

# 2023 Regional Benchmarks for literacy and numeracy

## Background

The Literacy and Numeracy components of PILNA are based on the Regional Benchmarks for Literacy and Numeracy which were developed collaboratively in 2006 by SPBEA (now EQAP), UNESCO, UNICEF and the Heads of Education Systems or their representatives from 15 countries in the Pacific. The literacy and numeracy benchmarks were derived from the curriculum skill components, elements and learning outcomes that were determined to be common across the national English and Mathematics curricula in the 15 countries. In 2007, at the Forum Education Ministers (FEEdMM), the benchmark standards were endorsed by the Ministers as the Regional Benchmark for Literacy, Numeracy for Years 2, 4, 6 and 8 for the Pacific.

The 2006 Regional Benchmarks were used as the basis for the 2012 and 2015 PILNA cycles.

Since 2006, revisions have been made to primary curricula in some countries and it was imperative that Pacific countries come together again to review the Regional Benchmarks before the next cycle of PILNA, hence the existence of the 2016 regional benchmarks which were the basis of the 2018 and 2021 PILNA items. With changes in curriculum, the teaching of languages in the region, and the way the last two recent cycles of PILNA were administered, another revision of the regional benchmarks has been organized as recorded in this document.

## Overview

The review of the 2016 benchmarks was collaboratively carried out by EQAP, ACER and two (1 literacy and 1 numeracy) curriculum representatives from each of the 15 Pacific countries in the week of 1<sup>st</sup> to 6<sup>th</sup> May 2023 at Novotel Hotel in Nadi.

Literacy and Numeracy are more than just “reading, writing and arithmetic” which these have been traditionally associated with. The understanding now is that literacy includes the capacity to read with understanding, write and critically appreciate various forms of communication, including spoken language (in whatever language one is comfortable with), printed text and media. Numeracy is not limited only to the ability to use numbers, use the four operations (addition, subtraction, multiplication and division) but numeracy also encompasses the ability to use mathematical understanding and skills to solve problems in everyday life. Numeracy includes the ability to think and communicate quantitatively, make sense of data, have spatial awareness, understand patterns and sequences and to recognise situations where mathematical reasoning can be applied to solve problems.

These benchmarks encompass the common broad learning outcomes that set out the knowledge, skills, understanding, values and capacities that Pacific students should have the opportunity to learn and develop in literacy and numeracy. These benchmarks are not curriculum in itself but contains indicators in areas of language and mathematics curriculum which are necessary in understanding other aspects of learning in order to effectively participate in society.

## 2023 REGIONAL BENCHMARKS FOR LITERACY

### PACIFIC DEFINITION OF LITERACY:

*The knowledge and skills necessary to empower a person to critically and effectively communicate with confidence through any form of language to achieve one's goals, express one's values and attitudes, and engage in the community and wider society as a 21st Century citizen.*

A literate person is empowered to:

- use critical and creative thinking when engaging in a variety of contexts
- create meaning from a range of oral, written and visual texts for a variety of purposes
- develop their knowledge and potential for sustainability and lifelong learning
- appreciate and understand the role and importance of literacy in engaging with self, family, community and globally.

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

Domain	Year 2	Year 4	Year 6	Year 8
<b>READING</b>	Students are able to read and comprehend simple texts. They can identify key words to locate explicitly stated information in a highly prominent position.	Students are able to read and comprehend texts with mostly familiar content and structure. They can identify explicitly stated information, make simple inferences and connect simple ideas.	Students are able to fluently read and comprehend a variety of less familiar texts. They can identify explicitly stated information, make inferences and connect related ideas in texts of some complexity.	Students are able to fluently read, comprehend and draw conclusions from a variety of texts. They can make a range of inferences from less familiar texts and analyze and apply logic to ideas with minimal complexity.
<i>Identifying information</i>	Match keywords to identify ideas and details in a simple text.	Skim and scan to locate information using key words that may be repeated in the text. Information may be in a less prominent position.	Paraphrase information and use knowledge of key vocabulary to locate explicitly stated ideas.	Identify and paraphrase complex ideas embedded in the text.
<i>Interpretation</i>	May make interpretations using prominent clues, such as key words and images, in a simple text.	Make simple inferences using prominent contextual clues and connect clearly related ideas.	Make a range of inferences using less prominent contextual clues and connect related ideas.	Present clear inferences using clues throughout the text. Inferences may require some reasoning of related ideas. Compare and contrast information across the text.
<i>Critical analysis</i>	Provide simple personal opinions about an aspect of a familiar text.	Provide personal judgements or opinions about simple ideas.	Provide evidence from the text to support personal judgments and opinions. Describe the purpose of familiar text types, such as procedures.	Provide evidence to support the reasoning of ideas from a range of less complex topics. Explain the purpose of a given text with supporting evidence.

DOMAIN	YEAR 2	YEAR 4	YEAR 6	YEAR 8
<b>WRITING</b>	Students are able to write simple sentences, using a range of simple vocabulary and basic writing conventions.	Students are able to write a simple text, such as a description or story, with related ideas and some detail. They have good control of basic writing conventions.	Students are able to write for a specific purpose, such as to persuade or inform, using a range of ideas. They use some complex writing conventions.	Students are able to express ideas and information about a wide range of topics or experiences for different purposes. They use a range of complex language and sentence structures.
<i>Quality of ideas</i>	Express a few ideas using common words in simple sentences. Ideas may not be well developed.	Express a small range of ideas that show some awareness of genre, such as minor character development or a description with some detail.	Show an increasing awareness of genre, such as a developing sense of character. Use details to enhance their ideas and display an emerging awareness of audience.	Generate ideas on a range of topics and using a range of sources. Use details to add depth to a text through imagination and original thought.
<i>Structure and organisation</i>	May connect some ideas using linking words/conjunctions. Show some understanding of structure, such as the basic features of a recount.	Show awareness of structure, such as the main elements of a story. Use a small range of linking words/conjunctions with accuracy.	Structure writing through clear thought blocks, which may or not appear as paragraphs.	Develop a coherent structure with logically sequenced ideas. Writing is well shaped with a clear beginning, development, and ending. Paragraphs are evident in their writing.
<i>Language conventions (Grammar &amp; Syntax, Vocabulary, Spelling and Preposition)</i>	Write simple sentences. Correctly spell some simple words. Use some basic punctuation such as capital letters and full stops/periods.	Use simple and some compound sentences. Some variation in vocabulary allows a small range of ideas to be expressed. Spell high frequency words accurately. Use some punctuation such as capital letters, full stops and commas.	Use a range of complex sentences with some accuracy. Ideas are expressed using vocabulary appropriate to the genre. Spell some complex words correctly. Use appropriate punctuation in most instances.	Accurately use compound and complex sentences. Vocabulary expresses ideas clearly and precisely. Good control of spelling and punctuation.

## 2023 REGIONAL BENCHMARK FOR NUMERACY

### **PACIFIC DEFINITION OF NUMERACY:**

*“Mathematical knowledge, concepts and skills including positive values and attitudes, necessary to empower a person to be able to use mathematical processes and language for a variety of contexts and purposes, to function effectively at school, home, in their community, in the region and globally in the 21<sup>st</sup> century.”*

### **A numerate person is empowered to:**

- develop strong number sense through application of mathematical knowledge, skills, concepts and processes with positive values and attitudes.
- solve problems by using creative, strategic, and critical thinking to justify their findings mathematically.
- communicate information and ideas using the formal or informal language of mathematics.
- make connections and transfer mathematical knowledge and skills to other contexts.
- appreciate and understand the role and importance of mathematics to make sense of the world for; self, family, community and globally.

	YEAR 2	YEAR 4	YEAR 6	YEAR 8
NUMBER	<ul style="list-style-type: none"> <li>• Recognize and represent groups of objects with numbers and symbols.</li> <li>• Recognize and describe simple patterns, number sequences and relationships.</li> <li>• Recognize the face value of money in the local currency.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize, represent and compare quantities.</li> <li>• Use place value materials to show an understanding of the number system.</li> <li>• Interpret number sequences using simple rules to solve problems.</li> <li>• Understand the relationship between unit fractions</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate understanding of numbers and their magnitude, properties and relationships.</li> <li>• Interpret relationships and properties of number sequences and fractions, decimals and percentages expressed in different forms.</li> <li>• Demonstrate mathematical knowledge and skills of equivalent everyday fractions, decimal and percentage to solve simple problem in a range of familiar contexts.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate understanding of rational numbers and their inter relationships in real life situations.</li> <li>• Identify and demonstrate understanding of number sequences and number patterns to solve problem set in a range of different contexts.</li> </ul>
OPERATIONS	<p>Recognise and apply basic addition and subtraction by using a range of counting and grouping strategies with whole numbers.</p>	<ul style="list-style-type: none"> <li>• Solve addition and subtraction problems with whole numbers by using non-counting strategies.</li> <li>• Solve multiplication problems with whole numbers and the corresponding division problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Solve addition and subtraction problems including everyday fractions and decimals.</li> <li>• Solve multiplication and division problems in a range of familiar contexts.</li> </ul> <p>Recognise and use order of operations</p>	<ul style="list-style-type: none"> <li>• Use a range of strategies when operating on numbers.</li> <li>• Demonstrate understanding of addition and subtraction of fractions, decimals, and integers.</li> <li>• Calculate fractions,</li> </ul>

				<p>decimals and percentages of quantities expressed as whole numbers.</p> <ul style="list-style-type: none"> <li>• Demonstrate mathematical knowledge, skills and use of the order of operations.</li> </ul>
<b>MEASUREMENT &amp; GEOMETRY</b>	<ul style="list-style-type: none"> <li>• Estimate and measure using non-standard units and order and compare objects and time to represent a range of measurable quantities.</li> <li>• Use spatial knowledge and skills to describe and compare physical attributes of common and familiar objects in real life situations</li> </ul>	<ul style="list-style-type: none"> <li>• Develop awareness of different measurable quantities, units of measure and conversion between them, and measurement tools.</li> <li>• Show spatial and geometric skills by measuring and calculating with physical attributes of common objects and time, and by comparing and working with properties of 2D shapes and common 3D objects</li> </ul>	<ul style="list-style-type: none"> <li>• Choose and use appropriate metric units to estimate, measure and calculate measurable quantities.</li> <li>• Identify, describe and represent 2D and 3D objects and their properties, including drawings and models.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop and use formula to calculate the perimeter, area and volume of 2D and 3D shapes.</li> <li>• Recognise, identify, sort and generalise the side, angle and symmetrical properties of shapes.</li> </ul>

<p><b>DATA &amp; CHANCE</b></p>	<ul style="list-style-type: none"> <li>• Collect and sort objects from familiar situations.</li> <li>• Represent objects where one object is one data value in tables or pictographs.</li> <li>• Respond to simple questions relating to the represented data.</li> </ul>	<ul style="list-style-type: none"> <li>• Collect, organise data and represent results in simple tables and charts.</li> <li>• Interpret and explain data from simple tables and charts.</li> <li>• Describe the chances of simple event occurring in everyday language such as it being certain, likely, unlikely, possible, impossible.</li> </ul>	<ul style="list-style-type: none"> <li>• Plan, collect and represent data in tables and graphs.</li> <li>• Interpret and analyse results.</li> <li>• List and compare outcomes of common chance experiments or events and represent these as a fraction, decimal and percentages.</li> </ul>	<ul style="list-style-type: none"> <li>• Investigate using the enquiry cycle to solve a problem.</li> <li>• Interpret and evaluate statistical information presented.</li> <li>• Determine probability of events from either theoretical or practical experiments and make inferences.</li> </ul>
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