

The status of Pacific education 2022

A regional monitoring report based on internationally comparable statistics



Educational Quality and Assessment Programme (EQAP)

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Abbreviations

AlS Atlantic, Indian Ocean and South China Sea

BM Regional 2030 Benchmark
CARICOM Caribbean Community

CPEM Conference of Pacific Education Ministers
DQAF Data Quality Assessment Framework

ECE early childhood education

EMIS education management information system
EQAP Educational Quality and Assessment Programme

FEMM Forum Education Ministers' Meeting **FEMM** Forum Economic Ministers' Meeting

GDP gross domestic product

GPE Global Partnership for Education

GPI gender parity index

ISCED International Standard Classification of Education

MICS Multiple Indicator Cluster Survey

PacREF Pacific Regional Education Framework

PHES Pacific Heads of Education Systems

PICs Pacific Island countries

PILNA Pacific Islands Literacy and Numeracy Assessment

SIDS Small Island Developing States
SDG Sustainable Development Goal

SPC Pacific Community

TVET technical and vocational education and training

UIS UNESCO Institute for Statistics

UNESCO United Nations Educational, Scientific and Cultural Organization

WB World Bank

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We are grateful to the Conference of Pacific Education Ministers (CPEM) for their ongoing support for the collection of education statistics in the Pacific region. It is envisaged that the evidence presented in this report will inform policy and guide planning for the improvement of education systems throughout the region.

The Pacific Community, through the Educational Quality and Assessment Programme (EQAP), is grateful to the Australian Department of Foreign Affairs and Trade (DFAT) for their financial support of education management information systems (EMIS) and reporting of education data in the Pacific region.

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Thank you all for your valuable contributions to the 2022 Status of Pacific Education Report.

Dr Michelle Belisle

Director

Educational Quality and Assessment Programme
Pacific Community



Foreword

Official statistics make an essential contribution to building resilient and strong democratic societies, as policy decisions are based on empirical data and not on anecdotes or opinions. In education, good quality data are the foundation for good education policy and planning. In the Pacific region, such data are not always readily available, which has significant implications for the development and monitoring of education sector policies and plans in the region. The Educational Quality and Assessment Programme (EQAP) has therefore taken on the challenge to improve the quality, availability and use of statistical information for education policy planning, development, implementation and management.

To achieve better quality data, EQAP has invested in the re-development and enhancement of education management information systems (EMIS) that can lead to the production of high quality education statistics. A key strategy is to assist Pacific Island countries to implement and maintain EMIS by supporting the coordination and development of national EMIS policies, conducting data quality assessments, and providing advice and technical support on the enhancement of national education databases.

To improve the availability and use of data, EQAP has partnered with the UNESCO Institute for Statistics (UIS) to ensure that internationally comparable education data from Pacific Island countries are available and used for regional monitoring and policy dialogues. The intended outcome of the partnership is that Pacific Island countries publish timely and regular high quality education data for decision-makers at all levels to use proactively.

It is important that good quality information about the status of education in the Pacific region is widely disseminated to ensure public trust in education statistics. It is hoped that the publication of this report will lead to greater confidence in the use of official education data and statistics to inform education policy and decision-making at national, regional and international levels.

> **Dr Stuart Minchin** Director-General **Pacific Community**



1. Introduction

This report is the second comprehensive report of a planned series of reports on the status of Pacific education to be produced biennially by the Pacific Community's Educational Quality and Assessment Programme (EQAP) as part of their monitoring of the Pacific Regional Education Framework (PacREF) 2018–2030. The series is primarily designed to provide the region's education ministers, their senior executives, and the region's development partners with regular overviews of progress as it relates to education in the region, alongside emerging issues and challenges that are common to most, if not all, Pacific countries.



The published report will also serve as an important source of official statistical information that can be used by various education organisations and communities, including heads of education, education strategic planning and policy makers, school leaders, teachers, and parents interested in tracking the progress of national education systems in meeting the intended outcomes, at the national level, of the Sustainable Development Goal four (SDG 4) and PacREF.

The introduction provides an overview of the regional approach to the organisation of Pacific education systems, including an outline of the policy areas of PacREF. This is followed by a brief discussion of the regional data collection mechanism, including an assessment of data availability and quality.

This main section of the report presents comparative statistical information on the performance of education systems in Pacific Island countries, with particular attention to the four policy areas of PacREF. For each indicator presented in this section, the purpose and definition is briefly discussed, followed by a graphical presentation of the indicator and a brief interpretation of the relative differences and similarities between Pacific Island countries. The implications of the indicator for regional planning are also explored.

The final section describes the common strengths and challenges of Pacific education systems, illustrated by time-series graphs and country vignettes that show the regional trends in key indicators over the last seven years. This is followed by an explanation of how regional initiatives will collectively respond to these challenges and raise the quality of the region's school systems.

The annex provides a list of PacREF indicators that will be used to track education progress across the Pacific region over the foreseeable future. These indicators also include global and thematic indicators used to monitor the SDG 4 targets.

1.1 Regionalism in Pacific education

Although each of the Pacific Small Island Developing States (PSIDS) has its own rich and diverse background, together they share many of the development challenges. The framework for Pacific regionalism, developed in 2014, seeks to address these challenges through the cooperation and collaboration of Pacific nations.

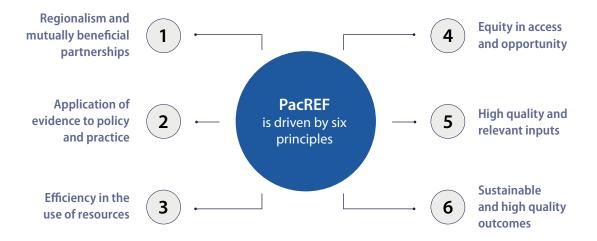
Recognising the importance of the development of human resources in supporting sustainable development, Pacific economic ministers agreed at a Forum Economic Ministers' Meeting (FEMM) in 1999 to prioritise education in national development planning and budgeting. In May 2001, a Forum Education Ministers' Meeting (FEdMM) was convened to consider issues related to human resource development in the region. The Pacific education for all 2015 Review further increased emphasis on basic education. Following a recommendation from this meeting, the Pacific Forum Leaders called for an FEdMM.

Over the two decades since then, the FEdMM has become an effective mechanism to discuss education policy issues at the regional level. At the 2001 meeting, FEdMM adopted the Forum basic education action plan (FBEAP), a document setting out the vision, goals and strategies for the future of basic education in the region and reaffirmed its commitment to the Dakar Framework for Action and the six Education for All goals. In 2009, at the seventh FEdMM, a revised regional agenda was endorsed and launched as the Pacific Education Development Framework (PEDF). Reviews of these programmes revealed that, despite their intentions, the region's main challenges had not been adequately addressed over the course of their implementation.

In 2015, the Pacific Heads of Education Systems (PHES) began to work towards shaping a more comprehensive, longer-term and calibrated programme to raise educational quality across the region. In doing so, the PHES partnered with regional international education agencies to develop a Pacific education framework. This was done and, in 2018, the Pacific Regional Education Framework (PacREF) was endorsed by FEdMM and formally aligned to the timeline established for the 2030 Agenda for Sustainable Development and achievement of the Sustainable Development Goals (SDGs). FEdMM is now referred to as the Conference of Pacific Education Ministers (CPEM).

PacREF provides a means of identifying and understanding similarities and differences relating to education across the region. It offers organising mechanisms for sector planning, reporting and collaboration, and it provides development partners with an understanding of where the region's resourcing priorities lie. It supports activities that are politically feasible and technically sound and that have a high probability of producing the desired outcomes.

¹ All the PSIDS have small but growing populations, limited resources, and fragile environments, and are remote, isolated and susceptible to natural disasters, the impacts of climate change, and external shocks. Most are also dependent on international trade and external financing.



The Pacific's three island groups participate in the PacREF:

- (i) Melanesia (Fiji, Papua New Guinea, Solomon Islands and Vanuatu);
- (ii) Micronesia (Federated States of Micronesia, Kiribati, Republic of the Marshall Islands, Nauru and Palau); and
- (iii) Polynesia (Cook Islands, Niue, Samoa, Tokelau, Tonga and Tuvalu).

1.2 The Pacific Regional Education Framework (PacREF)

The four key policy areas of PacREF² are quality and relevance, learning pathways, student outcomes and wellbeing, and the teaching profession.

Policy Area 1: Quality and relevance

The objective of the quality and relevance policy area is to provide high quality, relevant programmes for learners at all levels of education. The policy goal is to ensure that all learners are provided with a safe and supportive environment, within which they are offered learning opportunities that are meaningful, valuable, inclusive and future-focused. The outcome indicators below measure the contribution of PacREF activities in achieving this policy objective.

- **1.1** The percentage of schools meeting national minimum service standards
- **1.2** The percentage of primary schools with vernacular instruction in the first three years
- 1.3 The percentage of schools with access to clean drinking water and basic sanitation
- **1.4** The percentage of schools with access to computers for pedagogical use
- **1.5** The out-of-school rate for primary, lower and upper secondary education
- **1.6** The percentage of children over-age for grade in primary and -secondary education

Policy Area 2: Learning pathways

The objective of the learning pathways policy area is that learners' needs are met through a broad range of programmes and delivery modalities. The policy goal is to ensure that all learners have equal access to multiple and seamless pathways and modalities of learning that will allow them to meet their full potential. The outcome indicators below measure the contribution of PacREF activities in achieving this policy objective.

- **2.1** The participation rate of youth and adults in formal/non-formal education/training
- **2.2** The gross/net enrolment rates in early childhood, primary, secondary and tertiary education
- 2.3 The participation rate in early childhood education in the year before primary education
- **2.4** The transition rates between primary, secondary and tertiary education
- **2.5** The retention rates for primary and secondary education
- **2.6** The youth participation rate in technical and vocational education programmes

² Pacific Islands Forum Secretariat (2018) Pacific Regional Education Framework (PacREF) 2018–2030: Moving towards education 2030. University of the South Pacific and Pacific Islands Forum Secretariat.

Policy Area 3: Student outcomes and well-being

The objective of the student outcomes and well-being policy area is that learners at all levels of education achieve their full potential. The policy goal is to ensure that all learners acquire the knowledge, skills, values and attributes to enable them to contribute to their families and communities and to nation building. The outcome indicators below measure the contribution of PacREF activities in achieving this policy objective.

- The educational attainment rate for secondary, TVET and tertiary education
- 3.2 The percentage of pre-school children who are school-ready
- 3.3 The percentage of primary students achieving proficiency in literacy
- The percentage of primary students achieving proficiency in numeracy
- 3.5 The gross intake ratio to the last grade for primary and secondary education
- The completion rate for primary and lower/upper secondary education

Policy Area 4: The teaching profession

The objective of the teaching profession policy area is to support and empower teachers through opportunities for continuous development, shared understanding and accountability. The policy goal is to ensure that competent, qualified and certified teachers and school leaders are current in their professional knowledge and practice. The outcome indicators below measure the contribution of PacREF activities in achieving this policy objective.

- 4.1 The percentage of teachers meeting professional standards in primary and secondary education
- 4.2 The percentage of trained teachers in primary and secondary education
- The percentage of qualified teachers in primary and secondary education 4.3
- The student-teacher ratio by education level for qualified and trained teachers in primary and 4.4 secondary education
- 4.5 The percentage of teachers having annual professional development in primary and secondary education

Alignment between PacREF and SDG4 frameworks 1.3

Sustainable Development Goal 4 is a global framework for monitoring the progress of education at international, regional and national levels. The goal is to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all". The policy areas of PacREF and SDG 4 targets are aligned as shown below. A list of the SDG 4 indicators used for monitoring PacREF is provided in the annex.

PacREF policy area/ goal	SD	G 4 targets (summarised)	
1. Quality and relevance	4.1	Universal primary/secondary education	
All learners are provided with a safe		All girls and boys complete free, equitable and quality primary and secondary education	
and supportive environment, within	4.5	Gender equality and inclusion	
which they are offered learning opportunities that are meaningful,		Eliminate gender disparities in education and ensure access to all levels of education for the vulnerable	
valuable, inclusive and	4.a	Safe, non-violent, inclusive and effective learning environments for all	
future-focused		Build and upgrade education facilities that are child, disability and gender sensitive	
2. Learning pathways		Early childhood development and universal pre-primary education	
All learners have equal access to		All boys and girls have access to quality early childhood development, care and pre-primary education	
multiple and seamless pathways and	4.3	Equal access to TVET and higher education	
modalities of learning that will allow them to meet their full potential		Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education	
3. Student outcomes	4.1	Universal primary/secondary education	
All learners acquire the knowledge, skills, values and attributes to enable		All girls and boys complete primary and secondary education leading to relevant and effective learning outcomes	
them to contribute to their families and	4.4	Relevant skills for decent work	
communities, and to nation building		Increase the number of youth and adults who have relevant skills for employment, decent work and entrepreneurship	
4. Teaching profession	4.c	Teachers and educators	
Competent, qualified and certified teachers and school leaders are current in their professional knowledge and practice		Increase the supply of qualified teachers	

1.4 Data sources

Data collection

Over the last seven years, SPC and UIS have collaborated to develop a regional data collection mechanism as a single point of entry for national education data from Pacific Island countries (PICs). The intention is to reduce the response burden placed on small PICs by data requests from regional and international agencies by providing the required data for the calculation of education indicators for both regional and international reporting.

It is expected that the regional data collection mechanism will result in:

- increased reporting of education statistics by all PICs through the collection of good quality, timely data from education management information systems (EMIS);
- improved response rates to international data collections, including the provision of data on sectorwide enrolments, teachers and institutions for the UIS Survey of Formal Education; and
- enhanced analysis of household surveys and population censuses in the Pacific region to obtain data for reporting on relevant education indicators.

A key component of the regional data collection mechanism is the UIS Survey of Formal Education which collects data for the calculation of SDG 4 global and thematic indicators. The indicators are calculated based on reported national data aligned to the International Standard Classification of Education (ISCED), which allows for internationally comparable data across different education systems. These indicators are also used in the regional reporting for progress toward achieving SDG Goal 4 targets, as well as monitoring PacREF.

Pacific Island countries, as owners of the education data, approve the release of official statistics for publication in regional and international databases and publications. They report officially approved education data to regional and international development partners through the UIS Data Centre and the SPC Pacific Data Hub. Development partners use the education indicators to monitor and evaluate education progress of the SDGs and PacREF. Figure 1.3.1 shows the number of data submissions from PICs to UIS over the last seven years.

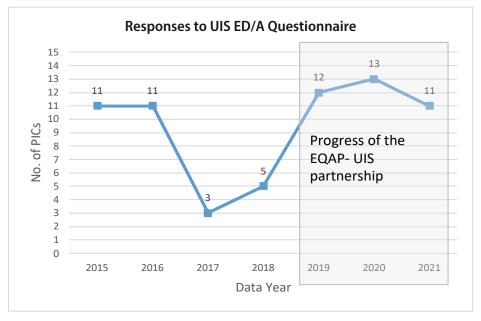


Figure 1.3.1 The number of data submissions from PICs to UIS over the last seven years

For the latest completed school year (2021), eleven Pacific countries submitted UIS ED/A³ questionnaires: Cook Islands, Fiji, Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Samoa, Tokelau, Tuvalu and Vanuatu. Papua New Guinea, Solomon Islands, Tonga and Kiribati will submit data to UIS once their latest data collection has been completed. While most countries report data on student enrolments and teachers for early childhood, primary and secondary education, very few countries provide data for tertiary education, including technical and vocation education and training.

³ UIS ED/A questionnaires collect data on students and teachers at ISCED levels 0–4.

Data quality

As shown by data quality assessments, many Pacific countries face challenges in collecting and producing good quality, timely education statistics. These challenges include: (i) little coordination in the collection of education data across the sector; (ii) delays in data collection due to increased data requirements; (iii) long periods spent on data entry; (iv) inadequate statistical processes to ensure data quality; (v) low level of technical capacity to produce and disseminate statistics; and (vi) no policy on time-frames for producing and disseminating regular statistics.

Like many nations, Pacific countries value timely, high quality data for planning and decision-making and recognise the importance of the availability, timeliness and quality of the education statistics they use for their planning. There are increasing efforts to disseminate education data to ensure accountability and value for money. In education and beyond, data quality improvement plans are essential tools for Pacific governments.

Over the last five years, PICs have made varying degrees of progress in their development of EMIS, aided by EQAP and UIS. Technical support for EMIS development is also provided by bilateral (Australia) and/or multilateral partners, viz: the Asian Development Bank, the United Nations Children's Fund and the United Nations Educational, Scientific and Cultural Organization [UNESCO]. Most countries have functional EMIS systems, and some countries are exploring systems with new features.

Eleven countries have undertaken data quality assessments using the Data Quality Assessment Framework on education (Ed-DQAF) which has recommended improvements to EMIS environments, processes and outputs. Full assessments have been conducted for Samoa, Kiribati, Tuvalu, Tonga, Papua New Guinea, Solomon Islands and Fiji. In addition, Cook Islands, Niue, Palau and Marshall Islands have conducted online assessments. UIS is collaborating with SPC to support Pacific countries to implement their data quality improvement plans, including improving EMIS technologies, providing training on statistical processes and technical assistance with statistical outputs (e.g. education statistics reports).

Data availability

At the national level, the priority PacREF and SDG 4 indicators are primarily published in education statistics reports and others can be derived from population census and household survey data. These data are used to illustrate the status of national education systems in the form of infographics. The following countries publish education statistical reports: Cook Islands (2020), Federated States of Micronesia (2021), Kiribati (2022), Marshall Islands (2021), Papua New Guinea (2019), Palau (2017), Samoa (2021), Solomon Islands (2019), Tuvalu (2022) and Vanuatu (2021). These data will be used alongside regional comparative data to report on progress with respect to SDG 4 and PacREF.

Regional comparative data on key education indicators are mostly derived from the UIS data centre and are published biannually on the UIS website for the latest completed school year. Some population-based indicators are derived from published national population and household survey reports. Educational assessment indicators for literacy and numeracy are obtained from national and regional Pacific Islands Literacy and Numeracy Assessment (PILNA) reports. Education finance data are sourced from the World Bank.

To improve the availability of regional education statistics, EQAP provides internationally comparable statistical data through the Pacific Data Hub, based on UIS data provided by all Pacific countries. Where data are not available for the most recent completed school year (i.e. 2021), the latest year's data are used as an estimate. Table 1.3.1 shows the years for which indicator data are available from the UIS database.

Table 1.3.1. PacREF priority indicator availability in UIS database 2015–2021

Country	School data Latest year	School data No. years	Student data Latest year	Student data No. years	Teacher data Latest year	Teacher data No. years
Cook Islands	2021	4	2021	5	2021	7
Fiji	2021	1	2021	7	2021	3
Kiribati	2020	1	2020	4	2020	3
Marshall Islands	2021	3	2021	7	2021	1
Micronesia (FSM)	2021	3	2021	7	2021	5
Nauru	2019	1	2020	3	2016	1
Niue	2021	4	2021	5	2021	3
Palau	2021	2	2021	2	-	0
Papua New Guinea	-	0	2018	2	-	0
Samoa	2021	6	2021	7	-	0
Solomon Islands	2019	2	2019	5	2019	5
Tokelau	2021	3	2021	4	2021	4
Tonga	2020	1	2020	4	2020	4
Tuvalu	2021	3	2021	7	2021	4
Vanuatu*	2015	1	2020	6	2019	5

Note * 2019 data submitted to UIS after the deadline for publication. Source: http://data.uis/unesco.org

Data interpretation

A graphical presentation is made for each indicator discussed in the report. A bar chart represents the magnitude of the indicator for each PIC, mostly as a percentage (%), and a circle represents the extent of gender parity in the form of an index (GPI). A circle between the two horizontal bars indicates relative parity, above the bar indicates a larger indicator value for females, and below the bar a larger indicator value for males.

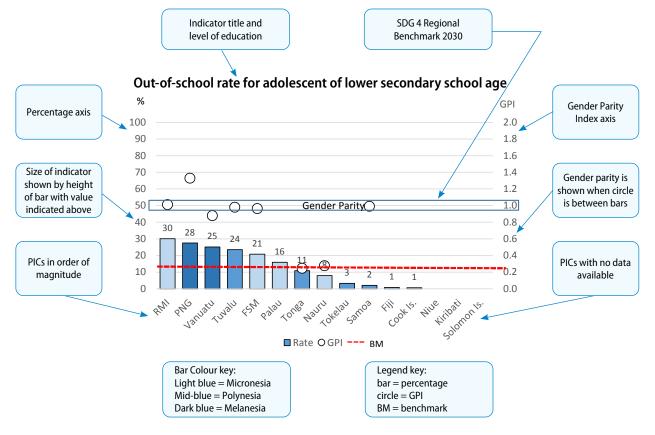


Figure 1.3.2 A guide to understanding the bar charts

2. Educational quality

Educational quality is a key policy area of PacREF. The number of out-of-school children and over-age students are indicators of the quality of education, as are indicators of the availability of school facilities in the Pacific region.



2.1 Out-of-school children

The purpose of the out-of-school rate is to identify the size of the population in the official age range for the given level of education who are not enrolled in school. This is done in order that they can be better targeted and appropriate policies can be put in place to ensure they have access to education. The rate is defined as the proportion of children and young people in the official age range for the given level of education who are not enrolled in pre-primary education, primary education, secondary (lower and upper) (SDG 4.1.5: UIS 2018).

The higher the number of out-of-school children and adolescents, the greater the need to focus on improving access to education. Some children have never been in school or may not eventually enrol as late entrants. Other children may have initially enrolled but dropped out before reaching the intended age of completion of the given level. A limitation of this indicator is that there are potential inconsistencies when comparing data across time and from different sources. Depending on whether the data are derived from enrolment data and household survey data, the date of data collection influences the calculation method.

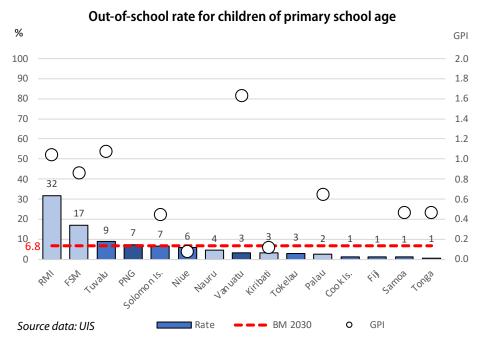


Figure 2.1.1 Out-of-school rate for children of primary school age

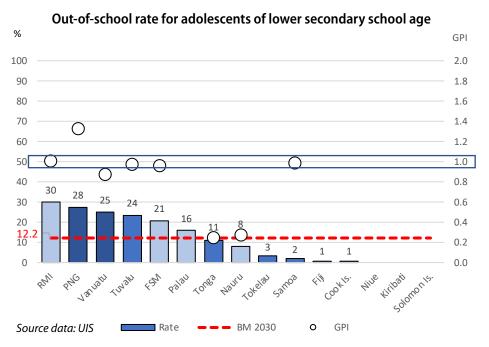


Figure 2.1.2 Out-of-school rate for adolescents of lower secondary school age

The regional 2030 benchmark for the out-of-school rate was set at seven per cent for primary education and twelve per cent for lower secondary education (UIS, SPC 2021). Most countries have low rates of out-of-school children⁴ with rates less than ten per cent not attending primary school (Figure 2.1.1) and less than thirty per cent not attending lower secondary education (Figure 2.1.2). While gender disparities affect boys and girls in both primary and lower secondary education in most countries, boys are more often out of school than girls. In Niue and Kiribati, boys are twice as likely to be out of primary education and almost twice as likely to be out of lower secondary education in Nauru and Tonga. Given the relatively low population in island states, the disparities may look larger due to comparing lower total numbers of boys and girls.

The higher out-of-school rates for some countries have significant policy implications for the development of education in those sub-regions. Where there is a high number of out-of-school children, national policies need to focus on improving access to education for all children, especially those children who have never enrolled in school or have dropped out, or been pushed out, before completing their intended education. There is a need for further investigation into the reasons for children not attending school, such as research into the barriers to accessing education, including reasons for dropping out of school. One reason could be poverty. In Papua New Guinea, for example, almost half of all children from the poorest quintile were not attending school.

2.2 Over-age students

The purpose of the over-age indicator measures progress towards ensuring that all girls and boys complete a full cycle of nine years of good quality primary and secondary education and progress with minimum grade repetition. Children may be over-age for a grade or year level because they started school late and/or repeated one or more previous grades/year levels.

The indicator is defined as the percentage of students in primary and lower secondary education who are at least two years above the intended age for their grade or year level. The intended age for a given grade/year level is the age at which students would enter the grade/year level if they had started school at the official primary entrance age, had studied full-time and had progressed without repeating or skipping a grade/year level (SDG 4.1.6: UIS 2018).

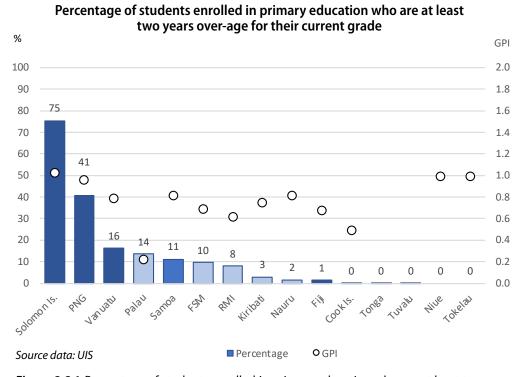


Figure 2.2.1 Percentage of students enrolled in primary education who are at least two years over-age for their grade

⁴ It should be noted that even a small rate in large countries could represent a large number of out-of-school children and, conversely, in some small countries the rate may be large but the absolute numbers may be relatively small.

Nine years of primary and lower secondary education is considered basic education, on top of the one year at the pre-primary level (UNESCO 2016). Completing basic education in Pacific countries means that most young people would graduate from basic education around the age of 15, prior to a common minimum age of work. Over-age progression and significant repetition are associated with lower levels of student learning achievement. A low value of this indicator will show that the majority of students start school on time and progress with minimum levels of grade repetition.

Percentage of students enrolled in lower secondary education who are at least two years over-age for their current grade % GPI 100 2.0 90 1.8 75 80 1.6 \cap \cap 70 1.4 1.2 60 0 50 1.0 0.8 40 Ö 0 \overline{C} 0 30 0.6 17 0 20 0.4 13 10 8 7 10 0.2 2 0 0 0 0 0.0 Source data: UIS Percentage O GPI

Figure 2.2.2 Percentage of students enrolled in lower secondary education who are at least two years over-age for their grade

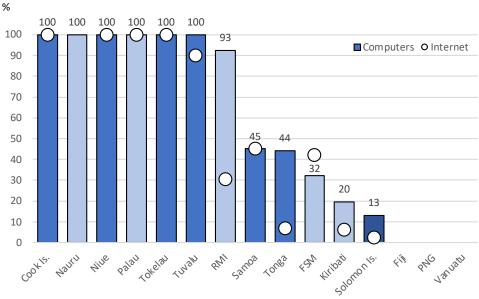
The Melanesian sub-region has the largest percentage of over-age children, both at primary and lower secondary level (Figures 2.2.1 and 2.2.2). For example, three-quarters of students in primary and lower secondary education are over the official school age for year level in Solomon Islands, as are half of all students in Papua New Guinea. Between ten and fifteen per cent of elementary school students are overage in countries of the northern Pacific sub-region. In Melanesian countries, both boys and girls are equally affected by over-age enrolment in education, while in most countries over-age is a boys' phenomenon, especially in primary education. In lower secondary education, for every three girls, two boys are affected by over-age in Tonga and Tokelau.

The high proportion of over-age students in Melanesian countries has significant policy implications for the development of education in the sub-region. Policies that ensure that students start school at the right age and progress with minimum levels of grade repetition are often associated with higher levels of student learning achievement compared to students who experience over-age progression and significant repetition. There is a need for further investigation the reasons for children not attending school at the correct age, such as research into the barriers to education participation, including reasons for starting school at an older age and repetition of grades/ year levels. The analysis should assess the equality of educational participation for vulnerable populations with reference to urban/rural location, socio-economic status, and disability.

2.3 Digital learning

The school facility indicators measure schools' access to basic services and facilities necessary to ensure a safe and effective learning environment for all students. The indicator is defined as the percentage of primary and secondary schools with access to a specific facility, infrastructure or service. Within the scope of digital learning, the indicator's dimensions of access to computers and the internet for pedagogical purposes are of most relevance. Computers for pedagogical use are devices used to support course delivery or independent teaching and learning needs. This may include activities using computers or the internet to meet information needs for research purposes, develop presentations, perform hands-on exercises and experiments, share information, and participate in online discussion forums for educational purposes (SDG 4.a.1: UIS 2018).

Percentage of primary schools with access to computers and the internet



Source data: UIS

Figure 2.3.1 Proportion of primary schools with access to computers for pedagogical purposes

Percentage of secondary schools with access to computers and the internet

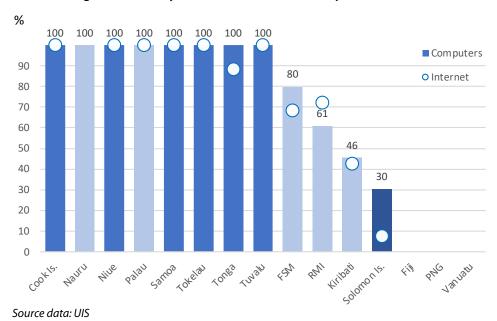


Figure 2.3.2 Proportion of secondary schools with access to computers for pedagogical purposes

Of those countries that reported data on ICT facilities, almost half indicated that all primary schools have access to computers and internet for learning purposes, especially the small island states (Figure 2.3.1). Less than half the schools in larger countries had access to computers with only one-in-five primary schools having access to computers. Most countries reported that all secondary schools had access to computers and the internet for learning purposes (Figure 2.3.2), though this was less commonly reported in Micronesian countries.

To improve equity of access to computers in schools, national policies on digital learning need to ensure that all teachers and students have adequate access to computers to assist teaching and learning in the classroom. Given the fast-changing environment for ICT in education, there is an urgent need to monitor the use of ICT in the classroom, especially during periods of restrictions, such as during the COVID-19 pandemic and the subsequent economic recovery.

While PICs report the availability of computers in schools, the use of devices in the classroom is not usually collected in the national school questionnaire. To monitor the uptake of digital learning in schools it will be necessary to distinguish between the use of computers for administrative and for teaching/learning purposes. In addition, the number of students per computer is an indicator of digital learning that could be calculated from school survey data.

2.4 Water and sanitation

The school facility indicators measure the access in schools to basic services and facilities necessary to ensure a safe and effective learning environment for all students. The indicator is defined as the percentage of primary and secondary schools with access to a specific facility, infrastructure or service. Within the scope of water and sanitation, the indicator's dimension of access to a safe source of drinking water and basic sanitation are the most relevant. Basic drinking water is defined as a functionally improved and safe drinking water source on or near the premises and water points accessible to all users during school hours. Basic sanitation facilities are defined as functionally improved sanitation facilities separated for males and females on or near the premises (SDG 4.a.1: UIS 2018).

At primary level, all schools had access to drinking water and basic sanitation in Polynesian countries. Around seven out of ten of schools in Micronesian countries and around half of all schools in Melanesian countries have access to drinking water (Figure 2.4.1). At secondary level, Polynesian countries reported that all schools had access to drinking water and basic sanitation, whereas fewer schools in Micronesia and Melanesia had access to drinking water (Figure 2.4.2). However, while a high proportion of countries have access to an improved water source, there will always be the question of whether they have access to a clean and therefore safe drinking water.

The lack of access to basic sanitation in Micronesian countries has significant policy implications for the development of education in the sub-region. National policies need to define and regulate school quality service standards to ensure that all schools have adequate access to safe drinking water and basic sanitation facilities, which are prerequisites for a healthy learning environment. There is a need for further investigation into whether the lack of functional gender-separated toilets in schools presents a barrier to education participation, particularly for girls. Some countries are now using EMIS as a tool for gathering information for the Water, Sanitation and Hygiene (WASH) project. The analysis should also assess the equality of educational participation for vulnerable populations with reference to urban/rural location, socio-economic status, and disability.

Percentage of primary schools with access to basic drinking water and sanitation

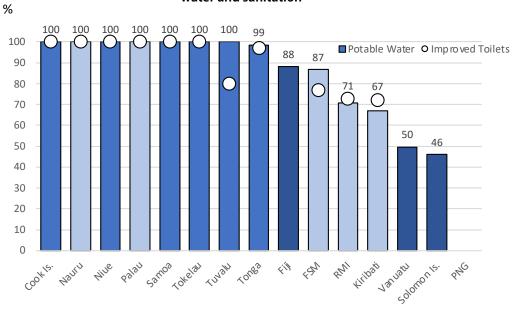


Figure 2.4.1 Percentage of primary schools with access to basic drinking water and sanitation

Percentage of secondary schools with access to basic drinking water and sanitation

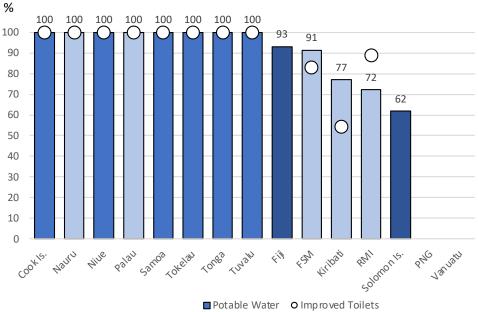


Figure 2.4.2 Percentage of secondary schools with access to basic drinking water and sanitation

3. Learning pathways

Learning pathways is a key policy area for PacREF. Net enrolment rates and gross enrolment ratios are indicators of student participation at different levels of education and provide a measure of the extent to which students are accessing learning pathways in early childhood, primary, secondary and tertiary education in the Pacific region.



3.1 Participation in early childhood education

The purpose of measuring the participation rate one year before the official primary age is to indicate children's exposure to organised learning activities in the year prior to the start of primary school.⁵ The indicator is defined as the percentage of children aged one year before the official primary entry age who participate in one or more organised learning programmes, including programmes that offer a combination of education and care. The age range varies by country, depending on the official age for entry to primary education. A high value of the indicator shows a high degree of participation in organised learning before primary education (SDG 4.2.2: UIS 2018).

The purpose of measuring the gross enrolment ratio in early childhood education is to show the general level of participation in the dimensions of pre-primary education and early childhood educational development. The selected indicator dimension is defined as the total enrolment in pre-primary education regardless of age expressed as a percentage of the population of the official age for pre-primary education. Data on early childhood educational development is not currently available for most Pacific Island countries (SDG 4.2.4: UIS 2018).

Among the 15 Pacific countries, 60% of the countries have high net enrolment rates for pre-primary education with on average nine out of 10 children attending at the age one year prior to when they would enter primary education (Figure 3.1.1). Only in Samoa and Federated State of Micronesia do between one and three in 10 children attend education one year prior to primary school. In general, the high value placed by Pacific households on attending pre-primary education is noticeable. The rate may increase if existing barriers in countries and populations with low attendance can be identified. Non-availability of pre-primary education may be the primary factor. The regional 2030 benchmark for adjusted net enrolment rate in early childhood education was set at 69 per cent. Eleven countries have already achieved the benchmark.

The gross enrolment ratio includes children beyond the age one year prior to primary education. It indicates that not all children, regardless of age, enrol in this level (Figure 3.1.2). For example, while in Nauru 96 per cent of children are enrolled of the age group one year prior to the age when they would enter primary education, only 32 per cent of eligible children are enrolled when the age groups above and below the age one year prior to primary education are considered.

Adjusted net enrolment rate for the year before the official primary age

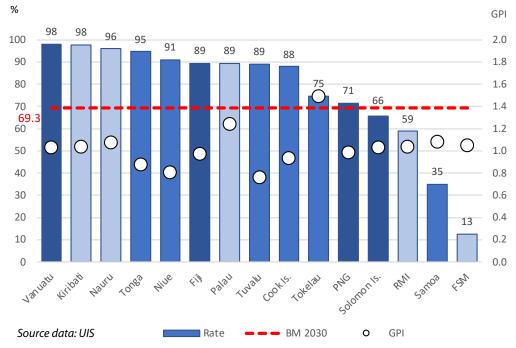


Figure 3.1.1 Adjusted net enrolment rate for the year before the official primary age

⁵ SDG 4.2 provides two indicators that measure the participation, namely: the participation rate in organised learning one year before the official primary entry age (also called the Adjusted Net Enrolment Rate), and 4.2.4 the gross early childhood education enrolment ratio in (a) pre-primary education and (b) early childhood educational development.

Gross enrolment ratio, early childhood education (pre-primary)

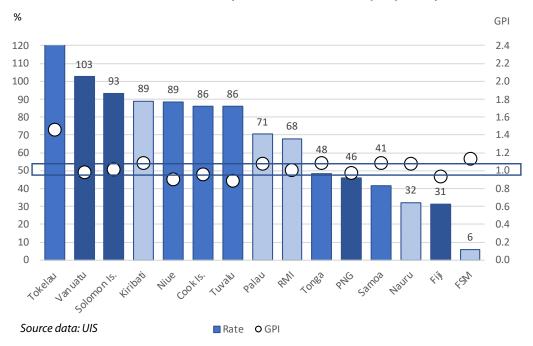


Figure 3.1.2 Gross enrolment ratio, early childhood education (pre-primary)

The low level of participation in early childhood education in some countries has significant implications for policy and planning in the region. National policies should ensure that all children have access to early childhood education, as evidence suggests that students who have previously attended ECE are likely to have better learning outcomes. The PILNA 2018 report states that "some positive association was found between attendance in early childhood education (ECE) programmes and performance in the literacy and numeracy assessments". However, there is a need for the monitoring of attendance at early childhood education to find out the extent to which ECE experience contributes to better student outcomes at primary school, such as proficiency in literacy, numeracy and psychosocial, cognitive, physical and behavioural skills.

3.2 Participation in primary education

The purpose of the primary net enrolment rate (NER) indicator is to show the extent of coverage in primary education. It is defined as the enrolment of the official age group for primary education expressed as a percentage of the corresponding population (UIS 2009).

The purpose of the primary gross enrolment ratio (GER) indicator is to show the general level of participation in primary education. It indicates the capacity of the education system to enrol students of the official age for primary education. It can also be a complementary indicator to net enrolment rate by indicating the extent of over-aged and under-aged enrolment. It is defined as the total enrolment in primary education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year (UIS 2009).

A high GER generally indicates a high degree of participation, whether the students belong to the official age group or not, and a high NER denotes a high degree of coverage for the official school-age population. The theoretical maximum value is 100 per cent, although GER often exceeds 100 per cent due to enrolment of under- and over-age students. A GER value approaching or exceeding 100 per cent indicates that a country is, in principle, able to accommodate all its school-age population, but it does not indicate the proportion already enrolled. The achievement of a GER of 100 per cent is therefore a necessary but not sufficient condition for enrolling all eligible children in school.

Apart from two northern Pacific countries, more than 90 per cent of primary school-aged children in the Pacific region are enrolled in primary education, with almost full enrolment in a third of countries (Figure 3.2.1). Most countries have a gross enrolment ratio above 100 per cent indicating that there are more children enrolled than in the official primary age group (Figure 3.2.2). This is particularly evident in the small island states of Niue and Tokelau, but it may be due to the relatively small numbers of students enrolled. In general, there is parity in the enrolment rates of boys and girls in primary education across the region.

Total primary net enrolment rate

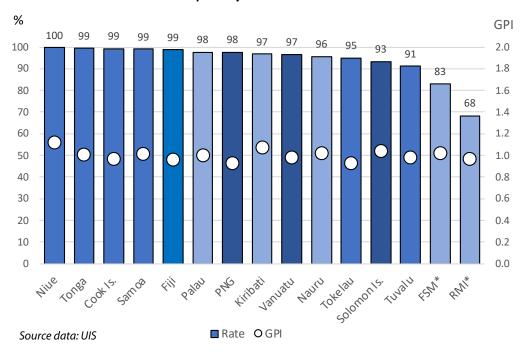


Figure 3.2.1 Total primary net enrolment rate

Note: * indicator denominator is from projections based on 2010 census.

The relatively low proportions of students attending primary schools in some Micronesian countries has significant policy implications for the development of education in the sub-region. As the SDG 4 goal is to provide quality education for all, national policies need to ensure that all children have access to and participate in primary education. Further investigation is, however, needed into barriers to education participation and the reasons for children not being enrolled or dropping out of primary school. The analysis should assess the equality of participation in education for vulnerable populations with reference to urban/rural location, socio-economic status, ethnicity and disability.

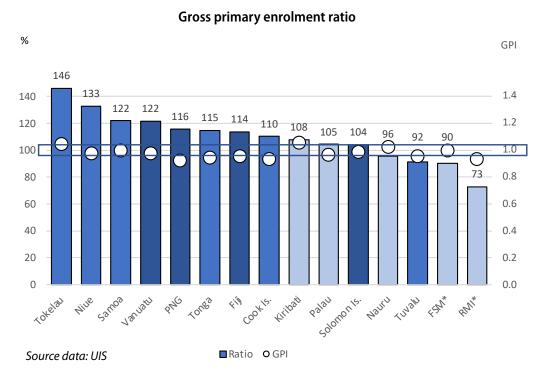


Figure 3.2.2 Gross primary enrolment ratio

Note: * indicator denominator is from projections based on 2010 census.

3.3 Participation in secondary education

The purpose of the NER indicator is to show the extent to which the relevant age group for each education level participates in secondary education. In this report, the focus is on upper secondary education. It is defined as the enrolment of the official age group in upper secondary education expressed as a percentage of the corresponding population. Upper secondary education refers to the final stage of secondary education that prepares students for tertiary education and/or teaches skills relevant to employment (UIS 2009).

The purpose of the GER is to show the general level of participation in education among all populations, regardless of the relevant age group. In this report the focus is on combined lower and upper secondary education. The indicator is defined as the total enrolment in both lower and upper secondary education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to secondary education in a given school year (UIS 2009).

A high GER generally indicates a high degree of participation in secondary education, regardless of students' age. A GER value approaching or exceeding 100 per cent indicates that a country is, in principle, able to accommodate all its school-age population, but it does not indicate the proportion already enrolled. The achievement of a GER of 100 per cent is therefore a necessary but not sufficient condition for enrolling all eligible children in school.

Total upper secondary net enrolment rate % GPI 100 94 94 2.0 90 1.8 81 77 80 1.6 70 70 1.4 59 59 1.2 60 45 43 1.0 50 40 0.8 30 0.6 20 0.4 10 0.2 0 0.0 YOURS RINI Source data: UIS ■ Rate O GPI

Figure 3.3.1 Total upper secondary net enrolment rate

The Polynesian sub-region has the largest enrolment of students in upper secondary education compared to the population of official age for that level of education (Figure 3.3.1). More than 90 per cent of the eligible school-aged population are enrolled in upper secondary school in Nauru and Tokelau, but less than half are enrolled in Papua New Guinea, Vanuatu, and Tuvalu. Overall, it appears that many, if not most, youths are not participating in upper secondary education in the relevant age group.

Looking at the participation in lower and upper secondary education and beyond the relevant age groups, it also shows that, in about half the countries, below 90 per cent of the population enrol (Figure 3.3.2). The low enrolments indicate missing access to secondary levels, which may be attributed to the young population missing incentives or not being able to enrol in a secondary school. In two countries, there is a substantial gender gap in the enrolment rates, with more girls enrolled in secondary education in Tonga and more boys in Papua New Guinea.

Gross secondary enrolment ratio

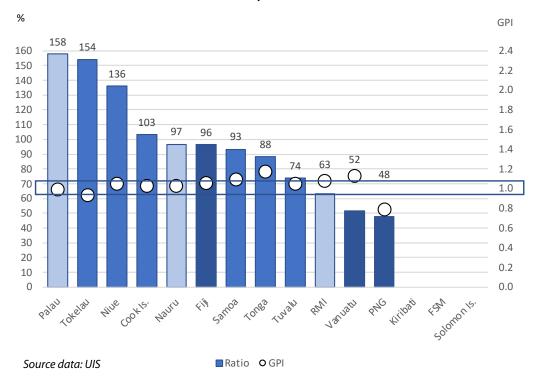


Figure 3.3.2 Gross secondary enrolment ratio

The relatively low proportions of students attending secondary schools in some Melanesian countries has significant policy implications for the development of education in the sub-region. National policies need to ensure that all young people have access to secondary education, which provides opportunities for future life-long learning. There is also a need for further investigation into the reasons for children not attending secondary school, such as inequality in access to and participation in secondary education.

3.4 Participation in tertiary education

The purpose of the participation rate in technical and vocational programmes indicator is to show the level of participation of youth in technical and vocational education and training (TVET). It is defined as the percentage of young people aged 15–24 years participating in technical or vocational education either in formal education, work-based or other settings, on a given date or during a specified period (SDG 4.3.3: UIS 2018).

The purpose of the gross enrolment ratio is to show the general level of participation in tertiary education. It indicates the capacity of the education system to enrol tertiary students of a particular age group. It is defined as the total enrolment in tertiary education regardless of age expressed as a percentage of the population in the five-year age group immediately following upper secondary education (SDG 4.3.2: UIS 2018).

In general, relatively few young people participate in technical and vocational programmes at school level (Figure 3.4.1). Apart from Palau, where almost one-in-five students are undertaking vocational education, less than one-in-ten students participate in TVET programmes. This indicator should be treated with some caution, however, as very few PICs report TVET enrolments in post-secondary education and even fewer in tertiary education institutions. Given the low enrolments beyond lower secondary education, or around the age of 15, the low numbers of students engaging in TVET programmes should raise concern about their economic integration in a given country.

The gross enrolment ratio for tertiary education shows that, apart from Fiji, there is relatively low participation in tertiary education by students of all ages (Figure 3.4.2). It should be noted however, that the large percentage of students enrolled in higher education in Fiji includes students from other countries in the Pacific region.

Percentage of youth enrolled in vocational education

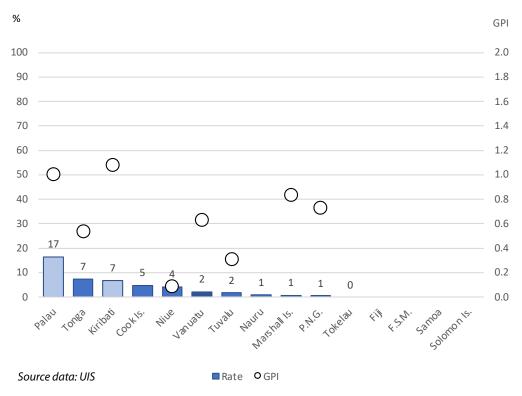


Figure 3.4.1 Proportion of 15–24 year-olds enrolled in vocational education

Gross enrolment rate in tertiary education

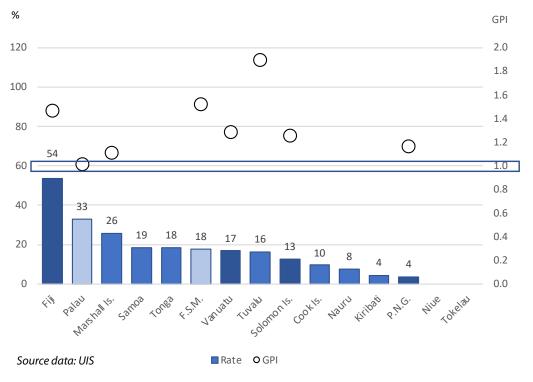


Figure 3.4.2 Gross enrolment ratio for tertiary education

4. Learning outcomes

Gender disparities are significant in both TVET and in tertiary education, with a higher gross enrolment ratio for women in tertiary education, and a higher participation for men in TVET. Social norms may explain these disparities, such as women delaying entry into the labour market for marriage and child-bearing, and men seeking practical/manual work instead of academic studies.



The relatively low proportions of students attending tertiary education has significant policy implications for the development of education in the region. Regional and national policies on the financing of tertiary education need to ensure there is adequate capacity of the tertiary education system to enrol all students who have completed secondary education, as well as older students who need to improve their academic qualifications and vocational skills for employment. To formulate these policies, further investigation is needed into the proportion of students who are not in education, employment or training, and the reasons for this, such as inequality of access to and participation in upper secondary education.

The percentage of Year 6 students meeting expected standards in literacy and numeracy is a proxy indicator for the percentage of children at the end of primary education achieving at least a minimum proficiency in reading and mathematics. The gross intake ratio to the last grade is a proxy indicator of completion rate for primary and lower secondary education. The completion rate and education attainment rate are population-based indicators derived from national population censuses.

4.1 Proficiency in literacy and numeracy

The purpose of the indicator is to provide a direct measure of the learning outcomes achieved in the two subject areas at the end of primary education. It is defined as the percentage of children and young people in Year 6 of primary education achieving at least a minimum proficiency level in reading and mathematics (SDG 4.1.1: UIS 2018). The indicator is based on the reading and numeracy scores from the 2021 Pacific Islands Literacy and Numeracy Assessment (PILNA). The minimum proficiency level is the benchmark of basic knowledge in a domain measured through learning assessments. It is defined as achieving at or above the minimum expected level for the year level being assessed. Students reaching the benchmark are able to apply basic knowledge in a variety of situations, similar to the idea of minimum proficiency (PILNA 2021).

While almost all Palauan students achieved the expected proficiency levels in both literacy and numeracy, other countries achieved lower results, ranging from less than a third of students assessed as proficient in literacy in Kiribati and Tonga to more than 80 per cent of students in Cook Islands, Tokelau and Niue (Figure 4.1.1). The proportions of students who achieved proficiency in numeracy was relatively higher, ranging from half of the students in Nauru to more than 90 per cent of students in Niue and Solomon Islands (Figure 4.1.2). On average, significantly more girls than boys achieved proficiency in literacy, and to lesser extent also more girls than boys achieved proficiency in numeracy.

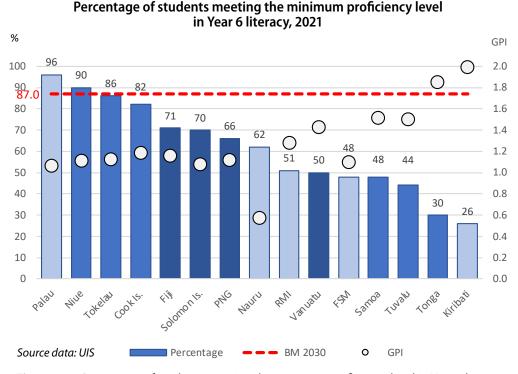


Figure 4.1.1 Percentage of students meeting the minimum proficiency level in Year 6 literacy

Percentage of students meeting the minimum proficiency level in Year 6 numeracy, 2021

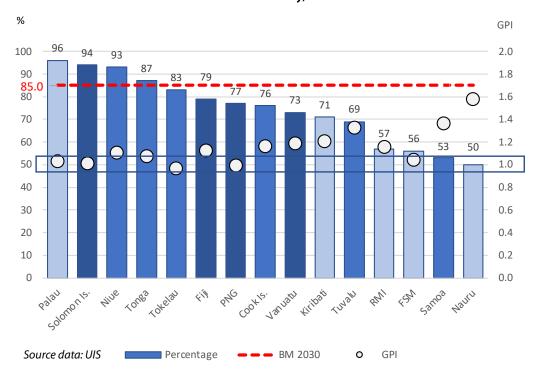


Figure 4.1.2 Percentage of students meeting minimum proficiency in Year 6 numeracy

The low proportions of students achieving proficiency in literacy and numeracy at the end of primary school has significant policy implications for the development of education in the region. Regional education goods and services and national education policies on teaching and learning need to ensure that all children have the opportunity to acquire basic skills in literacy and numeracy, the foundation of future learning. Also, research needs to be conducted into the reasons for students not achieving the expected learning outcomes, and factors affecting success at school, including the alignment of the curriculum to expected learning outcomes and the quality of teaching practice. The analysis should also assess the equity of learning outcomes in primary education for students with disabilities.

Completion of schooling

The gross intake ratio to the last grade of primary education is a proxy measure of primary completion. It reflects how the policies on access to and progression through the early grades of each level of education affect the final grade of that level. It also indicates the capacity of the education system to accommodate completion for the population of the intended entrance age to the last grade of the given level of education. It assumes that students entering the last grade for the first time will eventually complete the grade and hence the given level of education.

The indicator is defined as the total number of new entrants into the last grade of primary education or lower secondary education, regardless of age, expressed as a percentage of the population at the intended entrance age to the last grade of primary education or lower secondary education. The intended entrance age to the last grade is the age at which students would enter the grade if they had started school at the official primary entrance age, had studied full-time and had progressed without repeating or skipping a grade (SDG 4.1.3: UIS 2018).

Overall, a high ratio of students is enrolled in the last grade of primary and lower secondary education in relation to the official age for entry into the last grade (Figures 4.2.1 and 4.2.2). However, while a high ratio indicates a high degree of primary and lower secondary education completion, the ratio can exceed 100 per cent due to over-aged and under-aged children entering primary school late/early and/or repeating grades. Fewer students complete primary and lower secondary schooling in Papua New Guinea, Marshall Islands and Tuvalu than in other countries. With a few exceptions, there is overall gender parity for completion of primary education, though less so for lower secondary education, where more girls than boys complete school.

Gross intake ratio to the last grade of primary education

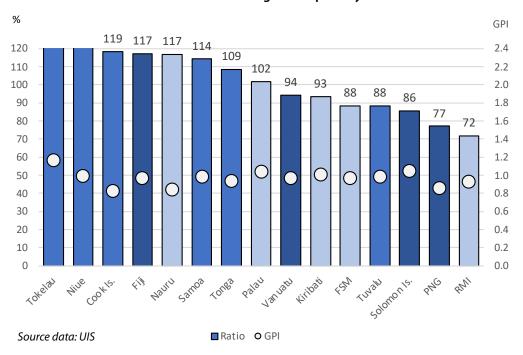


Figure 4.2.1 Gross intake ratio to the last grade of primary education

The lower completion rate for lower secondary education has significant policy implications for the development of education in the Pacific region, especially for the Melanesian sub-region. Policies on access to and progression through the early grades of education, such as grade repetition, may affect the capacity of an education system to provide for students in later grades, especially if there are large numbers of students who entered school late or have repeated earlier grades. Further investigation should focus on the reasons for students not completing secondary education, such as research into the factors affecting access and participation in secondary school. Section 8 of this report provides evidence from household surveys that there are large disparities in the completion of schooling between young people who live in urban and rural areas and/or are from rich or poor households. Further analysis should assess the extent to which ethnicity and disability affect the completion of secondary education.

Gross intake ratio to the last grade of lower secondary education

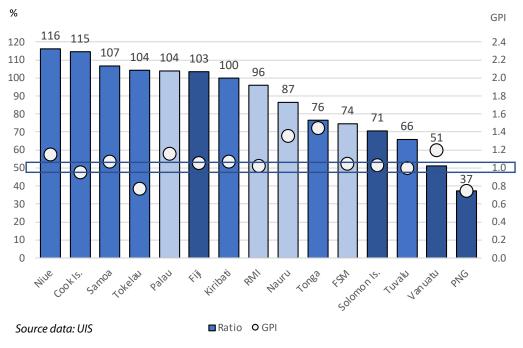


Figure 4.2.2 Gross intake ratio to the last grade of lower secondary education

4.3 Completion of education

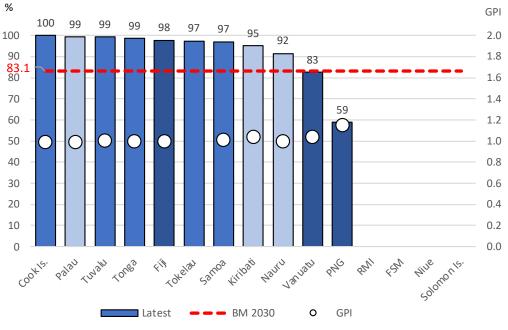
The completion rate indicates how many persons in a given age group have completed the relevant level of education. By choosing an age-group which is slightly older than the theoretical age-group for completing each level of education, the indicator measures how many children and adolescents enter school more or less on time and progress through the education system without excessive delays. A completion rate at or near 100 per cent indicates that most or all children and adolescents have completed a level of education.

The indicator is defined as percentage of a cohort of children or young people aged three to five years above the intended age for the last grade of each level of education who have completed that grade. The intended age for the last grade of each level of education is the age at which students would enter the grade if they had started school at the official primary entrance age, had studied full-time and had progressed without repeating or skipping a grade (SDG 4.1.4: UIS 2018).

Overall, a high percentage of youth have completed primary and lower secondary education (Figures 4.3.1 and 4.3.2) with only three countries not reaching the regional benchmarks. In most countries, more than 90 per cent of the population had completed primary education and more than 80 per cent had completed lower secondary education. However, less than 60 per cent of the population in Papua New Guinea have completed primary education and only 30 per cent have completed lower secondary education. There was also a low level of lower secondary completion in Nauru and Vanuatu, with less than 50 per cent of the population completing this level of education.

A low completion rate indicates low or delayed entry into a given level of education, high drop-out, high repetition, late completion, or a combination of these factors. To ensure that all children have the opportunity to complete their schooling in a timely manner, policies need to identify and support excluded population groups that have experienced low or delayed entry into school, high drop-out, high repetition, and/or late completion. Furthermore, the completion rate indicator may help explain the high number of youth who are out-of-school. When disaggregated by gender, location and other characteristics, this indicator can identify excluded population groups. An analysis of completion rates disaggregated by gender, location and wealth is provided in the equity section of this report.

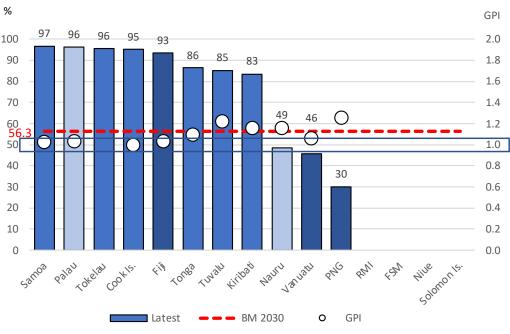
Completion rate of primary education



Source data: UIS, SPC

Figure 4.3.1 Completion rate of primary education

Completion rate of lower secondary education



Source data: UIS, SPC

Figure 4.3.2 Completion rate of lower secondary education

4.4 Educational attainment

The purpose of the educational attainment indicator is to measure the human capital of Pacific Island countries. According to the World Bank, human capital consists of the knowledge, skills, and health that people accumulate throughout their lives, enabling them to realize their potential as productive members of society. The indicator is a key component of the Human Development Index (HDI) published by UNDP.

The indicator is defined as the cumulative distribution of the population of a given age group according to the minimum level of education completed. This indicator is usually presented for age groups of at least 25 years and older in order to ensure that most of the population has completed their education. For each level of education, the indicator measures the percentage of the population who complete at least that level of education (SDG 4.3.3: UIS 2018).

Figures 4.4.1 and 4.4.2 show the levels of upper secondary and post-secondary education attainment for countries that have had a recent population census. Most Pacific people aged 25 years and over in Palau, Marshall Islands, Tonga, Niue and Cook Islands have completed at least upper secondary education but, apart from Palau, fewer adults have completed post-secondary education, such as technical and vocational education and training (TVET) or tertiary education. For example, while 80 per cent of all adults in Marshall Islands had completed secondary education, only five per cent had completed a post-secondary qualification. In general, there is gender disparity in both upper secondary and post-secondary attainment in most countries.

To enhance sustainable national development, education policies need to focus on supporting students to achieve qualifications in upper secondary education that lead to access to higher education. Higher levels of attainment in a population are associated with greater social development, national wealth and economic growth. Based on recent population censuses and household surveys, further research can be undertaken into the extent to which access to higher education relates to greater household and personal income in the Pacific region, such as type of occupation and level of salaries and wages for different levels of attainment. For example, recent household surveys suggest that people from wealthy households are more likely to complete secondary and higher education qualifications than those from poorer households (refer to Section 8).

Percentage of the population aged 25+ with upper secondary education

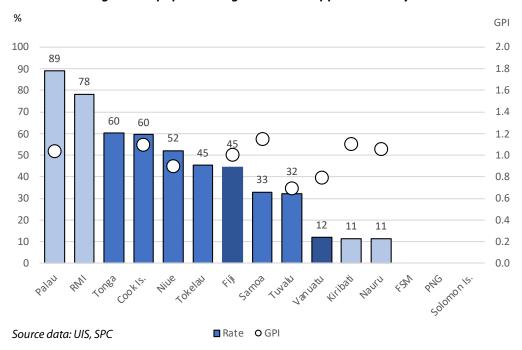


Figure 4.4.1 Percentage of the population aged 25+ with upper secondary education

Percentage of the population aged 25+ with post-secondary education

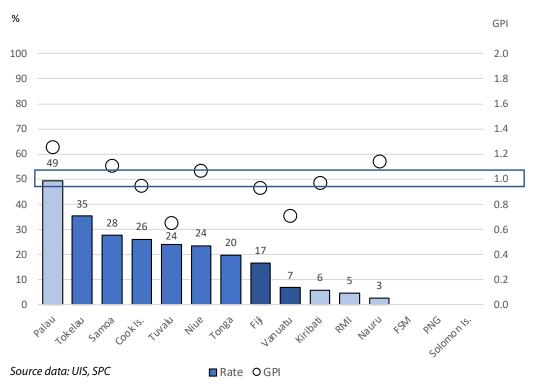


Figure 4.4.2 Percentage of the population aged 25+ with post-secondary education

5. Teaching profession

The proportion of trained and qualified teachers and student-teacher ratios in primary and secondary education are SDG 4 thematic indicators of the quality of the teaching profession in the Pacific region.



5.1 Trained teachers

Source data: UIS

Trained teachers play a key role in ensuring that the quality of education provided is good. Ideally, all teachers should receive adequate, appropriate and relevant pedagogical training to teach at the relevant level of education. This indicator measures the share of the teaching workforce that is pedagogically trained. This indicator is defined as the percentage of teachers in primary and secondary education who have received at least the minimum organised pedagogical teacher training (pre-service and in-service) required for teaching at the relevant level in a given academic year (SDG 4.c.1: UIS 2018).

A high value indicates that students are being taught by teachers who are and remain pedagogically well-trained to teach. It is important to note that national minimum training requirements can vary widely from one country to the next. This variability between countries lessens the usefulness of global tracking because the indicator would only show the percentage reaching national standards, not whether teachers in different countries have similar levels of training. Further work would be required if a common standard for teacher training is to be applied across countries.

Percentage of teachers with minimum teaching qualifications in primary education % GPI 100 100 97 100 94 2.0 91 88 82 90 **87** 1.8 80 1.6 70 1.4 62 57 60 1.2 51 50 1.0 38 40 0.8 30 0.6 20 0.4 10 0.2 0.0 ~okelau

Figure 5.1.1 Percentage of teachers with minimum teaching qualifications in primary education

BM 2030

GPI

Proportion

Only two Pacific Island countries, Cook Islands and Niue, have all or nearly all teachers in their workforce trained to teach in both primary and secondary education (Figure 5.1.1 and 5.1.2). All secondary teachers in Fiji and Papua New Guinea and Niue were trained to teach at secondary level, though it is uncertain whether all were qualified to teach. Only just over a third of teachers in Federated States of Micronesia were trained teachers in primary education, and only a third of teachers in Federated States of Micronesia were trained at the secondary level.

The relatively low levels of trained teachers in some Pacific Island countries have significant policy implications for the development of education in the Pacific region, especially for the Melanesian sub-region and small island states. Regional and national education institutions need to ensure that all pre-service teachers are pedagogically trained and certified to teach at the relevant education level. Policy evidence based on quality research is needed for pre-service and in-service training of teachers in the Pacific region, such as research into the factors affecting the professional competencies of teachers in the classroom, including whether or not teachers are receiving training in current teaching and learning practices. The analysis should assess the equity of class-sizes within the education sector with specific reference to the urban/rural location of schools, the school region/district, and the socio-economic status of communities.

Percentage of teachers with minimum teaching qualifications in secondary education

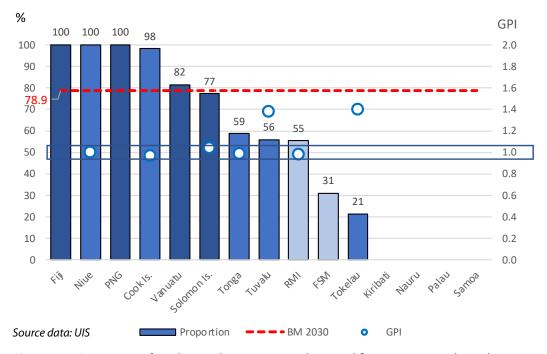


Figure 5.1.2 Percentage of teachers with minimum teaching qualifications in secondary education

5.2 Oualified teachers

Qualified teachers play a key role in ensuring that good quality education is provided. Ideally, all teachers should be academically well-qualified in the subject(s) they are expected to teach. This indicator measures the share of the teaching work force that is academically qualified according to national standards. It is important to note that national academic qualification requirements vary from country to country, which makes this indicator useful for national monitoring but not necessarily for international comparison.

The indicator is defined as the percentage of teachers who have at least the minimum academic qualifications required for teaching their subjects in primary and secondary education as determined by national education authorities. In many cases, trained primary teachers will have a recognised qualification in primary teaching that certifies they are qualified to teach. At secondary level, teachers may require a qualification in a subject area that they are required to teach (SDG 4.c.3: UIS 2018).

The available data (Figure 5.2.1 and 5.2.2) show that all primary teachers in Niue, Tonga and Tuvalu are qualified to teach, and more than 95 per cent are qualified to teach in Cook Islands, Fiji and Nauru. All or almost all secondary teachers are qualified to teach their subjects in Cook Islands, Nauru, Niue and Tuvalu, and more than 90 per cent are qualified in Solomon Islands and Federated States of Micronesia.

For some Pacific Island countries, the relatively low level of qualified teachers has significant policy implications for the development of education. National education policies need to ensure that all in-service teachers are qualified to teach at the relevant education level, especially upper secondary. This will require expanding requirements for teaching with the minimum qualifications, as well as ensuring that adequate in-service training is provided on a repeated basis to ensure that the required teaching competencies are acquired. To inform policy development, further investigation should be carried out into the opportunities available for professional development for teachers, including in-country and overseas study in degree level subjects. Based on available evidence, increases in the number of teachers with tertiary qualifications is likely to result in improvements in teaching and learning in the classroom.

Percentage of qualified teachers in primary education

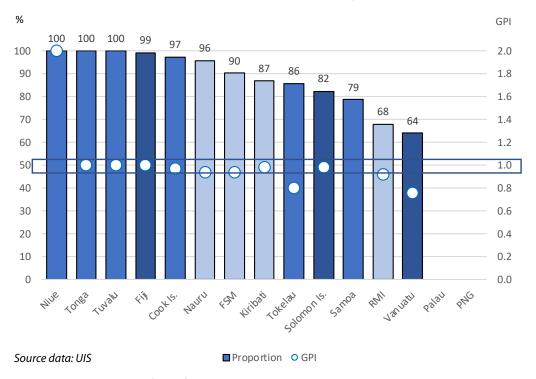


Figure 5.2.1 Percentage of qualified teachers in primary education

Percentage of qualified teachers in secondary education

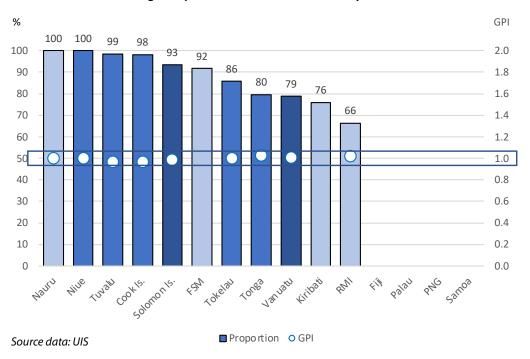


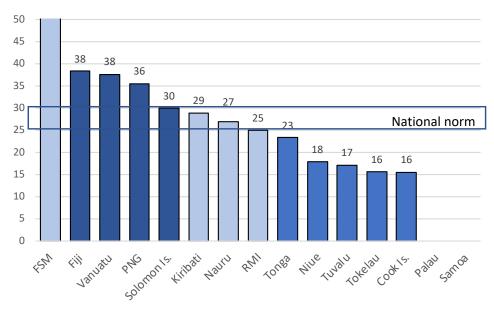
Figure 5.2.1 Percentage of qualified teachers in secondary education

5.3 Teacher supply

The purpose of the student:teacher ratio is to measure trained teacher workloads and human resource allocation in educational institutions and to give a general indication of the average amount of time and individual attention a student is likely to receive from teachers. The student:teacher ratios are considered important determinants of learning outcomes and an indicator of the overall quality of an education system.

The technical definition of the student:teacher ratio is the average number of students per trained teacher at a specific level of education in a given school year (SDG 4.c.2: UIS 2018). The student:teacher ratio can be compared with established national standards on the number of students per trained teacher for each level or type of education. In the Pacific region, the national norms are generally between 25 and 30 students per teacher in primary education and between 20 and 25 students per teacher in secondary education.

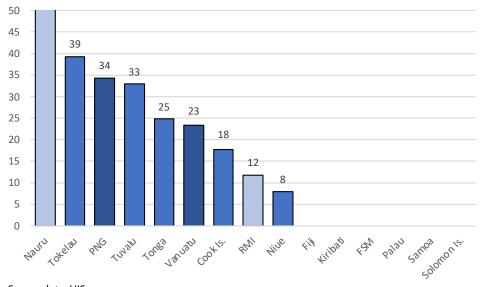
Student: trained teacher ratio in primary education



Source data: UIS

Figure 5.3.1 Student: trained teacher ratio in primary education

Student: trained teacher ratio in secondary education



Source data: UIS

Figure 5.3.2 Student: trained teacher ratio in secondary education

A high student:teacher ratio suggests that each teacher has to be responsible for a large number of students, i.e. the higher the student:teacher ratio, the lower the relative access of students to teachers. It is generally assumed that a low student:teacher ratio signifies smaller classes, which enables the teacher to pay more attention to individual students, which may in the long run result in a better performance of the students.

Apart from the Federated States of Micronesia, Fiji, Vanuatu and Papua New Guinea, the latest available student: trained teacher ratios are within or below regional norms in primary education (Figure 5.3.1). In secondary education, Nauru, Tokelau, Papua New Guinea and Tuvalu are well above regional norms (5.3.2). On average, there are 30 students per primary trained teacher and 33 students per secondary trained teacher. It should be noted that these data are based on a headcount of teachers and include part-time teachers.

To ensure an adequate supply of teachers in the Pacific region, national policies need to establish regulations on the maximum number of students per teacher for each level of education. These policies need to be informed by evidence on the supply and demand for qualified and trained teachers, such as research into the factors affecting the recruitment, retention and attrition of teachers, including teacher salary and employment conditions. The analysis should assess the equity of teacher provision with the education sector, with specific reference to the urban/rural location of schools since ratios significantly differ according to school location. For example, the ratios are very high in urban areas with dense populations and extremely low in remote island schools.

6. Financial resources

To achieve the SDG 4 goals and targets, it is important to monitor the adequacy of public financial resources allocated to education and to analyse the equity of government expenditure within education systems. National governments and regional development organisations need accurate and regular data on financing for effective education monitoring and policy planning (UIS 2016).



Total public expenditure on education, as a percentage of total government expenditure, assesses the extent to which government policy focuses on education relative to other public investments. In other words, it reflects the commitment of governments to invest in human capital development. It is calculated by dividing the total public expenditure on education incurred by all government agencies/departments by the total government expenditure for the same financial year.

The total public expenditure on education as a percentage of the gross domestic product (GDP) shows the proportion of national wealth that has been spent by the government on education in a specific financial year. The total public expenditure on education includes both recurrent and capital expenditure on education from the national budget. It is calculated by dividing the total public expenditure on education in a given financial year by the GDP of the country for the corresponding year.

More than half of PICs spend more than 15 per cent of total government expenditure on education and all except two PICs spend more than 4 per cent of GDP on education (Figures 6.1.1 and 6.1.2). A standout example of public investment in education is Solomon Islands, which spends almost a third of its total government expenditure on education, which represents 13 per cent of GDP. Conversely, Papua New Guinea spends only six per cent of total government expenditure and one per cent of GDP on education.

The relatively low levels of education expenditure in some Pacific countries provide financial challenges to policy development and to operational maintenance of the education system. To mitigate these challenges, development partners are mobilising financial and technical resources to assist PICs to implement national reforms and regional initiatives. To inform these mitigation strategies, further investigation into education financing at different levels of the education system is needed to assess the level of equitable funding across the system, as well as to assess the adequacy of funding for schools in low socio-economic areas.

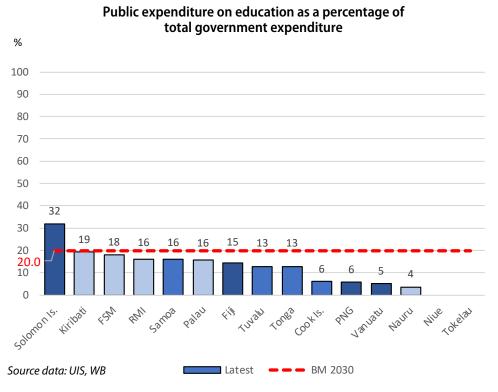


Figure 6.1.1 Public expenditure on education as a percentage of total government expenditure

Public expenditure on education as a percentage of GDP

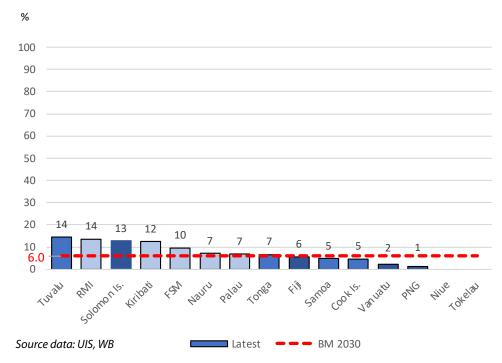


Figure 6.1.2 Public expenditure on education as a percentage of GDP

7. Regional trends in Pacific education



7.1 Quality and relevance

The first PacREF policy objective is to ensure that high quality, relevant programmes are provided for learners at all levels of education. The goal is for all learners to be provided with a safe and supportive environment, within which they are offered high quality learning opportunities that are meaningful, valuable, inclusive and future-focused. A key outcome is that curriculum and programmes are embedded in the Pacific context; they reflect Pacific values, cultures, traditional knowledge and skills, and provide a learning environment that supports learning at all levels of education.

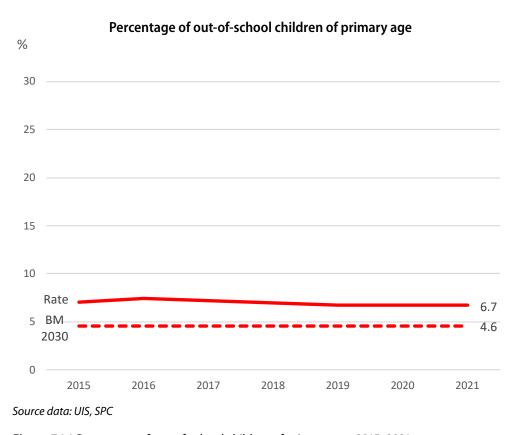


Figure 7.1.1 Percentage of out-of-school children of primary age, 2015–2021

Across the Pacific region, relatively few children are not enrolled in and attending primary school (Figure 7.1.1). The rates of out-of-school primary aged children have been falling over the last six years, and in 2021 less than seven per cent of children are not enrolled in school. However, the rates of out-of-school children of lower secondary age had been increasing (Figure 7.1.2), especially during the period 2015–2018. Since 2018, the out-of-school rates have levelled off with a guarter of children not enrolled.

Education policies can be better designed and targeted to ensure that all children have access to good quality education. PacREF is developing regional tools and processes to improve the quality and relevance of education, especially curriculum and programmes that meet the needs of children not enrolled or attending school. The regional tools and processes that are being developed include: regionally identified and agreed definition(s) of non-cognitive skills, tools for needs assessments related to the quality of school learning environments in the Pacific region, and quality assurance frameworks for quality school learning environments.

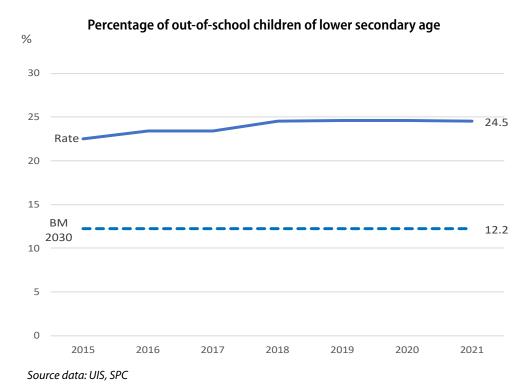


Figure 7.1.2 Percentage of out-of-school children of lower secondary age, 2015–2021

Learning pathways

The PacREF policy objective for learning pathways is to ensure that learners' needs are met through a broad range of programmes and delivery modalities. The goal is to provide equal access for all learners to multiple and seamless pathways and modalities of learning that will allow them to meet their full potential. A key outcome is that the youngest learners (pre-schoolers) are prepared to engage in formal schooling and that there are linked pathways between levels of schooling and beyond (PacREF 2018–2030).

Early childhood education (ECE) is a priority area of PacREF that encourages increased access and participation of young children in ECE programmes prior to their starting primary school. However, the mode of ECE provision varies across the region, with some governments funding ECE teachers' salaries and providing ECE facilities and materials, while others provide policy and regulatory frameworks to support and structure nongovernmental provision of early childhood education.

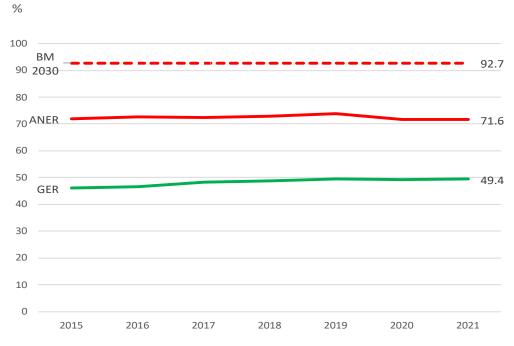
Although few Pacific countries have achieved full participation in ECE, the majority of Pacific children benefit from some form of ECE. However, the percentage of children that enrol in the year prior to primary education has decreased slight over the last two years (Figure 7.2.1). The decline in ECE enrolment rates in 2020 and 2021 may reflect the impact of the COVID pandemic on ECE participation.

In 2021, three-quarters of lower secondary-age students were enrolled in lower secondary education and half the students of upper secondary age were enrolled in upper secondary education (Figure 7.2.2). Over the last seven years, lower secondary net enrolment rates (NERs) have declined slightly, while upper secondary NERs have increased. The decline in NER for both lower and secondary education over the last two years was presumably the result of school closures during the pandemic.

To improve ECE access and participation, PacREF is developing regional tools and processes that assist PIC ministries of education to implement their ECE policies. The regional tools and processes include policy guidelines for the development of good quality ECE; tools for the governance, management, quality assurance, financing and programme development of ECE; and a framework for the domains of home to school transitions.

PacREF is also developing regional tools and processes that improve secondary and post-secondary pathways, such as technical and vocational education and training (TVET) programmes, a framework identifying learning pathways from ECE to adulthood, a Pacific skills portal, and a regional Pacific skills dialogue/summit.

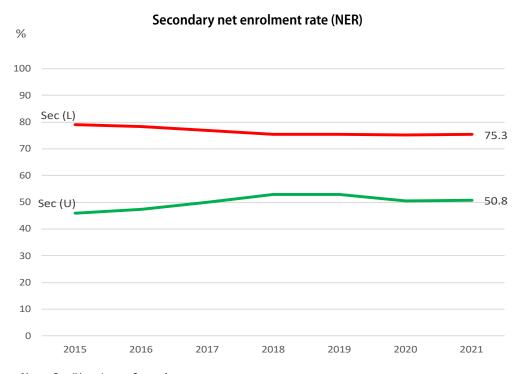
ECE enrolment ratio



Note: GER Gross enrolment ratio, early childhood education (pre-primary)
ANER Adjusted net enrolment rate (year before official primary age)
BM Regional benchmark 2030 (average)

Source data: UIS, SPC

Figure 7.2.1 Early childhood education enrolment ratio, 2015–2021



Note: Sec(L) = Lower SecondarySec(U) = Upper Secondary

Source data: UIS, SPC

Figure 7.2.2 Secondary education enrolment rate, 2015–2021

7.3 Learning outcomes

PacREF has a policy objective to enable learners at all levels of education to achieve their full potential. The goal is to ensure that all learners acquire the knowledge, skills, values, and attributes to enable them to contribute to their families and communities, and to nation building. A key outcome of PacREF is to increase the percentage of learners that achieve expected levels of literacy and numeracy at all levels of education, particularly by the end of the primary cycle (PacREF 2018–2030).

Figures 7.3.1 and 7.3.2 show the trends in the expected (minimum) proficiency levels for literacy and numeracy as measured by PILNA for the total weighted sample (w/sample), education system average (system avg.) and weighted student population (w/population). It should be noted that PILNA reported only on proficiency levels for reading in 2021, so the latest literacy rates are not available.⁶

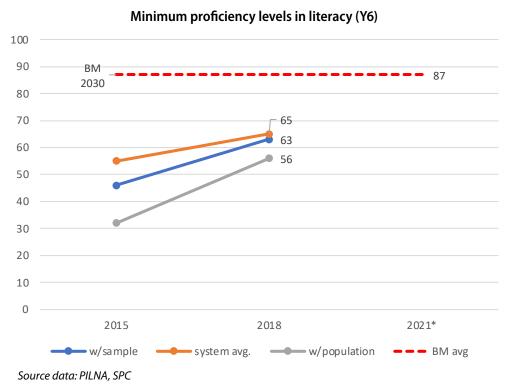


Figure 7.3.1 Minimum proficiency levels in literacy of Year 6 students, 2015, 2018, 2021

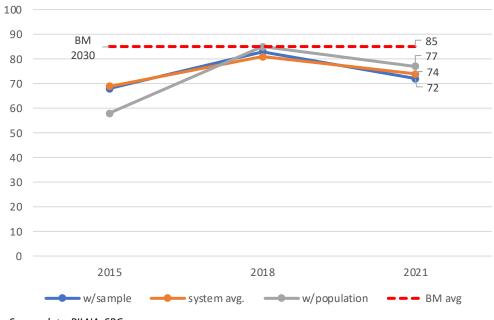
Around 63 per cent of Year 6 students who were assessed in 2018 achieved the minimum expected standard for literacy. However, at the regional level, only 56 per cent of end-of primary students are estimated as minimally proficient in literacy. Nonetheless, this represents a 33 percentage point increase since 2015 (Figure 7.3.1). In 2021 "on average, year six students in the region are meeting the minimum expected standard in reading" (PILNA 2021). However, only half (53 per cent) of the student sample were reading at or above the minimum expected level. Adjusting for population size, around two-thirds (65 per cent) of students in the region were achieving the minimum standard of reading proficiency at the end of primary education.

In 2021 "on average, year six students throughout the region are achieving above the minimum expected standard in numeracy...Most year six students (72 per cent) were meeting the minimum expected level for numeracy" (PILNA 2021). However, adjusting for population size, in 2021 more than three-quarters (77 per cent) of students in the region were achieving the minimum standard of numeracy proficiency at the end of primary education. This is eight per cent lower than in 2018 (Figure 7.3.2).

Overall, most Year 6 students are proficient in literacy and numeracy, with an average of three-quarters of students meeting the expected standard for numeracy and almost two-thirds of students meeting the regional literacy proficiency levels. However, there is a significant number of Pacific children that are still not able to read or comprehend what they read and are unable to write at expected levels. The fact that a substantial percentage of children do not achieve the expected curriculum outcomes for literacy is a critical system shortfall across almost all Pacific countries.

⁶ It is recommended that PILNA continues to report on literacy proficiency levels to enable the monitoring of learning outcomes across the assessment years.

Minimum proficiency levels in numeracy (Y6)



Source data: PILNA, SPC

Figure 7.3.2 Minimum proficiency levels in numeracy of Year 6 students, 2015, 2018, 2021

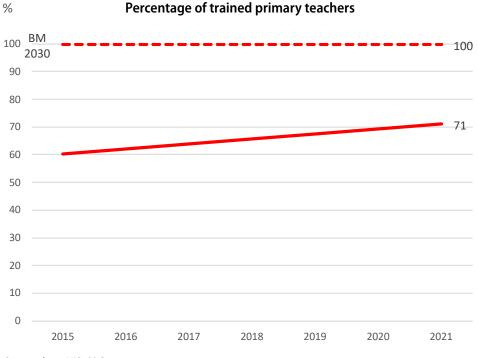
To improve student outcomes, PacREF is developing regional tools and processes to assess student literacy and numeracy, including assisting PIC ministries of education to implement the assessment at the national level. Another regional assessment is being developed for lower secondary education. PacREF has also developed the Waka Learning Hub, which provides teaching and learning resources for teachers.

7.4 Teaching profession

A key policy objective of PacREF is to enable the teaching profession to be supported and empowered through opportunities for continuous development, shared understanding and accountability. The goal is to ensure that the Pacific region has competent, qualified and certified teachers and school leaders who are current in their professional knowledge and practice. A major outcome to be achieved by PacREF is that all teachers and school leaders in the Pacific region are qualified and skilled certified professionals who are able to demonstrate their competencies against approved standards (PIFS 2018).

Most teachers across the Pacific region are trained and have received at least the minimum required amount of formal pedagogical teacher training, either pre-service and/or in-service. There is a high percentage of trained teachers in primary education (Figure 7.4.1), but a lower percentages in secondary education (Figure 7.4.2). While most countries have reported an increase in the number of trained and qualified teachers at primary and secondary levels, there is still a large gap between the current number of trained teachers and the regional benchmark.

To reduce the gap, PacREF is developing regional tools and processes that aim to improve the quality of the teaching profession by assisting PIC ministries of education to contextualise these tools and processes for national implementation. The regional tools and processes include teacher competency standards, accreditation and recognition of teacher education programmes, standards and qualifications in school leadership, and a framework for teachers' continuous professional development.



Source data: UIS, SPC

Figure 7.4.1 Percentage of trained primary teachers, 2015–2021

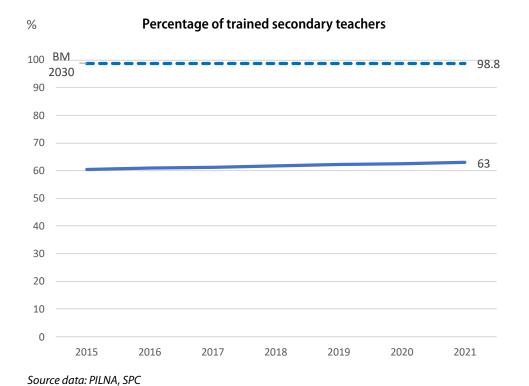


Figure 7.4.2 Percentage of trained secondary teachers, 2015–2021

7.5 Financial resources

The Education 2030 Framework for Action recommends that the SDG 4 and Education 2030 agenda is adequately financed. It also recommends that there is a need for national, regional and international partnerships to ensure the implementation of the agenda (UNESCO 2016). The framework encourages governments to increase public spending on education and allocate at least 15–20 per cent of public expenditure and 4–6 per cent of gross domestic product (GDP) in national budgets to the education sector.

% Public education expenditure as a percentage of total government expenditure

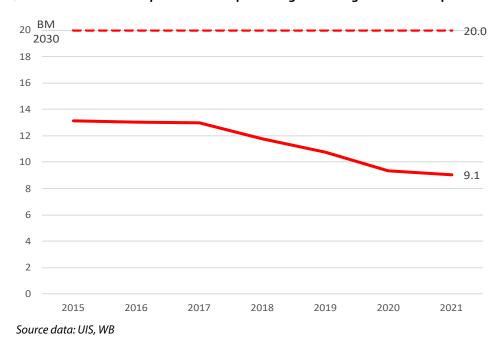


Figure 7.5.1 Public education expenditure as a percentage of total government expenditure, 2015–2021

For the Pacific region, public education expenditure as a percentage of total government expenditure declined from around 13 per cent in 2015 to 9 per cent in 2021 (Figure 7.5.1). This was largely the result of a decline in government expenditure in education in Papua New Guinea, which contributed almost half of the total regional expenditure in education. However, public education expenditure as a percentage of gross domestic product has remained relatively constant at around three per cent of GDP (Figure 7.5.2).

At the regional level, government spending on education has not met the recommended targets for the financial indicators which indicate that it is unlikely that the regional benchmarks on public education expenditure will be achieved by 2030. In 2021, less than half of the PICs reached this regional benchmark. To achieve the SDG 4 targets, it will be essential for governments to increase education spending and for development partners to increase investment in the education sector.

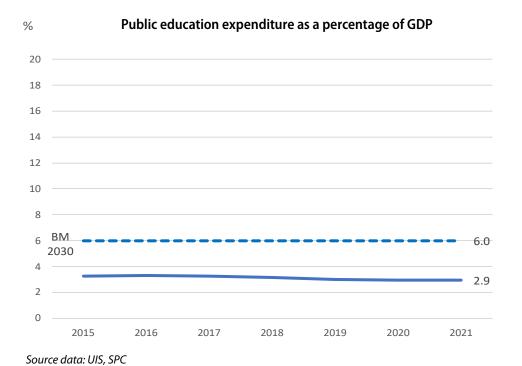


Figure 7.5.2 Public education expenditure as a percentage of GDP, 2015–2021

8. Equity of education access and participation

The SDG 4.5 target is: "by 2030, eliminate gender disparities in education and ensure access to all levels of education and vocational training for the vulnerable" (UIS 2018). Gender, location, wealth and disability are key variables for disaggregation of education indicators that measure the equity of education access and participation. This section discusses the disparities in education completion rates for lower and upper secondary education.



8.1 Gender equity

Depending on government policies towards gender inclusion, girls and young women may not be supported or encouraged to attend and complete secondary school or higher education. In some cases, girls may be expected to undertake non-academic subjects or perform domestic duties at home.

The gender of persons attending and completing education is collected in international sample surveys, such as the Multiple Indicator Cluster Survey (MICS), and national population censuses which routinely disaggregate education indicators by gender.⁷

In the Pacific region, gender data for completion rates are available for eight PICs: Fiji, Kiribati, Palau, Papua New Guinea, Samoa, Tonga, Tuvalu and Vanuatu. Figures 8.1.1 and 8.1.2 show the differences in the completion rates for male and female youth for lower and upper secondary education.

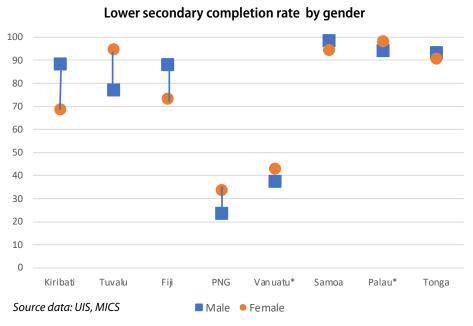


Figure 8.1.1 Lower secondary completion rate by gender

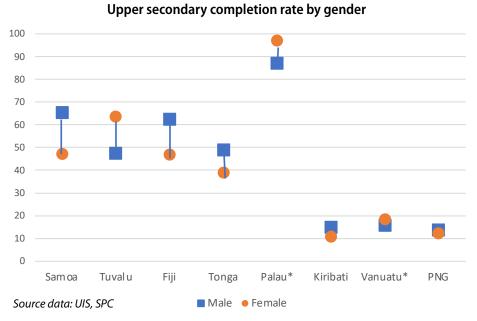


Figure 8.1.2 Upper secondary completion rate by gender

⁷ Disaggregated data for completion rates and other education indicators are available from the UIS data centre at data.uis.unesco.org

In some PICs, girls were less likely to complete secondary education than boys, though for other PICS, more girls than boys completed secondary education. While the gender gap between girls and boys varied across countries, it did not significantly differ between lower and upper secondary education.

To reduce gender disparity in education completion rates, policies are needed that support the participation of girls and young women in secondary and higher education. These policies may include: ensuring places for girls in senior secondary schools and higher education, financial incentives for girls to enrol in STEM subjects, and career education for girls.

Location equity

Depending on government policies on the provision of schooling in rural locations, rural children may not be able to attend school due to the distance to travel and consequent transport costs. In some cases, children in rural areas may be expected to walk long distances or cross rivers or sea passages to attend the nearest school. In other cases, children may need to relocate to another location to attend school (e.g. boarding school, boarding with relatives).

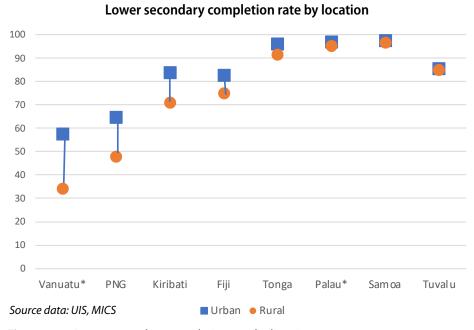


Figure 8.2.1 Lower secondary completion rate by location

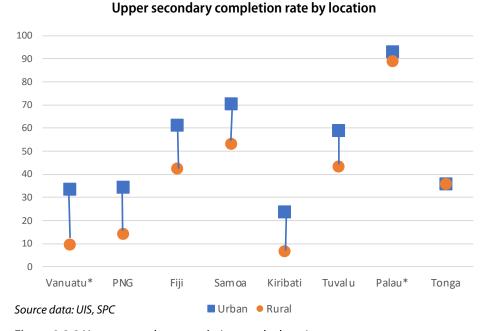


Figure 8.2.2 Upper secondary completion rate by location

The location of households is collected in international sample surveys, such as the Multiple Indicator Cluster Survey (MICS), and national population censuses, which disaggregate education indicators by urban and rural areas. The urban and rural area distinction is defined differently for each country, depending on its national statistical classification.

In the Pacific region, location data are available for eight PICs: Fiji, Kiribati, Palau, Papua New Guinea, Samoa, Tonga, Tuvalu and Vanuatu. Figures 8.2.1 and 8.2.2 show the differences in the completion rates for youth in urban and rural areas for lower and upper secondary education.

8.3 Wealth equity

Depending on government policies towards the cost of education tuition, children in poor households may not be able to attend school due to their parents/caregivers being unable to pay school fees or other costs related to schooling, such as transport costs. In some cases, children in poor families may be expected to work rather than attend school.

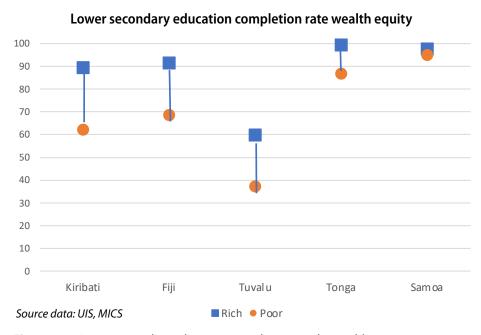


Figure 8.3.1 Lower secondary education completion rate by wealth

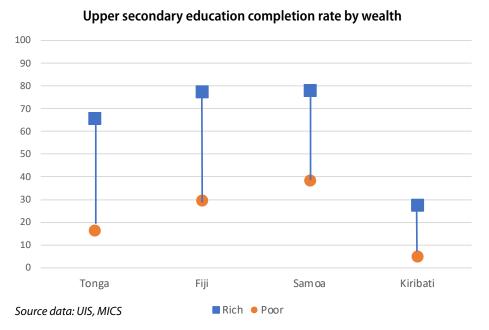


Figure 8.3.2 Upper secondary education completion rate by wealth

Wealth data are collected from international sample surveys, such as the Multiple Indicator Cluster Survey (MICS), which disaggregate education indicators by wealth index quintile. The wealth index is a composite indicator of wealth that uses information on the ownership of consumer goods, dwelling characteristics, water and sanitation, and other characteristics that are related to the household's wealth.

In the Pacific region, wealth quintile data are available for five PICs: Fiji, Kiribati, Samoa, Tonga and Tuvalu. Figures 8.3.1 and 8.3.2 show the differences in the completion rates for youth from the lowest quintile (poor) and highest quintile (rich) for lower and upper secondary education.

Youth in poor households were less likely to complete secondary education than youth in rich households. In fact, the gap between poor and rich youth increased with the level of secondary education. That is, significantly more youth in rich households completed upper secondary education than those in poor households, though the gap was somewhat smaller for lower secondary education.

To reduce the wealth disparity in education completion rates, policies are needed that support the participation of students from poor backgrounds in secondary and higher education. These policies may include free tuition for all students, school transport subsidies, school incentive funding to enrol students from disadvantaged backgrounds, social protection programmes and additional teaching resources for teachers of disadvantaged students.

Disability equity 8.4

Government policies toward inclusive education vary, but children with disabilities are sometimes denied access to education, especially attendance at mainstream schools. In some countries, children with disabilities are educated at a special education school with boarding facilities for students who do not live in the main centres. Inclusive education is also being tried out in mainstream schools, especially in rural to remote areas where there are usually no special schools.

In the Pacific region, seven PICs collect and report data on the number of children with disabilities attending school. However, the data are often not comparable, as the definition of disability and method of data collection vary across countries. Based on data in national education statistics reports, the number of boys and girls with disabilities enrolled in schools is shown as a percentage of total enrolments in primary and secondary education combined (Figure 8.4.1).

For four PICs, the percentage of boys identified as having a disability ranges from 3.4 per cent to 5.6 per cent of the total enrolment. This compares to a range from 2.0 per cent to 3.5 per cent for girls. Two PICs had very low numbers of students with disabilities enrolled, reporting less than one per cent of all students enrolled.

Learning disabilities were the most common type of disability for students with disabilities enrolled in schools. For example, RMI and FSM reported that between 63 and 64 per cent of students with disability had a specific learning disability (RMI Education Statistic Report 2021, FSM Education Statistics Report 2021).

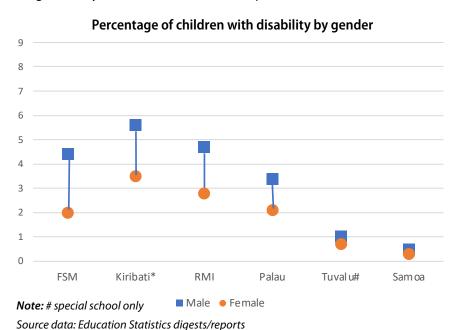


Figure 8.4.1 Percentage of children with disability by gender

50

9. International comparisons of education systems

While Small Island Developing States (SIDS) differ in population size and location, they share common challenges and vulnerabilities: high exposure to natural disasters, climate change and global economic crises, as well as limited financial resources, including for education.

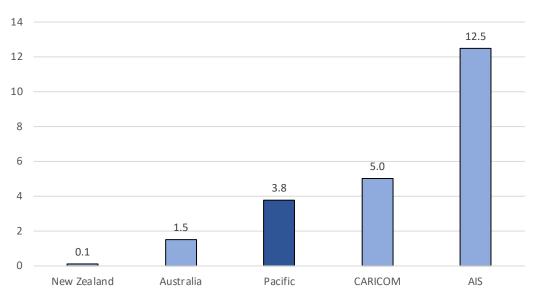


SIDS are grouped into three geographical regions: the Pacific; the Caribbean (CARICOM); and the Atlantic, Indian Ocean and South China Sea (AIS). Owing to their international comparability, key PacREF indicators can be compared with other regional groupings of countries, including with developed countries in the Pacific region: Australia and New Zealand. The following charts (Figures 9.1.1–9.1.4) highlight the status of the Pacific region in relation to other regional groupings and countries for key indicators related to each policy area of PacREF.

The out-of-school rate for primary age children is a key indicator for measuring the quality and relevance of education. The Pacific region has proportionately fewer primary-aged students not enrolled in schools than CARICOM and AIS countries, but more than New Zealand and Australia (Figure 9.1.1).

The adjusted net enrolment rate for ECE is a key indicator for tracking the learning pathways of young children. The Pacific region has proportionately fewer children enrolled in ECE in the year prior to primary education than New Zealand, CARICOM and Australia, but more than the AIS countries (Figure 9.1.2).

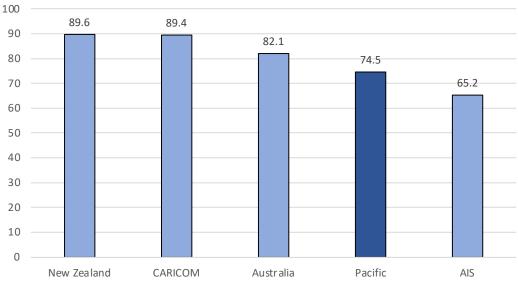
Out of School Primary Age Children



Source data: UIS, SPC

Figure 9.1.1 Percentage of out-of-school primary age children by regional groups

Early Childhood Education Net Enrolment rate



Source data: UIS, SPC

Figure 9.1.2 Early childhood education net enrolment rate by regional groups

The gross intake ratio to the last grade of primary education is a key indicator for monitoring the student outcomes of education. While all students in Australia and New Zealand complete primary education, proportionately fewer Pacific children do so, though the Pacific ratio is higher than that of CARICOM and AIS countries (Figure 9.1.3).

The trained teacher:student ratio in primary education is a key indicator for measuring the supply of trained teachers in the education system. On average, Pacific countries have more primary children per trained teacher than do New Zealand and Australia, have a similar ratio to CARICOM countries, but a lower ratio than AIS countries (Figure 9.1.4).

Overall, the Pacific region has achieved similar levels of educational development as the CARICOM countries, especially in the level of primary school enrolment and completion, and in the supply of trained teachers. However, the Pacific region has fallen behind in the participation of children in early childhood education, although it is still well ahead of the AIS countries.

Gross Intake Ratio to Last Primary Grade 98.3 97.1 100 86.9 90 80 70 60 50 40 30 20 10 Australia Pacific AIS

Source data: UIS, SPC

Figure 9.1.3 Gross intake ratio to last primary grade by regional groups

New 7ealand

35 31.9 30 25.0 24.5 23.0 20 16.8 15 10 New Zealand Australia CARICOM Pacific AIS

Primary Trained Teacher Student Ratio

CARICOM

Figure 9.1.4 Primary trained teacher:student ratio by regional groups

Notes for Figures 9.1.1 - 9.1.4

Source data: UIS, SPC

Due to lack of comparable data: - Pacific region excludes PNG, Palau and Tokelau.

- CARICOM excludes Bahamas, Jamaica, Guyana and Haiti
- AIS excludes Guinea-Bissau

10. Regional progress and recommendations



10.1 Regional status and progress

The current status of the key education indicators for the Pacific region by PacREF policy area is shown in Figure 10.1. In the outer circle, the green colour shows that positive progress has been made for the indicator since the commencement of PacREF implementation. Conversely, the red colour shows that there has been a negative trend for the indicator. The orange colour denotes little or no change.

For the quality and relevance policy area, positive progress has been made towards improving the out-ofschool rate for primary-aged children, but there has been little change for lower secondary-aged adolescents. Neither has there been any progress in reducing the number of over-age students at primary level but there has been some progress at lower secondary level. The finance indicators show that there has been a reduction in government spending on education since the beginning of the PacREF implementation.

For the learning pathways policy area, progress has been made towards increasing the overall number of young children enrolled in early childhood education, but fewer children aged one year prior to primary age were enrolled. For secondary education, there has been no progress in increasing the enrolment of students at lower secondary level, and at upper secondary level there was a declining trend.

For the student outcomes policy area, there has been progress in the completion of education at all levels. That is, more students are completing their schooling at primary, lower secondary and upper secondary levels. While there has been no progress in increasing the intake to the last year of primary education, there has been improvement in the intake of students to the last year of lower secondary education. Recent regional assessments show that more primary children are meeting minimum proficiency levels in literacy, but fewer are now proficient in numeracy.

For the teaching profession policy area, there has been progress in increasing the number of trained teachers teaching in both primary and secondary schools.

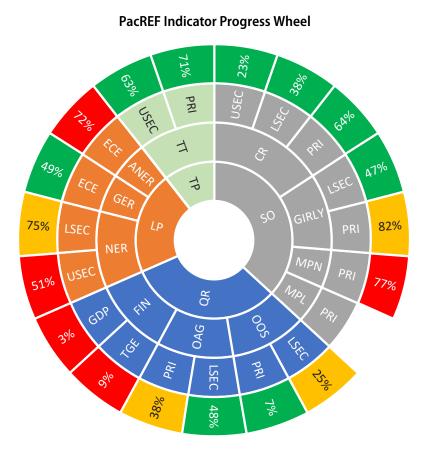


Figure 10.1 PacREF Indicator Progress Wheel

Key:

Policy areas

QR Quality and relevance LP Learning pathways SO Student outcomes ΤP Teaching profession

Sub-sectors

ECE Early childhood education PRI Primary education LSEC Lower secondary education USEC Upper secondary education

Indicators

ANER Adjusted net enrolment rate CR Completion rate FIN **Finance GDP** Gross domestic product GER Gross enrolment ratio GIRLY Gross intake rate to last year MPL Minimum proficiency – literacy MPN Minimum proficiency – numeracy NER Net enrolment rate OAG Over-age for grade oos Out-of-school rate TGE Total govt. expenditure Trained teachers ΤT

10.2 Policy recommendations

National policies need to focus on improving access to education, especially for children who have never enrolled in school or have dropped out or been pushed out before completing their intended education. Distance to schools and affordability of attending may play into barriers to education access. A comprehensive survey on education barriers among households may be required to shed light on the issue.

When young people leave school after completing lower secondary education, countries should investigate reasons and incentives behind their not continuing with upper secondary education. Given that there may be legal restrictions to young people participating in the labour market, technical vocational education and training opportunities need to be provided so that these young people can be kept in education for skills development.

Investigation into the reasons for children being over-age should be carried out to explore equity reasons of starting school at an older age and/or repetition of grades. Barriers to education access are likely linked to the phenomenon, referring to urban/rural location (distance), socio-economic status and disability.

Basic safe drinking water access and sanitation facilities, such as separate toilets with flushing water supply, are not a given at any school or country in the Pacific region yet. The lack of ensuring very basic human needs is likely to factor in school attendance barriers. The reasons for the missing services at schools need to be explored for regulatory remediation.

The gender-disparate participation of women and men in both TVET and tertiary education requires addressing by means of identifying the reasons behind both populations decisions to join or not to join either education path. The geographical availability of TVET and tertiary education in the island context may be a likely factor.

The low proportions of students with minimum literacy and numeracy skills require a thorough review on the underlying issues that impede the acquisition of these skills. Motivational issues and pedagogical methods may require assessment among both the student and teacher populations.

Policies need to be informed by evidence on the supply and demand for qualified and trained teachers. There needs to be research into the factors affecting the recruitment, retention and attrition of teachers, including teachers' salary and employment conditions. The analysis should assess the equity of teacher provision with the education sector, with specific reference to the urban/rural location of schools, since ratios significantly differ according to school location.

11. Regional educational initiatives

Over three phases, PacREF will operationalise the commitments of member states to raise the quality of their education systems, improve learners' outcomes, and produce high-quality graduates. In response to the serious performance challenges that Pacific education systems face, PacREF offers Pacific countries access to an integrated set of regional tools and mechanisms designed to assist them to meet their education objectives. To meet this obligation, PacREF shapes the investment of significant regional resources in a sustained strengthening of key regional agencies, enabling them to provide Pacific-focused goods and services consistently and to develop a series of Pacific education standards, such as teacher competences.



PacREF provides a means to identify and understand similarities and differences across the region: it offers organising mechanisms for sector planning, reporting and collaboration, and, importantly, it provides development partners with an understanding of where the region's resourcing priorities lie.

PacREF prioritises action on quality and relevance, learning pathways, student outcomes and well-being, and on the teaching profession. Its primary objective is to ensure sustainable gains in student learning outcomes across the Pacific region. It is committed to inclusive learning: it recognises and responds to the disadvantages faced by groups and communities (e.g. girls, young women, youth, persons with disabilities, rural communities, minority groups) in accessing education and/or training.

Importantly, PacREF directs significant resources to ensure that education is relevant to all Pacific children. The framework strengthens classroom practices and provides the tools with which the region's education systems can provide schools with competent, motivated teachers. By supporting the development of alternative learning pathways and investing in national and regional assessment systems, PacREF seeks to ensure that Pacific students experience an attractive education and master the necessary skills to move through it successfully and in a timely and rewarding manner.

In summary, PacREF assists national education systems across the Pacific to address the persistent challenges of improving learning outcomes and preparing students for continued education or work. The first four years of PacREF (Phase 1) improved the delivery of education services that ensured that the Pacific's school systems were able to offer children access to high-quality ECE and basic education, and that children progressed from their primary education, having mastered age appropriate cognitive and non-cognitive skills.

An important part of PacREF's agenda is to ensure that Pacific systems employ effective and efficient planning tools – a critical element of which is the availability of timely, comprehensive and reliable education data. To ensure that good quality education statistics are available in each system, PacREF has provided significant support to regional and associated national mechanisms that build EMIS' capacity, and their policy and planning skills development. In supporting a regional data collection mechanism, SPC and UIS will continue to monitor PacREF outcomes, as well as track progress towards the achievement of the SDG Goal 4 targets.

Regional tools, services and standards to be developed by PacREF

Quality and relevance

- · Regionally identified and agreed definition(s) of non-cognitive skills
- Regional tools for needs assessments related to the quality of school learning environments in the Pacific region
- Quality assurance frameworks for good quality school learning environments

Learning pathways

- Regional policy guidelines for the development of good quality ECE and tools for the governance, management, quality assurance, financing and programme development of ECE
- · Regional framework for the domains of home to school transition
- Regional framework identifying learning pathways from ECE to adulthood
- Pacific Skills Portal
- · Regional Pacific Skills Dialogue/Summit

Student outcomes and well-being

- Waka Learning Hub
- Pacific Islands Literacy and Numeracy Assessment (primary)
- Regional assessment at lower secondary

Teaching profession

- Regional teacher competency standards
- · Regional accreditation and recognition of the Pacific's teacher education programmes
- Regional standards and qualifications in school leadership
- · Regional framework for teachers' continuous professional development

PacREF Results Framework, Educational Quality and Assessment Programme

Annex: PacREF key outcome indicators

1 Quality and relevance

- 1.1 Percentage of primary and secondary schools meeting national minimum service standards
- **1.2** Percentage of primary schools with vernacular instruction in first three years (SDG 4.5.2)
- **1.3** Percentage of primary and secondary schools with access to drinking water and basic sanitation (SDG 4.a.1)
- **1.4** Percentage of primary and secondary schools with access to computers for pedagogical use (SDG 4.a.1)
- **1.5*** Out-of-school rate for primary, lower and upper secondary education (SDG 4.1.5)
- 1.6 Percentage of children over-age for grade in primary and lower secondary education (SDG 4.1.6)

2 Learning pathways

- **2.1*** Participation rate of youth and adults in formal/non-formal education/training in last 12 months (SDG 4.3.1)
- **2.2** Gross/net enrolment rates in early childhood, primary, secondary and tertiary education (SDG 4.2.4 & SDG 4.3.2)
- 2.3* Participation rate in early childhood education the year before primary education (SDG 4.2.2)
- 2.4 Transition rates between primary, secondary and tertiary education
- 2.5 Retention rates for primary and secondary education
- **2.6*** Youth participation rate in technical and vocational education and training programmes (SDG 4.3.3)

3 Student outcomes

- **3.1** Educational attainment rate for secondary, TVET and tertiary education (SDG 4.3.3)
- 3.2 Percentage of pre-school children who are school-ready (SDG 4.2.1)
- 3.3* Percentage of primary students achieving proficiency in literacy (SDG 4.1.1)
- 3.4* Percentage of primary students achieving proficiency in numeracy (SDG 4.1.1)
- **3.5*** Gross intake ratio to the last grade (GIRLY) for primary and lower/upper secondary education (SDG 4.1.3)
- 3.6* Completion rate for primary and lower/upper secondary education (SDG 4.1.4)

4 Teaching profession

- **4.1** Percentage of teachers meeting professional standards in primary and secondary education
- **4.2*** Percentage of trained teachers in primary and secondary education (SDG 4.c.1)
- **4.3** Percentage of qualified teachers in primary and secondary education (SDG 4.c.3)
- **4.4** Student:teacher ratios by education level for qualified and trained teachers in primary and secondary education (SDG 4.c.2 & SDG 4.c.4)
- **4.5** Percentage of teachers having annual professional development in primary and secondary education (SDG 4.c.7)

Note: * = Priority Indicators

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