reinforced these concerns by explaining the new curriculum is mostly taught by untrained teachers, and emphasised the need for more qualified teachers. It should be noted that interviewees often referred to temporary and untrained teachers interchangeably, even though temporary teachers possess a teacher qualification and untrained teachers do not.

At the same time, multiple respondents in both provinces expressed their views that temporary and/or untrained teachers were performing well in the classroom.

Respondents also noted the challenge that temporary and/or untrained teachers are paid by the community and not necessarily being recognised for doing the same amount of work as permanent teachers. One Pentecost SIO noted this lack of recognition for temporary teachers may impact their performance.

In the PILNA 2018 questionnaire more than half of surveyed Year 4 and 6 teachers disagreed or strongly disagreed with the statement 'I am getting a good salary as a teacher'. The financial difficulties for temporary teachers was raised widely by case study principals, PTs, SIOs and teachers in Malekula. One PT noted that although temporary teachers are committed, they are not supported financially. A SIO highlighted that such teachers are trained but they can 'leave any time'. A principal further explained how untrained teachers are sometimes unpaid for months, and as a result absent from school in order to source food.

This issue was reflected on by one teacher, who noted that as a temporary teacher paid by student contributions, sometimes she needs to miss a school day to find food, and that affects

⁷ Stakeholders referred to both temporary and untrained teachers, often interchangeably. It is the understanding of this research that *temporary teachers* are those who possess some kind of teacher qualification or training and are waiting to be licensed. On the other hand, it is understood that *untrained teachers* have not had any teacher training or qualification.

students' learning. Many temporary teachers who were interviewed expressed their desire to become permanent teachers on the government payroll.

SIOs also raised issues associated with teacher promotions and postings. Teachers who go through the training may be posted to other schools and teaching higher year level classes, whereas others who have never attended trainings are posted to lower year level classes.

3.3 Professional development

Professional development refers to the range of activities and programs that teachers and principals participate in for their professional learning. Examples include in-service training, cohort or network professional development, and school-based professional development (ACER, 2017).

This section provides insights into the professional development experiences of teachers and principals, with a focus on training. Other examples of professional development are discussed under Chapter 4.

With the new curriculum being rolled out, case study teachers and principals were asked which in-service training programs they had participated in. Four of the 32 teachers had not participated in any of the training programs, and three of these four teachers were teaching Year 4 (single-grade). The remaining teachers reported they participated in various training programs to different extents. The most widely attended programs were *Effective Learning and Teaching* (ELT) and *Ademap Lanwis* (language transition), followed by *Language and Community Teachers Guide*, and *Mathematics*. All case study principals had attended some training programs, with Instructional Leadership most widely attended, followed by ELT. Appendix D has further information.

While the extent of in-service training received under the new curriculum varied widely, it does indicate an increase when compared to previous levels of training. The PILNA 2018 questionnaire asked teachers of Year 4 and 6 students how many times in the past three years did they attend a professional development program across specified areas. At least 40 per cent of Year 4 and Year 6 teachers had not attended a professional development program in each of these areas, with the exception of numeracy for Year 4 teachers (31%) and classroom based assessment for Year 6 teachers (34%). Appendix E has further information.

3.4 Teacher knowledge, beliefs and attitudes

3.4.1 Key findings

Finding 1. VESP training appears to have been effective in strengthening principal and teacher knowledge on lesson planning, subject matter and pedagogical approaches. The training programs *Effective Learning and Teaching* and *Ademap Lanwis* have been particularly helpful.

Finding 2. VESP training and the accessibility of the new curriculum in both Bislama and vernacular languages have contributed to changes in beliefs and attitudes towards teaching, in particular improvements to principal and teacher motivation and self-confidence.

Finding 3. Untrained and/or temporary teachers have, in particular, benefited from VESP training by strengthening their knowledge of effective teaching and increasing their self-confidence.

3.4.2 Discussion

As defined in the Conceptual Framework (ACER, 2017), ‘teacher knowledge’ refers to professional knowledge including content, pedagogical, and pedagogical-content knowledge. ‘Beliefs about teaching’ can include beliefs about content, pedagogy and learning. ‘Attitudes about teaching’ can include confidence and motivation.

Changes in teacher knowledge, beliefs and attitudes as a result of VESP investments is investigated through the qualitative case study data.

Perceptions of teacher knowledge

Multiple case study **principals and teachers attributed improvements in teacher knowledge to VESP training.** This knowledge included subject matter and pedagogical methods, to carry out the new curriculum. As reported by a Malekula principal:

The training provided by the PTs supports the implementation of the new curriculum by teaching and training teachers how to teach the curriculum and give them skills to teach and capture student’s interest on how to learn.

Many respondents reported the **training has been particularly important to build the knowledge of untrained teachers on how to teach.**

One Pentecost teacher reflected that he now practices a learner-centred approach, which was something he did not do when he was teaching the previous curriculum. Another teacher reflected on the emphasis of the new curriculum on the local environment and context, which has helped change her teaching style.

A number of respondents cited specific training courses that helped them develop their knowledge. **ELT was noted by teachers and principals as particularly instrumental in building the capacity of knowledge about teaching practice,** and in particular, how to plan and prepare effective lessons around five aspects of teaching. Multiple teachers and principals referred to these five aspects during the interviews:

- Connect lessons to students’ real life experiences
- Ask plenty of questions
- Plan effective lessons that can challenge students’ learning
- Do different activities for one topic
- Work together with other teachers.

One Malekula teacher gave specific examples of how ELT has supported her in interacting with children,

“Taem ELT i kam i givem wan laet long mi, wan aedia long mi se mi stap ting daon long mi wan blong mi tij be rod hemia nomo. ELT hemi soem rod long mi.”

Translation: *“The ELT was like a light...it showed me the way and made me realise that I had been thinking badly about my ability to teach. But this is how to do it. ELT has shown me the way.”*

(Teacher, Pentecost)

including how to work with small children and undertake different activities to encourage children to express themselves.

Another Malekula teacher explained that even though she had graduated from the Vanuatu Institute of Teacher Education (VITE), this new training was useful and extended her knowledge:

We are teachers and graduates from VITE and clearly know how to prepare a lesson plan. But with *Effective Learning and Teaching* it showed us ways to make a lesson plan and points to follow for your lesson to be effective. And to add to that in the old curriculum we never gave comments on our lessons and what worked and what didn't, and looked for ways to improve it.

Some teachers also noted other training programs that have supported their teaching knowledge. **Several teachers reported that *Ademap Lanwis* has been helpful with language progression and the introduction of a second language.** One teacher reported the training *Language and Communication* has been most helpful as they work with sounds:

If a child does not know their sounds they cannot pronounce a word or even read a sentence. Language and communication helped me to support and teach the students to develop their sounds and to improve.

Perceptions of beliefs and attitudes towards teaching

Multiple respondents in both provinces reported a change in the beliefs and attitudes toward teaching.

A number of **principals and teachers described increased levels of confidence and motivation in their teaching.** This was attributed to either training they participated in through VESP or the accessibility of the new curriculum in both Bislama and vernacular languages.

Some principals reported the training gave teachers confidence. One principal from Malekula spoke about the **boost in confidence training has given to temporary and/or untrained teachers:**

Teachers are very confident in teaching in this new curriculum. After attending training in the new curriculum those who are untrained teachers are motivated, confident and are becoming provisional teachers.

Teachers reported that the language policy has helped improve their confidence and motivation as they can teach in a language in which both they and their students have confidence and enjoy using. To quote a teacher from Malekula:

For my experience as a teacher I also find difficulties teaching and speaking English since it is not our first language. But in Bislama I find it very enjoyable to teach in Bislama. I am more active and confident as a teacher.

One teacher from Pentecost explained:

My interest in teaching has changed because in the past the students did not find it easy with lessons when we taught solely in French. With this new curriculum, when

taught in the vernacular they understand each word's meaning and can relate or are able to understand well when translated into French.

A Malekula SIO noted that teachers can explain topics well in Bislama, whereas English sometimes was a barrier for them.

One SIO noted that there were still teachers who prefer the 'old curriculum' and were reluctant to change by using vernacular or Bislama in class, but observed:

The new curriculum encourages oneness in regards to Francophone teachers and Anglophone teachers. From what I observe, these two groups now focus more on what to teach and less on their differences.

One Malekula principal noted teachers' appreciation of the new curriculum grew over time, and by the third year of implementation, they have come to enjoy the curriculum, particularly as they are now familiar with the guide.

3.5 Teaching practice

3.5.1 Key findings

Finding 1. VESP training and a new curriculum closely related to local context appears to support teachers to improve their practice.

Finding 2. Ability to use Bislama or the vernacular language in the classroom is a critical factor to improving teaching practice.

Finding 3. A number of teachers have more interactions with students, are developing and using a range of student activities, and are incorporating different strategies to support a range of student abilities.

3.5.2 Discussion

As noted in the Introduction, 'teaching practice' refers to teachers' application of their professional knowledge, beliefs, and attitudes to provide learning experiences for students. It includes what teachers do to plan, implement, and evaluate learning experiences, and ways that teachers incorporate principles of teaching and learning (ACER, 2017).

The PILNA 2018 questionnaire queried Years 4 and 6 teachers on various aspects of teaching practice. These aspects of teaching practice are investigated further through the case study data, which will in turn look at language of instruction, planning, teaching and learning activities, and assessment. Details of the PILNA teacher questionnaire findings in regard to teaching practices are in Appendix E.



Perceptions of teaching practice

A number of case study respondents discussed **changes in teaching practice as a result of VESP support, which included new knowledge that they had explicitly applied to their teaching practice. Respondents noted that change in practice was the result of training and support, as well as the new curriculum that is closely related to their context.**

For example, respondents noted a number of specific strategies or training courses that from their perspectives had improved teaching practice. One Pentecost PT connected this to improved student learning:

Effective Learning and Teaching is like the master key. The teachers have learned a lot about improving their teaching strategies. And it's become easier for children to learn as well.

Language of instruction

Some teachers and principals reported a **critical factor to improved teaching practice is the change in language of instruction, and the ability to use Bislama or the vernacular in their classroom and school settings.**

One Pentecost teacher reflected on the *Language and Communication* course:

The Language and Communication course in particular has been very helpful in teaching in vernacular, especially for Year 1. This course has eased communication between teacher and students.



One teacher explained that being able to use a language familiar to students has helped her gauge their progress and make adjustments to her teaching:

I speak in a language that a child understands and I can identify if the child understands or not because it is the language that s/he speaks. So I can see if they get what I was trying to teach and from there I can also adjust myself in my teaching practise.

Lesson preparation

Multiple case study respondents reported **how teachers prepare and plan for lessons has improved with introduction of the new curriculum**. One teacher from Pentecost said that the new curriculum guides helped her in planning:

But with the new curriculum the guides are easy to understand and work with. Each topic for each week. The guides give us the topics and the strategies to use to teach each topic, which is very useful.

Malekula PTs attributed positive changes in teacher performance to clearer instructions to teachers provided in the teaching resources. To quote one PT:

Before the teacher wrote a lot but the lessons delivered in class were not effective and only a few children were learning, while others were struggling. But today the indicators direct the lesson and give key areas where the teachers need to focus, and we can see that teaches are performing well in teaching and so are the students.

Some SIOs agreed. One SIO noted the 'guides have everything in it for the teachers to use'.

Teaching and learning activities

Multiple case study **teachers reported examples of how their teaching practices have changed. Examples included greater interactions with students, developing and using a range of student activities, and incorporating different strategies to support a range of student abilities.**

One Malekula teacher reported that the knowledge she has gained from the ELT training has helped her to use a more student-centred approach in her teaching:

It helps by showing me how to work with small children or groups, how to listen and speak, answer questions and take part in different activities, and how children can express themselves. This has changed my teaching practice and it helps both myself as a teacher and the students.

Multiple teachers highlighted how the new curriculum and training has supported them to identify how students are progressing in their learning, and to cater to different abilities by providing additional support.

Other teachers referred to the use of classroom assessment to inform next steps for their teaching. For weaker students, support included making adjustments to activities to facilitate their understanding, additional homework to be completed with parental support, and additional catch up classes. To quote one teacher:

There are different ways we now support students after the assessment. If there are a lot of students that don't understand a topic, they can re-do that lesson again but we can separate them into a smaller group.

One teacher noted, however, that catering to different learning abilities is a challenge.

Assessment

The research team queried case study respondents about how teachers assess student learning. Respondents provided information about methods, frequency and how the assessment information is used.

A number of teachers and principals said they use both formative and summative assessment in their classrooms. Respondents noted a range of assessment frequencies: daily, weekly, at the end of topic, and end of each term. Some teachers advised they use written assessments, while others noted they also assess students daily through observation, checklists, or orally.

One Pentecost teacher explained that he gives his students tests, but he also assesses them in the daily activities or exercises, explaining 'assessment can be done anytime'.

Some teachers referred to a checklist in the textbook that provides them with directions on how to assess students. One of these teachers in Malekula stated that she uses the checklist to record areas in which students need support.

Assessment information is used for a range of purposes. Teachers stated they use the results to record student progress, identify areas for further support, find ways to help improve their teaching, produce reports, and provide information to parents on their child's progress. In terms of supporting students who had problems on an assessment, teachers said they would repeat an activity, spend extra time with a student, or add more homework to help students learn.

One Malekula principal also noted he uses assessment results to have discussions with teachers about their class performance.

An SIO said that she explains the importance of student assessment to the principals she supports, and encourages the daily use of formative assessments as well as summative assessments at the end of a term.

3.6 School leadership

3.6.1 Key findings

Finding 1. VESP training, and in particular the *Instructional Leadership* training, supports principals to understand instructional leadership and a number of principals report increased confidence to focus on improving the quality of teaching and learning in their schools.

Finding 2. Principals' support to teachers through observation and feedback, provision of resources, and school-based training, helps improve teaching practice and confidence in teaching.

Finding 3. Support from PTs and SIOs to schools and their principals is welcome, but infrequent.

3.6.2 Discussion

Leadership was discussed in the context of how school principals directly support and influence teaching quality as a result of VESP supported interventions. Both case study principals and teachers commented on how they perceived leadership as impacting teaching quality. Principals in both provinces referred to their participation in training as instrumental in helping them to understand their role as a principal and how to support teachers.



Principals in Malekula referred in particular to **the *Instructional Leadership* training as being helpful**. Principals in Pentecost referred to training from VESP and the UNICEF-supported Vanuatu school-based in-service teacher training (VanSBITT) which was piloted in Penama province.

Multiple principals reported they were more confident in their roles and more focused on the quality of teaching and learning in their school, as a result of the training. Principals also reported a shift to instructional leadership and increased cooperation between themselves and their teachers. To quote from one principal:

In the *Instructional Leadership* I was trained on how to instruct and help teachers in how to teach, and what they teach in class. The trainings gave me confidence to teach and assess teachers in class, which we didn't normally do in the old curriculum as I did not know how to assess teachers.

Principals in Pentecost also referred to how the training sessions have helped them to support the wellbeing of their teachers. As one principal said:

The trainings that I have been through have supported me to have some vision and have given me a direction to sit and think about how to better support my teachers in terms of their wellbeing, their health, and awareness. How can we ensure that any issues or problems at school have solutions and are managed properly.

Another principal, from Malekula, referred also to his increased confidence in managing the school and interacting with the community:

As a principal I am very confident in what I do compared to the past. I can now lead and direct teachers, hold community awareness sessions and manage the school. This curriculum has given me skills and knowledge on how to do that.

A few principals from Pentecost mentioned that they had attended VanSBITT training, and that this was particularly helpful in supporting instructional leadership. This program was not part of VESP, but initiated in 2014 with funding from UNICEF for Years 4 to 6⁸. One principal described the program as focusing in different teaching techniques, observation and cooperation. Another principal expressed he has been able to apply what he learnt through VANSBITT to current activities funded under VESP. Principals reported it helped them think about a whole school approach.

⁸ UNICEF supported VITE-ISU to develop an instructional leadership module to strengthen the capacity of primary school principals to support teachers in their professional development. This module was part of the UNICEF-supported VANSBITT which was piloted in Penama province in 2015. VITE-ISU decided to roll out the instructional leadership module nationwide in 2016.

Some principals suggested PT and SIO support is useful, but advised more was needed. A Pentecost principal described how the SIO supports him:

For me, the SIO helps me a lot with things like leadership and administration. They help me a lot. Because I just came in three years ago. And if there is something that I don't know, they help me with advice. It's meant that this year, I feel as if things are going well.

Some principals acknowledged they received observation visits from SIOs, either once a term or once a year. Budget – especially a travel allowance for visits – was mentioned as a factor that prevented SIOs or PTs from making more frequent principal observation visits.

For the most part, **teachers said that the support provided to them by principals was helpful in terms of improving teacher practice and confidence in teaching.** Examples included support to attend training, provision of stationery and other resources, provision of school-based training, and checking of lesson plans. Multiple teachers reported they valued observations and feedback from their principal. A teacher from Pentecost explained how the principal supported teachers:

The principal observes the teachers regularly. Through observations he advises the teacher on ways to improve. He lifts us up when a teacher fails. The principal encourages cooperation between his teaching staff.

Not all teachers, however, have been observed by their principal. To quote one teacher from Pentecost:

I felt that he should be observing us in the classroom and evaluating our weaknesses and strengths but since I started teaching in this school I have never been observed by him. So I am not sure whether my teaching is acceptable and proper or not.

Many principals said that they were also teaching in addition to fulfilling the expectations around the role of principal, including management, budgeting and teacher support. A Pentecost SIO observed:

The principals themselves wear three hats. They manage school administration, finance, and teach classes at the same time. It is quite challenging for them.

4 New curriculum implementation

4.1 Introduction

This chapter addresses the research question: **to what extent has the investment in teacher training and mentoring supported effective implementation of Vanuatu's new curriculum?**

Chapter 4 explores this question by presenting year 1 qualitative case study data from Malampa and Penama and questionnaire data from PILNA 2018 as background and for indicative comparative purposes. Implementation of a new curriculum and use of language in different provincial contexts is complex and, as such, linkages with the effect of teacher and principal development on the implementation of the new curriculum are unclear. This chapter discusses a number of constraints affecting the success of curriculum implementation.

4.2 Context

Case study respondents discussed some factors that impacted curriculum implementation that were beyond the tangible scope of VESP. These factors have been documented because at both a systemic and school level they have an impact on the implementation of the curriculum. Some respondents discussed that either Bislama or a vernacular language was being used in their schools, others noted there was uncertainty about using language in class, and that the system was constantly changing. A number of respondents reported there was a lack of resources, materials and books for students, although they did note the usefulness of teachers' guides in supporting the new curriculum.

In Malekula, the case study schools visited mainly use Bislama as the language of instruction and not a vernacular. Several respondents noted that this is due to intermarriage and teachers and students coming from different areas with different languages. To quote one parent:

Students cannot learn in their language due to people moving around and many women come in from different places. The only language that can help them to communicate is Bislama.

One parent suggested that a change to teacher deployment practices could change this practice:

We have a lot of teachers from our area but they are teaching in different places. If they were all posted to this area and teach in the local language I think things will improve for the better.

In Pentecost, teachers and principals said that they had already been using the vernacular in Year 1, and that Bislama was not commonly used in the early years' classes. However, one school in Pentecost teaches Bislama in Years 1 to 3. A teacher reflected that this is a challenge for students who do not regularly speak Bislama at home, and as a teacher she often switches between Bislama and the vernacular:

Some children are already speaking Bislama at home, but for some, Bislama is very new to them. It's like learning English or French. So at times during a lesson a student

would put their hand up to request the teacher to switch to vernacular because they did not understand most of what was taught in Bislama.

A shortage or inadequacy of instructional materials was reported in PILNA 2018 by 42 per cent of responding principals as hindering their school's capacity to provide instruction to a moderate or large extent. Following the introduction of the new curriculum, respondents said resources were an issue in Years 1 to 4. Case study SIOs, principals and teachers mentioned the lack of resources. For example, one SIO reflected:

In the past curriculum there were teachers' guides and students' textbooks. With this one, for Years 1 to 3 there is only a teachers' guide, but there are no students' textbooks.

Two teachers from Pentecost mentioned the challenges they had with English and French teachers' guides, which may indicate the need for more supplementary resources to support the transition to English and French.

4.3 Language

4.3.1 Key findings

Finding 1. The use of a language most students in a school are familiar with and confident in seems to support students' learning in early years.

Finding 2. The language policy requiring the use of Bislama or the vernacular is applied differently given the mix of language groups in some communities. Some schools and communities have expressed concern about the language policy in the new curriculum.

4.3.2 Discussion

Case study respondents shared a range of opinions about the language of instruction or choice of language at school. Many of these opinions are related to the years when their students transition from vernacular or Bislama to English or French and how this transition will or will not disadvantage each students' education in these languages.

Speaking in focus groups, parents offered a range of opinions about the use of language at their children's school. Some parents **agreed with the language policy and the use of vernacular or Bislama, while others expressed their concern**. One parent in Malekula explained why she agrees with the use of vernacular or Bislama as the language of instruction:

... because my child is learning the language he was brought up with and it makes it easier for him to learn.

One Pentecost parent suggested the new curriculum 'protects our language', adding:

I have learnt some vernacular words, for example, months of the year, from my child. Words which most of us don't know or are not using anymore.

Another male parent from Pentecost added:

My main concern is about the transition to English and if the children will be able to perform well within the transitions. I hope that they will be okay with their English language.

Parents in a Malekula Francophone school expressed concerns that their children will find it difficult to speak and write in French. One parent explained that it is easier for Anglophone schools as Bislama and English 'are the same in many ways, especially words'. Another noted that his concern now is that the 'French language is at risk'.

Principals, teachers, PTs and SIOs talked about a number of issues, from **noting that the new curriculum is helpful in supporting students' learning, to concern that the transition year from vernacular to English or French happens too quickly and this could impact children's learning in the future**. Some respondents noted that teachers are struggling with an education system that is changing all the time. Some raised they worry whether students will be well-equipped for national examinations⁹. As one Pentecost principal said:

... they are worried now because Class 1, Class 2, Class 3 is vernacular. And then there is a small change in Class 4, 5, 6 and then the National Exam. Everything else is good, but the English language – and French – because it switches really quickly. Maybe they'll adapt and it will be okay, but in my view, it's too fast for them to pass their National Exam.

Parents at one Malekula school reported they were not aware of the change in curriculum and suggested parents needed to understand the rationale behind why Bislama was introduced. As explained by one parent:

That's why we feel that English should be also taught in school. Maybe there is a good side of using Bislama, but we don't know it.

4.4 Teacher support

4.4.1 Key findings

Finding 1. SIOs and PTs provide support for curriculum implementation for principals and teachers, but more support is needed.

Finding 2. Teachers and principals within schools support each other in implementing the new curriculum with advice, observations and peer learning.

Finding 3. Opportunities for support and knowledge exchange about the curriculum between schools exists but is a challenge in some contexts.

⁹ In 2019, MoET announced that national examinations for Year 6 and Year 8 students (to continue to Year 7 and Year 9) would be discontinued starting in 2020.

4.4.2 Discussion

Case study respondents said that teacher support was a critical part of helping teachers to implement the new curriculum. Teacher support includes how principals, SIOs and PTs support teachers, and how teachers work together to support one another.

Provincial level supports

Principals and teachers generally found the support from PTs and SIOs helpful, but many urged that more support was required. Some respondents said they were confused about the respective roles of PTs and SIOs. Limited funding for visits was cited as a major challenge to PTs and SIOs providing ongoing support to schools.

PTs interviewed described their support role. One Malekula PT referred to a ‘teacher and principals support program’ focused on school visits to see how teachers have applied their trainings to implement the new curriculum. Generally, PTs noted that funding and time for visits was a challenge such that not every teacher was visited. Another PT reported she only could do one support visit last year.

SIOs described their role as supporting principals, and teachers. Examples of this support included checking to see if the teacher was using the manual to prepare a good lesson and indicators to check students learning, undertaking follow up activities to check teacher progress, and working with the principal to prepare school improvement plans. One SIO noted he assists the principal with teacher appraisals. Another stated:

We also provide the practical support to help the principals help the teachers to carry out peer observations.

This SIO also assesses principals and ensures that they are observing and monitoring teachers. She and another SIO clarified that the role of SIOs is to observe the principal, not the teacher:

We observe the principal directly and not the teacher. However, whenever a principal needs me to assist a teacher then I can work directly with the teacher, but that does not happen often.

A Pentecost teacher noted that SIOs used to work directly with teachers, when they were known as ‘Zone Curriculum Advisers’. This arrangement was confirmed by one Pentecost principal:

Now in the current system, the SIOs just come to see us – all the principals in the schools – to see how we’re managing the teachers, and the finances of the school. But they don’t go as far as the teachers any more. They just come and observe me, once a term.

Principals discussed how PTs and SIOs supported them to support teachers. Principals mentioned that trainings provided by the PTs were helpful in supporting them to become more confident in their roles, understand the new curriculum, and support teachers in the classroom. Principals also noted the training the PTs provided to teachers on the new curriculum was helpful. To quote one Malekula principal:

The training they provided was delivered in a way that the teachers understood and that suited each grade level that they teach.

A number of teachers said they received support from PTs through various training courses that were offered. One Pentecost teacher recalled a PT helping teachers at her school write lesson plans. Another teacher said the PT had helped him a lot through training.

However, **most principals and teachers noted the need for more ongoing follow-up support from PTs and SIOs after trainings, and quality feedback.** To quote one Pentecost principal:

SIOs come with the Provincial Observation Sheet, and complete that, and then go back. That's it. They explain it a little, but it would be better if they stayed for a day or two.

A principal of one school highlighted the limited support his school has received, noting that to access SIOs he needs to go to their workplace in town:

The PTs provided the trainings and come visit and do observation but they never give feedback after observation. The SIOs never support us. Maybe the government did not give them money to visit school? Last year the SIO never visited.

Another principal from another school confirmed that the SIO had not visited his school, and that the school had to meet the cost for the PT's visit. One principal noted that the PTs and SIOs do the same things, whereas another principal stated that SIOs only give support on administration aspects such as the budget.

School-level support

Multiple respondents reported that teachers provide support to each other, indicative of a change in the teacher environment towards more collaboration. Most of this support took place within schools, but in some instances respondents gave examples of across school support. A Malekula principal of one of these schools stated the importance of teachers working together:

It is a good thing to support each other. Not every teacher has the same level of education. So seeking advice from other schools or asking them to teach a lesson while others observe is also a way of educating other teachers.

Support provided within schools

Principals discussed the ways that they worked with teachers at their school to improve teaching and learning, and confidence. These include staff meetings, professional development meetings with teachers and the principal, and encouraging teachers to work together cooperatively and professionally.

One principal reported that at his school in Malekula, he holds an academic meeting every Monday with those classes under the new curriculum and the upper classes grouped separately, explaining:

They help each other to list out the outcomes of each subject and work towards it.

Teachers also said that their principals provided important support through observations, reports and feedback. One Pentecost teacher mentioned that her school principal:

...supports the teachers well and encourages them positively through any challenges faced. She gets the teachers to fill in her monthly report, as an assessment, and from

there meets with individual teachers to discuss performances and gives very helpful feedback to improve their classroom practices and student learning.

Many teachers said that meeting with other teachers and the principal at their school was a valued source of support. Respondents mentioned a range of activities that teachers undertake to support each other, including: preparing lessons; sharing resources; meeting to discuss challenges and ideas; and observing each other's classes. Some teachers explained that when they do not understand a topic, they ask others to teach that topic while they observe, or request others to observe their lessons and provide feedback. A Pentecost teacher reflected:

Years 1 to 3 teachers usually get together to discuss and share ideas on how to teach using the guides. We also share the learning kits. Sometimes I ask another teacher to come teach a certain topic to my students if I have difficulty teaching it.

Some teachers mentioned that in their school they provide additional support to teachers who have not attended the full set of trainings provided by the PTs.

Support provided across schools

Only some schools work with other schools. One principal of a church school reported they meet with other church schools every quarter:

There is a school-to-school training and observation program for teachers where they observe and support each other in the curriculum. They share ideas and observe others teach a lesson to learn and improve their lessons.

Some respondents talked about 'lighthouse schools'. Malekula PTs spoke about the creation of lighthouse schools in Malekula (six schools in the Lakatoro area), explaining:

The main idea behind it is to provide support to other schools if they need support.

Generally, 'lighthouse schools' refer to schools that have been identified as showing successful practice, and that may operate as a hub to provide additional support to other schools. A teacher at a Malekula lighthouse school explained that if other schools need advice, they come to their school. One teacher reflected that her school goes to the lighthouse school if they need advice, but they do not work with other schools.

In Pentecost, while teachers said that they worked with other teachers at their school, distance and the cost of transport were issues that prevented them from working with teachers at other schools.

5 Student learning outcomes

5.1 Introduction

This chapter addresses the research question: **to what extent have teacher training and support activities led to improved learning outcomes?**

As defined in the Conceptual Framework (ACER, 2017), ‘student learning’ is used broadly in this evaluation series to encompass both cognitive and non-cognitive aspects of learning – in essence, what students know, what students believe, what students are disposed towards, and what students are able to do.

Chapter 5 explores various aspects of student learning by presenting student literacy and numeracy data from VANSTA 2017 and the PILNA 2015 and 2018 assessments, for Years 4 and 6 student cohorts who are yet to study under the new curriculum. While these VANSTA and PILNA cohorts did not engage in the new curriculum, the data provides a reference point for student learning outcomes for comparison in subsequent years of this study. Year 1 qualitative case study data from Malampa and Penama provinces contributes to an understanding of the impact of VESP on student learning.

While PILNA and VANSTA collect information about student learning outcomes, they have different objectives. PILNA is a regional assessment of students’ literacy and numeracy skills in Year 4 and Year 6, and is administered every three years. PILNA is administered to a representative sample of Year 4 and Year 6 students in all provinces of Vanuatu. Teacher, principal and student questionnaires were added to the PILNA assessment cycle in 2018. VANSTA is a national assessment of Year 4 and Year 6 students’ literacy and numeracy achievement within the national curriculum. VANSTA is administered as a census to all students in Years 4 and 6.

5.2 Year 4 and 6 student performance under the former curriculum

5.2.1 Key findings

Finding 1. VANSTA 2017 and PILNA 2015 and 2018 indicate there are widespread differences in student achievement between provinces.

Finding 2. VANSTA and PILNA indicate girls generally outperform boys at both year levels in literacy and numeracy.

Finding 3. The impact of VESP investments on student learning outcomes is inconclusive as current student cohorts tested through VANSTA and PILNA have not engaged in the new curriculum.

5.2.2 Discussion

The following section outlines results from VANSTA 2017 and the PILNA 2015 and 2018 assessments, and presents some background information related to teaching practices collected via questionnaires in PILNA 2018.

To summarise, the results from the two assessments show that there is a high proportion of children not meeting the learning outcomes expected at their grade level, particularly for literacy. Performance in numeracy across the two assessments is better. **Differences in performances by province is considerable**, with Torba and Tafea usually underperforming when compared to other provinces. **Girls, generally, have performed better than boys. Curriculum changes in relation to both content and pedagogy had not yet directly affected these VANSTA and PILNA cohorts.** Regardless, both assessments do provide a reference point for student learning outcomes to be analysed in future reporting.

VANSTA 2017

Separate Year 4 and Year 6 tests were developed for students as they were taught in either English or French at the time of administration. Each test had the same overall design and similar tasks. For literacy, three major strands from the curriculum were assessed: reading comprehension; language elements; and writing. For numeracy, five strands were assessed: numbers; measurement; geometry; patterns; and, chance and data.

Minimum test scores were identified for the test and for each assessed strand. The levels of achievement used for both numeracy and literacy were: critically below minimum standard; approaching minimum standard; meeting minimum standard; and exceeding minimum standard. Table 2 below sets out the VANSTA 2017 results. The percentages in the table below represent the proportion of students who returned a test result¹⁰.

Table 2. VANSTA 2017 results

	English Literacy N (%)		French Literacy N (%)		Numeracy N (%)	
	Y4	Y6	Y4	Y6	Y4	Y6
Critically below	441 (11)	401 (11)	267 (13)	493 (32)	387 (10)	487 (10)
Approaching	1022 (24)	526 (15)	438 (22)	417 (27)	474 (8)	820 (16)
Meeting	1457 (35)	1515 (43)	688 (34)	450 (30)	2719 (44)	2062 (41)
Exceeding	1280 (30)	1054 (30)	603 (30)	161 (11)	2531 (41)	1706 (34)

Literacy

Year 4 literacy results showed that students who completed either the English or French tests performed at similar levels, with around one-third of students performing below the minimum

¹⁰ It is known that there were a number of missing responses (students from at least 24 schools from four provinces, out of the potential population to be tested due to: dislocation caused by the Manoro volcano eruption; missing enrolment information in the student database; and illness/absenteeism on the day (MoET, 2018).

standard ('critically below' or 'approaching'), one-third 'meeting' standards, and one-third 'exceeding' standards.

Year 6 literacy results are concerning. A higher proportion (32%) of Francophone students were assessed as performing 'critically below' the minimum standard or only 'approaching' the minimum standard (27%), compared to students taking the English Literacy tests.

At both year levels, girls are outperforming boys in both languages in literacy. For example, for Year 4, the mean score for girls was 25.6 compared to 22.3 for boys; in French, the mean score for girls was 24.8 compared to 22.1 for boys.

Tables 3 and 4 show the English and French literacy results by year level and province. Students from Tafea and Torba provinces achieved at lower levels across both year levels and languages. In particular, the variation is highest for Francophone students in Tafea and Torba, where 77 per cent of Year 4 and 6 students being assessed was below the minimum standard.

In contrast, the provinces of Penama, Sanma and Shefa at both year levels and in both languages, generally met or exceeded national level results. Year 4 students in Malampa have performed at similar levels to the national results, but are underperforming in both languages by Year 6.

Table 3. VANSTA 2017 English Literacy results by year level and province

Province	Year Level	Critically below	Approaching	Meeting	Exceeding
Malampa	Y4	97 (14)	158 (23)	272 (40)	156 (23)
	Y6	96 (16)	131 (22)	272 (45)	105 (17)
Penama	Y4	16 (3)	63 (14)	179 (39)	203 (44)
	Y6	16 (4)	36 (10)	165 (45)	150 (41)
Sanma	Y4	103 (11)	227 (24)	287 (30)	333 (35)
	Y6	65 (9)	109 (15)	340 (45)	235 (31)
Shefa	Y4	91 (7)	270 (22)	419 (34)	454 (37)
	Y6	118 (11)	134 (12)	398 (36)	441 (40)
Tafea	Y4	82 (12)	235 (35)	242 (36)	107 (16)
	Y6	87 (16)	87 (16)	270 (50)	96 (18)
Torba	Y4	52 (25)	69 (33)	58 (28)	27 (13)
	Y6	19 (13)	29 (20)	70 (48)	28 (19)

Table 4. VANSTA 2017 French Literacy results by year level and province

Province	Year Level	Critically below	Approaching	Meeting	Exceeding
Malampa	Y4	54 (14)	85 (22)	147 (39)	95 (25)
	Y6	104 (28)	126 (34)	113 (31)	24 (7)

Penama	Y4	16 (7)	45 (20)	75 (33)	92 (40)
	Y6	32 (23)	39 (28)	41 (29)	29 (21)
Sanma	Y4	37 (7)	84 (17)	169 (34)	211 (42)
	Y6	82 (26)	77 (25)	121 (39)	32 (10)
Shefa	Y4	52 (14)	67 (18)	117 (32)	130 (36)
	Y6	73 (24)	73 (24)	114 (37)	45 (15)
Tafea	Y4	95 (20)	146 (31)	157 (34)	67 (14)
	Y6	174 (52)	83 (25)	50 (15)	28 (8)
Torba	Y4	13 (24)	11 (20)	23 (42)	8 (15)
	Y6	28 (46)	19 (31)	11 (18)	3 (5)

Numeracy

There are fewer Year 6 students meeting or exceeding the minimum standards (75%) than Year 4 students (85%). Year 4 numeracy performance levels across students tested in English and French students was similar, but a higher percentage of Francophone students did not achieve the minimum standard in Year 6. Once again, girls outperformed boys.

As Table 5 shows, provincial level results for numeracy show a similar trend to that of literacy, with students in Torba, Tafea and Malampa not meeting the minimum standard of achievement. Penama and Sanma students had the highest levels of performance in numeracy with at least 80 per cent of Year 4 and 6 students meeting or exceeding minimum standards.

Table 5. VANSTA 2017 Numeracy results by year level and province

Province	Year Level	Critically below	Approaching	Meeting	Exceeding
Malampa	Y4	82 (8)	82 (8)	526 (50)	367 (35)
	Y6	111 (11)	175 (18)	425 (43)	272 (28)
Penama	Y4	22 (3)	36 (5)	242 (35)	388 (56)
	Y6	23 (4)	45 (9)	184 (36)	263 (51)
Sanma	Y4	62 (4)	90 (6)	614 (43)	649 (46)
	Y6	77 (7)	133 (12)	434 (39)	455 (41)
Shefa	Y4	94 (6)	111 (7)	630 (40)	726 (47)
	Y6	139 (10)	211 (15)	552 (40)	478 (35)
Tafea	Y4	91 (8)	121 (11)	584 (52)	329 (29)
	Y6	101 (12)	199 (23)	373 (43)	195 (22)
Torba	Y4	36 (14)	34 (13)	123 (46)	72 (27)
	Y6	36 (16)	57 (25)	94 (41)	43 (19)

PILNA 2015 and 2018 data

Population statistics for PILNA 2015 and 2018 achievement were estimated using plausible values (PVs). Plausible values provide a range of estimates for each student as opposed to a single value, and is the standard methodology for large-scale assessment programs (Australian Curriculum, Assessment and Reporting Authority (ACARA), 2018).

Appendices F and G show the PILNA literacy and numeracy proficiency level descriptors, along with an indication of the expected minimum levels for Year 4 and Year 6.

The mean of each of the five PVs was taken, and then used to calculate an overall PV mean for literacy and numeracy shown in Table 6, representing the average scale score on the literacy or numeracy scale.

Table 6. PILNA 2015 and 2018 National level literacy and numeracy results

	Literacy		Numeracy	
	Y4	Y6	Y4	Y6
PILNA 2015	425.91	491.95	492.30	526.52
PILNA 2018	416.29	489.70	479.39	537.82

Nationally, girls in Years 4 and 6 performed significantly better ($p < 0.05$) than boys in literacy in 2015 and 2018, and in numeracy in 2018. There was no significant difference in boys' and girls' performance in numeracy in 2015. Students in urban areas also performed significantly better ($p < 0.05$) in literacy and numeracy in 2015 and 2018 compared to students in rural or non-urban areas in both Years 4 and 6.

Table 7 shows student achievement in literacy in Years 4 and 6 in 2015 and 2018 nationally and for each province. The PILNA 2015 and 2018 literacy results found the majority of Year 4 students did not meet the minimum expected proficiency level for Year 4. Definitions of proficiency levels for PILNA Year 4 and Year 6 literacy are in Appendix F.

Reflecting trends in the VANSTA 2017 results, Penama, Sanma and Shefa were the highest performing provinces, and Malampa, Tafea and Torba underperformed. The Year 6 PILNA literacy results showed a different picture with wide variation in provincial level results, most notably for Penama which was the highest performing province in 2015 and the lowest in 2018. Based on mean PVs, Year 6 students in four provinces (Tafea, Torba, Malampa and Penama) performed at the expected minimum level for Year 4.

Table 7. Achievement levels in literacy for Y4 and Y6 students in PILNA 2015 and 2018 by province

LEVELS and PILNA scale scores	PILNA 2015		PILNA 2018	
	LIT Y4	LIT Y6	LIT Y4	LIT Y6
LEVEL 8 (587.5 or greater)				
LEVEL 7 (537.5 to < 587.5)				

LEVEL 6 (512.5 to < 537.5)		Penama (514.5)		
LEVEL 5 (487.5 to < 512.5) *Expected minimum level for Year 6		Shefa (503.1) National (492.0) Malampa (488.4)		Sanma (510.8) Shefa (508.2) National (489.7)
LEVEL 4 (462.5 to < 487.5) *Expected minimum level for Year 4		Sanma (483.9) Torba (473.9) Tafea (473.6)		Tafea (473.4) Torba (472.3) Malampa (472.1) Penama (466.0)
LEVEL 3 (437.5 to < 462.5)	Penama (448.5)		Penama (444.1)	
LEVEL 2 (412.5 to < 437.5)	Sanma (430.8) Shefa (429.9) National (425.9) Malampa (425.4) Tafea (418.1)		Sanma (428.7) Shefa (428.7) National (416.3)	
LEVEL 1 (362.5 to < 412.5)	Torba (403.2)		Malampa (409.8) Tafea (397.0) Torba (386.8)	
LEVEL 0 (Less than 362.5)				

Table 8 shows student achievement in numeracy in Year 4 and Year 6 in 2015 and 2018 nationally and for each province. The PILNA 2015 and 2018 numeracy results were more positive, with the mean PVs for students in all provinces meeting or exceeding the minimum expected levels for each year level. Definitions of proficiency levels for PILNA Year 4 and Year 6 numeracy are included in Appendix G.

Students in Penama and Sanma, similar to VANSTA 2017, met or exceeded minimum proficiency levels across both PILNA administrations and year levels. Year 4 Penama students had a mean PV in Year 4 meeting or exceeding Year 6 expected minimum levels. Torba, similar to VANSTA 2017 results, demonstrated a majority of students did meet minimum proficiency levels.

Table 8. Achievement levels in numeracy for Y4 and Y6 students in PILNA 2015 and 2018 by province

LEVELS and PILNA scale scores	PILNA 2015		PILNA 2018	
	NUM Y4	NUM Y6	NUM Y4	NUM Y6
LEVEL 8 (575 or greater)				
LEVEL 7 (550 to < 575)				Penama (574.7)
LEVEL 6 (525 to < 550)		Penama (547.8) Sanma (535.5) National (526.5)	Penama (529.3)	Sanma (549.6) National (542.8) Shefa (537.4) Malampa (539.1)

LEVEL 5 (500 to < 525) *Expected minimum level for Year 6	Penama (503.4) Sanma (502.6)	Shefa (524.3) Tafea (523.8) Torba (517.1) Malampa (515.5)	Tafea (522.0) Torba (507.9)
LEVEL 4 (475 to < 500)	Tafea (494.5) National (492.3) Malampa (490.4) Shefa (489.9)		Sanma (489.5) Shefa (489.4) National (488.0) Malampa (487.7) Tafea (472.6)
LEVEL 3 (450 to < 475) *Expected minimum level for Year 4	Torba (464.9)		Torba (450.1)
LEVEL 2 (425 to < 450)			
LEVEL 1 (375 to < 425)			
LEVEL 0 (Less than 375)			

Teaching practices

Teachers of PILNA 2018 Year 4 and 6 students were asked a series of questions related to their teaching practices, which provide some insights into the student assessment results. While this study focuses on teachers in Years 1 to 4, the PILNA teacher questionnaire findings also provide insights into general teaching practices in primary schools. See Appendix E for further information.

Ease of teaching literacy and numeracy

Teachers' beliefs and confidence in their own teaching abilities can affect student learning in the classroom. PILNA explored questions that enabled teachers to indicate their level of confidence in teaching aspects of both literacy and numeracy.

Teachers were asked in the questionnaire how difficult they found teaching different strands of literacy, for example, vocabulary, grammar and syntax, spelling and punctuation, reading comprehension, oral language. The strands that teachers found the most difficult were teaching 'organisation and structure in writing', 'phonemic awareness', and 'quality of ideas in writing', with over a third of Year 4 and 6 teachers indicating that these were difficult or very difficult.

Similarly, teachers were asked how they found teaching different strands of numeracy, including numbers and patterns, place value, fractions and percentages, operations, measurement, geometry, and data and chance. Whilst the majority of teachers indicated that these strands were either easy or very easy to teach, over a third found fractions and percentages, and data and chance difficult or very difficult to teach.

Frequency of reading activities

Teachers were asked how often they practised certain reading activities, covering: whole class/choral reading; peer reading/guided reading; independent reading; summarising; and

asking and responding to questions about a text. Notably, 37 per cent of Year 4 and 28 per cent of Year 6 participating teachers indicated that they rarely or never practice summarising a reading passage with their class. More than 80 per cent of teachers reported they undertake the other reading activities sometimes or often.

Instructional time

Teachers were presented with a series of statements related to instructional time. At least one-third of teachers (34% Year 4, 39% Year 6) either disagreed or strongly disagreed that they 'get enough time to work with students who are slow learners'. The majority of teachers (at least 70%) reported they strongly agreed or agreed that they have enough time to complete the required lessons in maths, writing and reading, although the rates were slightly higher for maths.

Student characteristics

In the PILNA 2018 questionnaires, teachers were also asked a series of questions related to issues affecting their Year 4 and 6 students¹¹. A lack of basic knowledge or skills, reading impairment, absenteeism, and behaviour disorder were issues reported by at least 20 per cent of responding teachers as affecting more than 41 percent of their class. For Year 4 teachers, the more prevalent issue was reading impairment – a third (33%) reported that at least 41 per cent of their students were affected by this issue. For Year 6 teachers, absenteeism was the more prevalent issue – also a third (33%) reported that at least 41 per cent of their students were affected by absenteeism. See Appendix E for further information.

Teacher Professional Development

The PILNA 2018 questionnaire also provided insight into the number of times that Year 4 and Year 6 teachers had participated in some form of professional development support over the past three years. Over 60 per cent of Year 4 and Year 6 teachers (combined) had participated in professional development in reading or numeracy at least once over the past three years. But just under 40 per cent of teachers had never received professional development support in reading or numeracy. Over 60 per cent of teachers also reported receiving support in pedagogy (including classroom-based assessment, curriculum and student welfare). Relatively high percentages of teachers reported never having support in the past three years in school support services (including student welfare, classroom management and inclusive education). See Appendix E for further information.

5.2.3 Concluding comments on VANSTA and PILNA

While VANSTA and PILNA are administered to Year 4 and Year 6 students, they provide a reference point for student learning in literacy and numeracy. VANSTA assesses students' understanding of the Vanuatu national curriculum, while PILNA is a regional survey that assesses students' general skills in literacy and numeracy. PILNA also administers

¹¹ The issues were: lack of basic knowledge or skills; reading impairment (e.g. dyslexia); lack of interest; poor health; absenteeism; being hungry/hunger; lack of sleep; behaviour disorder; auditory/visual impairment (not corrected by hearing aid/glasses).

questionnaires to Year 4 and Year 6 teachers (in addition to students and principals), and as such provides some insight into general practices in primary schools¹².

Importantly, the evidence presented from VANSTA, PILNA and stakeholder perceptions enable a deeper insight into complexities of teachers' experience of the new curriculum, as well as professional learning and support about the new curriculum. These insights are reflected in the stakeholder perception data on student learning outcomes discussed in Section 5.3.

5.3 Perceptions of student learning outcomes

The following section presents Year 1 qualitative case study data from Malampa and Penama provinces to contribute to an understanding of the impact of VESP on student learning. Generally, respondents reported that a range of VESP activities have supported improvements in reading and writing, speaking, student attendance levels, interest in lessons and wellbeing, and particularly confidence. There were different views with regards to numeracy. These are discussed in detail below.

5.3.1 Context

There are a range of factors that impact student learning outcomes that are outside the interventions implemented by VESP. These were discussed by case study respondents. Issues of weather and distance are discussed in the section on attendance. Respondents mentioned other issues which included school infrastructure, lack of water, student attitudes and community obligations.

During focus group interviews parents reflected on some of the contextual issues that they perceived as influencing their children's learning outcomes. In terms of infrastructure, some parents noted that the classrooms were in disrepair, or the school library needed to be completed.

Many parents stated the school should provide more materials for their children. One teacher in Malekula noted she has been teaching in a house made from bamboo and leaves that was damaged by the cyclone. She noted that student displays have to be removed at the end of each day, and explained how this adversely impacts the learning environment:

When you display a child's work, they can compare themselves with others and see the differences among themselves. It also helps them to improve. A child should have a good environment for learning to take place.

An issue that was raised repeatedly in Pentecost was the lack of potable water. Teachers also acknowledged that lack of water and sufficient water bottles for students are challenges. One parent explained:

The school does not have water. The school's water tanks need cleaning and therefore are currently not usable. The full school uses just one tank which becomes empty during the dry seasons.

¹² PILNA questionnaires only became a permanent part of the assessment cycle in 2018.

5.3.2 Academic outcomes

Key findings

Finding 1. Content and pedagogy in the new curriculum seems to have improved students' learning outcomes in years 1 to 3 as a result of some VESP interventions, particularly in reading, writing and speaking using Bislama or the vernacular, though the evidence is inconclusive.

Finding 2. Students seem to have experienced challenges with reading and writing in English and French during the language transition year.

Discussion

Some respondents attributed that the ability to use Bislama or a vernacular in the classroom has supported improvements in students' academic outcomes. As one Malekula teacher explained:

There is change in the way we use Bislama. It works better. The child gets the basic skills through the language that they understand and that we help them with. So basic skills for language, mathematics or general studies, they understand them at that early age. The skills that they need in grade one and two they already have them because the language we use is understandable to them.

Literacy

Multiple case study respondents observed students are now more talkative and expressive, and able to speak more coherently and clearly. To quote one teacher:

When you ask questions in Bislama, they answer the questions confidently and correctly compared to the other classes under the old curriculum, where students found it hard to put the words together to make a sentence to answer the questions.

Many case study respondents noted improvement in their students' reading and writing skills as a result of some VESP interventions. A principal discussed how the new curriculum has helped students with reading and writing:

I can tell you that the new curriculum has really helped teachers a lot. And the children. For example, when a child was in Class 2 before, they were just starting to learn to read. But with the new curriculum, now if you put a passage in front of them in language or in Bislama, they are able to read it. They learn to read more quickly.

This observation was also made by multiple teachers. A teacher added about her Year 3 class:

There is a big change... when I ask a child to write about their morning news, in the old curriculum a child would write a few words only. But in the new curriculum a child can write a whole story in a few sentences. They can express themselves and understand better than before.

At the same time some teachers and principals noted students were having challenges with reading and writing because of the language transition year. One teacher said 'My students and I still have problems with *Ademap Lanwis* in the classroom'. One principal explained:

Those in class 4 are the first product of this curriculum. When they started to learn English it was difficult at first but at the end of term in class 3 we had learned English. For example, what we did was when writing a story we thought about the story in Bislama and then tried to write it in English. They got the words and spelling mixed up, but the teachers were there to support them. It is challenging when trying to write in English.

Parents were mainly very positive about the progress their children had made in reading and writing in Bislama. Some parents reported this foundation in Bislama has helped their children with English, but some of their children mix up Bislama and English sounds and spelling. Some parents in French communities were concerned about their children's progress in reading and writing in French, noting that many of the children are finding difficulties with the transition. While the majority of the case study schools in Pentecost used the vernacular in Years 1 – 3, some parents expressed similar concerns to those from Malekula.

One Malekula parent observed that students can easily read in English, but 'they did not understand the story they were reading'. This observation is supported by a Malekula Year 5 teacher who reported that although children can read and write a sentence in English, they do not understand English¹³.

Numeracy

Not many case study respondents spoke about numeracy. Of the respondents that did discuss this issue, there were different views with regards to changes in students' numeracy. A few principals observed that students are more able to count and calculate than under the old curriculum. A teacher noted that mathematics remains the main challenge:

When in groups they can do their maths exercise but individually, they cannot do their work.

Another teacher noted that under the new curriculum the activities are similar for numeracy, but there are more activities and the teacher can choose which activities are best suited to her class. She added however:

There is no big difference in numeracy. Only in language there is a huge difference in learning compared to the old curriculum.

5.3.3 Student attendance

Key findings

Finding 1. The impact of VESP investments on student attendance gives some indication that the pedagogy of the new curriculum encourages children to come to school, though the evidence is inconclusive.

Discussion

A range of issues can impact the ability of a student to attend school regularly. Some case study respondents reported that travel distance, the weather and subsequent flooding were

¹³ This was an early pilot school for VESP. The Year 5 teacher was teaching students who had been taught using the new curriculum.

key factors in affecting students coming to school. At the same time, **teachers suggested that because students were more engaged in the new curriculum, they made the effort to come to school.** Some parents explained the importance of their children attending school. One male parent said that children must consistently attend school.

One principal compared attendance levels to the past:

Student attendance is good compared to the past, where they [students] normally missed classes if they do not understand a topic.

Some respondents reflected that **improved attendance could be because of the new curriculum and learning in a language the students understand.** A teacher in Pentecost said:

No matter the weather they still come to school. They are always happy to come to school and do not want to miss school, compared to the past. This is because the teacher speaks their vernacular, their own vernacular.

A principal from Malekula stated:

Using Bislama in class helps them to better understand what the teacher says in class and they are happy to come to school. One of the key factors is that they use the language they were brought up with compared to the past where students skip classes because the teacher is talking in a different language and they cannot understand.

An SIO attributed improved attendance to the new curriculum and the need for parent support:

The new curriculum is encouraging children to come to school. Those children who miss classes are those whose parents are not being very supportive to their child's learning at home.

5.3.4 Student interaction, participation and interest in school

Key findings

Finding 1. Students appear to be more interested in participating in school because they are familiar with the language and can express themselves in class.

Finding 2. Teacher engagement in planning different activities and using new curriculum resources seems to have had a positive impact on student interest in school.

Discussion

Multiple case study respondents reported that students are more interested in lessons and participate more actively in lessons. **Teachers and principals said they observed students being willing to express themselves in class because they felt confident in speaking a language they were familiar with.** A number of respondents attributed the change in student interest to language and connection to the lessons.

A principal reflected:

In the new curriculum a child can express themselves and when they understand a topic in class, they complete the exercise, and they can ask for another thing to do.

One PT noted that children in Years 1, 2 and 3 were not active before and couldn't express themselves, 'but today every child participates and are learning'.

A Pentecost teacher attributed student interest in lessons, to language:

But in this new curriculum the children are very interested in attending classes because of the language they use in class. That is because they know the language and are free to express themselves.

Some respondents said that **teacher engagement and activities teachers learned in training about the new curriculum had a positive impact on student interest in school**. For example, a Pentecost principal reflected there's been a shift in teacher engagement:

All the students now have an interest in coming to school. Maybe it's because the teachers also are interested. And this makes the students interested to come.

Some respondents noted that **the use of a greater number and more diverse range of resources and activities has been important for improving students' interest in lessons**. One Malekula teacher explained:

Before the use of the new curriculum, student learning was so poor. The reason is that there were not enough resources for teachers to use, and students needed to learn more on a particular subject. Today using 'effective teaching', teachers plan different kind of activities and use different resources to capture students' interest. The resources and guides used in this new curriculum educate both teachers and students to participate in students learning.

5.3.5 Student wellbeing

Key findings

Finding 1. Students seem to be more confident in engaging with their teachers and each other due to changes in pedagogy and because they are able to use the vernacular or Bislama in class.

Discussion

Research indicates that wellbeing in school is a critical student learning outcome (Lawson, 2013) (Klem, 2004). Students who feel safe and confident in class are able to communicate more easily with other students and their teachers. Training, support of teachers and the new curriculum were reported by teachers to impact students' wellbeing.

Multiple respondents reported **students appear happier, more confident and more outspoken under the new curriculum**. Many also reported **students seem to interact better with each other and their teachers, and are not scared of teachers**.

A principal from Pentecost said that students have confidence in the teachers more so than before the implementation of the new curriculum. Multiple respondents mentioned that children now are more 'free' and confident in class. One principal said

Because they can speak, and they can express themselves to their teacher. In the old curriculum, the children just stayed in their shells. They never came out. If they didn't understand something, that was it. They just wouldn't understand it now.

Another teacher expanded that this confidence extends to tests:

When doing assessments or testing, students are confident, happy. They believe in themselves and feel that they can do it. When compared to before, students were nervous and the test questions had to be read out for the students to understand when doing a test.

One principal mentioned that 'grouping children in class' seemed to work well in **building children's confidence because they can speak up in class. Some respondents attributed this change to the use of vernacular or Bislama.** One female parent from Pentecost attributed this change in their child's engagement in school to the use of vernacular:

The child questions the teacher more than before, because they can speak up in vernacular rather than in English. Also, they participate better when the teacher asks them questions.

A teacher noted:

Because in the past they could not talk a lot like this since it is not their first language. They also are confident in expressing themselves or their point of view about anything in the classroom. Therefore the big and positive change in the children's learning is their communication.

5.4 Parent and community support

5.4.1 Key findings

Finding 1. VESP support of activities in implementing the new curriculum appears to have increased, generally, parents' understanding of the need to support their children in the learning process. There is a recognition that the more parents understand what their children are learning, the better they are able to support them in school.

Finding 2. The new curriculum may facilitate more engagement with parents through school activities and use of Bislama or vernacular. However, many parents said they do not talk to teachers or principals about their children's learning progress other than through formal activities.

5.4.2 Discussion

Parents and communities have an impact on students' engagement in school. The following section presents Year 1 qualitative case study data from Malampa and Penama provinces to contribute to an understanding of the impact of VESP on how parents and communities support students and engage with schools.



As a result of the activities and training involved in supporting the implementation of the new curriculum, there have been changes in how parents and communities engage with schools. In particular, parents' focus groups emphasised that in addition to their responsibility to ensure that their children attend school, parents need to have an understanding of what their children are learning so they can better support them.

“Evri samting we i hapen long skul, papa i mas save, mama i mas save, mo pikinini i mas save.”

Translation: *“Parents and children should all know what is happening at school.”*

(Parent)

Parents agreed on the importance of being informed about the education of their child. One parent summarised:

It is important for us to be informed. It is us who are responsible for our child's education so it is very important. Being informed will also help us to better support our child to have a good education and get a job in the future.

Some parents acknowledged that the more they know about what their children are learning, the better able they are to support them. For example, one female parent from Pentecost shared that it is important for her to know about the new curriculum:

... so that I can better support my children at home, especially if they did not understand the lesson well in class then I can be of help at home too.

Multiple respondents reported that this curriculum facilitates more engagement with parents, particularly due to the use of Bislama or vernacular. One principal noted that parents ‘they too understand the curriculum and it is easy for them to support with school work’.

SIOs, principals and teachers reported that while some parents support their child, not all do. An SIO stated:

Slowly parents are supporting their children with school work. Awareness has helped to address this, and get them more involved, but not to the extent that we are happy. Community participation still needs to be improved.

Many parents spoke about ways in which they support their child at home. In general, this involved helping their child with homework, reading, and exercises. Some parents mentioned

preparing a daily timetable or plan for their children to follow and checking their workbook each day. Others mentioned the other ways they support their child, such as through preparing food for school, paying school fees and buying school supplies.

As a parent when you play your part in supporting and directing your child, then they will not just do well in school but in every aspect of life.

However, a few parents from Pentecost said that they were unable to help with their children's homework because it was difficult for them to understand. At the same time, they added that their role should be getting their children to school, and making sure they are healthy. One Malekula principal stated that some parents say, 'teaching is the teachers' responsibility'. Both principals and teachers observed that it is noticeable when a parent is involved in a students' life. Parental support at home is critical to a child's learning outcomes. As one Pentecost teacher said:

The parents need to play their part in their child's learning at home, especially if the student has not fully understood the topic, parents should help out with the homework they take home, in order for the student to fully understand. The child's behaviour in the classroom also depends on the atmosphere at home or their upbringing. These are the children which I have to spend a lot of classroom time with.

Some teachers in both provinces discussed the *Lifelong Community* subject. Teachers said that because of this subject parents and the community are more involved in class activities and the school as a whole, as opposed to the old curriculum. An example provided were activities involving student research with parents. However, another teacher described how the *Lifelong Community* subject presented some challenges:

The *Lifelong Community* topics demand assistance from the community or the parents. Teachers are supposed to invite individuals in the community to come to the classroom to show or teach the students cultural activities. However, this has had some challenges, as the community demand to be paid an allowance.

Most parents expressed they do not talk to teachers about their child's progress in school, even in cases where parents have been invited to do so. This was confirmed by principals and teachers. Interactions between parents and teachers are largely done through formal organised activities, such as end of term or end of year meetings. One teacher mentioned mothers were more likely to be involved in school activities than fathers.

6 Equity

6.1 Disability

Multiple case study respondents highlighted the importance of inclusive education and the need to support children with a disability to participate. However, it should be noted that there seemed to be relatively few children with disabilities in the schools visited.

A few teachers and parents mentioned that there has been change in terms of children with disabilities in schools. This change could be attributed to a range of factors including not only the new curriculum but also targeted Government strategies such as the *National Disability Inclusive Development Policy (2018-2025)*. Some parents reflected that a child with a disability was often left at home. One teacher from Pentecost said:

I think things have changed for the better for any children with a disability. In the past, I think they were kind of left out in terms of the teacher spending effort or particular attention to their learning needs.

PTs highlighted that the new curriculum emphasises inclusive education, and training was provided to teachers to help them support children by preparing appropriate lessons. One PT said:

Before inclusive education was not included in most schools but in this curriculum it is included. Teachers when preparing lessons in class also prepare lessons for those that have any form of disability. Lessons are prepared in a way to suit those that are disabled and those that are not.

In Malekula, some principals and teachers reported there were either no children with disabilities in their school, or no major disabilities. One Malekula principal spoke extensively about his school's efforts towards inclusion, noting they are taking in students with disabilities within the school coverage area to make sure that every child with any form of disability has access to education.

Malekula teachers who stated they had children with disabilities in their school gave examples of how they are supported. These included: preparing different exercises, community awareness of the right to education, extra homework, and additional classes. Some teachers referred to the training provided by PTs on inclusive education, and the teachers' guide which supports this.

In Pentecost, respondents in one school spoke about being well-supported to support children with disabilities. An SIO described this system:

We have a separate "inclusive classroom". With a recent graduate from APTC teaching there (she has just started). And she is working with other teachers in the school and the area. Students with learning differences come and get extra support there and she says that it is helping the students cope and learn better. And it is also helping the teachers in the school to build up their capacity and understanding about how to be "inclusive".

Respondents said that in the past students with special needs often dropped out of school, or had very poor attendance.

At the same time, an SIO in another part of Pentecost reflected that the challenge is to fill the need for specialized teachers to teach students with disabilities. And a principal said that at his school they did not have anyone specifically trained to work with children with special needs. He said, "Teachers try their best." Many teachers across both provinces also reflected that they had not had any specialized training in working with students with disability.

6.2 Gender

Case study respondents were also asked to comment on gender and equity at their schools. Most attributed some change to new kinds of pedagogical activities in the curriculum, particularly activities involving groups made up of both boys and girls. A number of respondents identified group work as one of the pedagogical practices that encouraged equal participation of boys and girls. There was no discussion of *how* students actually worked together in groups.

Most respondents reported that girls and boys participate equally in school activities. One principal noted this is encouraged under the new curriculum.

One teacher said that PTs encourage teachers to "practice gender equality in class and school activities..." SIOs said gender equality could be a result of activities that encourage equal participation of girls and boys in school, with one stating:

Both genders participate regardless of their age, their abilities. Everyone equally participates in school activities. Girls can speak their minds and so do the boys.

Many teachers explained they now mix girls and boys in activities and seating arrangements, and one teacher said this has improved equal participation:

The most important change is that both boys and girls can interact well in class. From past experience boys are more involved compared to girls, but that may have been due to teachers separating them by gender and their involvement in group activities. Nowadays we have mixed seating arrangements and both genders participate equally.

An SIO commented on how boys and girls work together and how it has changed in the education system:

In the past, the boys had their own class. Today both boys and girls go together. But in the past, girls would go to home economics and boys to woodwork. But today everybody thinks the same. And this is from the upper level down to the primary. Every student works together. We don't separate boys from girls today.

One teacher did however note the following:

...there are certain cultural class activities that the community culture and custom do not permit girls or boys to participate in.

7 School and systems outcomes

7.1 School level outcomes

There has been a change in school outcomes that can be attributed to VESP support on implementation of the new curriculum. School outcomes in this analysis refer to changes in school leadership capacity, changes to relationships with other schools, and changed engagement with parents by schools. Section 5.4, Parents and Communities, discussed how parents engage with schools to support students. This section, on the other hand, discusses how schools have engaged with parents to support school level outcomes.

7.1.1 Engagement with parents

Parent focus groups were asked about the national campaign to promote primary school enrolment at the right age – *Yia 6 Klas 1*. Many parents said they were aware of this campaign, and had heard about it primarily through radio, through their children’s kindergarten teachers, or through the school or SIO. The parents agreed that the campaign had made them aware of the importance of enrolling their children in school at the right age. To quote one parent from Malekula:

Awareness programs have helped us to get organised and make sure the child is in the right class at the right age.

A number of parents said that they were influenced by the national campaign to ensure that children start school at the right age. Examples of how parents summarised the campaign message are below:

When a child starts their education at the right age they have an interest to learn. Whereas those that start later have no interest in learning and they become a disturbance to other children in class.

Children have to start school at the right age because having a nine year old in year 1 does not make sense.

Schools engage with parents and communities in a variety of ways and to varying extents. Some schools have little interaction beyond end of term events, whereas others have set up specific programs to engage with parents, some invite parents to come to classrooms, and other have more formal reporting systems. One SIO from Pentecost said:

Yes, some schools run programs with parents. For example, reading folders – so that the parent can help their child with reading at home. As a result, some parents have improved in terms of supporting their child’s learning at home. A child’s school report is now written in Bislama so that it is much easier for the parent to read and make sense of it.

One teacher explained how they communicate with parents in person to actively encourage their involvement:

Sometimes we request parents to meet with the teacher to discuss their child. Because the parents also need to know about the changes in the education system.

We tell them that it is not just our job to teach their children but they have a part to play at home too. Both the teachers and parents need to know what the new curriculum is about.

Some principals and teachers reported the steps they took to increase community support for the new curriculum changes. To quote one principal from Malekula:

When the implementation of the new curriculum began in school, the community opposed the idea of teaching in Bislama. We had disagreements but at the end of the first year report the students and teachers did a presentation that captured the communities attention. They witnessed how Bislama has contributed to their child's learning.

However, not all experienced such success with poor parental turnout at community awareness raising events. One Pentecost teacher said the school does not get much support from the community:

We do not usually get a lot of support from the community. Usually there is always a turnout of 1 or 2 people for any community related activity requested by the school, such as cleaning up in the school compound or physical labour in building of a new library.

While one principal noted his school uses the school community association as a channel for communication and community awareness, an SIO felt that the school community associations still struggle to work together. He added that SIOs have an awareness plan for parents on the importance of playing their role in the community.

Some parents gave suggestions about how schools could improve their support for children and communities. These included awareness campaigns being run in communities, rather than schools. One mother from Malekula noted:

More women are involved in school activities than men. So sometimes information does not reach both parents. If the awareness program is delivered in the community, everyone will be there to listen.

7.2 System level outcomes

Some case study respondents reflected on the effect of VESP at the local, regional and national levels. PTs have received training through the In-Service Unit (ISU) of VITE, and they in turn have conducted training workshops with teachers, principals and some SIOs to support various aspects of the new curriculum. An SIO suggested that the new curriculum was at the heart of system reform:

The new curriculum is an improvement to education in Vanuatu. In my experience, the new curriculum has a baseline which guides us. Our policies that guide our work today, and the improvement that our teachers are going through now, will help the quality of education in Vanuatu.

A number of provincial leadership roles changed in 2018. The role of ZCA was replaced by SIOs, and PTs work from provincial offices (rather than Port Vila) to support provincial level training and to provide follow-up support to schools. As one SIO reflected:

Yes we work together. PTs include SIOs in their teacher trainings. And we sometimes discuss the results of our observations in school with PTs, in particular, weaknesses. And we also make suggestions for training. I encourage working in unity with the PTs.

However, some PTs and SIOs reported the need to collaborate more closely. Many respondents also reported some confusion about the differences in the roles of PTs and SIOs.

Another SIO reflected that the scope of her role only allows her to work with principals, and not teachers, and she said this has left a big gap in that she doesn't know what is happening at the teacher level.

Most respondents reported budget for PT and SIO travel is an issue, and ongoing support is necessary. One principal said he would also like the PTs to come out to schools to follow up on the courses they've run. The principal reflected:

Once you plant a garden, you need to come and check up on it.

8 Sustainability

8.1 Challenges and suggestions

Sustainability explores the extent of how VESP activities have the potential to contribute to teaching quality, student learning outcomes and curriculum implementation in the long-term. Respondents raised a number of challenges to sustainability and, in some cases, considerations to address these.

8.1.1 Support for transition years

Respondents often expressed concern about how lack of training in the transition years could impact students' learning outcomes. Those who had or were about to receive cohorts from the new curriculum expressed unease. To quote one principal who is also a Year 5 teacher:

This group under the new curriculum can write and read in Bislama, but it is challenging in terms of grammar usage. Vocabulary is a bit hard for them to use in English, but in Bislama they do really well.

An SIO reflected:

...there needs to be a lot of training done on transition. We now have been receiving complaints from parents about transition into English or French. I still see that challenge in the future if transition is not done well. That could very much affect the child's learning.

A teacher shared a similar challenge about the transition years:

There should be another specific training towards the bridging year of vernacular/Bislama to English, because we are dealing with three languages here. How do you bridge it, and how do you teach it? If we do not do it well down here we are putting our students at risk of still not being able to spell or pronounce words in year 6 upwards.

One teacher expressed:

The new curriculum is good but for me I need more training in language to better teach phonics to the transition group which is the Years 3 and 4.

Additionally, one SIO spoke about the need to raise community awareness about the curriculum, noting 'there were no funds available to do awareness about the program in rural and remote areas'. There is largely support for the new curriculum, but some parents have continued to raise questions about the language of instruction, and in particular they raise concerns about the transition years.

8.1.2 Teacher training

At the time of data collection, Year 4 teachers had not yet received training. For example, three case study teachers in Malekula were Year 4 teachers. These teachers reported trying their best to use the new curriculum, but one noted difficulties in lesson planning and identified a need for support.

More broadly, multiple respondents reported the need for further support for teachers, and in particular, training for teachers who have not yet received any training and training for new teachers and principals. To quote one principal:

The teachers need support in training. There should be additional training or refresher training for teachers, and for those who have not attended the trainings. The PTs should make time available to run more training and also some teachers still need support with the teachers' guide. The other thing is feedback from the observations they have done, especially the SIOs. After the observation they should be receiving feedback. That's the only way we can identify weaknesses and improve ourselves.

Another teacher summarised the need for more training or refresher training to enable 'teachers to stand firm on their two feet'.

Other respondents expressed that a one week training was too short. One PT noted that this training was particularly too short for temporary and/or untrained teachers:

When they teach there is difference in the way they teach. A graduate when teaching, if they find out that the method used is not suitable for the students they can quickly change their approach because they have the skills and knowledge to do that. A temporary teacher has nothing to lean on. They have no background knowledge in teaching. They have background knowledge as a student but as a person who can transmit knowledge they do not have that skills.

A principal spoke about the difficulty of being the only teacher trained in his two-teacher school, stating 'the other teacher has a different view towards the curriculum'.

Given regular changes to teaching posts, several respondents suggested expanding training to include all teachers, not just Years 1, 2 and 3. One principal explained:

You never know when there might be changes and the teacher might leave or something. The training should be for every teacher to participate.

Another principal added:

... if you are posted to another school, you might be teaching the upper classes and a grade 4 or 5 or even 6 will be teaching lower classes and she might not have attended the trainings.

An SIO and principal noted the curriculum needs to be taught in VITE to 'teach the new teachers this before they put them in the field'.

A principal suggested given the responsibility assigned to SIOs, there is a need to train teachers to carry out trainings and observations:

If we want quality in teaching we need people who focus just on training, observations and giving feedback to the teachers, and who stay around to support teachers if they need support, especially teachers in remote areas. The PTs provide training but they only come around once in a while as do the SIOs. It would be better to train teachers to deliver the trainings as well. It might be costly but I believe it will be worth it.

8.1.3 Temporary and untrained teachers

Multiple respondents spoke about the challenges for temporary and untrained teachers, who are not well paid, but often working hard and are very committed to teaching.

Some respondents felt that in some instances, temporary and/or untrained teachers were teaching more effectively than permanent teachers and were particularly skilled in teaching the vernacular. A PT added about the issue of temporary and/or untrained teachers:

...but the work of teaching has increased so much, with all of the planning, right through to assessment. In my view they should be paying the 'untrained' the same as the government teachers, because it's a lot of work to implement this.

A teacher summarised the challenges with his position as an untrained or temporary teacher. This opinion was echoed by several teachers:

We, the in-service [untrained] teachers get de-motivated when we do not receive the support we need. We are the ones teaching the new curriculum and yet we cannot be supported equally, in terms of pay and recognition. I cannot pay for my kids school fees and meet some other expenses with the salary I get here.

8.1.4 Resources

Multiple respondents raised the need for additional resources to effectively teach the new curriculum.

To quote one parent who raised the need for additional resources:

I realised my child was reading the same book every day, and she was getting bored. Even I could read the book by heart.

Multiple teachers expressed the need for more resources, including textbooks, a Bislama dictionary, and reading books. Some specified the need for materials to support 'life in the community' and science.

Several teachers and principals noted particularly, the need for student textbooks. To quote one principal:

There are not enough books. Six books for a class to use is not enough compared to the huge number of students per class. There are six student books and one teachers' guide.

Teachers also expressed the need for more resources – such as activity books or posters and charts in vernacular instead of Bislama and French.

Some teachers described how they coped when materials for the new curriculum were delayed. For example, one teacher noted she used local materials for counting in the absence of the numeracy kit. One teacher suggested access to internet resources would support him better as a teacher. Some respondents noted the delay in training and provision of new curriculum materials was a problem. One Year 3/4 teacher explained the numeracy kit only arrived in March 2019, so she had to teach her class using other resources she could find.

One principal from Pentecost also noted the difficulties of integrating the inputs of parents and community into the curriculum:

...when they bring in chiefs or parents to talk about culture or *kastom*, they are often inconsistent. They say different (contradictory) things. So there is an inconsistency in the information that is provided to the children.

He suggested maybe they should have a council meeting to agree on what their stories are and how they go.

8.1.5 Capacity of PTs and SIOs to support schools

Multiple respondents raised the need for more ongoing support from PTs and SIOs. As one PT said about the challenge of providing ongoing support:

I'm very worried that I'm just running training. But I have to go and support all of my people out there – the people I have trained.

PTs and SIOs spoke about the limited budget and time available for them to support schools. One PT reported they can only visit schools that are accessible, not remote schools due to limited funds. Another PT added:

To do the support program, we need money. So far there is no money so we concentrate only on the schools that are close. If a teacher or school needs [our] support they pay for transportation for PTs to visit.

One SIO added that there should be an “increase in the monitoring fund so that regular or needed visits could be made to schools more often.” She emphasised such a fund would enable her to visit all schools in her region. Multiple respondents also saw the need for greater funding. As one principal noted:

That's a question that comes out a lot. When you [PTs] run all of those courses, it would be good for you to come to the schools too. Just to see if what you've tried to put in place is happening in the way it should...

Some respondents said there would be value in better collaboration between PTs and SIOs. Some PTs and SIOs said their working relationship worked well, but others did not. One PT explained:

We work together, but have differences and gradually we are building a relationship. We have to understand each other. It takes time and this year there was a coordinator in Vila who came and tried to make us work together.

One SIO noted that even though in his case PTs and SIOs are working in the same building, they do not work together. He suggested that when PTs do school visits, they should include SIOs 'to help each other do their job'. Another SIO suggested:

We work under the same government and it is better to communicate well so we can share available resources so that each group can have the tasks allocated to them done, due to limited funding and resources to cater for school visits and observations.

Many PTs and SIOs expressed their need to be upskilled. An SIO emphasised the importance of ongoing training in addition to some other suggestions:

...everything is needing to be upgraded, especially for us to use the internet, but we don't have the facilities for that. Next is that there should be further training. They should give us further training. And leadership – I want to have more leadership courses concerning my job as an SIO.

One SIO suggested the need for SIOs to attend the initial training that is provided by ISU to PTs, explaining:

It is better for SIOs together with PTs to attend the trainings, not just the PTs. The reason is that [SIOs] do the monitoring and PTs provide the trainings. The SIOs have different ways to monitor the curriculum and also do not have in-depth training on the program. [SIOs] might also have different opinions that can cause misunderstandings.

Another SIO added it is professional for SIOs to be in the same room as teachers going through the training together given they will be monitoring these teachers. PTs also discussed the challenges of their status in that they are still getting paid the same as teachers.

9 Conclusion

9.1 Review of key findings

The research in Malekula and Pentecost specifically addressed Questions 1, 2 and 3. The review of the VANSTA and PILNA data was focused on Question 3. In addressing these questions, there are a number of indicative findings emerging from the first phase of research on the VESP investment in regard to improved teaching quality and improved student learning.

1. To what extent has the investment improved teaching quality in Vanuatu?

VESP training and support have been effective in strengthening the quality of instruction, active engagement between teachers and students, teachers' understanding of content and their application of different pedagogical approaches. Instructional leadership training (including PT and SIO support) for principals has enabled an additional source of support for teachers, but this training was not wholly provided through the VESP investment.

Case study research in Malekula and Pentecost indicates that VESP investments support improved teaching quality in the following ways:

- VESP training appears to have been effective in strengthening principal and teacher knowledge on lesson planning, subject matter and pedagogical approaches. The training programs *Effective Learning and Teaching* and *Ademap Lanwis* have been particularly helpful.
- VESP investment in training and the accessibility of the new curriculum in both Bislama and vernacular languages have contributed to changes in beliefs and attitudes towards teaching, including some improvements to principal and teacher motivation and self-confidence.
- Untrained and/or temporary teachers who had the opportunity to participate in VESP training said it strengthened their knowledge of effective teaching and increased their self-confidence.
- VESP training and a new curriculum closely related to local context appears to support teachers to improve their practice.
- A number of teachers have more interactions with students, are developing and using a range of student activities, and are incorporating different strategies to support a range of student abilities.
- VESP training, and in particular, the *Instructional Leadership* training, supports principals to understand instructional leadership and a number of principals report increased confidence to focus on improving the quality of teaching and learning in their schools.

2. To what extent has the investment in teacher training and mentoring supported effective implementation of Vanuatu's new curriculum?

The professional learning support received through VESP has helped teachers and principals to improve their teaching practice and implement the new curriculum, but there is an urgent need for consistent ongoing support and quality feedback. Empowering teachers to

collaborate in learning about the new curriculum and community awareness is vital to maintaining understanding and support for the new curriculum.

Case study research in Malekula and Pentecost indicates that VESP investments support the implementation of Vanuatu's new curriculum in the following ways:

- The use of a language most students in a school are familiar with and confident in seems to support students' learning.
- Implementing awareness campaigns which to some extent supports community understanding about the new curriculum.
- Empowering SIOs and PTs to support curriculum implementation, particularly for principals, but more support is needed.
- Empowering teachers within schools to support each other in implementing the new curriculum with advice, observations and peer learning.

3. To what extent have teacher training and support activities led to improved learning outcomes?

The extent to which the VESP investment leads to improved learning outcomes for Vanuatu students is less clear at this stage, but the analysis of earlier (pre-curriculum rollout) student learning outcomes data provide a reference point for the next phases of this research. For now, case study research indicates that a range of VESP activities have supported improvements in students' reading and writing, speaking, attendance levels, interest in lessons, wellbeing, and particularly confidence:

- The impact of VESP investments on student attendance gives some indication that the pedagogy of new curriculum encourages children to come to school, though the evidence is inconclusive.
- Teacher engagement in planning different activities and using new curriculum resources seems to have had a positive impact on student interest in school.
- VESP support of activities in implementing the new curriculum appears to have increased, generally, parents' understanding of the need to support their children in the learning process. There is a recognition that the more parents understand what their children are learning, the better they are able to support them in school.

9.2 Key lessons, barriers and recommendations

Investigating how VESP impacted teaching quality, curriculum implementation and student learning outcomes in two different provinces provided a good opportunity for comparison to explore differences in implementation, outcomes and program sustainability. Both Malekula (Malampa) and Pentecost (Penama) stakeholders discussed how aspects of VESP supported and changed their work. They also mentioned how context and programming presented challenges to gains made with the support of VESP.

9.2.1 Program recommendations

A number of sustainability risks were identified during the analysis, which have implications for lessons learned and any possible future recommendations for the program. Some of these

risks include:

1. **The reach, targeting and timeliness of training:** The number of Year 1 to 3 untrained and temporary teachers who are delivering the new curriculum with minimal training and to multi-grade classes, and the inconsistent participation of Year 1 to 3 teachers in the full suite of training. The delay in training for Year 4 teachers, despite it being a key language transition year, presents a risk to any learning gains made in Year 1 to 3 and community and school support for the curriculum.

Recommendations:

- Offer follow-up or more extended training for untrained and temporary teachers as a strategy to support teachers without immediate access to more formal teacher training programs. While teachers indicated that they found the new curriculum training helpful, untrained and temporary teachers particularly found this to be the case, especially *Effective Learning and Teaching (ELT)* and *Ademap Lanwis*.
 - Provide additional training and follow-up support to teachers to develop skills and strategies in language transition in Year 3 and Year 4.
 - Undertake an audit of which training programs teachers have participated in, and prioritise those who have missed out for follow-up training.
 - Develop strategies to support teachers who are teaching in multi-grade settings. One possible strategy includes training SIOs, PTs and principals to support the upskilling of teachers in these settings. Another possible strategy includes encouraging peer learning sessions at schools that focus on special multi-grade settings.
2. **Strategy for ongoing training:** The absence of ongoing and follow-up training limits the effective long-term impact of the investment for schools, which can lead to frustration of principals and teachers in delivering the curriculum, and confusion in communities about the curriculum.

Recommendations:

- Increase the long-lasting impact of whole-school support by including follow-up curriculum training for all school staff to increase their capacity to support understanding of curriculum objectives and content.
 - Provide follow up information sessions for communities about the changes in the new curriculum. Evidence indicates that once communities and parents understood the objectives of the new curriculum, the majority were supportive of it.
 - Continue periodic refresher training or peer-learning sessions, including about the curriculum, for school staff, provincial staff and communities.
3. **Institutional capacity and resourcing of support structures:** Limited resources to improve the capacity of SIOs and PTs to support schools

Recommendations:

- Consider a strategy for resourcing to support SIOs and PTs conduct observation and training activities in schools. Develop strategies for SIOs and PTs to visit schools in their areas in less costly ways, such as joint and rotated visits and support to encourage within-school peer-learning models.

- Provide training to SIOs and PTs on their roles and how to provide effective coaching and mentoring support to principals, teachers and schools to ensure the effectiveness of their school visits.
 - Develop constructive accountability measures that ‘check in’ with PTs and SIOs when there is an extended period between school visits or observations.
4. **Gender and disability inclusion:** This case study collection also collected evidence on gender and disability inclusion. Whilst school leaders and teachers widely recognise educational equity as a human right and endeavour to incorporate inclusive teaching practices, there are capacity gaps to implementing equitable systems at schools. At the same time, an example worth highlighting is the one school that employed a recent APTC graduate with specialised training in disability. This support ensured support for a zone of schools in both identifying and supporting children with special needs in schools.

Recommendation:

- Develop gender and disability inclusion training for principals and teachers. PTs and SIOs to cover topic areas such as identification, inclusive attitudes and values, and inclusive teaching strategies which enable the curriculum to be delivered in ways to suit the student.
5. **Tracking and understanding student learning outcomes:** Findings from both VANSTA 2017 and PILNA 2015/2018 indicate that there are a large portion of students in Years 4 and 6 who are not achieving learning outcomes at their expected grade levels, particularly in literacy. While it has been noted that these cohorts of students have not been taught from the new curriculum, these results signify the importance of understanding these results and tracking student learning outcomes – especially in subsequent years as ‘new curriculum’ students engage in national and regional assessments.

Recommendation:

- Support the use of results from such learning assessments, including through upskilling teachers and principals in understanding those results and developing interventions to improve student learning outcomes in literacy and numeracy.

9.2.2 Study recommendations

This overall investigation benefits from the availability of two assessments: VANSTA and PILNA. While the current cohort of students has not experienced the content and pedagogy of the ‘new curriculum’, the results provide a reference point for student learning outcomes data to inform subsequent case study collections.

Future directions for this study include the following:

- Continue applying case study design to collect and document stakeholder experiences and insights of the VESP investment in additional provinces.
- Extend case study data collection to include national level stakeholders, including MoET, ISU and VITE, VESP and DFAT.
- Include the outcomes of VANSTA 2019 in Year 2 of the study to investigate the student learning outcomes of students who have experienced the ‘new

curriculum'. The next round of PILNA in 2021 will be analysed in the final year of the study.

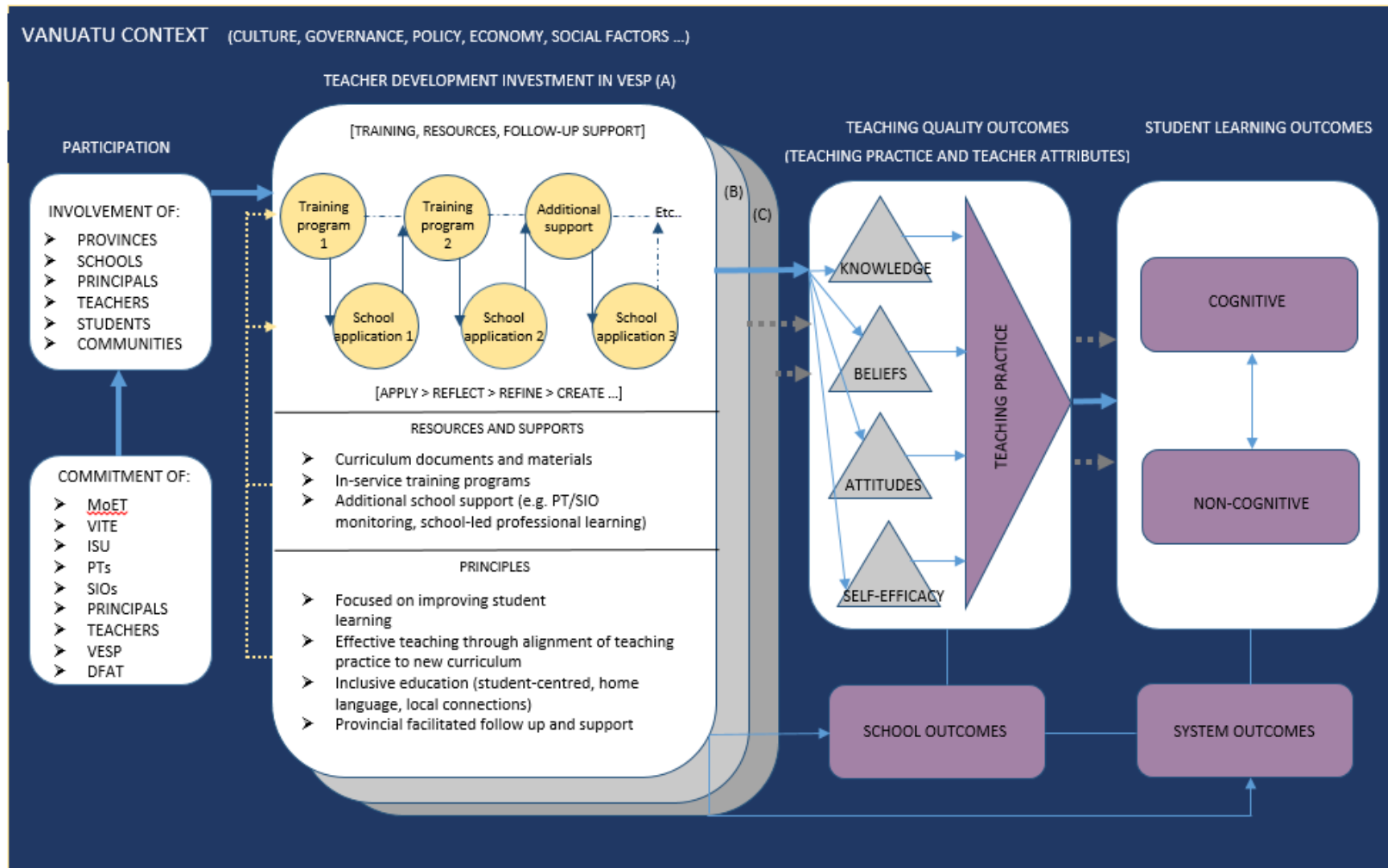
- Investigate in more depth the application of the language policy in schools, importantly the process of how either Bislama or the vernacular are determined in early years' classrooms.

References

- Australian Council for Educational Research (ACER) (2017). *Education Analytics Service: Teacher Development Multi-Year Studies Conceptual Framework*. Melbourne: ACER.
- ACER (2018). *Evaluation Plan for Vanuatu's Investment in Training and Supporting Teachers to Implement the New Curriculum in the Vanuatu Education Sector*. Melbourne: ACER.
- Australian Curriculum, Assessment and Reporting Authority (ACARA) (2018). *National Assessment Program - Literacy and Numeracy (NAPLNA) 2018: Technical Report*. Sydney: ACARA.
- Department of Foreign Affairs and Trade (DFAT) (2015). *Investing in Teachers*. Canberra: DFAT.
- Educational Quality Assessment Program (EQAP) (2016). *2015 Pacific Islands Literacy and Numeracy Assessment (PILNA) Regional Report*. Suva: Pacific Community.
- EQAP (2016). *Pacific Islands Literacy and Numeracy Assessment 2015 Technical Report*. Suva: Pacific Community.
- EQAP (2019). *Pacific Islands Literacy and Numeracy Assessment 2018: Regional Report*. Suva: Pacific Community.
- EQAP (2019). *Pacific Islands Literacy and Numeracy Assessment 2018 Technical Report*. Suva: Pacific Community.
- Klem, A.M. and Connell, J.P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health* 74(7), 262-273.
- Lawson, M.A. and Lawson, H.A. (2013). New conceptual frameworks for student engagement research, policy and practice. *Review of Educational Research* 83(3), 432-479.
- Ministry of Education and Training (MoET) (2012). *Vanuatu National Language Policy*. Port Vila: MoET.
- MoET (2018). *Statistical Digest Report 2016-2018*. Port Vila: MoET.
- MoET (2018). *VANSTA 2017: A report on the results of the literacy and numeracy tests conducted in 2017 with all Year 4 and Year 6 Vanuatu students*. Port Vila: MoET.
- VESP (2016). *Technical Report: Professional development for the new Vanuatu primary curriculum*. Port Vila: VESP.

Title Page Images sourced from DFAT Flickr.

Appendix A: Conceptual model



Appendix B: Sample for PILNA 2015 and 2018

For both PILNA 2015 and 2018, sampling across all the Pacific Island countries was a complex process as there was a great variation across all the countries. Whilst a census approach was used for the smaller Pacific Island countries in 2015, a sample approach was used for Vanuatu, taking into account provincial, district, locality, school authority, school, and class sizes as selection variables. Given these selection criteria, a two stage sampling frame was used to select approximately 93 schools with one intact class of roughly 25 students in a class from each school (Educational Quality Assessment Program (EQAP), 2016).

In 2018, a similar sampling frame was used with more specific definitions developed for the target population. That is, the Year 4 population “includes all students who have completed approximately four years of formal schooling, counting from the first year of International Standard Classification of Education (ISCED) Level 1”. Year 6 students “includes all students who have completed approximately six years of formal schooling counting from ISCED Level 1” (EQAP, 2019).

Students from 92 and 91 schools across Vanuatu’s six provinces were included in PILNA 2015 and 2018, respectively. Figure B1 shows the number of schools sampled in each province.

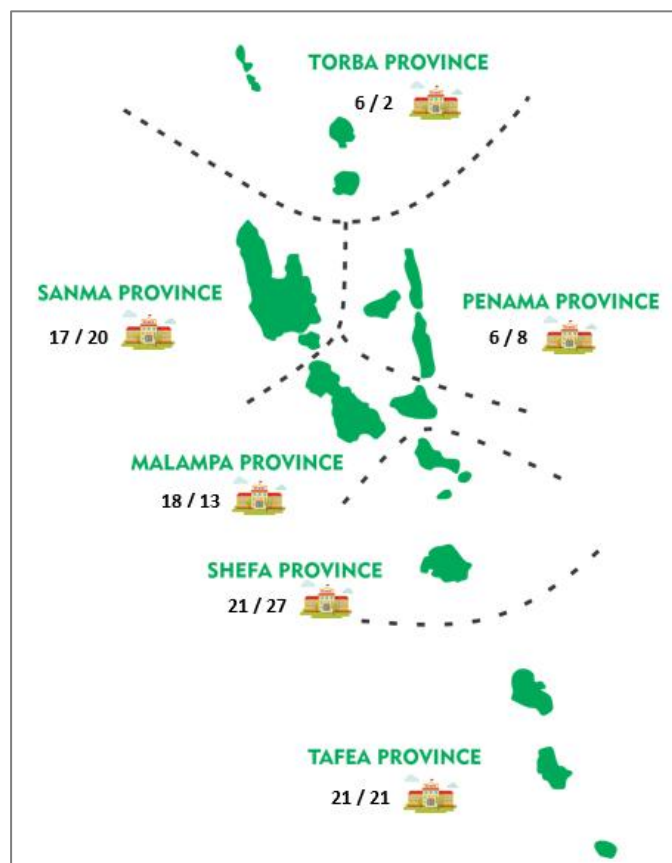


Figure B1. Number of schools sampled in each province for PILNA 2015 and 2018

Note: There are 3 schools in PILNA 2015 with an unknown location.

The tables below shows the number of Year 4 and Year 6 students who took part in the PILNA 2015 and 2018 literacy and numeracy tests by province (Table B1), gender (Table B2), locality

(Table B3) and age (Table B4). Only students who are marked as being present for both the reading and writing session are deemed as having participated in the literacy test here.

Table B1. Participation in PILNA 2015 and PILNA 2018 by year level and province

Province	PILNA 2015				PILNA 2018			
	Year 4 (N)		Year 6 (N)		Year 4 (N)		Year 6 (N)	
	Lit	Num	Lit	Num	Lit	Num	Lit	Num
Malampa	205	182	183	155	386	358	321	300
Penama	101	64	88	83	193	180	154	125
Sanma	242	213	227	175	485	463	387	371
Shefa	464	500	535	519	550	513	559	516
Tafea	313	238	254	228	431	411	415	394
Torba	80	66	64	41	66	62	51	49
Missing	25	17	19	11	0	0	0	0
TOTAL	1430	1280	1370	1212	2111	1987	1887	1755

Table B2. Participation in PILNA 2015 and PILNA 2018 by year level and gender

Gender	PILNA 2015				PILNA 2018			
	Year 4 (N)		Year 6 (N)		Year 4 (N)		Year 6 (N)	
	Lit	Num	Lit	Num	Lit	Num	Lit	Num
Male	696	651	664	632	1073	1006	950	874
Female	734	629	706	580	1027	979	932	879
Missing	0	0	0	0	11	2	5	2
TOTAL	1430	1280	1370	1212	2111	1987	1887	1755

Table B3. Participation in PILNA 2015 and PILNA 2018 by locality

Locality	PILNA 2015				PILNA 2018			
	Year 4 (N)		Year 6 (N)		Year 4 (N)		Year 6 (N)	
	Lit	Num	Lit	Num	Lit	Num	Lit	Num
Urban	335	356	345	340	419	398	437	408
Non-urban (2018 only)	N/A	N/A	N/A	N/A	1692	1589	1450	1347
Rural (2015 only)	206	202	232	219	N/A	N/A	N/A	N/A
Remote (2015 only)	864	705	774	642	N/A	N/A	N/A	N/A
Missing	25	17	19	11	0	0	0	0
TOTAL	1430	1280	1370	1212	2111	1987	1887	1755

Table B4. Participation in PILNA 2015 and PILNA 2018 by year level and age

Age (years)	PILNA 2015				PILNA 2018			
	Year 4 (N)		Year 6 (N)		Year 4 (N)		Year 6 (N)	
	Lit	Num	Lit	Num	Lit	Num	Lit	Num
6	2	0	0	0	1	1	0	0
7	2	2	0	0	0	0	0	0
8	16	16	0	0	46	46	0	0
9	158	184	0	0	310	293	10	9
10	470	434	12	12	654	612	30	27
11	368	305	167	160	551	522	240	221
12	256	218	443	397	356	333	533	498
13	89	63	345	290	120	117	489	464
14	34	25	234	210	40	39	368	340
15	23	26	137	117	19	19	144	131
16 or over	9	7	30	25	1	1	67	62
Missing	3	0	2	0	13	4	6	3
TOTAL	1430	1280	1370	1212	2111	1987	1887	1755

Sample for PILNA 2018 Questionnaires

Students

For the 2018 PILNA questionnaires, 3,637 students completed the student questionnaire. Of these students, 1,819 (50%) were girls and 1,780 (49%) were boys, with the remaining 38 cases reported as missing data. Table B5 shows the distribution of ages of the students.

Table B5. Number of students participating in PILNA 2018 questionnaires by age

Age (years)	Frequency	Valid %
8	114	3.2
9	245	6.8
10	601	16.8
11	642	17.9
12	848	23.7
13	595	16.6
14	379	10.6
Above 14	157	4.4
Sub-total	3581	
Missing	56	
TOTAL	3637	100.0

Teachers and principals

Eighty-eight principals from 91 schools completed the PILNA head teacher questionnaire, of which 61 (69%) were male, and 27 (31%) were female. For the PILNA teacher questionnaire, 213 teachers completed this of which 98 (46%) were male, and 115 (54%) were female. Table B6 below shows the age range of both principals and teachers. Year 4 teachers tended to be younger with 52 per cent below the age of 35. This can be compared to 38 per cent of Year 6 teachers and 23 per cent of principals below 35 years.

Table B6. Age ranges of principals and teachers completing PILNA 2018 questionnaires

Age (years)	Principal		Teacher – Year 4		Teacher – Year 6		Teacher - Total
	Frequency	Valid %	Frequency	Valid %	Frequency	Valid %	
20 or under	0	0	2	1.9	0	0.0	2
21 – 25	0	0	17	15.9	5	4.7	22
26 – 30	4	4.5	16	15.0	14	13.2	30
31 – 35	16	18.2	21	19.6	21	19.8	42
36 – 40	18	20.5	15	14.0	15	14.2	30
41 – 45	27	30.7	20	18.7	24	22.6	44
46 – 50	17	19.3	13	12.1	15	14.2	28
Over 50	6	6.8	3	2.8	12	11.3	15
Missing	0		0		0		0
TOTAL	88	100.0	107	100.0	106	100.0	213

As shown in Table B7, nearly three-quarters (73%) of principals had 10 years or less experience being a principal, and just over one-quarter (27%) with experience of 11 years or more.

Table B7. Number of years of experience being a principal

Years	Frequency	Valid %
2 years or less	18	20.5
3 – 5 years	23	26.1
6 – 10 years	23	26.1
11 – 15 years	10	11.4
16 – 20 years	7	8.0
More than 20 years	7	8.0
TOTAL	88	100.0

Figures B2 and B3 show the years of teaching experience and qualifications of teachers of students who participated in PILNA 2018. Of all the students who participated in PILNA 2018, a significantly greater proportion of Year 6 students had teachers who had more years of teaching experience, than Year 4 students. Nearly half of the surveyed Year 4 teachers (49%) had nine years or less teaching experience, compared to one-quarter of Year 6 teachers (25%). One-third of Year 6 teachers (33%) had more than 20 years teaching experience.

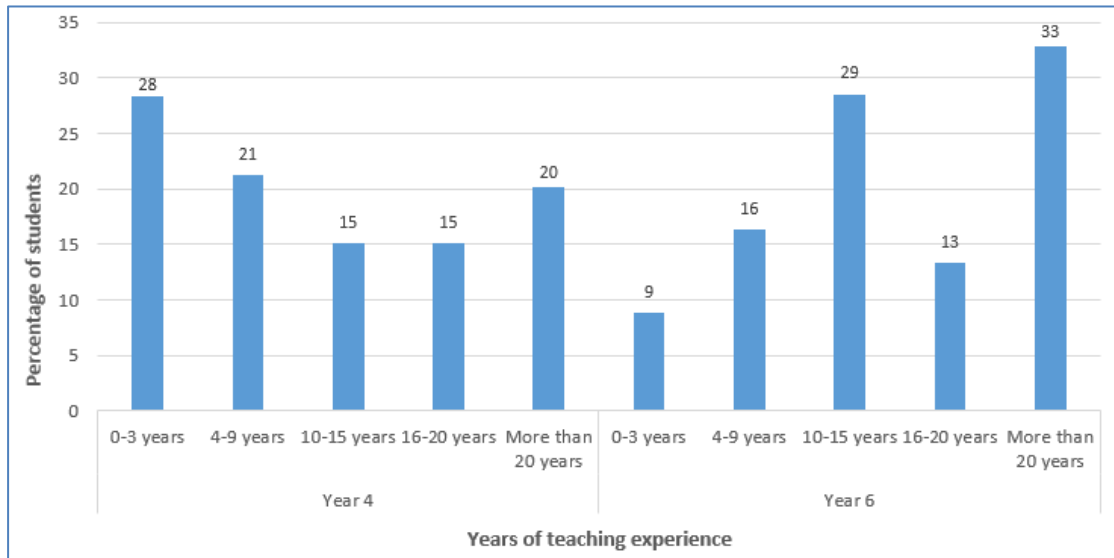


Figure B2. Number of years of teaching experience

The highest qualification levels attained by teachers is not significantly different between year levels, with more than three-quarters of teachers of both levels having attained either a high school certificate or tertiary certificate. However, interestingly there are higher percentages of Year 4 teachers with a diploma (23%) in contrast to Year 6 teachers (14%), but more Year 6 teachers with either a bachelor's or higher degree.

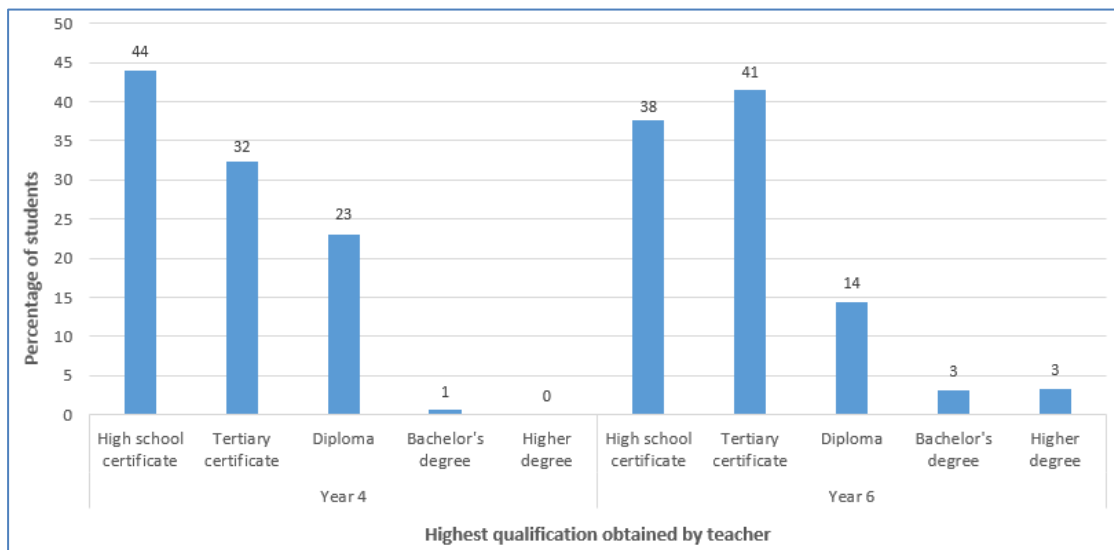


Figure B3. Highest qualification attained by teacher

Appendix C: Sample for VANSTA 2017

The VANSTA 2017 was administered as a census with all students in Years 4 and 6 expected to undertake the VANSTA tests. Over 90 per cent of all primary schools took part in VANSTA 2017, comprising of 245 English-speaking, and 132 French-speaking schools. The following tables show the breakdown of schools by province (Tables C1 and C2), and students by language and gender (Table C3).

Table C1. Number of Year 4 students and schools participating in VANSTA 2017 by province

Province	Literacy		Numeracy	
	Schools	Y4 Students	Schools	Y4 Students
Malampa	75	1064	74	1057
Penama	49	689	50	688
Sanma	81	1451	82	1415
Shefa	67	1600	68	1561
Tafea	70	1131	71	1125
Torba	22	261	22	165
TOTAL	364	6196	367	6111

Table C2. Number of Year 6 students and schools participating in VANSTA 2017 by province

Province	Literacy		Numeracy	
	Schools	Y6 Students	Schools	Y6 Students
Malampa	69	971	70	983
Penama	50	508	49	515
Sanma	75	1061	77	1099
Shefa	63	1396	63	1380
Tafea	65	875	64	868
Torba	21	206	22	230
TOTAL	343	5017	345	5075

Table C3. Number of Year 4 and 6 students participating in VANSTA 2017 by language and gender

	English				French			
	Y4 Lit	Y4 Num	Y6 Lit	Y6 Num	Y4 Lit	Y4 Num	Y6 Lit	Y6 Num
Male	2228	1919	1735	1837	1032	1018	755	803
Female	1968	2196	1760	1845	961	971	766	821
Missing	4	4	1	1	3	3	0	0
TOTAL	4200	4119	3496	3683	1996	1992	1521	1624

Appendix D: Case study sample

Across the 12 case study schools, 53 respondents were interviewed (11 principals/head teachers, 32 teachers, 6 SIOs and 4 PTs) and 16 parent FGDs conducted. Some parent FGDs were mixed male and female, while some were single-sex FGDs.

Table D1. Case study participants, by province and school

Province	School	Parents FGD	Principal interviews	Teachers interviews	SIO interviews	PT interviews
Malampa	A	1	1	2	3	3
Malampa	B	2	1	2		
Malampa	C	2	1	-		
Malampa	D	1	1	2		
Malampa	E	2	1	4		
Malampa	F	1	1	4		
Malampa	G	2	-	2		
Penama	H	-	1	4	3	1
Penama	I	1	1	3		
Penama	J	1	1	3		
Penama	K	1	1	3		
Penama	L	2	1	3		
TOTAL		16	11	32	6	4

Table D2. Case study participants' qualifications, experience and training participation

PRINCIPALS	Malampa							Penama				
	A	B	C	D	E	F	G	H	I	J	K	L
Qualification	Dip.	Cert.	Cert.	Cert.	Cert.	Cert.		Cert.	Cert.	Cert. ?	Cert.	Cert.
Also currently teaching? Which grades?	G4	G5/6	G1/3 /4	G3	G5	G6				G4		G4
New curriculum training participation*												
All (not specified individually)	X	X	X	X		X					X	X
Some					X			X	X	X		
None												

*Note: Participation is indicative only as participants were asked to recall training programs they had participated in, not review a checklist of training programs.

TEACHERS	Malampa															
	A1	A2	B1	B2	D1	D2	E1	E2	E3	E4	F1	F2	F3	F4	G1	G2
Qualification																
Temp.	X	X	X	X		X						X				
None	X	X	X	X								X				
Cert.					X		X	X	X	X	X		X		X	X

Dip.																	
Grade(s) teaching now	G1, 2	G3, 4	G1, 2	G3, 4	G1	G2	G1	G2	G3	G4	G1, 2	G3	G4	G5	G1	G4	
New curriculum training participation*																	
None										X			X			X	
All (not specified)	X						X	X			X	X			X		
Some			X	X					X								
Minimal		X			X	X											

TEACHERS	Penama															
	H1	H2	H3	H4	I1	I2	I3	J1	J2	J3	K1	K2	K3	L1	L2	L3
Qualification																
Temp.						X		X	X	X				X		X
None								X	X	X	X	X		X	X	X
Cert.	X	X		X									X			
Dip.			X		X		X									
Grade(s) teaching now	G1	G2	G3	G4	G1, 2	G3	G4	G1	G2	G3	G1, 2	G3	G4	G1	G2	G3
New curriculum																

training participation*																
None												X				
All (not specified)	X				X	X		X						X		
Some		X	X	X			X		X	X						
Minimal											X		X		X	X

*Note: Participation is indicative only as participants were asked to recall training programs they had participated in, not review a checklist of training programs.

SIOs and PTs	S1	S2	S3	S4	S5	S6	PT1	PT2	PT3	PT4
Qualification	Cert.	Bach.	Bach.	Cert.	Dip.	Cert.	Cert.	Cert.	Cert.	Cert.
Teacher exp.	X	X	X	X	X	X	X	X	X	X
Principal exp.	X	X	X	X		X	X			X

Appendix E: PILNA 2018 teacher questionnaire

As well as the mathematics and literacy measurements, background questionnaires collecting contextual information about students, teachers, and principals were administered as part of PILNA 2018 in an effort to understand the factors influencing students' achievement in PILNA. These questionnaires provide us with insights into teachers' knowledge, attitudes and practices, and the context that the students, teachers and principals operate within. This appendix presents some relevant data collected from the principals and teachers of Year 4 and 6 participating students.

Resources

The PILNA 2018 questionnaire data provides insight into the resourcing constraints that faced schools. The following graph (Figure E1) shows the percentage of PILNA 2018 participating teachers who noted that the following items or facilities could not be found in their classroom. Of particular concern are the 45 per cent and 44 per cent of Year 4 and 6 teachers respectively who indicated that there were no bookshelves or reading books.

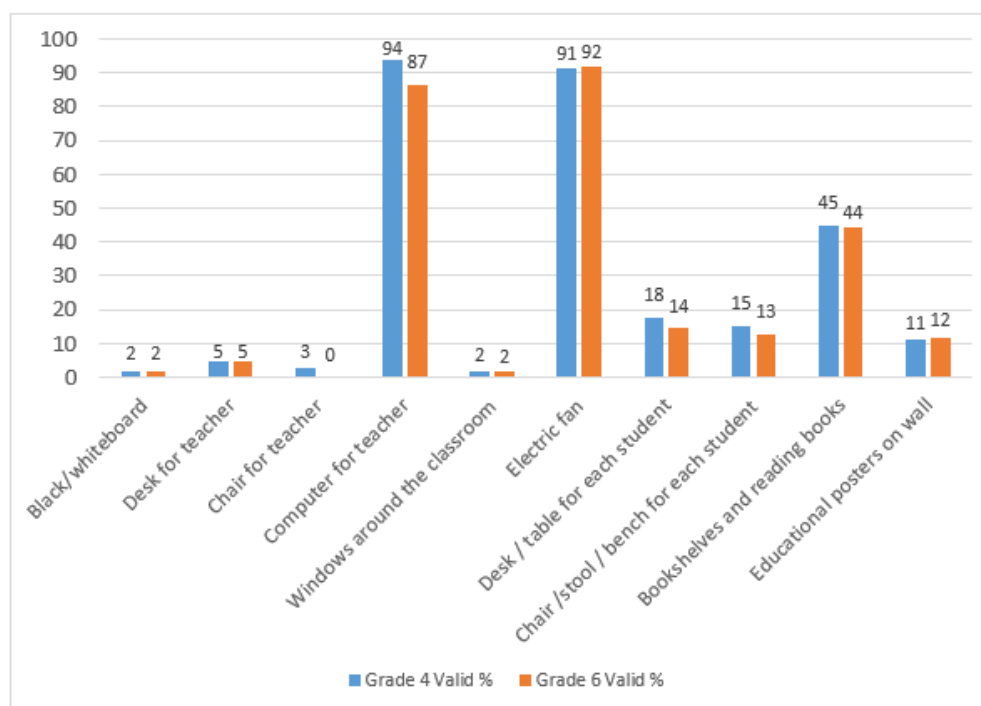


Figure E1. Items or facilities not available in classrooms

Principals were also asked to indicate the extent to which their school's capacity to provide instruction was hindered by certain issues, mostly related to resourcing (see Table E1).

Table E1. Extent to which school capacity to provide instruction is hindered by the following issues

	To a large extent		To a moderate extent		To a little extent		Not at all	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Shortage or inadequacy of	14	15.9	29	33.0	18	20.5	19	21.6

classrooms								
Shortage or inadequacy of instructional materials (e.g. textbooks)	8	9.1	29	33.0	28	31.8	16	18.2
Shortage of teachers	11	12.5	30	34.1	26	29.5	13	14.8
Lack of qualified teachers	17	19.3	26	29.5	22	25.0	16	18.2
Teacher absenteeism	4	4.5	26	29.5	32	36.4	15	17.0
Shortage or poor conditions of toilets	18	20.5	20	22.7	22	25.0	21	23.9
Natural disasters	14	15.9	27	30.7	27	30.7	12	13.6

Teaching and learning

Regularity of certain practices

The PILNA 2018 questionnaire asked teachers how frequently Year 4 and 6 teachers do certain activities in a week. As shown in Figures E2 and E3, for both Year 4 and 6 teachers who responded, lesson planning is a frequently occurring activity, with 85 per cent of Year 4 teachers and 78 per cent of Year 6 teachers planning their lessons three to four times a week or every day. Classroom-based assessments are conducted regularly, with one-third of Year 4 and 6 teachers reporting they do this daily. Of concern are the teachers who indicate that they have never observed another teacher’s lesson, had discussions with other teachers about their class or lessons, or had discussions with individual students about their performance.

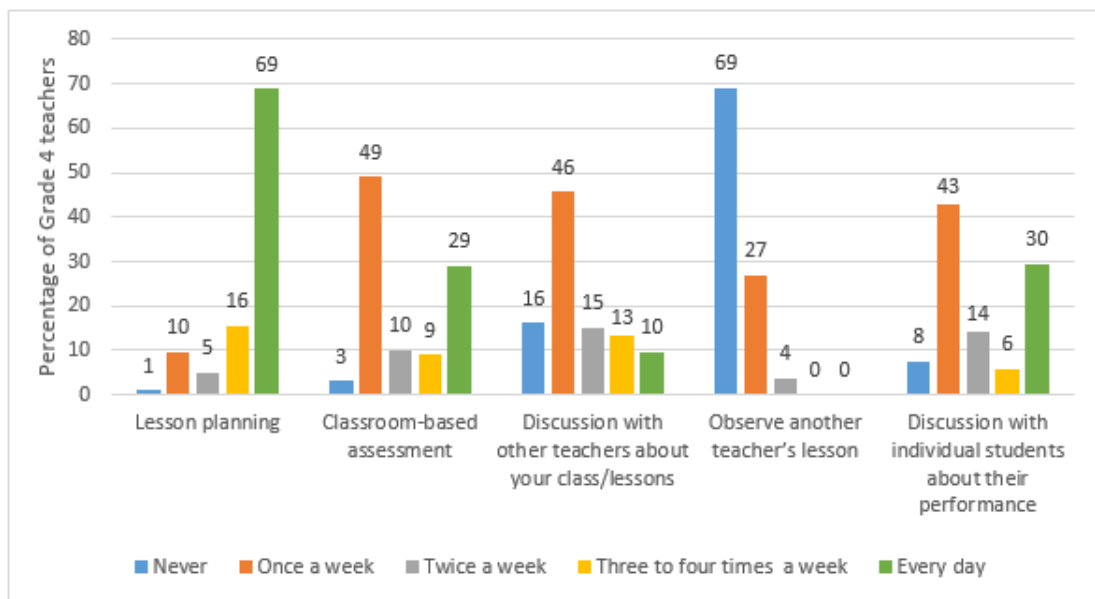


Figure E2. How frequently do Year 4 teachers do the following activities in a week?

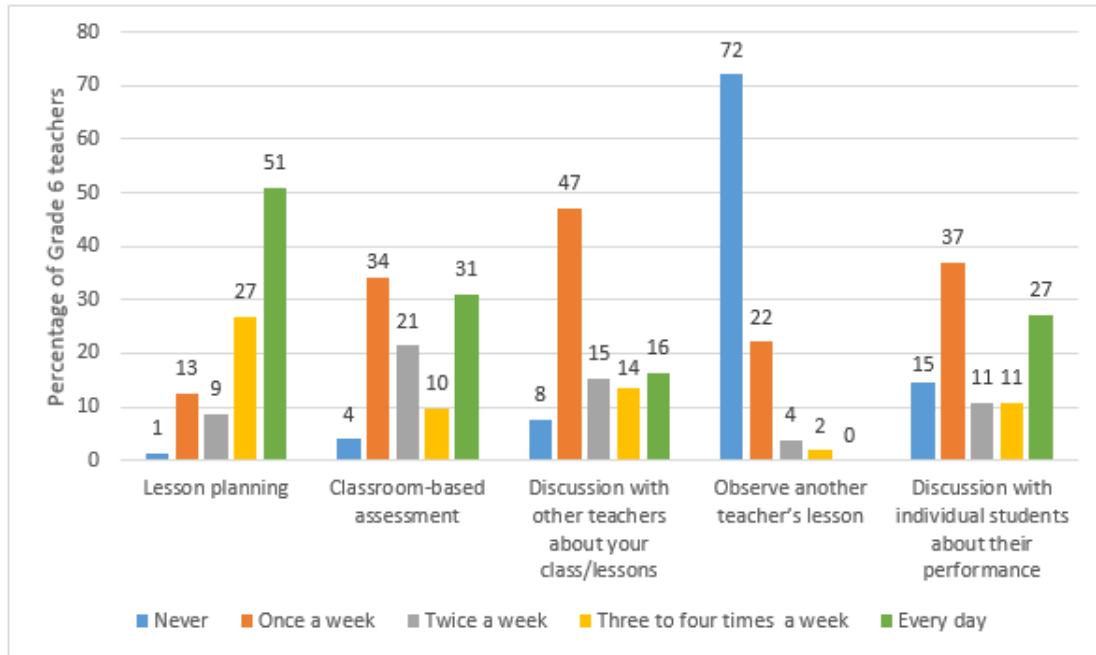


Figure E3. How frequently do Year 6 teachers do the following activities in a week?

Ease of teaching literacy and numeracy

Teachers were asked in the questionnaire how difficult they found teaching different aspects of literacy (Tables E2 and E3), and similarly for numeracy (Tables E4 and E5).

Table E2. How do Year 4 teachers find teaching the following aspects of literacy?

	Very difficult		Difficult		Easy		Very Easy	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Vocabulary	1	1.0	17	16.3	70	67.3	16	15.4
Grammar and syntax	2	1.9	24	22.9	72	68.6	7	6.7
Spelling and punctuation	1	1.0	14	13.3	73	69.5	17	16.2
Quality of ideas (writing)	6	5.8	41	39.8	50	48.5	6	5.8
Organisation and structure (writing)	7	6.8	33	32.0	58	56.3	5	4.9
Phonemic awareness	6	5.8	31	29.8	60	57.7	7	6.7
Letter sound correspondence	2	1.9	24	23.1	64	61.5	14	13.5
Reading comprehension	1	1.0	15	14.3	71	67.6	18	17.1
Oral language – speaking and listening	2	1.9	16	15.4	68	65.4	18	17.3

Table E3. How do Year 6 teachers find teaching the following aspects of literacy?

	Very difficult		Difficult		Easy		Very Easy	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Vocabulary	0	0.0	27	25.7	63	60.0	15	14.3
Grammar and syntax	3	2.9	25	24.3	67	65.0	8	7.8
Spelling and punctuation	1	1.0	11	10.5	72	68.6	21	20.0
Quality of ideas (writing)	4	3.8	46	43.8	49	46.7	6	5.7
Organisation and structure (writing)	5	4.9	42	40.8	48	46.6	8	7.8
Phonemic awareness	3	2.9	34	32.7	59	56.7	8	7.7
Letter sound correspondence	1	1.0	28	26.9	62	59.6	13	12.5
Reading comprehension	0	0.0	15	14.3	74	70.5	16	15.2
Oral language – speaking and listening	2	1.9	17	16.2	72	68.6	14	13.3

Table E4. How do Year 4 teachers find teaching the following aspects of numeracy?

	Very difficult		Difficult		Easy		Very Easy	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Numbers and patterns	1	1.0	5	4.8	74	70.5	25	23.8
Place value	0	0.0	17	16.2	72	68.6	16	15.2
Fractions and percentages	6	5.7	34	32.4	54	51.4	11	10.5
Operations	0	0.0	6	5.8	70	67.3	28	26.9
Measurement	1	1.0	16	15.2	71	67.6	17	16.2
Geometry	2	1.9	17	16.3	69	66.3	16	15.4
Data and chance	3	2.9	29	28.4	63	61.8	7	6.9

Table E5. How do Year 6 teachers find teaching the following aspects of numeracy?

	Very difficult		Difficult		Easy		Very Easy	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Numbers and patterns	0	0.0	2	1.9	75	72.8	26	25.2
Place value	0	0.0	7	6.9	76	74.5	19	18.6
Fractions and percentages	4	3.8	29	27.9	64	61.5	7	6.7
Operations	1	1.0	3	2.9	77	75.5	21	20.6
Measurement	2	1.9	21	20.4	63	61.2	17	16.5
Geometry	4	3.9	28	27.2	54	52.4	17	16.5
Data and chance	8	3.9	64	31.5	118	58.1	13	6.4

Frequency of reading activities

Teachers were asked how often they practised certain reading activities. As shown in Tables E6 and E7, notably, 37 per cent of Year 4 and 28 per cent of Year 6 participating teachers indicated that they rarely or never practice summarising a reading passage with their class.

More than 80 per cent of teachers reported they undertake the other reading activities sometimes or often.

Table E6. How often do Year 4 teachers practise the following reading activities?

	Never		Rarely		Sometimes		Often	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Whole class / choral reading	3	2.9	6	5.8	34	32.7	61	58.7
Peer reading / guided reading	5	4.8	6	5.7	51	48.6	43	41.0
Independent reading	0	0.0	9	8.6	36	34.3	60	57.1
Summarising	7	6.7	33	31.4	46	43.8	19	18.1
Asking and responding to questions about a text	3	2.9	7	6.7	24	22.9	71	67.6

Table E7. How often do Year 6 teachers practise the following reading activities?

	Never		Rarely		Sometimes		Often	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Whole class / choral reading	0	0.0	8	7.5	38	35.8	60	56.6
Peer reading / guided reading	6	5.7	12	11.3	52	49.1	36	34.0
Independent reading	0	0.0	2	1.9	39	36.8	65	61.3
Summarising	8	7.9	20	19.8	47	46.5	26	25.7
Asking and responding to questions about a text	1	0.9	2	1.9	30	28.3	73	68.9

Instructional time and supports

Teachers were presented with a series of statements related to their class and classroom, including instructional time and supports related to space, parental support and salary (Tables E8 and E9).

Table E8. To what extent do Year 4 teachers agree or disagree with the following statements?

	Strongly agree		Agree		Disagree		Strongly disagree	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %
I have adequate space in my classroom for all my students.	28	26.7	50	47.6	17	16.2	10	9.5
I have a space/room to prepare my lessons/work in the school.	29	27.9	63	60.6	9	8.7	3	2.9
I spend the appropriate amount of time on administrative work.	20	20.4	56	57.1	19	19.4	3	3.1
I get enough time to work with students who are slow learners.	23	21.9	46	43.8	28	26.7	8	7.6
I get enough time to complete the required lessons in mathematics.	23	21.9	63	60.0	17	16.2	2	1.9

I get enough time to complete the required lessons in writing.	14	13.5	58	55.8	30	28.8	2	1.9
I get enough time to complete the required lessons in reading.	17	16.2	55	52.4	31	29.5	2	1.9
There are story books in the classroom for children to read.	23	22.1	44	42.3	23	22.1	14	13.5
Parents support their children's reading requirements.	9	8.6	25	23.8	37	35.2	34	32.4
I am getting a good salary as a teacher.	7	6.7	41	39.4	32	30.8	24	23.1

Table E9. To what extent do Year 4 teachers agree or disagree with the following statements?

	Strongly agree		Agree		Disagree		Strongly disagree	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %
I have adequate space in my classroom for all my students.	39	38.2	39	38.2	17	16.7	7	6.9
I have a space/room to prepare my lessons/work in the school.	41	39.4	56	53.8	6	5.8	1	1.0
I spend the appropriate amount of time on administrative work.	18	18.2	54	54.5	20	20.2	7	7.1
I get enough time to work with students who are slow learners.	9	8.6	55	52.4	34	32.4	7	6.7
I get enough time to complete the required lessons in mathematics.	21	19.8	67	63.2	16	15.1	2	1.9
I get enough time to complete the required lessons in writing.	21	20.2	62	59.6	20	19.2	1	1.0
I get enough time to complete the required lessons in reading.	17	16.0	58	54.7	30	28.3	1	0.9
There are story books in the classroom for children to read.	23	21.7	46	43.4	23	21.7	14	13.2
Parents support their children's reading requirements.	8	7.5	15	14.2	48	45.3	35	33.0
I am getting a good salary as a teacher.	5	4.8	40	38.1	29	27.6	31	29.5

Teacher professional development

The PILNA 2018 questionnaire provided insights into the level of professional development support for Year 4 and 6 teachers in implementing the curriculum (Tables E10 and E11).

Table E10. How many times in the past three years did Year 4 teachers attend a professional development program in the following areas?

	Never		Once		Twice		Three times		Four times		>Four times	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Reading (7a)	39	41.5	31	33.0	12	12.8	2	2.1	3	3.2	7	7.4
Writing (7b)	42	46.7	27	30.0	10	11.1	5	5.6	1	1.1	5	5.6
Numeracy (7c)	29	30.9	38	40.4	12	12.8	5	5.3	1	1.1	9	9.6
Classroom based assessment	44	45.8	28	29.2	10	10.4	6	6.3	1	1.0	7	7.3
Curriculum	48	49.5	26	26.8	9	9.3	4	4.1	2	2.1	8	8.2
Student welfare	47	51.1	22	23.9	11	12.0	3	3.3	1	1.1	8	8.7
Classroom management	38	39.6	36	37.5	9	9.4	4	4.2	2	2.1	7	7.3
Inclusive education	48	49.0	33	33.7	8	8.2	5	5.1	0	0.0	4	4.1
Leadership skills	52	53.1	30	30.6	9	9.2	3	3.1	0	0.0	4	4.1

Table E11. How many times in the past three years did Year 6 teachers attend a professional development program in the following areas?

	Never		Once		Twice		Three times		Four times		>Four times	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Reading (7a)	38	39.2	33	34.0	10	10.3	9	9.3	2	2.1	5	5.2
Writing (7b)	43	45.3	30	31.6	11	11.6	7	7.4	2	2.1	2	2.1
Numeracy (7c)	42	46.7	23	25.6	12	13.3	5	5.6	2	2.2	6	6.7
Classroom based assessment	34	34.0	31	31.0	19	19.0	10	10.0	2	2.0	4	4.0
Curriculum	39	39.8	32	32.7	10	10.2	11	1.2	1	1.0	5	5.1
Student welfare	45	50.6	23	25.8	11	12.4	3	3.4	0	0.0	7	7.9
Classroom management	42	42.9	33	33.7	9	9.2	5	5.1	1	1.0	8	8.2
Inclusive education	43	45.3	32	33.7	10	10.5	2	2.1	1	1.1	7	7.4
Leadership skills	41	40.2	33	32.4	14	13.7	10	9.8	2	2.0	2	2.0

Principals were asked which approaches were used to support their teachers in implementing the new curriculum (Table E12). Of the 88 principals who responded to the questionnaire, 64 per cent indicated they have a professional development plan for their teachers.

Table E12. Approaches used to support teachers in implement the curriculum

	Yes		No	
	N	Valid %	N	Valid %
Curriculum delivery workshops	75	85.2	9	10.2
Advisory visits by curriculum officers	61	69.3	20	22.7
Cluster meeting with teachers from other schools	46	52.3	33	37.5
Cluster meeting with teachers of your school	77	87.5	5	5.7
In-service programmes	62	70.5	17	19.3
Assistance with remedial class by the local community	12	13.6	61	69.3
Provision of instructional/curriculum materials	67	76.1	11	12.5
In-school professional development	66	75.0	15	17.0

Issues affecting students

In the PILNA 2018 questionnaires, teachers were also asked a series of questions related to issues affecting their Year 4 and 6 students (Tables E13 and E14).

Table E13. What proportion of students in Year 4 classes are affected by the following issues?

	0% - 20%		21% - 40%		41% - 60%		61% - 80%		81% - 100%	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Lack of basic knowledge or skills	35	35.5	33	33.0	23	23.0	7	7.0	2	2.0
Reading impaired (e.g. dyslexia)	34	33.7	32	31.7	20	19.8	13	12.9	2	2.0
Lack of interest	51	50.0	30	29.4	11	10.8	7	6.9	3	2.9
Poor health	71	73.2	14	14.4	9	9.3	3	3.1	0	0.0
Absenteeism	43	42.6	25	24.8	18	17.8	10	9.9	5	5.0
Being hungry/hunger	77	78.6	8	8.2	7	7.1	5	5.1	1	1.0
Lack of sleep	82	81.2	11	10.9	3	3.0	4	4.0	1	1.0
Behavioural disorder	47	44.3	28	26.4	15	14.2	8	7.5	8	7.5
Auditory/visual impairment (not corrected by hearing aid/glasses)	82	84.5	11	11.3	2	2.1	0	0.0	2	2.1

Table E14. What proportion of students in Year 6 classes are affected by the following issues?

	0% - 20%		21% - 40%		41% - 60%		61% - 80%		81% - 100%	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Lack of basic knowledge or skills	46	43.8	32	30.5	20	19.0	4	3.8	3	2.9
Reading impaired (e.g. dyslexia)	47	46.5	28	27.7	18	17.8	5	5.0	3	3.0
Lack of interest	54	54.0	23	23.0	15	15.0	6	6.0	2	2.0
Poor health	76	76.8	13	13.1	6	6.1	4	4.0	0	0.0
Absenteeism	39	38.6	29	28.7	21	20.8	12	11.9	0	0.0
Being hungry/hunger	152	78.4	24	12.4	9	4.6	8	4.1	1	0.5
Lack of sleep	76	77.6	16	16.3	2	2.0	4	4.1	0	0.0
Behavioural disorder	57	55.9	19	18.6	17	16.7	8	7.8	1	1.0
Auditory or visual impairment (not corrected by hearing aid or glasses)	81	83.5	10	10.3	2	2.1	2	2.1	2	2.1

Appendix F: PILNA literacy proficiency level descriptors for 2015 and 2018

LEVEL and PILNA scale scores interval	LITERACY DESCRIPTORS
8 587.5 or greater	Students at each of the levels 1 to 8 are able to do the skills in each described level with proper guidance by the teacher, and are likely to do the skills in the preceding lower levels independently. Draw valid conclusions and explain the main arguments in an authentic text on an unfamiliar subject. Demonstrate understanding and mastery in the use of language conventions. Write a story using an expanded range of well-expressed ideas that are elaborated and organised in a coherent text with full control and use of key language features.
7 537.5 to < 587.5	Derive the author's implicit intent, make inferences and interpret information from a variety of texts. Demonstrate proficiency in spelling, punctuation, grammar, syntax and vocabulary. Write a story using an expanded range of elaborated ideas that are organised in a coherent text with good control of key language features and a variety of sentence structure.
6 512.5 to < 537.5	Relate specific information to images portrayed in poems and instructional text and draw conclusions based on evidence in a story. Demonstrate general proficiency in the use of common conventions in grammar, tense and various degrees of comparison. Write a story using a range of elaborated ideas and structure in a coherent text with correct use of language features.
5 487.5 to < 512.5 Expected level for Year 6	Read and critically respond to a variety of texts/genres. Connect ideas in the titles and in the sequence of events across the texts. Identify common grammatical conventions in the use of verb forms and in spelling of some frequently used two-syllable words. Structure a story that has a beginning, a complication and conclusion. Draw additional details beyond the prompts.
4 462.5 to < 487.5 Expected level for Year 4	Locate directly stated information in a variety of genres. Recognise the correct grammatical conventions in the use of capitals for proper nouns and in spelling of blends. Write a coherent text that has a few simple ideas by using common story elements, such as a simple title, and has a beginning but the conclusion may be missing or weak.
3 437.5 to < 462.5	Locate the main events in a variety of texts. Identify common language conventions in the use of text connectives and synonyms. Spell diagraphs; identify and correct errors in some frequently used one-syllable words.
2 412.5 to < 437.5	Make some meaning from texts that have visual images. Identify setting, author and simple literal information explicitly stated in a variety of texts/genres. Demonstrate basic and emerging proficiency in the use of prepositions and pronouns. Write a text consisting of a few simple ideas but with a weak structure.
1 362.5 to < 412.5	Identify literal information that is directly stated such as the titles and important dates in a variety of texts/genres. Identify meanings of simple words used in context. Write ideas using simple vocabulary but structure is limited to one paragraph.
0 Less than 362.5	Students at this level are not able to do any of the skills above and/or there is insufficient evidence to indicate their ability.

Source: 2015 PILNA Regional Report, p.25

LEVELS and PILNA scale scores interval	LITERACY DESCRIPTORS
	Students at each of the levels 1 to 8 are able to do the skills in each described level and are likely to demonstrate the skills in the preceding lower levels independently.
LEVEL 8 (587.5 or greater)	Make inferences that require some reasoning of ideas across a text. Identify the purpose of a textual feature, such as numbering. Write an original or imaginative text with well-developed ideas that contribute to the overall theme. Coherently structure and logically sequence a text, such as a story that begins, develops and concludes. Demonstrate control over key language features, including some sophisticated vocabulary and punctuation that enhances meaning.
LEVEL 7 (537.5 to < 587.5)	Identify an idea developed across several sentences, and make subtle distinctions between related ideas. Interpret ideas in less familiar texts types, such as the reason for an instruction or an action in a poem. Apply an idea to a different context, using evidence from the text. Derive the author's intent when clues are prominent. Write a text with a range of features of the genre, such as a story with main events and an attempt at character, and with some coherence in structure, such as the sequencing of events. Use a variety of vocabulary and punctuation, such as commas and capital letters.
LEVEL 6 (512.5 to < 537.5)	Locate information that is surrounded by related ideas. Make a range of simple inferences from less familiar text types. Provide evidence from the text to support an interpretation. Provide a simple reason to support a personal judgment. Write a text with some features of the genre, such as a story with a setting or plot, where ideas are related. Spell basic words and use a small variety of sentence structures.
LEVEL 5 (487.5 to < 512.5) *Expected minimal level for Year 6	Locate a paraphrase of an idea or detail in a less familiar text, such as a procedure. Connect ideas across several adjacent sentences to make an interpretation, such as the reason for an event. Generalise about a key feature, such as a character trait, from prominent clues across a text. Critically evaluate the logical purpose of a simple, straight-forward text. Write a text with minimal awareness of genre, such as a story with some details that is largely descriptive.
LEVEL 4 (462.5 to < 487.5) *Expected minimal level for Year 4	Locate explicitly stated information in a less prominent position from a range of simple, familiar texts where the key word or phrase is repeated. Make inferences from prominent clues, and simple distinctions between related ideas. Interpret the main idea of a simple paragraph. Write a text of some length where ideas may relate but not develop.
LEVEL 3 (437.5 to < 462.5)	Locate an explicit detail, such as a main action or event, from a less prominent position in a small range of simple, highly familiar texts. Make simple inferences, such as about a character's feelings or behaviour, using prominent clues. Write a brief text with some genre elements, such as a story with a beginning that does not develop.
LEVEL 2 (412.5 to < 437.5)	Identify and match identical or synonymous words to locate explicitly stated information, such as a setting, in a small range of simple, highly familiar texts. Write a brief text that shows some control over simple sentence structures and uses a small range of simple vocabulary.
LEVEL 1 (362.5 to < 412.5)	There is no information about students' reading ability at this level. Write a very brief text where ideas are present but not clearly related or developed.
LEVEL 0 (Less than 362.5)	There is no information about students' reading ability at this level. Write some basic words or very simple sentences with limited vocabulary, some correct spelling and simple punctuation, such as a full stop.

Source: 2018 PILNA Regional Report, p.27

Appendix G: PILNA numeracy proficiency level descriptors for 2015 and 2018

LEVEL and PILNA scale scores interval	NUMERACY DESCRIPTORS
8 575 or greater	Students at each of the levels 1 to 8 are able to do the skills in each described level with proper guidance by the teacher, and are likely to do the skills in the preceding lower levels independently. Round off numbers to the nearest tenth and hundredth and convert fractions to percentages and vice versa. Add and subtract fractions with denominators that are multiples. Measure and determine the perimeter of a simple shape. Show time on a clock and solve problems involving time duration. Calculate averages from data given in a bar graph.
7 550 to < 575	Represent a proportion of a whole as a fraction and round off numbers to the nearest tens and hundreds. Divide a two-digit number by a one-digit number with a remainder, and understand the order of operation by simplifying expressions involving the four operations. Solve word problems involving both addition and subtraction to the extent of calculating the total cost and change from shopping. Tell the time from an analogue clock in minutes.
6 525 to < 550	Complete an increasing number pattern that involves decimal numbers with two decimal places, and also complete a decreasing whole number pattern. Subtract up to three-digit numbers from up to four-digit numbers with regrouping, and also subtract decimal numbers with different numbers of decimal places and with regrouping. Multiply a three-digit number by a two-digit number with regrouping to the extent of solving word problems involving multiplication, calculating unit cost and calculating change from shopping. Tell the time to the quarter hour and half hour from an analogue clock. Draw a complete bar graph that will convey information from a given set of data.
5 500 to < 525 Expected level for Year 6	Write a four-digit number involving zeros in numerals and identify place values of a two-digit number. Add and subtract fractions with the same denominators, and add two decimal numbers with different numbers of decimal places and with regrouping. Subtract a two-digit number from a three-digit number with regrouping. Multiply a three-digit with a two-digit number without regrouping, and understand and simplify brackets to determine the order of operation. Measure height.
4 475 to < 500	Read numbers on a place value number system and compare four-digit whole numbers and decimal numbers. Identify the numerator and denominator of a fraction to the extent of representing proportion of a whole as a simple percentage. Add three two-digit whole numbers with regrouping, multiply a two- or a three-digit number and a one-digit number with regrouping, and divide a two-digit by a one-digit number without remainder. Simplify expressions involving addition and subtraction and calculate total cost of three items. Identify days in a week and read with understanding data from a bar graph.
3 450 to < 475 Expected level for Year 4	Write a four-digit number not involving zero in words and numerals. Write a three-digit number involving zero in numerals and write a four-digit number involving zero in words. Complete increasing number patterns involving decimal numbers to one decimal place in a relation and recognise money according to its value. Add two- to four-digit numbers with two- to three-digit numbers with regrouping, and add two decimal numbers with the same number of decimal places and with regrouping. Multiply a two-digit number and one-digit number with no regrouping and solve simple word problems involving subtraction. Use a ruler to draw and read a given length and tell the time to the hour only from an analogue clock.
2 425 to < 450	Write a three-digit number not involving zero in words and in numerals, and write a three-digit number involving zero in words only. Compare prices of items and calculate the total cost of two items. Subtract a two-digit number from a two- or three-digit number without regrouping and solve simple word problems involving addition. Identify hands of a clock and know the relation of days and weeks.
1 375 to < 425	Write a two-digit number not involving zero in words and in numerals, and also complete increasing number patterns in a simple relation. Add any pair of two-digit and two- or three-digit numbers without regrouping. Compare heights of data presented in a bar graph.
0 Less than 375	Students at this level are not able to do any of the skills above and/or there is insufficient evidence to indicate their ability.

Source: 2015 PILNA Regional Report, p.24

LEVELS and PILNA scale scores interval	NUMERACY DESCRIPTORS Students at each of the Levels 1 to 8 are able to do the skills in each described level with proper guidance by the teacher and are likely to do the skills in the preceding lower levels independently.
LEVEL 8 (575 or greater)	<p>8b: Undertake the skills described for the levels below and as well can undertake metric length conversions and comparisons and calculate the probability of an event.</p> <p>8a: Round off numbers to the nearest tenth and hundredth and convert fractions to percentages and vice versa. Add and subtract fractions with denominators that are multiples. Subtract decimal numbers with different numbers of decimal places with regrouping (including with one number being a whole number). Solve complex word problems, involving mixed operations, fractions and rounding off decimals. Show time on a clock and solve problems involving time duration and length, perimeter and area of rectangles. Understand rotations on 2D shapes.</p>
LEVEL 7 (550 to < 575)	<p>Round off numbers to the nearest tens and hundreds and converting simple fractions to a percentage. Divide a two-digit number by a one-digit number with a remainder and understand the order of operation by simplifying expressions involving the four operations. Solve word problems involving multiple operations and money. Tell the time from an analogue clock in minutes.</p>
LEVEL 6 (525 to < 550)	<p>Apply understanding of numbers and place value to create whole numbers up to 999 meeting specified criteria, and identify fractions and percentages represented in words, numbers or models. Subtract up to three-digit numbers from up to four-digit numbers with regrouping, and also subtract decimal numbers with different numbers of decimal places and with regrouping. Multiply a three-digit number by a two-digit number with regrouping. Complete an increasing number pattern that involves decimal numbers with two decimal places, and also complete a decreasing whole number pattern. Solve word problems including with multiple operations, fractions, money, and calculating total costs and change. Tell the time to the quarter hour and half hour from an analogue clock. Identify 2D from 3D shapes. Understand the use of common language of chance in relation to an everyday event. Identify and compare information represented in a simple graph (pie chart).</p>
LEVEL 5 (500 to < 525) *Expected minimum level for Year 6	<p>Write a four-digit number involving zeros in numerals and identify place values of a two-digit number. Represent numbers up to 999 using place value material. Add and subtract fractions with the same denominators and add two decimal numbers with different numbers of decimal places and with regrouping. Multiply a three-digit with a two-digit number without regrouping and understand and simplify brackets to determine the order of operation. Measure the length of an object (in cm) and read measurement scales with appropriate unit (Temperature and Weight), and read the time shown on an analogue clock. Identify and compare information represented in a table. Draw lines of symmetry and identify the consequences of rotations on 2D shapes.</p>
LEVEL 4 (475 to < 500)	<p>Read numbers on a place value number system, compare four-digit whole numbers and compare decimal numbers. Identify and extend number patterns including skip counting by 2s, 5s, 10s. Identify the numerator and denominator of a fraction. Add sets of whole numbers with regrouping, subtract a two-digit number from a three-digit number with regrouping, and multiply a two- or a three-digit number by a one-digit number with regrouping, and divide a two-digit by a one-digit number without remainder. Solve simple word problems using addition, subtraction and multiplication and calculating the total cost of a set of items. Use common language of chance in relation to identifying the outcome of a simple everyday event.</p>
LEVEL 3 (450 to < 475) *Expected minimum level for Year 4	<p>Write a four-digit number not involving zero in words and numerals. Write a three-digit number involving zero in numerals and write a four-digit number involving zero in words. Add pairs of numbers with regrouping up to a total of 9999, and add two decimal numbers with the same number of decimal places and with regrouping. Multiply up to a two-digit number by a one-digit number (horizontal and vertical) with no regrouping. Complete increasing number patterns involving decimal numbers to one decimal place and recognise money according to its value. Solve simple word problems involving subtraction and simple multiplication. Use a ruler to draw and read a given length, tell simple time from an analogue clock, and identify correct volume of a given rectangular prism. Complete a whole number bar graph, using given data and graph.</p>
LEVEL 2 (425 to < 450)	<p>Write a three-digit number not involving zero in words and in numerals, and write a three-digit number involving zero in words only. Subtract pairs of numbers up to 999, without regrouping and solve simple word problems involving addition and subtraction (without regrouping). Identify hands of a clock and know the relation of days and weeks. Draw a triangle.</p>
LEVEL 1 (375 to < 425)	<p>Write a two-digit number not involving zero in words and in numerals, and also complete increasing number patterns in a simple relation. Add pairs of whole numbers up to 999 without regrouping. Interpret data represented in simple whole number bar graph or pictograph. Read value from a ruler and identify days in the week.</p>
LEVEL 0 (Less than 375)	<p>Students at this level are not able to do any of the skills above and/or there is insufficient evidence to indicate their ability.</p>

Source: 2018 PILNA Regional Report, p.26