





REGIONAL REPORT

PACIFIC BENCHMARKING FOR EDUCATION RESULTS (PaBER)

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ABBREVIATIONS

DFAT Department of Foreign Affairs and Trade

EMIS Education Management and Information System

GDP Gross Domestic Product

MEHRD Ministry of Education and Human Resources Development

MESC Ministry of Education, Sports and Culture

PaBER Pacific Benchmarking for Education Results

PILNA Pacific Islands Literacy and Numeracy Assessment

PNG Papua New Guinea

NDoE National Department of Education

SABER Systems Approach for Better Education Results

ACKNOWLEDGEMENT

The PaBER pilot project is a journey of three countries in their quest to bring to every education system in Papua New Guinea, Samoa and the Solomon Islands and the Pacific at large a process, an approach that brings value and clarity to what we may have already been doing or that we should do in our own ministries of education. It was all made possible by the Government of Australia.

We extend our most sincere gratitude to the Government of Australia for funding the pilot project and its commitment to supporting Pacific Forum Education Ministers decision 2010 on the concept of 'benchmarking the quality of education for results' to improve the quality of education in the region. Special thanks goes to the Department of Foreign Affairs and Trade (DFAT) regional office in Suva and DFAT office in the three countries.

We extend our sincere gratitude to the Ministries and Department of Education in the three countries for their support throughout the project. Special thanks goes to the PaBER National coordinators for their support, commitment and passion towards the project, which enabled seamless implementation of the project at the country level.

Members of the Steering Committee and Technical Working Group, those who left and those joined the journey at different stages, we are indebted to you, for your patience and endurance throughout the long hours of so many meetings and the way in which you always value the changes the project is beginning to make in your own systems.

We also express our appreciation to the World Bank in providing assistance with the SABER tools in terms of training as well as data analysis and report writing. We are also grateful to all other organisations who have supported and contributed to the success of the PaBER project in one way or another.

The pilot project may have ended at the regional level, however there is still work to do at the country level before the benefits of the PaBER project are fully evident.



BACKGROUND

The Pacific Benchmarking for Education Results (PaBER) project was introduced in 2012 to improve the quality of education and student performance across the Pacific, in particular to respond to low levels of literacy and numeracy. The PaBER project provides education ministries with systematic and reliable evidence and analysis of their own systems, benchmarked against high performing systems globally. This gives policy-makers and other stakeholders the opportunity to judge the strengths and weaknesses of current policy and systems, assess how these may influence learning, and formulate appropriate reforms and action. The PaBER project was set up to test this approach in three pilot countries (Papua New Guinea, Samoa and the Solomon Islands).

To achieve these ambitions, the project was designed around three components: i) learning assessment of Year 6 students' performance in literacy and numeracy, based on the use of the Pacific Islands Literacy and Numeracy Assessment (PILNA) in 2012 and 2015; ii) policy and system assessment, benchmarking of national education systems in each of five policy domains: Teacher Quality, Assessment Systems, Curriculum and Materials, School Governance and Management, and Education Management Information Systems (EMIS); iii) policy in practice, consisting of research on policy implementation at school level. Along with institutional capacity assessments, this body of work is enabling a dynamic view of education systems, with a particular focus on student learning.

This report pulls together common evidence across the three countries, and sets out strategic generic recommendations that will impact on learning outcomes. This draws on a body of evidence set out in over 40 reports covering country and cross-country analysis. The report highlights some key emerging findings where there is strong evidence and the ways these intersect across policy domains. Recommendations are based on this, set out as both policy reforms and actions to improve delivery, premised on linked responses to key barriers to improving student learning. Over the four years of its implementation, the PaBER project has achieved a significant amount, including close collaboration with the pilot countries, generation of evidence, and establishment of an approach that can be built on in coming years, both in these three countries and potentially with others in the region.

CONTEXT

Section 2 of the report provides a comparative contextual background that is important to the PaBER analysis in a number of ways. The results of the PaBER project need to be applied in the specific context of the three countries that participated, as the three countries come from a wide range of contextual backgrounds. Hence, it is important to understand and acknowledge these differences and similarities when deciding on what is best and appropriate for each country.

There are large differences in geography, population size and the number of languages spoken amongst the three pilot countries. There are some similarities in the informal sector of the economies, in terms of large proportion of the population engaging in subsistence farming. Two of the three countries have a highly decentralised education system, and a key challenge has been the interface between national and subnational levels, particularly oversight and quality assurance of service delivery. All three countries have developed longer-term Education Strategic Plans that set out the broad roadmap for their education sector with specific targets and strategies for achieving their national goals.

Whilst all three countries have made progress in their education system, particularly in access to basic schooling, they still face challenges in expanding equitable access to basic education, particularly with completion rates for basic primary education. In terms of learning outcomes, the PILNA conducted in 2012, indicated some worrying results for basic literacy and numeracy achievements. The majority of students assessed were not performing at satisfactory or expected levels in literacy.

EMERGING THEMES AND PRIORITIES

The analysis set out in Section 3 of the report is a cross-synthesis of the evidence against each of the policy domains. The findings are the basis for a broader analysis of emerging themes and priorities. This looks at ways in which the evidence points to key linkages across the sector, and priorities in terms of improving classroom teaching and learning. These findings and associated analysis go some way to capturing the extent to which policy is in place, the difference between policy level intent and the reality of delivery at school level and, where we have it, an understanding of how institutional and staff capacity influences this dynamic.

Inconsistent provision of teacher professional development, monitoring and support. Provision of ongoing professional development, and the associated monitoring and support given to teachers, are insufficient and inconsistent. There is a lack of clarity around how professional development should be targeted and delivered, or even the minimum annual requirements. Some important priorities are not being effectively supported, and professional development does not draw on a range of activities associated with instructional improvement.

The use of assessment, particularly classroom assessment, to inform teaching and improve learning. An enabling environment for assessment is not sufficiently in

place, leading to ineffective implementation and use of assessment results. Assessment is not being used effectively to monitor teaching and learning, nor is it used to make school adjustments. The low capacity of school leaders, teachers and assessment staff at different levels contributes towards this situation.

Classroom assessment policies do not adequately guide effective and consistent implementation. While assessment policy documentation makes reference to classroom assessment, they fail to provide clear guidelines on implementation at the classroom level, monitoring the quality of the assessment and use of the results to improve teaching and learning. Consequently, the way teachers conduct classroom assessment varies significantly between schools and classrooms, and there are inconsistencies in how the results are used to improve learning by stakeholders within the school (students, teachers, school leaders) and outside the school (parents, school boards and community).

The lack of teaching materials to support classroom learning highlights the need for more effective procurement and distribution systems. Policy articulation concerning the curriculum cycle is clear. Practice, however, indicates a weakness in the procurement, distribution and monitoring of learning materials.

Inconsistent implementation of curriculum across schools and classrooms. Implementation of the curriculum varies due to a wide range of teachers' competency and capacity. Teachers have mixed awareness and understanding of the expectations of the curriculum and often find terminology in the curriculum hard to understand. Teacher competency in the implementation of the curriculum is generally supported through professional development and monitored through national professional standards for teachers. Not all teachers are trained because of a lack of opportunities to attend professional development workshops or such sessions are non-existent in schools.

There is limited capacity amongst school leaders in the design and implementation of school-based professional development programmes. Mechanisms to monitor and evaluate performance of head teachers, as well as identifying and building capacity of potential school heads, are either weak or inconsistent. The design and implementation of a school-based professional development programme to improve teaching and learning is hampered by a lack of management skills at the school level. There is a lack of policy at the central level to support school autonomy (school governance and operations).

There is lack of an EMIS legal framework, policy and guidelines. Absence of a comprehensive EMIS policy that provides clear guidelines on processes, procedures and resource allocation was a major finding in the three pilot countries. This may limit the future development and sustainability of an EMIS. There are no guidelines in place to support the running and effective utilisation of an EMIS system as well as a dedicated budget to ensure its longer term sustainable funding, although the operations of an EMIS have been established.

RECOMMENDATIONS FOR THE PABER COUNTRIES

A number of recommendations are highlighted in Section 4. These draw on the country reports, look at the potential for linked responses and target improvements in classroom teaching and learning processes. They are strategic, evidence-based recommendations that draw on the key findings. As such, they represent a first step towards implementation planning. The recommendations are represented in summary in Table 1.

TABLE 1: Recommendations for the PaBER countries

	RECOMMENDATION	KEY ACTIONS
1.	Strengthen classroom and national assessment practice to inform teaching and learning, and improve	 Review, strengthen and update the policy and guidelines for assessment, covering school and classroom assessment, and the broader national level assessment of learning.
	accountability.	 Review should include: administration, reporting, dissemination and use of assessment results for decision-making for national large-scale assessment; guidelines on the evaluation of student performance; and give direction to the use of classroom assessment.
		Mandate schools to develop assessment plans and guidelines.
		• Teacher, head teacher and assessment staff training in classroom assessment.
2.	Enhance teacher skills through more systematic	Develop a comprehensive professional development framework.
	and comprehensive professional development.	 Include a monitoring and evaluation framework to guide school-based professional development.
		• Training for head teachers to provide leadership to teachers, particularly on improving their teaching practice and content knowledge.
		Develop an induction training policy guide for novice teachers.
		• Ensure teachers and head-teachers are familiar with the National Teacher Standards.
3.	Develop mechanisms for procurement and monitoring of learning	 Undertake a strategic review of procurement and distribution processes of curriculum materials to all schools.
	resources.	 Monitor the effectiveness in the processes of procurement and distribution.
		Mandate schools to use school budgets to purchase learning materials.
		 Develop school-based responsibilities to manage and coordinate the supply of learning resources, including an oversight role for school committees.
4.	Strengthen school-based management functions and capacity.	 Undertake a review and consolidation of policies establishing the School Committees.
		 Develop a manual that sets out the operation of the School Committee with associated training.
5.	Consolidate and ensure the future development of an EMIS.	 Establish an EMIS policy to set out provisions for the budget; data collection, management and utilisation; integration with external databases; and professional development.



The Pacific Benchmarking for Education Results (PaBER) project was first conceptualised as an approach to address a regional concern that too many children leave primary school without the necessary literacy and numeracy skills. In response to this concern the Pacific Forum Education Ministers Meeting 2010 endorsed the concept of 'benchmarking the quality of education for results' to improve the quality of education and student performance across the Pacific², building on benchmarking already underway in selected countries. A pilot project was proposed and three countries – Papua New Guinea (PNG), Samoa and the Solomon Islands – were selected to take part in the pilot.

THE PABER PROJECT

The aim of the PaBER project is to improve literacy and numeracy levels of children in the region through a process that will equip policy-makers in Pacific countries with the information and knowledge to drive interventions that will have a real effect on learning results. The outcome from the PaBER project, at the end of the project is that pilot countries are better positioned to plan and implement interventions and reforms that will improve learning.

To achieve this outcome, the PaBER project was designed around three components. The first component, Learning Assessment, is the diagnoses of Year 6 students' performance, which are then used to inform policy development. The Learning Assessment component included the use of the Pacific Islands Literacy and Numeracy Assessment (PILNA) results from 2012, as this is a regional assessment for measuring literacy and numeracy outcomes at the primary (Year 6) level. Results

of the PILNA 2012 and subsequent preliminary results of the PILNA 2015 have been shared with and among the three pilot countries and capacity has been measured and developed within the relevant ministries for using assessment data to develop policy for improving learning outcomes.

The second component, Policy and System Assessment, undertook the benchmarking of national education systems in each of five policy domains: Teacher Quality, Assessment Systems, School Governance and Management, Curriculum and Materials, and the Education Management Information System (EMIS). The EMIS was added as a domain partway through the pilot project. The World Bank Systems Approach for Better Education Results (SABER) tools were adopted for use in four of the domains. A parallel tool, modelled on the SABER tools, to measure Curriculum and Materials, was developed specifically for the PaBER project.

Through component two, the national systems in the five policy domains have been benchmarked against international good practice. This gives policy-makers and other stakeholders the opportunity to judge the strengths and weaknesses of current policy and systems, and how these may influence learning, and to formulate appropriate reforms and action. The SABER reports for each of the countries have been adopted and published on the World Bank website, contributing to the global body of knowledge in these areas. A system of cross-country analysis was adopted within the project to build capacity in relevant ministries in the use of benchmarking for improvement in target areas.

To deepen the analysis provided around these policy domains, the PaBER project also undertook a number of institutional and capacity assessments, the aim of

¹ Learning for all: Investing in people's knowledge and skills to promote development, World Bank Education Strategy 2020 as referenced in programme design document: Pacific Benchmarking for Education Results (2012).

² Programme design document: Pacific Benchmarking for Education Results (2012).

which was to provide analysis of current capacity and key bottlenecks in delivering in these five domains. Particular focus was given to capacity around the implementation and use of student assessment. Although the policy tools provided a 'snapshot in time' of systems in the three countries, through cross-country analysis, practices have been shared and policies and systems have been, and continue to be, adjusted with reference to international standards. This demonstrates the dynamic dimension of the PaBER project, and how strong country ownership of this evidence base has already led to policy and system reforms and strengthening.

The third component of the PaBER project, Policy in Practice, called for valid and reliable data to be collected on the implementation of education policy in schools and classrooms. A research framework, data analysis and reporting framework, and associated data collection instruments were developed with input from all three countries, then collaboratively adapted and subsequently adopted for use. The field evidence is now being used to facilitate policy review and development in the related domains, as well as to inform ministries as they build capacity in comparative analyses of country practice. While component two focuses mainly on policy intent, this field research is an important step in understanding what that looks like on the ground. It is well recognised that having a policy in place does not guarantee its effective and consistent implementation. There are complex dynamics involved in this. Taken together, these two components aim to help government and others to understand which policies may help improve learning outcomes, what needs to be done in order to deliver these in practice, but also to ensure that the realities of practice can inform policy.

THE PABER APPROACH

Benchmarking is at the heart of both the PaBER project and what has now been dubbed 'the PaBER approach'. Originally developed for the business world, benchmarking provides a systematic process for measuring and comparing the performance and work processes of one organisation to those of another. The goal of benchmarking is to provide an objective standard for measuring the quality, cost and efficiency of internal activities, and to help identify where opportunities for improvement may be found. The adoption of a benchmarking approach in education represents a significant shift in education system development and reform, since it involves making available performance

information that permits comparisons within and between systems. Benchmarking in education attempts to answer three questions:

- a. How well is a system, or parts of a system, doing compared to an external reference standard, defined in relation to the performance of others?
- b. What are the better performers doing that the poorer performers are not?
- c. What interventions can be developed to bring about improved learning outcomes?

Benchmarking provides a baseline against which the performance of education systems can be monitored, and it also facilitates diagnosis – understanding areas of lower performance and the underlying factors to act upon to bring improvement. It also helps to provide a measure of transparency so that stakeholders are able to hold education providers accountable for the quality of education based on evidence rather than anecdotes or political rhetoric.³

The PaBER team developed an approach to examine and apply the findings from the analytical work carried out throughout the three components of the project. This consisted of applying the same instruments/tools in all countries, which included an internal validation process where the countries signed off on the findings. Every analytical work then went through a cross-country analysis at the regional level.

Regional workshops were then held with participants from the countries. The reports were presented and a cross-country analysis was carried out to explore commonalities as well as contextual findings unique to each country. The workshops allowed for a robust exchange of ideas and knowledge. The findings and recommendations from these workshops were captured in cross-country regional reports. The crosscutting analysis among the three countries was at the heart of the PaBER approach.

As noted above, existing instruments were utilised for some of the activities, including the PILNA tool and the SABER instruments of the World Bank. The SABER methodology includes identification of indicators of policy and institutional development, as well as the data source for each indicator. A rubric has been developed

³ Programme design document: Pacific benchmarking for education results (2012).

for combining the indicators to come up with ratings of the countries' progress within each domain.

SABER instruments have been standardised so that progress along each dimension is defined on a four-point scale, ranging from 'latent' (the lowest level) through 'emerging' and 'established' to 'advanced'(the highest level), based on international benchmarks. The SABER programme had not developed an instrument for curriculum and materials, and PaBER contracted an international consultant to design an instrument using the SABER methodology and rubrics for easy comparability. This approach of ranking from latent to advanced was also used in some of the other instruments used in the PaBER project. Ranking is not explicitly used/referred to in this report, but it sits behind the analysis.

A more extensive description of the governance structures and its methodology can be found in Annex 1 to this report.

FINAL RESULTS

Through this approach, the PaBER project has provided a breadth and depth of evidence for each domain on policy and policy delivery, including how institutional and staff capacity influences the implementation of policy. The purpose of this report is to pull together the key evidence from the three countries' findings across the five domains and how they intersect. This regional analysis has been accomplished through consolidation of the multitudes of findings drawn from each of the country reports.

In addition to this regional report, there are individual country reports and cross country analysis reports that provides more in-depth findings on each of the specific components and policy domains (see Annex 2 for list of reports and Annex 3 for country specific findings by policy domain).

ACHIEVEMENTS AND LIMITATIONS

The PaBER project has achieved several outcomes, both intended and unintended, over the four years of its implementation. In addition to diagnoses of Year 6 students' performance in literacy and numeracy, establishment of national benchmarks in key policy domains, and the generation of a substantive body of evidence to inform and facilitate whole-of-systems educational change, the project has produced a methodology and a set of contextualised tools to support benchmarking work in the Pacific. The principle of transparency that was key to the project has ensured that frank and open discussion has occurred at each workshop and meeting throughout the project. This spirit of sharing and collaboration has opened the door to learning from one another and has gone a long way to break down the barriers that have prevented ministries of education from sharing results and practices in the past.

The PaBER project, like any other project, has limitations that should be kept in mind when looking at the results. The project was designed to look at evidence to inform policy and planning with a view to improving student learning. The evidence is being presented now, at the end of the project. While findings and recommendations in the individual domains have already begun to have impact on national planning and practice, the intent was not to have implemented everything by the end of PaBER, but rather to have the evidence in place for the next steps in national education planning. In addition, although the aim of PaBER holds improvement of student literacy and numeracy at its core, the pilot project did not expect to impact on student learning levels during the data collection and analysis phase that was the pilot. The impacts on student learning levels will be apparent over time as the recommendations are acted upon to produce lasting system improvements.

PaBER has developed from an idea into a significant body of evidence that has the potential to make a real difference in education systems and student learning outcomes across the PaBER pilot countries. The body of evidence can support decisions regarding education systems and education policy. Not only have the findings identified or confirmed areas in which to focus priorities, the evidence gathered from multiple sources during the pilot quantifies those findings and suggests what should be monitored for sustained improvement over time. The

⁴ The What, Why and How of the Systems Approach for Better Education Results (SABER), April 2013.



tools and methodologies that have come out of PaBER can be utilised by others to undertake similar work and the findings of the pilot project can inform ministries, development partners and the broader education community at work in the Pacific as we collectively work to achieve high quality education for all students.

The three PaBER countries share common and also unique background context. PNG shares a similar ethnic and cultural diversity with the Solomon Islands, and Samoa is the least diverse country.

There are large differences in terms of geography, population and language between the three countries. PNG covers a landmass of 463,000 km², around 600 islands with an estimated population of 7.3 million (2013) that speaks more than 850 indigenous languages. The Solomon Islands, the second largest country to PNG in size, has a population of just over half a million people (2010) and consists of more than 900 islands across the archipelago. Samoa on the other hand, comprises of ten islands, a land area of 2,820 km² with a population close to two hundred thousand. Both PNG and the Solomon Islands use the English language as the language of instruction in schools, whereas Samoa utilises a bilingual language policy of Samoan and English.

Economically, PNG is a low- to middle-income country with a gross domestic product (GDP) of USD15.4 billion and a per capita income of USD2,104.9 (World Bank, 2013). It has a formal, corporate sector and a large informal sector where subsistence farming accounts for the bulk of economic activity. The formal sector provides a narrow employment base, and consists of mineral production, some manufacturing, the public sector, and services including finance, construction,

transportation and utilities. The country is rich in natural resources (forests, fish and minerals) and has vast ecosystems hosting a unique biodiversity. Oil and gas, mining and construction activities have allowed the economy to expand strongly in recent years.

Similarly for the Solomon Islands, more than 75 per cent of the labour force is engaged in subsistence farming or fishing. The country is rich in natural resources, including timber and commodities such as canned tuna, palm oil, copra, and cocoa. Samoa has around 12 per cent of the total population engaged in formal paid employment. Two-thirds of the potential labour force is absorbed by subsistence village agriculture, a dominant sector in the local economy.

Samoa is reliant on foreign imports and has a large trade deficit. The economy is largely driven by tourism (20–25 per cent of GDP), remittances (25 per cent of GDP), and foreign aid.

NATIONAL EDUCATION SYSTEMS ACROSS THE PILOT COUNTRIES

National education systems across the three pilot countries shared similar and varied levels of governance from national to subnational levels. PNG has 22 provinces and three governance levels: national, provincial, and local districts. Solomon Islands has 10 provinces with two governance levels (national & provincial). Samoa has 22 districts with one level of governance. Both PNG and the Solomon Islands have provincial government systems which leads to a highly decentralised education system. The national government in the three pilot countries is responsible for developing national polices including the curriculum, national education plans and teacher education and training.

PNG has the highest number of schools, student enrolment and teaching workforce among the three countries, because of its larger population size. The PNG National Department of Education (NDoE) provides support and oversight to provinces for all schools registered within the national education system. About half of all the schools are run by churches.

Education in PNG and the Solomon Islands is not compulsory, a point of difference when compared to Samoa. In Samoa, primary education from Years 1 to 8 is compulsory for children between the ages of 5 and 14.

In 2015, the government of PNG through its NDoE adopted a National Education Plan (NEP) for the five-year period 2015-2019. The NEP sets out the broad roadmap for education in PNG with specific education targets and strategies. It provides the framework for translating the national plans and the international education goals, including the Millennium Development Goals and the Education for All goals, into concrete targets and strategies for the PNG education sector. Likewise, in the Solomon Islands, the Ministry of Education and Human Resources Development (MEHRD) has recently undergone significant reforms and is guided in policy by its Education Strategic Framework and in turn by its National Education Action Plan. The MEHRD has now adopted a longer term Education Strategic Framework 2016-2030. This framework aligns to the Sustainable Development Goals (SDGs) that reflect national priorities, and guides the new National Education Action Plan (NEAP) 2016-2020. In Samoa, The Ministry of Education, Sports and Culture (MESC) is the key arm of government responsible for ensuring the efficient and effective implementation of the Education Sector Plan amongst others, and is mandated to carry out its duties and functions as stipulated in the Ministerial and Departmental Act 2003 and the Public Service Act 2004; together with its policy framework which guides its operations.

In terms of current reforms and initiatives, PNG has carried out a number of significant reforms in education. Large-scale curriculum reform was introduced in 2014 based on a standard based curriculum model. The curriculum reform puts emphasis on the subject and content standards which students are expected to acquire to transit into higher grades. Teacher quality issues include upgrading of teacher qualifications, introduction of aptitude tests for persons wishing to become teachers,

and development of teacher quality indicators. PNG also has introduced a Fee Free Tuition Policy for all its schools within the national education system.

Similarly for the Solomon Islands, through its sector wide programme the management of the formal education system is being strengthened and has introduced various policy initiatives such as basic education policy, learners' assessment policy, literacy policy and procurement, distribution and storage policies of curriculum materials. Other initiatives include up-dated school infrastructure, a school grants policy and fee free education, training of untrained teachers by distance education, pilots in vernacular to increase access and the quality of education, and revised curriculum and the distribution of text books and teaching aids to primary schools.

Samoa has also undertaken a number of significant reforms in education. The Samoa School Fees Grant Scheme (SSFGS) was launched in 2010 to provide grants to primary schools in lieu of school fees. For the MESC, its policy framework underpins donor support which is channelled through the Education Sector Programme. Samoa has undertaken reforms in curriculum and assessment, monitoring and evaluation, teacher professional development, and continued supporting the establishment of minimum service standards at school level. The MESC has also adopted a whole school approach to school improvement.

In terms of the education budget, the financing of education programmes in PNG has increased since 2011–2015. The education sector's share of total public expenditure rose from 12.5 per cent in 2011 to an estimated 14.4 per cent in 2015. This was due to the government prioritising education as one of the important pillars for effecting and stimulating economic growth. Likewise, the share of GDP going to education has increased over these five years. The Government of Samoa allocated 18 per cent of public expenditure to education in 2012. This represents 2 per cent of GDP.

There is a challenging environment for service delivery in all three countries. The NDoE in PNG continues to face the challenge of having the organisational capacity to administer and monitor the implementation of policies at the provincial, district and school levels. The interface between national and subnational levels of education is weak. The Solomon Islands is also faced with weak infrastructure and institutional capacity constraints at all levels. The majority of schools do not

have access to electricity and communications, directly impacting educational services in the country. Although initiatives are being undertaken to provide speedy and affordable internet connections, access to rural areas still poses a significant challenge. For Samoa, there are ongoing capacity issues and constraints by school leaders and teachers in responding to learning assessment results. This concern is also true for the other two pilot countries. Retaining high quality teachers in the system is a problem at both primary and secondary levels. This is being addressed through the development of a National Teacher Framework, which specifies policies in teacher management and development. Selected national education indicators across the three pilot countries are shown in Table 3.

TABLE 3. Selected Education Indicators

INDICATOR	PNG 2014	SOL 2014	SAM 2015
Net enrolment rate, primary / basic	84%	88.4%	104%
Completion rate, primary / basic	77%	63.5%	88%
Pupil-teacher ratio, primary / basic	36.1	23.2	27.1
Qualified teachers, primary / basic (per cent)	75.4%	68.7%	84.3% ^a 3.6% ^b
Gender parity index, primary / basic	0.92	0.97	0.93
Public expenditure on education as per cent of total government expenditure	20.2%	29.6%	n/a
Public expenditure on education as per cent of GDP	4.9%	12.3%	n/a

^a 2014 data on % of primary teachers with Diploma in Education.

Despite the gains in enrolment, all three PaBER countries are facing a crisis in learning. Students are not acquiring the basic literacy and numeracy skills that are needed to be successful for further education. The PILNA (2012) results for English literacy ranged from just under 8 per cent in Samoa to just over 40 per cent of children are performing at the expected level in the Solomon Islands. Roughly 18 per cent of PNG students are performing the expected level. In all countries the achievement disparity within subgroups remains a challenge especially whereby non-government schools outperform government schools by a large proportion. Likewise, students attending urban schools are performing better than those attending non-urban schools.

^b 2014 data on % of primary teachers with Bachelor in Education.



The PaBER project adopted an ambitious scope of analysis across the education system. The five domains were selected in recognition of their important role as enabling inputs to improving the quality of education. In planning reform, each of these areas can be seen, to some extent, as closed, self-reinforcing systems. So, in addressing teacher quality, we cannot only look at inservice professional development, or the preparation teachers receive on recruitment. Teacher quality is also influenced by the quality of candidates entering the profession, the conditions under which they work, and how they are motivated and supported to perform. A teacher also needs to work in a well-managed school, the operational parameters of which vary from country to country. We know that to contribute to learning, a good school needs a degree of managerial autonomy, to use assessment to inform teaching practice and inform the training of teachers, and to use results to ensure accountability to stakeholders locally and higher up the system.

For each of the domains under the PaBER project, the research and analytical tools were designed with this in mind. A significant body of work has been established which can be used by policy-makers and technical staff at different levels of the system to inform planning and track progress over time. It is not possible in a summary report to capture the breadth of this work, or do justice to some important issues. However, it is possible to draw out some clear emerging priorities. It is also possible to see that there are important ways in which these domains, or parts of the education system, interact. It is unlikely that in trying to address a shortcoming in one area without taking account of these interactions, optimal results will be achieved.

As stated in the introduction to this report, the purpose of the PaBER project was to focus on those areas that

would impact on learning, particularly literacy and numeracy results. It has also been a guiding premise to focus on how the education system enables the process of teaching and learning in the classroom. With this in mind, this section sets out some of the cross-cutting themes, which are emerging as priorities and which in some way speak to the priorities already set out across the three pilot countries' national education plans.

EMERGING THEMES AND PRIORITIES

FINDING 1: Professional development of teachers is inconsistent and insufficient, in part due to the lack of clear policy guidelines

Policy documents, in the three PaBER countries, support regular professional development at the national and school level. Although policies state that professional development is required for teachers, these polices lack specific details that would guide implementation at national/sub-national as well as school level, and also ensure consistency. For example, teacher professional development training does not include activities that research has found to be associated with instructional

improvement (e.g. participation in teacher or school networks, engaging in research and induction programmes, and mentoring) and there is no statement of minimum number of required days of professional development per year.

Even though, teachers' tasks are officially stipulated, there is no specific guidance on the

"High-performing systems spent more time on activities that are related to instructional improvement such as analysis of instructional practice or research. In addition, these systems allocate more time for teacher professional development than actual contact time with students."

PaBER cross-country report -Teacher Quality percentage of time teachers should allocate to tasks such as professional development, supervising students, grading assessments, and standing in for absent teachers. Non-teaching time allocated to training, mentoring, collaborating with other teachers can make teaching time much more effective and meaningful.

PaBER research findings revealed that the majority of teachers do not receive professional development on an ongoing basis thus leading to inconsistencies in the type of professional development provided to teachers who do take part. For those teachers who participated in such training, there is little evidence to suggest that skills learnt have translated to improved teaching. It is also likely that the lack of structured training and mentoring programmes for school principals is limiting their ability to provide instructional leadership and support to teachers.

FINDING 2: The skills and competencies of teachers to effectively carry out classroom assessments, from planning to the use of assessment results to improve teaching and learning, vary considerably.

The effectiveness of classroom assessment is influenced by teacher knowledge, and the resources at their disposal, as well as their level of competency in identifying and using

the most appropriate method. This leads to teachers using only the methods they are comfortable and competent with such as paper and pen tests, despite issues relating to the validity of the assessment, at the expense of other more appropriate assessments such as portfolios.

"International research has shown that the assessment skills of teachers matters for improving student learning outcomes. Some of the studies...indicate that many teachers are ill-prepared to develop, administer, and interpret the results of various types of assessment."

Assessment audit of teachers and assessment personnel report, PaBER 2014.

Research findings do indicate though that teachers lack skills in planning and developing classroom assessment, as well as using and reporting classroom assessment results. One of the most important skills teachers lack is the use of classroom assessment results to improve teaching and learning.

The majority of teachers, based on the research findings, use summative not formative assessment and are unable

to develop and use assessment tools to guide teaching strategies. Reports generally include aggregate test scores only, and very little commentary is provided about the learning that has taken place. Such reporting does not provide meaningful information to the student, parent or the teacher.

With the limited assessment capacity of teachers, how they conduct classroom assessment varies significantly between schools and classrooms, which leads to inconsistencies in how the results are used by stakeholders within the school (students, teachers, and school leaders) and outside the school (parents, school boards/committees and the community) to improve learning. While assessment policy documents make reference to classroom assessment, they fail to provide clear guidelines on implementation at the classroom level, or monitor the quality of the assessment and use of the results to improve teaching and learning. Teachers do not have access to the necessary support to be able to successfully carry out the assessment in the classroom and be able to effectively use the results to improve teaching and learning. This may be impacting on delivery.

In addition, there is limited use of assessment results for school and management decisions. This is compounded by mechanisms that are not well established to enable stakeholders to demand accountability through use of school and student assessment results. This all indicates a need for more formal/structured training of teachers, both pre-service and in-service, to strengthen their use of assessments and adapt their teaching strategies based on the needs of their students.

FINDING 3: Schools lack adequate supply of curriculum materials and quality resources to deliver the curriculum effectively.

The lack of adequate access to curriculum materials in schools is a problem found in the three pilot countries which prevents teachers from effectively delivering the curriculum. Shortage of curriculum materials in literacy and numeracy curriculum documents is a chronic problem across most schools. In some schools, curriculum materials are lacking not only in English and Mathematics but all subjects and across all grades. Where a school has access to curriculum materials, support teaching materials are usually limited or not available at all. This shortage of curriculum materials and support teaching materials led teachers to produce their own through extensive photocopying. Lack of teachers'

guides is also a problem and teachers resorted to sharing of curriculum materials, an arrangement most practiced by schools with limited supply.

Teachers' capacity to effectively assess student learning through the development and application of classroombased assessment is hindered by an insufficient supply

"Curriculum materials are a critical component for improving subject instruction and supporting teachers to deliver quality education."

Mapping of policies on curriculum and materials report, PaBER 2015.

quality resource Evidences materials. have also shown that schools where have assessment plans place, assessment plans have been consistently implemented across schools and is common to note variations in

teachers knowledge and understanding of assessment.

Although curriculum policies have been developed and implemented in the three pilot countries, the extent of practice and expectations of the curriculum has taken different forms in schools. In one pilot country, procurement and quality assurance of curriculum materials are broadly stated in policy but lack specific direction for implementation and guidance for monitoring implementation. Policies are in place but schools have little or no capacity to evaluate them and ensure their quality in aligning with the curriculum outcomes.

FINDING 4: Curriculum is implemented inconsistently across schools and classrooms due to low competency of teachers to confidently implement the curriculum as intended.

There is variable implementation of the curriculum due to teachers' diverse competency and capacity. Competencies for teaching the curriculum are not fully articulated in the curriculum policy and on some level contributed to variations in implementing the curriculum in schools and across classrooms. Teachers have mixed awareness and understanding of the expectations of the curriculum and often find terminologies in the curriculum hard to understand.

Teacher competency in the implementation of the curriculum is generally supported through professional development and monitored through the national professional standards for teachers, but teachers have not been trained, either because of lack of opportunities

to attend profession development workshops, or sessions are non-existent in schools. Competencies of teachers teaching English and numeracy have not been strengthened through teacher competency standards in the three pilot countries. As a result, teachers' preference to teach in their own mother tongue over what is prescribed in the curriculum policy is having an effect on student literacy in English. This leads to low teacher confidence using the curriculum outcomes to monitor classroom assessment and reporting of students learning.

FINDING 5: There is limited capacity of school leaders in the design and implementation of school-based professional development programmes.

Mechanisms to monitor and evaluate performance of head teachers, as well as identifying and building capacity of potential school heads, are either weak or inconsistent. The design and implementation of a school-based professional development programme to improve teaching and learning is hampered by a lack of management skills at the school level. There is a lack of policy at central level to support school autonomy (school governance and operations).

FINDING 6: Absence of an EMIS policy and guidelines to support processes, procedures and resource allocation for an EMIS.

Absence of a comprehensive EMIS policy that provides clear guidelines on processes, procedures and resource allocation is a major finding in the three pilot countries. This may limit the future development and sustainability

of an EMIS. There are no guidelines in place to support the running and effective utilisation of an EMIS system, nor a dedicated budget to ensure its longer term sustainable funding. Although operations of an EMIS have been established, it is often that these operations are guided by a national ICT policy which too often addresses issues not related to an EMIS.

"Information is a key ingredient in an effective education system. A successful EMIS is credible and operational in planning and policy dialogue as well as teaching and learning."

SABER EMIS report, 2015.

The EMIS data has been utilized by the central system in the three pilot countries. The extent of underutilization of the EMIS data remains very high. There is an underutilisation of EMIS data by stakeholders for school and system planning and management, and informing policy decisions. This is exacerbated by the lack of integration of education data which limits the communication of information and the utilisation of the EMIS data for better informed decisions at different levels.

The EMIS Unit lacks the capacity to deliver its mandate effectively. Limited systems and capacity to analyse data limit the utilisation of an EMIS for decision-making at system and school levels. There are capacity and technical constraints in the operations of an EMIS.





THE INFLUENCE OF THE PABER PROJECT AT THE COUNTRY LEVEL

At the country level, the PaBER project has had varied influence depending on the level of commitment demonstrated by each country towards the PaBER philosophy and approach as an evidenced-based project. However as a pilot, it is crucial for the PaBER project, and any future lessons that other countries could learn from the pilot, that each pilot country starts telling its story and the influence that the PaBER project has had. Without this, the other countries in the region that have shown keen interest in being part of a similar support process will not have the benefit of lessons to be learned from the pilot countries. Outlined below is how the PaBER project has influenced the situation in each country during the life of the pilot project.

PAPUA NEW GUINEA

The PaBER project has made some significant input to, and impact on, PNG's NDoE in the following areas.

- 1. The NDoE in the new structure: The PaBER project has provided insight into guiding the NDoE in the new structure of its divisions and wings. The new structure has catered for additional wings that clearly demarcate their functions to promote 'standards and quality' in service delivery to teachers and students. As a results of the diagnosis on the national system's policies, the NDoE has seen the gaps over the years in effective and efficient delivery of education services to enhance teaching and learning. Thus, the 'Provincial Education Services Wing'was created. These new structures have been created to cater for monitoring standards and providing quality in curriculum and academic achievement, providing quality services to schools, and monitoring teacher standards and training. PNG has highly decentralized education functions.
- The new National Education Plan (NEP) 2015 - 2019: The project has also had an influence on the new NEP 2015 - 2019 especially in two key areas. As a result of the PaBER work on mapping policies in the four key policy domains (School Governance & Management, Teacher Quality, Student Assessment and Curriculum), the NEP 2015 - 2019 provides for a strategy to map and monitor the policy situation with the intention of improving such policies. In addition, the NEP also allows for the use of data from the assessment of literacy and numeracy through the PILNA to monitor and evaluate the learning of students throughout the system. Key divisions within the NDoE are now aware of policy gaps and recommendations from the various PaBER reports and are taking measures to address them in a positive way.
- 3. Development of Standard-based Curriculum: The experience from the PaBER project in terms of the use of benchmark standards as the basis for monitoring literacy and numeracy has assisted PNG in the development of its new standards-based curriculum, especially at the primary level. This has guided the NDoE through its Curriculum Division to set clear benchmarks at each grade level in the effort to raise the standard of student performance in all subjects, especially in Mathematics and Language/English.
- 4. The PaBER work in the country has linked up key divisions in the NDoE and other entities within the Ministry of Education. There is more open dialogue, sharing of information and collaboration and consultation on ways forward to improve standards and quality system wide.

- 5. The PaBER project has also contributed to capacity building of the NDoE personnel through trainings and workshops attended through the life of the PaBER project. Through PaBER, PNG was able to learn lessons from other 2 countries on their good practices as well as other international best practices in terms of policies in the areas of curriculum, school governance, and assessment and teacher standards.
- 6. The analysis of the institutional capacity and staff capacity in the Assessment Division conducted by the PaBER project has provided opportunities for other divisions within the NDoE to consider their capacity. This has seen senior officers undertaking capacity building at the country level. Some are anticipating putting in place strategies for capacity building within the various divisions.
- 7. Sharing of information, one of the key issues PaBER has been promoting (transparency), has also had an impact within the NDoE with the various divisions within the NDoE now sharing information and experiences. The sharing of the PILNA results for example has challenged schools to put in place intervention strategies to improve the effectiveness of teaching and more importantly student learning.

SAMOA

Overall, the PaBER project has made an important contribution to some of the key developments that are being implemented in Samoa.

1. The institutional capacity analysis aspect of the PaBER project has enabled the MESC, to identify, and in some cases reconfirm, the skills gaps that exist within the Assessment Unit and as a result, a strategy to urgently address these is being developed. While waiting for the strategy document to be finalised, MESC is progressing with the available capacity building opportunities for staff, a good example of this is the financial support offered for the Principal Education Officer for Assessment to take up the Professional Education course which focuses on Education Assessment, Measurement and

- Statistics at the Western Australia University.
- 2. The assessment of policy intent using the SABER tools and the PaBER tool for the Curriculum and Materials domain is a new experience for the MESC and a very critical one at that because it facilitated the identification of the gaps in its policies. Some of these policies have been in place for a significant number of years and they have not been thoroughly analysed as it has been done under the PaBER project. This policy intent analysis activity has also led to a rethinking of the format and documentation of some of the Samoan education policies.
- 3. Benchmarking is an approach that Samoa has decided to adopt for its development, especially in the core divisions of MESC such as Policies and Research, Teacher Development, School Operations, Curriculum and Assessment and Monitoring and Review. Benchmarking for the new primary curriculum implementation was introduced in September 2014 and teachers from government schools conducted visits to one of the private schools to witness some of the best practices there, especially in the teaching of literacy and numeracy.
- 4. Samoa in 2014 started a phased approach to replace the schools broadcasts over the radio with the television programmes. Using the benchmarking approach, the MESC started identifying best practices from the schools in terms of the teaching and learning approaches and using them for the television programmes. There has been a lot of positive feedback from stakeholders for showing real life situations in the field which the rest of the schools can learn from.
- 5. Research evidence to support and inform policy development is an important approach of the PaBER project that Samoa is taking note of. Although Samoa has implemented a number of interventions as a response to the findings of the PILNA 2012 and SPELL results, the outcomes of the PaBER research on policy in practice would inform revisions to the current initiatives and new interventions can be formulated if necessary.

- 6. The PaBER project has also provided much needed capacity building opportunities for a significant number of the MESC staff in the four policy domains. The flexibility of the project to accommodate as many participants as possible from the three countries has provided for more staff to have their capacity built and contribute to the various activities and outputs of the PaBER project. It also allowed more staff within the MESC to gain a better understanding and appreciation of the PaBER project and what its focus is.
- 7. The cross country analysis is one other important activity under the PaBER project that has enabled Samoa to further compare its policy situation to that of the other two countries in the four PaBER domains, as well as the students' performance through PILNA. The sharing of information and learning from one another is an important aspect of this project.

SOLOMON ISLANDS

The Solomon Islands participation in the PaBER project has had several positive impacts including;

- 1. PaBER-NEAP integration: PaBER activities have impacted positively on quality education and specifically on teaching and learning aligned to the quality outputs in the 2013-2015 National Education Action Plan (NEAP) implementation.
- 2. The PaBER approach to benchmarking provided the Solomon Islands with a systematic and reliable approach:
 - a. to better understand its own system and processes;
 - b. to have improved understanding of policy gaps and misalignments which subsequently had resulted in better policy development, review and implementation;
 - to identify which policies, processes and activities have contributed positively on the quality of education; and
 - d. to learn from other pilot countries best practices that can be adapted to local context.

- 3. Skills and knowledge transfer through a series of regional workshops attended by MEHRD officers: this has led to a better understanding of roles and responsibilities and increased participation in MEHRD activities.
- 4. Develop a culture of evidence-based approaches to inform policy reforms and decision-making. Co-sharing of decision making is now widely practiced within the MEHRD. There has been a change in how we carry out internal processes such as using assessment tools, data analysis, confirmation of drafts and reporting.
- 5. Adoption of PaBER project's Risk Management Strategy and its application down to the divisional level has helped the MEHRD manage its own NEAP.



RECOMMENDATIONS FOR THE COUNTRIES

This report has pulled together some of the key emerging findings from the country reports. From this, we have looked at how some of the issues interact and how this may have an impact on student learning. This section therefore sets out a small number of recommendations, which draw on the country reports, seeking linked responses that target improvements in classroom teaching and learning processes.

The recommendations therefore aim to promote practical efforts and actions that can bring about change at different levels, also recognising from the PaBER analysis that we need to target a number of actors at the same time and focus on capacity building and institutional support where it is most needed. It is not suggested that these recommendations represent all that is needed to address what are often complex and interconnected areas of system reform. They are a first step and a good place to start based on the evidence that we have. It is suggested that for more detailed reform and implementation planning to refer to the individual country reports.

Recommendation 1: Strengthen classroom and national assessment practice to inform teaching and learning and improve accountability

Review, strengthen and update the policy and guidelines for assessment, covering school and classroom-based assessment, and the broader national-level assessment of learning to ensure clearer guidelines on the use of assessment data to improve pedagogical practices and school operations, and make personnel adjustments to maximise student learning outcomes. This also ensures there is consistent implementation

across schools. As part of the revised policy, schools should be mandated to develop assessment plans, and guidelines should be provided for monitoring this. As part of this process, consideration should be given to making assessment results public at national and subnational levels – not to shame, but to identify and better understand, through research and analysis, under-performance as well as good performance. Work on curriculum and materials also points to the need for policy to mandate standardised assessment of literacy and numeracy at all levels.

To improve the implementation of this assessment policy, there is a need for support for both teachers and assessment personnel to develop their competencies in this area. Teacher training (both in-service and preservice) should cover classroom assessment, including the development of assessments, and analysing, reporting and communicating assessment results. Training and support for teachers should include the use of methods beyond multiple choice and information recall activities, and should be used for more formative assessment beyond student ranking. Head-teachers also need specific training in assessment to ensure they can provide leadership to teachers and can use the results from different types of assessment to inform school management decisions and instruction. As part of this, reporting mechanisms need to be put in place to ensure schools have the results of assessments and can use them.

In order to support this, and ensure more effective national-level assessment, **personnel at the central level need additional training** and consideration should be given to the **appropriate staffing levels** and competency needs of Assessment Units in particular.

Recommendation 2: Enhance teacher skills through more systematic and comprehensive professional development.

A key priority emerging from the findings is to address the lack of a clear policy and integrated approach to professional development programmes for teachers. It is suggested that a **policy is needed,** or a review is conducted of current **guidance and responsibilities for ensuring professional development takes place** and is of sufficient quality and quantity (annual minimum requirements), sets out the modes of delivery, and gives sufficient attention to matching provision to identified needs.

A comprehensive professional development framework could be developed that focuses on competencies for instructional improvement, includes a range of professional development approaches and methods, mandates a minimum time spent on professional development annually, and incorporates a monitoring and evaluation framework to guide school-based professional development. Competency standards are needed to guide professional development and ensure it is aligned to curriculum priorities.

A related recommendation is to ensure **head-teachers** receive appropriate training to provide leadership and support to teachers, particularly on improving their teaching practices and content knowledge, and that they can implement systems for teacher performance appraisal. As part of the induction of head-teachers to their role, support should be provided in line with international good practice, including mentoring and peer learning.

Recommendation 3: Develop mechanisms for procurement and monitoring of learning resources.

Most schools are lacking a reasonable range of curriculum support materials to enhance teaching and learning. The recommendation therefore is to undertake a strategic review of procurement and distribution of curriculum materials to ensure more effective distribution of high-quality learning materials to all schools and to monitor the effectiveness of the procurement process. A related recommendation is to ensure curriculum officers at different levels are given appropriate and regular training and support.

At school level, roles and responsibilities can be strengthened to support this. This should include **developing school-based responsibilities** to manage and coordinate the supply of learning resources, and mandating the use of school budgets to purchase learning materials. School committees should be empowered to take an oversight role in ensuring the school has sufficient learning resources for students. This role should be part of a school management policy that clearly stipulates the roles and functions of the school committee.

Recommendation 4: Strengthen school-based management functions and capacity.

Findings indicate that some of the barriers to policy implementation more broadly relate to issues around school management; that is, the inconsistent understanding and implementation of policy, and the roles of school principals and School Committees. ministries should undertake Education review and consolidation of policies establishing School Committees and setting out their roles and responsibilities. The role of the School Committees could be strengthened and expanded to include a role or increased voice in the recruitment, transfer and management of teachers, clear responsibilities in budget/ grant planning and management, and more of a voice in issues around student learning, not least the use of assessment data. This should be accompanied by a manual setting out the operations of School Committees, which would serve as a valuable reference guide, and by regular training to ensure consistent understanding of these responsibilities.

As set out above, for assessment and professional development, school principals need more systematic and regular training and development (e.g. mentoring, peer education) to ensure they can fulfil their responsibilities properly.

Recommendation 5: Integrate and ensure the future development of an EMIS.

The PaBER country reports highlight the good progress made in establishing a functioning EMIS, particularly in terms of providing information upwards from schools to various levels. The reports outline a number of ways in which the EMIS now needs to be consolidated and its future guaranteed and planned for. These include **establishing an EMIS policy** to set out provisions for the budget; data collection, management and utilisation; integration with external databases; and professional development.

There are a number of ways the EMIS can be taken forward, and this will need to be reflected in the ministries' plans. It is suggested the PaBER reports can form a starting point for planning and capacity building in this area. Some of the key areas included in this will need to be the **integration of learning assessment data**, enhanced **utilisation of data by key stakeholders** including effective feedback loops to Education Authority/school-level stakeholders, data integrity checks, and **professional learning for staff**.

LESSONS LEARNED

The PaBER project had an ambitious agenda and a multifaceted methodology. The project attempted to go down the whole road, from formulation of policy at the national level to implementation of policy and practices in the classroom. To a large extent, the PaBER project succeeded in producing a robust evidence base on the challenges in improving learning. Some key lessons emerged from the analytical work that was done along the journey. The research also opened new pathways that could be explored. The following are some of the key lessons learned that are relevant.

- 1. The research told us some things, but not everything. The field research made a valuable contribution as it gave a clearer picture of what is taking place at the school level. But it could be improved to answer key questions in more depth, and possibly to look at how policy implementation takes place at levels between the central ministry and school (local authorities, districts, etc.). There would be some value in reflecting on the tools used for capacity analysis, and looking at aspects of teacher skills other than for assessment. All of this could be considered if/when planning further roll-out and adoption.
- **2.** Some schools perform better than others, but we still do not know why. The PILNA results clearly showed that some schools are achieving good learning outcomes. Follow-up analysis could look at high performing schools and understand what they are doing that could be applied more broadly. According to the PILNA results, there are significant differences between public and private and urban and rural schools.

- 3. Publication and open discussion of learning outcomes can act as a wake-up call for countries - governments are acknowledging that learning is not taking place. When the PaBER project started there was little public sharing of what was considered 'sensitive' information. Most staff from ministries had a strong sense that there was a learning crisis but few actually knew how serious the situation was. The process of benchmarking against other countries can lead to more transparency, better implementation of solutions, and strong ownership. It is difficult to know if the three countries would have addressed the findings and evidence if they had not put their own weaknesses in the spotlight.
- 4. Good policies alone do not translate into good education results. The policy reports from Papua New Guinea, Samoa and the Solomon Islands showed many areas where the three countries have established policies benchmarked against international standards. However, the learning outcomes are very poor. Policy intent provides the framework for strong education systems, but the implementation of policies must be based on proven practices that lead to better learning.
- 5. Countries want to implement reforms, but the resources and capacity are not always available. Ministries and departments of education are keen to improve their education systems and are increasingly open to seriously reviewing their weaknesses and using evidence to find solutions. There is now an abundance of findings and recommendations and the countries are embracing them, but implementation is still very weak. Implementation may be based on priority areas.
- 6. The SABER instruments and approach can give a country a solid start to assessing its education systems. The original SABER tools assessed only policy intent. There is now a recognised need to assess both policy intent and policy implementation. Otherwise, there is a serious risk that the findings from the reports could give a skewed picture of a country's education system. In addition, the tools become more reliable when a series of SABER tools are used in one country. This provides a deeper

analysis of the system and a wider array of policy recommendations. The EMIS instrument underpins the data needs in a country and should be included where other tools have been implemented. New SABER tools include both policy intent and implementation.

7. Regional collaboration, and open exchange of best practices based on a solid evidence base can help countries better focus their resources. The PaBER project provided a good start on benchmarking education systems across the Pacific. The evidence provided in this report and the recommendations should help countries improve learning over time. This experience should not be lost. Future work could include: periodic tracking of the domains in the existing countries; review and revision of the PaBER instruments and tools for other countries; and expansion of the approach to other countries in the region.

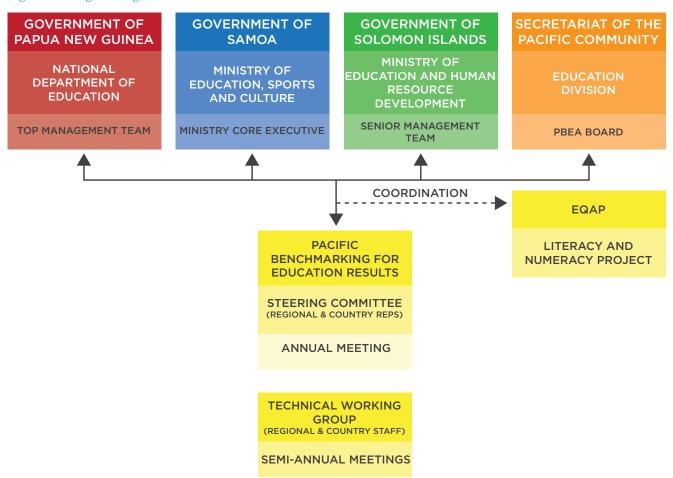
ANNEXES

ANNEX 1. PABER METHODOLOGY

PABER GOVERNING STRUCTURE

PaBER governing structure comprised of three layers; i) governments of the three countries (ministries of education) and SPC have overall, oversight and responsibility for PaBER; ii) a steering committee (SC) which consisted of CEOs from the respective government education ministries including the presence of the Director of EQAP and representatives from DFAT; a technical working group (TWG) comprises of country technical experts and jointly chaired by EQAP and DFAT. PaBER governing structure is shown in Fig 1 below.

Fig 1: PaBER governing structure



The TWG has co-chairs [EQPA Director and DFAT] and meet bi-annually produce reports on annual implementation plans, monitor progress achieved on a six-monthly basis and provided budgetary updates and financial reports that are discussed and endorsed by TWG. These reports are presented to the SC for approval.

EQAP took on the role of Project Manager and played a leading role in overseeing the overall management of the program. EQAP PaBER officers provided the secretariat support and technical assistance to the countries. At the country level, each country appointed a PaBER Country Coordinator to oversee the proper implementation of the program at the country level. This governance structure is unique to PaBER and is successfully implemented throughout its life.

PROCESSES FOR POLICY ASSESSMENT

Five policy assessments were carried out in 2013 – 2015 in Papua New Guinea, Samoa and Solomon Islands. Each policy assessment was carried out using the same process with the exception of the EMIS assessment. The SABER EMIS instrument was developed later by SABER and not included in the original design of PaBER. It should be noted that the Teachers, School Autonomy and Accountability, Student Assessment and Curriculum and Materials instruments were primarily looking at policy intent and not policy implementation. The EMIS instrument provides an assessment of policy intent and implementation. The process for carrying out the policy assessments is shown in Figure 2 given below.

Fig 2: Policy assessment process 1



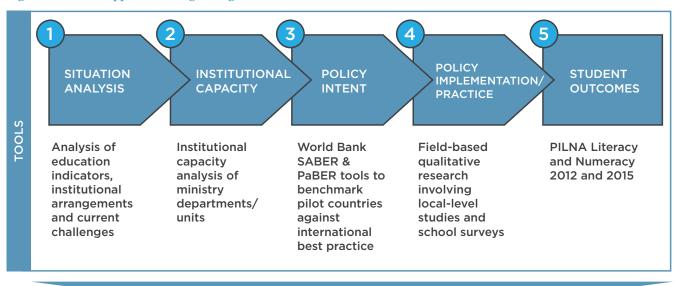
For each domain, a 2-3 day preparation/training workshop (Step 1) is required with key Ministry of Education staff from the relevant policy areas. The objective of the training workshops are to ensure better ownership and facilitation of the data collection, report writing and validation procedures. Consultants are usually engaged to carry out the review using the SABER framework and methodology. Additional items/questions can be included in the data collection instrument relevant to the countries' context.

The consultant along with the PaBER Assessment Officers and assistance from the local PaBER coordinators usually carry out the data collection in each country for each domain (Steps 2-4). The first part of the exercise is to collect data in-country using the agreed instruments. The draft reports are written by the consultant and / or by the SABER team in Washington, D.C., depending on the domain. The draft reports are always presented to the Ministries for validation.

Following the validation and country approval of reports, a 2-3 days workshop (Step 5) is usually held with all three countries. The objectives of the workshop are to benchmark the findings and agree on recommendations from the report. The participants are usually senior staff (3-4) from the relevant policy sections within the ministries of education. The reports are reviewed and agreements are made by each Ministry of Education on the issues to adopt.

It should be noted that countries sometimes bring other issues to the table and shared their views, practices and probable solutions with each other as part of benchmarking or learning from each other. A regional report is then developed and submitted to the Technical Working Group for further deliberation and endorsement before it goes to the Steering Committee for final approval (Step 6).

Fig 3: The PaBER approach through using of various tools.



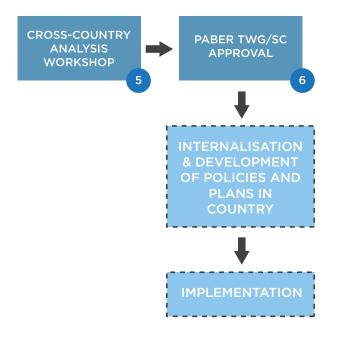
OUTCOMES OF PaBER

Capacity developed within relevant ministries for using diagnostics data to develop and implement policy and interventions that will improve learning outcomes.

Integration of PaBER into country level Education Strategy and National Action Plans.

To facilitate the process, PaBER through its approach has developed/adapted and used tools to inform and identify policy and interventions that could improve learning outcomes as shown in Fig 3.

Fig 4: Implementation of Steering Committee recommendations in-country



The Ministries of Education in each country are not expected to begin actively consider and implement all the recommendations from the 5 policy assessments immediately following the workshops. The original intention of PaBER is that the reports would be considered in line with the institutional assessments and the research carried out under component 3. This would form part of the evidence base at the end of the program that would be submitted to all three countries to show what worked and what didn't work. Figure 4 indicate the process at the country level after Steering Committee has approved the recommendations.

To make use of the breadth of evidences collected through PaBER, a triangulation exercise is planned and instituted to consolidate the huge amount of data and evidences collected under each of the domain. Throughout the exercise the countries identified key findings that are important evidences to informing policy interventions to improve quality of education.

ANNEX 2. LIST OF THE REPORTS GENERATED WITHIN THE PABER PROJECT

The table below sets out the various documents produced during the life time of the PaBER project.

DOCUMENT TITLE	AUTHOR	DATE
Benchmarking Education Quality for Results in the Pacific	Forum Education	October
	Ministers' Meeting	2010
Developing a Design Proposal for a 3-5 year pilot in PNG, Solomon	lan Collingwood	January
Islands and Samoa: Inception Report and Work Plan	&	2011
	Fred Brooker	
Report to UNESCO on the PILNA Trial	SPBEA	November
·		2011
PILNA Report to FEdMM	SPC	2012
Program Design Document for a Regional Pilot Program in Papua New Guinea,	PaBER	April, 2012
Samoa and Solomon Islands		
Institutional Capacity Analysis of National Education Assessment System	ACER	2013
(Samoa)		
PNG School Autonomy and Accountability SABER Report	World Bank	2013
PNG Students Assessment SABER Report	World Bank	2013
Samoa School Autonomy and Accountability SABER Report	World Bank	2013
Samoa Students Assessment SABER Report	World Bank	2013
Solomon Islands School Autonomy and Accountability SABER Report	World Bank	2013
Solomon Islands Students Assessment SABER Report	World Bank	2013
Financial Report (Regional)	PaBER	February
		2013
Institutional Capacity Analysis of National Education Assessment System	ACER	February
(Solomon Islands)		
PILNA 2012: A summary regional report	SPBEA	July 2013
Six-monthly Consolidated Financial Report from 1 January to 30 June,	PaBER	September
2013		2013
PNG Curriculum and Materials Country Report	PaBER	2014
PNG Teachers SABER Report	World Bank	2014
Samoa Curriculum and Materials Country Report	PaBER	2014
Samoa Teachers SABER Report	World Bank	2014
Solomon Islands Curriculum and Materials Country Report	PaBER	2014
Solomon Islands Teachers SABER Report	World Bank	2014
Institutional Capacity Analysis & Plan for Capacity Development Mea-	ACER	January
surement		2014
Services Branch Department of Education Papua New Guinea		
Six-monthly Consolidated Financial Report from 1 July to 31 December,	PaBER	March,
2013		2014
A Report on PILNA & PaBER Progress to FEdMM	PaBER TWG	April 2014
Six-monthly Consolidated Financial Report from 1 January to 30 June, 2014	PaBER	October, 2014
PNG EMIS SABER Report	World Bank	2015
Samoa EMIS SABER Report	World Bank	2015
Solomon Islands EMIS SABER Report	World Bank	2015

Six-monthly Consolidated Financial Report from 1 July to 31 December, 2014	PaBER	April, 2015
Skills Audit of Assessment Personnel	PaBER	April 2015
Annual PaBER Monitoring and Evaluation Report, 1 July 2014 - 30 June 2015	PaBER	October 2015
Formulating Evidence-Based Policy Interventions for Pilot Countries	PaBER	October 2015
PILNA and PaBER 2015 and Beyond	PaBER	October 2015
Revised Consolidated Work Plan and Budget for 2015/16	PaBER	October 2015
Risk Management Report	PaBER	October 2015
Six-monthly Consolidated Financial Report from 1 Jan to 30 June, 2015	PaBER	October 2015
Six-monthly Consolidated Progress Report: 1 January to 30 June, 2015	PaBER	October 2015
Six-monthly Consolidated Progress Report: 1 January to 30 June, 2016	PaBER	June 2016
Six-monthly Risk Management Report: 1 January to 30 June, 2016	PaBER	June 2016
Monitoring and Evaluation: 1 January to 30 June 2016	PaBER	June 2016
Institutional Policy Capacity Analysis, Samoa	PaBER	June 2016
Institutional Policy Capacity Analysis, PNG	PaBER	June 2016
Institutional Policy Capacity Analysis, Solomon Is	PaBER	June 2016
Mapping of policies against key education thematic areas	PaBER	June 2016
PaBER Country Report, Samoa	PaBER	June 2016
PaBER Country Report, Samoa	PaBER	June 2016
PaBER Country Report, Samoa	PaBER	June 2016
Samoa Country Field Research Report	PaBER	June 2016
PNG Country Field Research Report	PaBER	June 2016
Solomon Is Country Field Research Report	PaBER	June 2016

ANNEX 3. COUNTRY FINDINGS BY POLICY DOMAIN

The tables below highlight the country findings by policy domain.

PAPUA NEW GUINEA

DOMAIN	KEY FINDINGS
Teacher Quality	Professional development of teachers at national and subnational levels is inconsistent and insufficient for the needs of teachers, in part due to the lack of clear policy guidelines.
	There are variations in teacher evaluation, pedagogical guidance and support provided to teachers to improve, partly due to limited training of head teachers.
	Teachers lack skills in planning and developing classroom assessment, as well as using and reporting classroom assessment results to improve teaching and learning.
	The limited range of incentives to work in hard-to-staff schools, and lack of policy on addressing shortages in key subjects, may be creating variation and inequity in provision of quality teaching.
Assessment systems	Current assessment policies do not adequately guide effective and consistent implementation of classroom assessment or use of assessment results across schools.
	The skills and competencies of teachers to effectively carry out classroom assessments vary considerably, limiting the use of the results to provide effective intervention for improving student learning.
	The ability of the MSB to effectively implement its assessment mandate, as outlined in the various policy documents, is influenced by the limited capacity of the MSB and its staff.
Curriculum and Materials	The lack of adequate access to curriculum materials in schools prevents teachers from effectively delivering the curriculum.
	Evaluation and review of curriculum materials implementation, processes for the evaluation of literacy and numeracy programmes, and monitoring, evaluation and quality assurance of curriculum materials are all absent from policy.
	There is variable implementation of the curriculum due to teachers' variable competency and capacity.
School Governance and Management	Mechanisms to monitor and evaluate the performance of head teachers, as well as identifying and building capacity of potential school heads, are either weak or inconsistent.
	School and student assessments are not used to inform school improvements and adjustments in the areas of pedagogy, school management and resourcing due to lack of clear guidelines.
	The effectiveness of school governance arrangements is undermined by a lack of clear guidelines to demarcate the roles of the Board of Management
	(BoM), the School Learning Improvement Plan (SLIP) Committee and the Parents and Citizens Committee (P&C), as well as a lack of involvement of the school community.
Education Management Information	Absence of a comprehensive EMIS policy that provides clear guidelines on processes, procedures and resources allocation may limit the future development and sustainability of EMIS.
System	Underutilisation of EMIS data by stakeholders for school and system planning and management, and informing policy decisions.
	The EMIS Unit lacks the capacity to deliver its mandate effectively.

SAMOA

DOMAIN	KEY FINDINGS		
Teacher Quality	The absence of clear guidelines for the implementation and monitoring of school-based professional development programmes limits the effectiveness of support to teachers to improve instruction.		
	Teachers have limited capacity and skills to effectively teach literacy and numeracy.		
	Teachers are not able to effectively implement classroom assessment due to a lack of capacity to plan and develop the assessment and to use the results to improve teaching and learning.		
Assessment systems	The effectiveness of delivering classroom-based assessment and using the results to inform reporting, operational, pedagogical and management decisions is limited by the capacity of teachers.		
	Monitoring of both the quality of the assessment and the use of results to inform teaching and learning is inconsistent at all levels.		
	The capacity of MESC staff in planning and administering assessments, as well as in analysis, reporting and use of results to inform policy decisions, is limited.		
Curriculum and Materials	Most teachers lack the skills, knowledge and confidence to deliver a bilingual student-centred, outcomes-based curriculum in literacy and numeracy.		
	In spite of a bilingual policy embedded across the curriculum, teachers' preference to work in Samoan with Samoan materials is having an effect on student literacy in English.		
	Teachers' capacity to effectively assess student learning through the development and application of classroom-based assessment is hindered by an insufficient supply of quality resource materials.		
School Governance and Management	The design and implementation of a school-based professional development programme to improve teaching and learning is hampered by a lack of management skills at the school level.		
	Student assessment results are not being used for management and pedagogical improvement, or for accountability to the community.		
	The involvement of school committees is limited to finances and school environment with almost no involvement in teaching, learning and assessment-related matters.		
Education Management Information System	There are no policies that support the running and effective utilisation of an EMIS system in Samoa and ensure its longer term sustainable funding.		
	The lack of integration of education data limits the communication of information and the utilisation of the EMIS data for better informed decision at different levels.		
	Limited systems and capacity to analyse data limit the utilisation of the EMIS for decision-making at system and school levels.		

SOLOMON ISLANDS

DOMAIN	KEY FINDINGS
Teacher Quality	MEHRD may not be attracting the most talented candidates into the teaching profession due to having low minimum entry requirements to the profession.
	Professional development of teachers at national and school level is inconsistent and insufficient for the needs of teachers, in part due to the lack of clear policy guidance.
	Assessment results and teacher performance appraisal are not used effectively to guide improvement in teaching and learning.
Assessment systems	Classroom assessment policies do not adequately guide effective and consistent implementation or use of assessment results across schools.
	The skills and competencies of teachers to effectively carry out classroom assessments varies considerably, limiting the use of the results to provide effective intervention for improving student learning.
	The lack of an overarching policy for the national large scale assessment (SISTA), and limited capacity in the assessment unit (NESU) limit the effective implementation and dissemination of results.
Curriculum and Materials	Procurement and quality assurance of curriculum materials are broadly stated in policy but lack specific direction for implementation and guidance for monitoring implementation.
	The assessment and reporting of student learning, including performance of the curriculum, is well articulated in policy. Practice however, shows that implementation is inconsistent across schools, teachers are not confident in using curriculum outcomes to assess student learning, and reporting of student achievement is limited to final grades.
	Teacher competency in the implementation of the curriculum is generally supported through professional development and monitored through the national professional standards for teachers, although not all teachers understand this. Policy however, does not mandate the focus of professional development, and hence, only benefits some teachers.
School Governance and Management	There is a lack of policy at central level to support school autonomy (school governance and operations).
	There is limited use of assessment results for school and management decisions. This is compounded that mechanisms are not well established to enable stakeholders to demand accountability through use of school and student assessment results.
	There is lack of clarity of roles and responsibilities of school committees and community.
Education Management	Operations of the EMIS have been established but are not supported and guided by a comprehensive EMIS policy.
Information System	The EMIS data is not being fully utilised by stakeholders for school and system planning and management or informing policy decisions.
	There are capacity and technical constraints in the operations of the EMIS.