SEA-PLM 2019
Audit of Curricula
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Acknowledgment

The first audit of curricula of the Southeast Asian Primary Learning Metrics (SEA-PLM) assessment was made possible through the valuable contributions and collaboration of SEAMEO, UNICEF and the national teams of potential participating countries of SEA-PLM 2019 in ASEAN namely: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor Leste and Vietnam. This publication lays the foundation for the first regional assessment of SEA-PLM, as well as paves the way for future rounds of assessment.

Without the financial partnership between UNICEF and Ministries of Education of participant and honorary members of SEA-PLM, the institutional commitment of SEAMEO, the technical expertise of ACER and other international experts from international agencies and universities, this important first step in the construction of the SEA-PLM regional assessment could not have been carried out.

SEAMEO and UNICEF also wish to particularly acknowledge and thank experts from ACER for their ongoing technical support, expertise and coordination assistance throughout the conception phase and during the implementation of the assessment.

Finally, SEA-PLM Secretariat is thanked for their technical and administrative support.

A full list of experts is included at Annex I.

The Australian Council for Educational Research Ltd (ACER) has been contracted to design and implement the first round of SEA-PLM assessment, SEA-PLM 2019. This report has been prepared by experts from ACER in 2015-2016.
Introduction

An early step in developing an assessment framework for the Southeast Asia Primary Learning Metrics (SEA-PLM) was determining how to design and construct a single assessment program across all ASEAN member countries. This step needed to take account of the similarities and differences in the curriculum frameworks in each country for the four domains to be assessed through SEA-PLM: Mathematics, Reading, Writing and Global Citizenship.

This account was achieved through an audit of the curriculum materials from 11 ASEAN countries, comprising those countries already participating in the SEA-PLM field trial, and others likely to join SEA-PLM in the future. The audit examined statements concerning the overarching orientation of education in each country and then focused on the details of the curriculum for Grade 5, as the first set of assessment instruments developed for SEA-PLM target this grade level.

The curriculum audit revealed several clear messages. Firstly, there is considerable diversity across the ASEAN countries in the way they define curriculum requirements for their schools in the relevant learning domains. Broad learning goals are specified in a variety of different ways, strongly indicating differing priorities in particular countries. Secondly, such diversity is reflected in each country’s frameworks in relation to the expected learning outcomes of students. In some cases this is evident through specific arrangements designed to recognise and accommodate differentiated teaching and learning. Thirdly, there is nevertheless significant overlap and similarity across the curriculum statements.

The challenge was to determine an approach to design and develop SEA-PLM in a manner that respected the differences, acknowledged and used the commonalities, and could be implemented in practical terms across all countries in Southeast Asia.

Analysis of the audit outcomes supported an approach referred to as ‘curriculum-referenced assessment’. SEA-PLM has sought to develop assessment frameworks and assessment instruments that reflect the curriculum priorities of ASEAN member countries. The assessment frameworks and instruments ensure that students with different levels of proficiency in reading, writing, and mathematics and varying levels of understanding and beliefs about global citizenship can partake.

The overarching orientation in the curriculum goals and frameworks of the SEA-PLM countries is that education should produce citizens who are able to deal with challenges and to solve the kinds of problems they are likely to confront, both now and in the future. This concern with the practical application of students’ skills, knowledge and understanding in everyday and future contexts is described as a ‘literacy orientation’ and this is the orientation of the SEA-PLM assessment framework. This notion of literacy also includes the fundamental precursor skills that need to be built in each domain.

The framework is designed to support the development of assessment instruments that focus on students applying their skills. This can be assessed in a variety of realistic contexts beginning with simple, highly familiar contexts and moving to increasingly unfamiliar and abstract contexts as students move through the school system. The mathematics tasks are concerned with applying mathematical ways of understanding, beginning with simple counting and comparing tasks and moving on to increasingly complex mathematical problems. The reading tasks are concerned with reading for meaning, beginning at the single-word level, and moving on to reading and understanding one or two sentences and then increasingly longer texts of a wide variety. The writing tasks are all concerned with producing meaningful pieces of text beginning with extremely short, simple texts and moving on to longer texts in a wide variety of text types. The global citizenship tasks are concerned with students’ ability to apply their knowledge, values and skills in increasingly complex contexts.
This document presents the outcomes of the curriculum audit in the domains of Reading, Writing, Mathematics, and Global Citizenship for the following countries: Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Singapore, Thailand, Timor Leste and Vietnam. Limited information was available from Myanmar, due to the national curriculum reform process that was happening at the time of the audit; however some general information was reviewed.
1. Methodology for curricula analysis

The review is organised around the structure of the assessment framework that emerged from the initial study of the different curricula. The review identifies how and where the key features of each curriculum are reflected in this structure. The following section summarises the structure of the framework with a brief commentary about how this reflects the findings of the curricula review.

Domain definitions

The definitions of the four domains were drawn from a review of the overarching orientation and purpose of the curricula in relation to Reading, Writing, Mathematics and Global Citizenship. Introductory curriculum statements about the role of education and, where available, overarching standards in relation to each of the domains were examined.

This examination revealed a high degree of consensus about the overarching purpose of education being to produce citizens who have the skills and motivation to effectively apply their knowledge and skills in their everyday life and who are capable of future learning and making a positive contribution to society.

This focus has been reflected in the development of working definitions for the four domains under consideration:

**Mathematical literacy** is a person’s capacity, given a problem in a context that is of interest or importance to them, to translate the problem into a suitable mathematical formulation, to apply mathematical knowledge and skills to find a solution, and to interpret the mathematical results in relation to the context and to review the merits or limitations of those results.

While most curricula had a clear focus on connecting mathematical conceptual and procedural knowledge to usage in daily life and other ways of applying knowledge, the mathematics frameworks also differed in creative ways. In particular, the way audit countries expressed their broader goals (related to higher level goals of their mathematics curriculum) varied widely.

**Reading literacy** is understanding, using and responding to a range of written texts, in order to meet personal, societal, economic and civic needs.

The curricula had a common focus on purposeful reading of a range of text types with reference to ideas such as usefulness, applying knowledge in daily life, and relating reading to everyday experience and opinions. There were some marked differences in descriptions relating to the general orientation to literacy, where reading was sometimes not explicitly mentioned, but was implied in the references to learning the national language or the language of instruction, developing knowledge in various learning areas, or to understanding national culture.

**Writing literacy** is constructing meaning by generating a range of written texts to express oneself and communicate with others, in order to meet personal, societal, economic and civic needs.

The curricula had a common focus on purposeful writing in a range of text types. Differences were marked in descriptions relating to the general orientation to literacy, where writing was sometimes not explicitly mentioned as a separate learning area, but was implied in the references to learning how to communicate in the national language or the language of instruction for a wide range of purposes, and to using language as part of the process of developing competence in different learning areas.
Global citizens appreciate and understand the interconnectedness of all life on the planet. They act and relate to others with this understanding to make the world a more peaceful, just, safe and sustainable place.

Concepts typically associated with global citizenship were included in all curricula, in some cases to a substantive extent. Typically, these concepts were included in introductory sections. In a number of curricula they included not only knowledge-related goals, but also the development of behaviours and skills, and attitudes and values.

**Organisation of the framework**

Since the ability to acquire and apply skills, knowledge and understanding in a range of contexts is a fundamental purpose of education for these countries, it follows that an assessment framework needs to outline the content students are expected to know, appropriate contexts for the application of skills and the processes students might demonstrate.

The Mathematics, Reading and Writing domains are all described in terms of content, context and process. Global citizenship is described in the context of the main learning area where related concepts and concepts are found, and organised by measurement domains, namely, knowledge and understanding, attitudes and values, and behaviours and skills.

**Scope of the framework**

The SEA-PLM assessment framework (‘the framework’) encompasses the development of students’ skills, knowledge and understanding in Mathematics, Reading, Writing and Global Citizenship from the most basic early concepts through to highly sophisticated applications, so the working definitions of each domain and the content, contexts and processes described in the framework are deliberately broad.

The focus of this review is on Grade 5 and the purpose of the review is to identify if the Grade 5 curriculum expectations for each country generally fit within the content, contexts and processes outlined in the assessment framework, recognising that the Grade 5 curriculum is not expected to cover the scope of the framework.

The review focus on Grade 5 has also informed the development of the first SEA-PLM assessment instruments. These instruments are designed to reflect the range of skills, knowledge and understanding that are common to Grade 5 curricula expectations in the four domains as well as including some simpler skills. Most audit countries acknowledge the fact that different students, even within a particular grade level, will acquire different levels of knowledge and proficiency as a result of their studies and that different outcome levels will be observed in relation to performance grades and standards. The SEA-PLM assessment instruments are designed to cater for this wide range of ability by providing test questions of a wide range of difficulty.

**Content**

The curriculum review focused on the content specifications for Grade 5 to identify what students are taught and to what extent there was a common core of content across the countries for the four domains.

**Mathematics**

The most common feature among the curricula reviewed is their specification of strictly syllabus-based mathematical content. While this aspect is configured somewhat differently by different countries, all aim to cover some combination of topic areas with labels similar to number, patterns and algebra, geometry, measurement, and statistics (data).
The Mathematical Literacy review identified three broad content categories:
- Number and Algebra
- Measurement and Geometry
- Chance and Data.

**Reading**

The Reading Literacy content review identified that in almost all countries students in Grade 5 are generally expected to read a wide range of text types. Most curricula referred to stories, narratives and/or poems, while reference to non-continuous texts such as tables and instructions varied, although there tended to be explicit reference to one or more categories of a range of non-continuous texts. Some countries specified expected topics of texts, but this was not a common feature.

To support the clarity of the framework, a distinction was made between text format and text type that is not reflected in most curricula but underpins the notion of a range of text types. This ensures that the SEA-PLM assessment instruments cover all the key features of a range of text types.

Text format was classified as:
- Continuous (composed of sentences or paragraphs)
- Non-continuous (diagrams, tables, maps and lists that include words)
- Composite (continuous and non-continuous, several texts on a theme).

The Reading Literacy content review identified the full range of text types that students might read as:
- narrative
- descriptive
- persuasive
- instructional
- transactional
- label.

**Writing**

In terms of content, most countries referred to writing stories, recounts and letters. Other kinds of writing described in the curricula varied across countries, from sentences to paragraphs to more general references to personal or imaginative writing. Some countries referred to writing of specific text types such as informative and persuasive texts, describing procedures or completing forms, while others referred more generally to variety: of text types, purposes, cultures, contexts and audiences.

The Writing Literacy content review identified the full range of text types that students might write as:
- narrative
- descriptive
- persuasive
- instructional
- transactional.

**Global Citizenship**

Content related to global citizenship was generally found in the following learning areas:
- Social Studies
- Social Science
- Moral Education
- Civics and Citizenship Education.
Overall findings from the curriculum audit and review confirm that concepts typically associated with global citizenship are included in all curricula, in some cases to a substantive extent. Global citizenship concepts are most frequently located in the introduction or background to the learning area or curriculum as a statements relating to aims or objectives. In a number of cases these aims include not only knowledge-related goals, but also the development of behaviours and skills, and attitudes and values. However, while many curricula use terms such as ‘interdependence’, ‘global issues’, or ‘active citizenship’ in the introductory sections, they do not necessarily expand upon these terms. Where global citizenship concepts such as ‘social diversity’, ‘social cohesion’, ‘respect for difference’, ‘peace’, ‘equity’, ‘justice’, ‘participation’ and ‘active citizenship’ are included in objective statements related to knowledge, behaviours and skills, and attitudes and values, they are not necessarily translated into learning outcomes in the framework content.

The review identified three core dimensions of content for Global Citizenship:

- Knowledge
- Attitudes and values
- Behaviours and skills.

Knowledge includes:

- The organisation of societies and the world including local, national and global (families, tribes, groups, communities, villages, cities, provinces, countries, regions)
- Teaching and learning about global issues such as climate change, global conflict, resource shortages and financial crises
- Teaching and learning about the relationship between local and global issues
- Teaching and learning about global structures or systems and phenomena such as trade, migration, media, international organisations, political and economic alliances, public and private sectors, civil society.

Attitudes and values include:

- Values learning about global citizenship
- Fosters respect for or appreciation of diversity
- Values opportunities to demonstrate the behaviours or skills associated with global citizenship such as encouraging respect for diversity, assisting those in need, or acting to protect the environment.

Behaviours and skills include (as related to global citizenship concepts):

- Opportunities to present ideas
- Opportunities to demonstrate leadership
- Opportunities to make decisions
- Opportunities for communication
- Opportunities to advocate for improvement

The learning area ‘Moral Education’ within the Lao PDR national curriculum was deemed to include the most references to global citizenship themes and concepts at both the aims and objectives level, and also the basic learning competencies framework for Grade 5. Included are knowledge related competencies, and also attitudes and values and behaviours and skills aligning with all three of the SEA-PLM measurement domains. Substantial evidence of global citizenship concepts and topics spanning the cognitive, affective and behavioural sub-domains was also located across five subjects within the Indonesian Curriculum 2013.

**Contexts**

The review also looked for evidence of the kinds of contexts mentioned in curriculum documents to identify commonalities. This led to the identification of three contexts that apply across all four of the domains:

- Personal
- Local
Typically Grade 5 curricula have a strong focus on the personal and local while including some national and wider-world contexts, especially in narrative texts and learning areas associated with global citizenship such as social studies or citizenship.

**Process**

An overarching educational purpose of educating students to be able to apply the skills, knowledge and understanding they have acquired requires a focus on process as well as content. Students need to understand and be able to demonstrate a wide range of strategies that they can use to solve problems. The curriculum review looked for evidence of the kinds of processes that students are taught or expected to demonstrate in Mathematics, Reading and Writing.

**Mathematical Literacy**

Most of the countries explicitly focus on mathematical thinking and reasoning, and on mathematical problem solving (albeit expressed in a variety of ways) and clearly identify highly valued learning outcomes that go beyond the narrow content-based skills inferable from a simple list of mathematical topics. The curriculum statements feature various ways of referencing different mathematical competencies. Almost all have a clear focus on connecting mathematical conceptual and procedural knowledge to usage in daily life and other ways of applying knowledge. Several of the countries' curricula also explicitly list higher-order learning outcomes, such as those that would enable and support students to use their mathematical learning to become creative and productive members of twenty-first century society.

Three processes were identified for Mathematical Literacy:

- **Translate** is the process of expressing the problem in mathematical language, thus taking it from the context to a mathematical formulation suitable for finding a solution.
- **Apply** is the process of using mathematical knowledge and skills to find a mathematical solution or to generate mathematical results: this process deals mainly with mathematical ideas, objects and techniques.
- **Interpret** is the process of retranslating the mathematical solution to the context of the problem. This may include a review of the solution to see whether it is reasonable and makes sense in context, and identifying any limitations to the solution.
- Almost half of the countries make some kind of reference in their curricula to the use of calculators and to a variety of other information and communication technologies (ICT), including computers, smart phones and PC tablets.

**Reading Literacy**

Four processes were identified for Reading Literacy:

- **Locate** (finding directly stated information)
- **Interpret** (making meaning from the text that is not directly stated)
- **Reflect** (relating what is being read to information outside the text)
- **Recognise words** (a basic element of literacy that requires relating the written form of the word with its meaning).

Almost all Grade 5 curricula referred explicitly to the basic process of understanding letter-sound relationships, recognising words and building vocabulary. There was almost universal reference to locating or understanding literal information or details in texts. Most countries referred in some way to interpretation or analysis of texts, including construction of meaning, although the depth of description varies considerably. There was frequent reference to the idea of evaluating or reflecting on the contents of what they read, including understanding ways in which text features can be used to represent different ideas, although these are described in different terms across the countries. Throughout, there is a common focus on the use of texts and information students read, with
reference to ideas such as usefulness, applying knowledge in daily life, and relating reading to everyday experience and opinions. The importance of reading aloud, fluently, with correct pronunciation and appropriate pausing is an important part of many reading curricula. These skills are not described in the SEA-PLM framework because of the impracticality of assessing them on a large scale. However, the application of fluent reading skill is assessed through the four reading processes.

**Writing Literacy**

Almost all countries made explicit reference in various ways to similar processes of writing: generating and expressing ideas and information; organizing their writing in paragraphs or longer texts, with emphasis on clarity. There was also strong consistency among countries in their reference to use and choice of vocabulary; grammar, sometimes specifying linguistic features; punctuation; and in some cases, handwriting. Throughout, either implicitly or explicitly, there is a common focus on writing as a tool of independent communication in everyday life, both in school and beyond.

Six processes were identified for Writing Literacy:

- Generating ideas
- Controlling text structure and organization
- Managing coherence
- Using vocabulary
- Controlling syntax and grammar
- Other language-specific features (not assessable across all languages).

**Documentation**

The curriculum statements for grade 5 level were provided for Mathematics, Reading and Writing for each country along with the curriculum statements for any learning areas that linked to the cross-curricular area of Global Citizenship. These learning areas are frequently denoted as social studies, civics and citizenship or similar.

The following curricula informed the review for the domain of Global Citizenship:

- Brunei Darussalam, Social Studies for years 4, 5, and 6, 2009
- Kingdom of Cambodia, Social Studies Grades 4-9, 2006
- Lao People’s Democratic Republic, World Around Us, 2013; and Moral Education, 2013
- Kingdom of Thailand, Social Studies, Religion and Culture, 2008
- Republic of Singapore, Civics and Morality Education Syllabus Primary, 2007
- Democratic Republic of Timor Leste, Social Science Curriculum, 2014
- Socialist Republic of Vietnam, Morals; and, Nature and Society, 2007
- Republic of the Philippines, Edukasyon sa Pagpapakatao, (Education in Health), 2013
- Republic of Indonesia, Religion; The Five Moral Principles; Citizenship; Social Sciences; and Natural Sciences, 2013.
2. Mathematics

2.1 Brunei Darussalam

General information

The Mathematics curriculum recognises the wide range of mathematical skills of students at different year levels and identifies basic competencies that students must do, skills that the majority of students should do and skills that higher level students could do.

The documentation includes a brief introduction about the classifications. The content is divided into five areas and presented in a table with the standards, performance indicators and extensive teaching notes and examples.

Overarching orientation

The documentation supplied did not include an introductory section with statements about overarching orientations. The content is differentiated by the coding M (Must Do), S (Should Do), C (Could Do) and +MC (Mental Computational skills). The use of calculators is identified in the curriculum from Year 5 as optional. The documentation states calculators can only be used by pupils under strict supervision of the teacher, and may not be used in tests and examinations. This reflects the intention of the assessment framework to be calculator neutral.

Content

The Year 5 content areas reflect the framework classifications with the addition of Mathematical Thinking and Problem Solving which is identified as a separate classification that requires students to use and apply all their mathematical skills.

- Number: whole numbers (up to 6 digits), combined operations, multiplication and division, fractions, decimals, percentage and rates
- Measurement: length, mass and volume, area of triangles and parallelograms
- Geometry: angles and triangles, geometrical patterns - tessellations
- Statistics: line graphs
- Mathematical Thinking and Problem Solving: thinking skills, problem solving.

Number

Students read, write, recognise place value, compare, order, round-off and continue simple number sequences. Students solve multi-step problems including word problems and add, subtract, divide and multiply numbers. Students add, subtract, multiply and divide fractions and solve word problems involving fractions. They compare, order, round-off, add, subtract, multiply and divide, convert fractions and decimals and solve word problems. They understand percentages as parts in every hundred, convert fractions and percentages and decimals and percentages, calculate and apply rates in solving daily transactions and solve word problems involving rate.

Measurement

Students interpret quantities, convert units, carry out operations and solve word problems involving length, mass and volume. They calculate the area of a triangle and a parallelogram without the formula, and calculate the areas and sides of related composite figures.

Geometry

Students recognise and apply the sum of angles on straight lines and at a point, sketch right-angled, equilateral and isosceles triangles, describe basic features of these triangles and find unknown angles.
They also recognise shapes that can tessellate, construct tessellations with a given shape, design basic shapes that tessellate and draw tessellation patterns using a computer.

**Statistics**

Students read and interpret line graphs and solve problems involving line graphs.

**Mathematical Thinking and Problem Solving**

Students recognise patterns of numbers and of shapes, deduce simple rules, explain solutions and solve routine problems and simple non-routine problems.

**Contexts**

The contexts for applying mathematical skills are not defined, but given through extensive, detailed examples of relevant contexts and how the mathematical concepts and skills in question should be applied. Contexts are mainly familiar and local and concern everyday observations and behaviours that require mathematical skills.

**Processes**

Processes in the Brunei curriculum are identified and coded as follows:

- [C] Communication
- [PS] Problem Solving
- [CN] Connections
- [R] Reasoning
- [V] Visualisation
- [S] Skills

These are a more detailed breakdown of the three identified processes of the framework; Translate, Apply, Interpret and review.

The curriculum provides detailed teaching ideas and worked examples of how to teach the content and which processes might be required. There is a strong focus on understanding and applying the content to solve simple problems.

**Reference documents**

- SPN21 Curriculum for Mathematics
2.2 Cambodia

General information

The Mathematics curriculum (Years 1 – 9) recognizes that mathematics is part of all aspects of life. The Cambodian mathematics curriculum identifies mathematics as a reasoning and creative activity that is used to solve problems. There is an emphasis in the lower year levels of basic mathematics competencies that form the foundation of later mathematical learning.

Overarching orientation

The curriculum is stated as being taught from a base of concrete experiences. It is divided into grade levels, then specific learning outcomes which are grouped into units. The units and suggested time for teaching these units is indicated as well as text book references. These units belong to the different strands.

The use of calculators is included within the curriculum documents, within units. There is no other ICT mentioned in the documentation.

Content

The Grade 5 content areas (strands) reflect the framework classifications with Chance and Data being identified as Statistics. The strands for mathematics are:

- Number
- Measurement
- Geometry
- Patterns and Algebra
- Statistics.

Number
Students increase their confidence in dealing with whole numbers of any size and in applying mathematical operations to numbers in fractional and decimal form. They recognise prime numbers, rename fractions and identify, devise and extend number patterns based on the multiplication and division of whole numbers, and the addition and subtraction of fractional numbers. They automatically recall multiplication and division facts, and choose and use a range of written and mental strategies to solve problems.

Measurement

Students use a variety of measuring instruments with particular attention to the degree of exactness required in making and recording measurements.

Geometry

Students use correct language to describe the features of figures and objects and distinguish between different physical attributes such as perimeter and area.

Patterns and Algebra

Students develop their understanding of number patterns and the properties of operations and then begin to transfer understanding of these concepts from collections of specific instances to general expressions. They are introduced to the use of pro-numericals in number sentences.
**Statistics**

Students use lists, tables and graphs to classify, display, summarise and interpret data.

**Contexts**

The contexts for applying mathematical skills are not specifically defined within the curriculum, however, the curriculum does acknowledge the importance of mathematics in everyday life, at home, in the community and the work place. The Cambodian Mathematics curriculum, like the framework, identifies the importance of mathematics in other communities (the wider-world).

**Processes**

There is a specific emphasis on developing the skill of reasoning and this is separately identified at each grade level. The curriculum also provides detailed teaching ideas and worked examples of how to teach the mathematics content, and through these examples, the three processes identified in the framework of translating, applying and interpreting and reviewing, are evident.

**Reference documents**

2.3 Indonesia

General information

The Indonesian Mathematics curriculum identifies the need for knowledge and skills to be balanced with spiritual and social attitudes. The curriculum is for Years 1 – 6.

Overarching orientation

The learning of mathematics seems to be moving towards inquiry-based learning where the emphasis is on the process of learning. The curriculum intends that Indonesian people will be equipped with a variety of mathematical abilities to assist them to live as individuals, and that they will become citizens who can be productive, creative and innovative, in the context of a focus on religious teachings and beliefs, and who are capable of contributing to the society and the world.

In the Curriculum 2013, Mathematics is also developed around the four core competencies. These competencies focus on spiritual attitudes, social attitudes, knowledge and skills. In the first two competencies, students are required to demonstrate a critical, meticulous, honest, punctual, resilient and responsible attitude in completing their tasks, and to develop an inquisitive attitude and interest in learning mathematics via their experiences. They are expected to be involved in discussions with an open and objective mind, and also to appreciate other people’s opinions. In the other two competencies, students are expected to demonstrate their understanding of factual knowledge via observation and inquisitive behaviour and demonstrate the ability to present their knowledge clearly, systematically and logically.

ICT knowledge and skills or the use of calculators are not mentioned in the curriculum.

Content

The Grade 5 content areas are a further breakdown of the framework classifications.

- Number and place value
- Fractions and decimals
- Patterns and Algebra
- Using units of measurement
- Shape
- Location and transformation
- Geometric reasoning
- Chance
- Data representation and interpretation.

The Grade 5 content areas reflect the framework classifications.

Number and Algebra

Students identify and describe properties of square and triangular numbers; select and use mental and written strategies and apply appropriate procedures to solve problems by analysing symbols and relevant patterns; find unknown quantities in calculations involving addition, subtraction, multiplication and division. They identify equivalent number sentences involving addition, subtraction, multiplication and division; make connections between fractions, decimals and percentages and carry out simple conversions; solve problems involving addition, subtraction, multiplication and division in decimals and percentages; multiply and divide fractions and decimals.
Measurement and Geometry

Students find the circumference and area of a circle by experiment; record the distance and the traveling time of different moving objects in a table to understand the concept of speed, and solve problems using the formula for speed; calculate area and volume of a hexahedron; calculate volume and draw simple or defined objects; recognise and create three-dimensional objects and other two-dimensional representations; use scales, legends and directions to interpret information in basic maps. Create maps using a grid reference system to describe locations using landmarks and directional language; describe translations, reflections and rotations of two-dimensional shapes, and identify line and rotational symmetries; make mathematical formulation; use effective strategies to solve daily problems involving concepts of comparison, ratios and relationship in quantities; introduce the Cartesian coordinate system; estimate, measure and define angles using degrees; and construct angles using protractors.

Statistics

Students understand the concept of frequency in probabilities by experiment.

Contexts

The contexts for applying mathematical skills are not defined, but given through detailed examples of relevant contexts and how the mathematical concepts and skills in question should be applied. Contexts are mainly familiar and local and concern everyday observations and behaviours that require mathematical skills.

Processes

Processes are not clearly identified with categories as in the assessment framework, but the curriculum details how to teach the content and which processes might be required. There is detail in the standard statements on formulating and solving problems using numbers, fractions, decimals, percentages and measurements, as well as students explaining calculations and results of mathematical calculations.

Reference documents

- Curriculum 2013: Basic framework and structure for primary schools and madrasah ibtidaiyah (Islamic primary schools). Organisation of the mathematical literacy domain framework
2.4 Lao People’s Democratic Republic

General information

The curriculum documentation is currently in draft form.

The mathematics curriculum recognises that mathematical concepts and processes exist in all cultures and are essential for use in everyday activities. Mathematics is identified as a way of thinking and communicating that is used in concrete situations. Representation and abstraction are acknowledged with mathematics also being identified as a creative activity/process. There is an introductory statement provided in the document that includes the objectives and content. The basic competencies for each grade are presented in a table format within the content areas.

Overarching orientation

Three objectives for the learning of mathematics for primary school students are indicated and elaborated on.

Knowledge

- Understanding of basic mathematical concepts in the mathematics areas of number, geometry and measurement, and how these concepts are applied in problem solving in everyday life
- Understanding of basic mathematical language; both spoken and written
- Knowledge of mathematics tools, how to use them, and for what purpose.

Skills

- Ability to apply basic mathematical knowledge to understand a problem situation mathematically
- Ability to interpret available data for use in problem solving; including interpreting mathematical representations and identifying relevant and irrelevant data
- Ability to apply basic mathematical processes appropriately in everyday problem solving
- Ability to communicate clearly and precisely using mathematical representations
- Ability to justify approach to problem solving and the resulting solution.

Attitudes and Values

- interest in and enjoyment of the intellectual challenge of mathematics, and appreciation of its power
- self confidence in use of mathematics
- an approach to problem solving that is systematic, persevering and both rational and creative.

There is no indication of the use of ICT or calculators within the curriculum. No coding of expected standards is included.

Content

The content is divided into four sections reflecting the content described in the framework.

- Number
- Operations
- Geometry/Data
- Measurement.

Number

Includes whole numbers, decimals and fractions, money.
Operations
Includes addition, subtraction, multiplication, division.

Geometry/Data
Includes two-dimensional shapes, three-dimensional shapes, position, data skills.

Measurement
Includes length, area, mass (weight), capacity and volume, temperature, time.

Contexts
The contexts for applying mathematical skills are only identified in the introduction of the Laos document. Contexts indicated are mainly familiar and local and are not as broad as the framework.

Processes
No processes are clearly stated other than in the objectives in the draft curriculum. However, the objectives clearly emphasise the importance of translating and applying skills especially in the descriptions of required skills. Justifying an approach to problem solving and the resulting solution matches the framework process of interpreting and reviewing as well as the descriptions of attitudes and values that promote rational and creative thinking. There are some examples of teaching ideas but no worked examples are included.

Reference documents
Laos Mathematics (draft) Curriculum.
2.5 Malaysia

General information

The rationale of Mathematics Education in the curriculum documents identifies mathematics as 'the best platform to develop individual intellectual proficiency in making logical reasoning, space visualisation, abstract thinking and analysing. Pupils develop numeracy skills, reasoning, thinking and solving problems through learning and application of mathematics.'

The document is clearly presented with general statements about the teaching and learning frameworks, values and skills. This leads into the content presented in tabular form of learning standards and recommended teaching times within content topics.

Overarching orientation

The aim of the curriculum is stated as developing pupils' understanding of the concept of numbers, basic calculation skills, understanding simple mathematical ideas and competencies in applying mathematical knowledge and skills effectively and responsibly in daily life.

The primary curriculum comprises two levels. Level 1 focuses on basic understanding and basic application skills. Level 2 builds on the understandings of Level 1 and develops more complex application skills for real life challenges. It is divided into content and learning standards that are further divided into topics against which recommended time allocations are provided.

The mathematics curriculum contains statements about:
- Content (Learning area)
- Attitude and value
- Skills
- Processes.

Six skills areas are also identified, with expanded dot point detail for each:
- Mathematics skills
- Analysing skills
- Problem solving skills
- Research skills
- Communication skills
- Information and communication technology skills.

The use of information communication technology refers to using and handling mathematical instruments such as abacus, calculators, computers, educational software, websites and educational packages.

Content

The content is organised into four learning areas which reflect the framework:
- Numbers and Operations
- Measurement and Geometry
- Relationship and Algebra
- Statistics and Probability.

Numbers and Operations

Includes: whole numbers, addition, subtraction, multiplication, division, mixed operations, fractions, decimals, percentages, money.
Measurement and Geometry
Includes: time, length, mass, volume of liquid, three-dimensional shapes, two-dimensional shapes.

Relationship and Algebra
Includes: coordinate, ratio and proportion.

Statistics and Probability
Includes: data management, likelihood.

Contexts
A section about attitudes and values is provided within the document, relating to local and wider-world applications. Personal, interaction, procedural and intrinsic values are described in relation to the mathematics curriculum. A statement about teaching and learning is also provided but specific examples are not included with the content and learning statements.

Elements of other values are indicated in the documentation e.g. Creativity and Innovation; Entrepreneurship in Mathematics; Information and Communication Technologies.

A statement is made about Skills for the 21st Century under the sections: Thinking, Career and Life Skills and Values.

Processes
Five process areas with written descriptions are identified as:
- Communicating
- Reasoning
- Relating
- Problem Solving
- Representing.
This loosely reflects the framework, however these are not coded or identified specifically with the content and learning statements. Detail is provided for the teachers in the form of examples or strategies within the written statements.

Reference documents
KURIKULUM STANDARD SEKOLAH RENDAH (Primary School Curriculum Standard) (KSSR) Mathematics Year 5.
Reading literacy
2.6 Philippines

General information

The Grade 1–10 curriculum states ‘mathematics is one subject that pervades life at any age and in any circumstance. Thus, its value goes beyond the classroom and the school.’ The twin goals of mathematics in the basic education levels, K–10, are Critical Thinking and Problem Solving. These are elaborated on and supported with research. Theories such as Constructivism, Cooperative Learning, Discovery Learning and Inquiry-based Learning are also mentioned.

The document is presented with introductory statements, then the standards. This leads to a tabular presentation of the content which includes: content standards, performance standards, learning competencies, codes and support materials. The table is then divided into teaching quarters at each year level.

Overarching orientation

The overarching orientation of the Filipino curriculum is to achieve the twin goals of critical thinking and problem solving through organised and rigorous curriculum content, a well-defined set of high-level skills and processes, desirable values and attitudes, and appropriate tools, taking into account the different contexts of Filipino learners.

Within the curriculum document there are suggestions made for ICT-enhanced lessons. The use of manipulative objects, measuring devices, calculators and computers, smart phones and tablet personal computers, and the Internet are identified.

Content

The framework content categories are reflected in the five content areas:

- Numbers and Number Sense
- Measurement
- Geometry
- Patterns and Algebra
- Probability and Statistics.

Numbers and Number Sense
Includes: concepts of numbers, properties, operations, estimation, and their applications.

Measurement
Includes: the use of numbers and measures to describe, understand, and compare mathematical and concrete objects. It focuses on attributes such as length, mass and weight, capacity, time, money, and temperature, as well as applications involving perimeter, area, surface area, volume, and angle measure.

Geometry
Includes: properties of two- and three-dimensional figures and their relationships, spatial visualisation, reasoning, and geometric modelling and proofs.

Patterns and Algebra
Includes: studies of patterns, relationships, and changes among shapes and quantities. It includes the use of algebraic notations and symbols, equations, and functions, to represent and analyse relationships.
Statistics and Probability

Includes: developing skills in collecting and organising data using charts, tables, and graphs; understanding, analysing and interpreting data; dealing with uncertainty; and making predictions about outcomes.

Contexts

The contexts are defined as ‘a locale, situation, or set of conditions of Filipino learners that may influence their study and use of mathematics to develop critical thinking and problem solving skills. Contexts refer to beliefs, environment, language and culture that include traditions and practices, as well as the learner’s prior knowledge and experiences’. These contexts are mainly familiar and local.

Processes

The processes have the same scope, but are more detailed than the framework’s three categories of Translate, Apply, Interpret and review:

- knowing and understanding
- estimating
- computing and solving
- visualising and modelling
- representing and communicating
- conjecturing
- reasoning
- proving and decision making
- applying and connecting.

Values and attitudes are also included:

- accuracy
- creativity
- objectivity
- perseverance
- productivity.

Some teaching and learning examples are included in the curriculum document and learning materials are mapped against each of the standards in the table.

Reference documents

- K to 12 Curriculum Guide MATHEMATICS (Grade 1 to Grade 10).
2.7 Singapore

General information

The mathematics curriculum (Primary 1 to 6 and Secondary 1 to 5) states 'learning mathematics is a key fundamental in every education system that aims to prepare its citizens for a productive life in the 21st century'.

It identifies the value of mathematics in terms of the nation and for the individual learner. The goal of the curriculum is identified as ensuring all students will achieve a level of mathematical mastery useful for their lives and, for those who have the interest and ability, the option of pursuing mathematics at the highest level.

The extensive document is divided into the framework, the design of the framework, teaching and learning and assessment and the content itself. The curriculum is divided into year levels, content areas, sub strands and numbered outcomes. Support is provided with teaching ideas.

Overarching orientation

One curriculum covers all students from 1st to 4th year primary. There are separate curriculum outlines at 5th and 6th year primary (Standard and Foundation) and five outlines at the secondary level.

The curriculum is comprehensive. It outlines a framework designed around the idea of mathematical problem solving and is underpinned by five inter-related components:

- Skills: Numerical calculation, Algebraic manipulation, Spatial visualisation, Data analysis, Measurement, Use of mathematical tools, Estimation
- Concepts
- Processes
- Attitudes: Beliefs, Interests, Appreciation, Confidence, Perseverance

The introduction of the revised curriculum is staggered, Year 4 introduced in 2016, Year 5 in 2017 and Year 6 in 2018.

The curriculum also describes:

- Learning experiences
- Principles of teaching: this includes three principles: 1: There is a connection between teaching and learning, 2: Teaching and learning should be based on students' experiences and be engaging, and 3: Teaching should connect learning to the real world
- Phases of learning
- Assessment in the classroom: 1: Role of assessment (ongoing, used to inform and support classroom instruction), 2: Range of assessment (primarily formative and diagnostic in the classroom but reporting should be based on summative data) and integrating assessment with instruction.

From 5th Year Primary calculators are allowed unless otherwise stated.

Content

There are three content areas that reflect the framework:

- Number and Algebra
- Measurement and Geometry
- Statistics.
Number and Algebra
Primary Sub-strands: Whole numbers, Money, Fractions.

Measurement and Geometry
Primary Sub-strands: Measurement, Geometry, Area and volume.

Primary: Statistics, Secondary: Statistics and Probability
Primary Sub-strands: Data representation and interpretation.

Contexts

The contexts for applying mathematical skills are not defined, but given through examples of relevant contexts and how the mathematical concepts and skills in question should be applied. Contexts are mainly familiar and local and concern everyday observations and behaviours that require mathematical skills, although broader indications are included in the introductory statements.

Processes

The following mathematical processes are documented with detail.

- Reasoning, Communication and Connections
- Applications and modelling
- Thinking Skills and Heuristics

The documentation includes diagrammatic modelling to illustrate the links between mathematical models and solutions, and real world problems and solutions. Pedagogical detail is provided for primary contexts.

A section is included in the documentation exploring the principles of teaching and phases of learning. Three principles of teaching are explored:

- There is a connection between teaching and learning
- Teaching and learning should be based on students’ experiences and be engaging
- Teaching should connect learning to the real world.

This material is supported with documentation about phases of learning: readiness, engagement and mastery. Specific guidance is provided for primary mathematics contexts such as teacher-directed inquiry and direct instruction as students work through the phases.

Reference documents

Primary Mathematics Teaching and Learning Syllabus (2013)
Secondary Mathematics Syllabuses (2007)
Additional Mathematics (O and N(A)-Level) Teaching and Learning Syllabus
N(T)-Level Mathematics Teaching and Learning Syllabus
O- & N(A)-Level Mathematics Teaching and Learning Syllabus.

The SEA-PLM reading literacy framework is primarily described in terms of content (the text variables: text format and text type), context (the situation to which texts are relevant) and process (the cognitive processes readers use). As an adjunct, the inclusion of precursor skills contributes to elaborating the constituents of the domain at the early stages of reading development. The precursors are described in terms of constituent skills such as word recognition.
2.8 Thailand

General information

The Mathematics curriculum document states mathematics is the 'application of knowledge, skills and scientific process for problem solving'. It is located in everyday life and leads to further education. It aims to develop a favourable attitude toward mathematics, as well as develop systematic and constructive thinking.

The curriculum is presented with introductory statements then the detail is organised into a tabular format. The table is organised into strands e.g. Number and operations, standards and then grade level indicators. There is an emphasis in the curriculum on 'explaining' rather than just doing, such as explaining the characteristics of three-dimensional geometric figures.

Overarching orientation

Mathematics sits within five key competencies:

- Communication capacity
- Thinking capacity
- Problem solving capacity
- Capacity for applying life skills
- Capacity for technological application.

It is one of the eight learning standards:

- Thai Language
- Mathematics
- Science
- Social Studies, Religion and Culture
- Health and Physical Education
- Art
- Occupations and Technology
- Foreign Languages.

The mathematics standard is divided into strands and within grade level indicators. Detail is provided for what students should be able to achieve at each year within each of the standards. The standards are identified via a coding system. For each year level (1 to 10-12) specific indicators are provided in each of the strands and presented as a table.

The learning standards are coded:

MA1.1 Gr1/2
MA = Mathematics
1.1 = First subject area (Numbers and operations) Standard 1 (Understanding of diverse methods of presenting numbers and their application for real life)
Gr 1/2 = Indicator 2 for Grade 1

There are statements provided for each of Grades 3, 6, 9 and 12 indicating what 'graduates' at these levels should achieve. Teaching times are indicated and within the document it is stated for Grades 1?3, that additional learning time can be included for mathematics.

It is also stated that the curriculum can be adjusted to suit the situations and contexts of target groups such as specialised education, education for the gifted and talented, alternative education, education for the disadvantaged and informal education.

Students’ learning is assessed in a number of ways; classroom assessment, school assessment, local assessment and national tests.
Content

The content areas reflect the framework classifications with the addition of Mathematical skills and processes, which is identified as a separate classification that requires students to use and apply their mathematical skills in problem solving situations. The content areas are:

- Number and operations
- Measurement
- Geometry
- Algebra
- Data analysis and probability
- Mathematical skills and processes.

Numbers and Operations
Includes understanding of diverse methods of presenting numbers and their application for real life, understanding of the results of operations of numbers, the relationships of operations, and the application of operations for problem-solving, use of estimation in calculation and problem-solving, understanding of the numerical system and the application of numerical properties.

Measurement
Includes understanding of the basics of measurement; ability to measure and to estimate the size of objects, solving measurement problems.

Geometry
Includes ability to explain and analyse two-dimensional and three-dimensional geometric figures, ability in visualisation, spatial reasoning and application of geometric models for problem-solving.

Algebra
There is no Algebra until Year 6.

Data Analysis and Probability
Includes understanding and ability to apply statistical methodology for data analysis, application of statistical methodology and knowledge of probability for valid estimation, application of knowledge of statistics and probability for decision making and problem solving.

Strand 6: Mathematical Skills and Processes
Includes ability in problem solving, reasoning, communication and presentation of mathematical concepts, linking various bodies of mathematical knowledge, and linking mathematics with other disciplines; and attaining ability for creative thinking.

Contexts

The contexts for applying mathematical skills are not specifically defined within the curriculum, however, the curriculum does acknowledge the importance of mathematics in everyday life.

Processes

Processes are identified as a specific content area (Strand 6) Mathematical Skills and Processes and they include problem solving, reasoning, communication and presentation of mathematical concepts, linking various bodies of mathematical knowledge, and linking mathematics with other disciplines; and attaining ability for creative thinking. These processes cover the scope of the three framework processes of translating, applying and interpreting and reviewing.

Reference documents

Basic Education Core Curriculum B.E. 2551 (A.D. 2008)
2.9 Timor Leste

Introduction

The Timor Leste curriculum recognises that in many day-to-day situations mathematics is required to solve problems. It states ‘it is essential to provide an extended mathematics education to all children and young people’.

The curriculum is introduced with a number of statements about orientation, content and teaching and learning. The content is presented in a summary table with standards organised under year levels (1st–6th year) within the content areas. Further detail is provided for each year level with sub-areas, learning outcomes and performance indicators included.

Overarching orientation

The mathematics curriculum is guided by three principles.

- Integral human development – mathematics is present within all aspects of society
- Learning and teaching quality – teaching should be student centred and students should learn by doing
- On the cultural and local livelihoods – learning should be framed by the local culture.

It is then divided into content areas and learning outcomes. The Learning outcomes are identified using a code e.g. MAT1.2.3 where:

MAT1= Mathematics 1st Year
.2 = content area (e.g. Geometry)
.3 = Learning outcome

Mathematical competence is described as going beyond just the skills, knowledge and ability to solve problems. Critical thinking, communication and flexible thinking are also required. No mention is made of calculators or any other ICT tools.

Content

The content is divided into five areas, which reflect the framework classifications:

- Numbers
- Algebra
- Quantities and measures
- Geometry
- Organisation and data processing.

In each teaching/learning cycle only four of the areas are addressed, with the acknowledgement that the learning of mathematics is a ‘gradual and continuous process’.

Numbers
Sub-areas: Natural numbers, Addition and subtraction, Multiplication and division, (in years 5 and 6 these are combined as ‘Operations’), Fractions and decimals, Direct proportionality, Negative numbers.

Algebra
Sub-areas (Year 6 only): Powers, Algebraic expressions.

Quantities and measures
Sub-areas: Length, Area, Weight, Capacity, Time, Money.

Geometry
Sub-areas: Location and orientation in space, Geometric figures, Regularities, Geometric solids.
**Organisation and data processing**
Sub-areas: Sets representation, Data representation, Information on maps.

**Contexts**

The contexts for applying mathematical skills are not defined. The documentation does state mathematics is a part of all people’s lives and as such should be taught not just as the acquisition of knowledge but also as the ability to problem solve, reason and communicate.

**Processes**

The mathematical processes are not made explicit in the documentation. The sections Mathematical Competence and Contextualisation discuss the ways students should be encouraged to approach mathematical problems, develop strategies for solution, apply their mathematical knowledge and interpret and communicate their findings. However the focus of the overarching orientation on going beyond skills and knowledge (translation) to solving problems (apply) and critical thinking and communication (interpret and review) about mathematical ideas covers the scope of the framework’s three processes.

**Reference documents**

- Timor Leste mathematics curriculum translated into English.
2.10 Vietnam

General information

Primary education is implemented from Grades 1 to 5. The mathematics curriculum begins with a statement about objectives. It then presents a teaching plan of the number of sessions per week for each Grade level. The content is presented in tabular form indicating the content broken into topics (numbered) to be taught at each year level within each content area. A second table is provided with teaching and assessment notes (mostly examples to be used in class) for each topic. A series of achievement statements is also given for each topic.

Overarching orientation

The basis of the curriculum, as stated, is to develop students’ competence in three areas:
- basic mathematical knowledge
- maths skills in number, measurement and problem solving
- thinking capacity, reasoning and imagination and excitement in mathematics.

The curriculum outlines a teaching plan at each grade level in terms of time allocated and topics that should be covered.

A general explanation is included that assessment should be fair to all students and balanced in terms of methods of assessment.

Calculators and other ICT tools are provided to students as an elective topic.

Content

There are four content areas.
- Arithmetic
- Quantity and quantity measure
- Geometrical factor
- Solving math problems with written words.

This differs to the framework as Chance and Data is not included as a separate area. There are some elements of Chance and Data content in the Arithmetic area. Solving math problems with written words is identified as a separate classification where students solve basic problems in the Vietnamese curriculum which differs from the framework.

Arithmetic
Includes: Numerals to 100,000, Addition and subtraction, Multiplication and division, Fractions, Ratios, Decimals, Percentage, and Statistics including statistical tables, means, tabulation and simple diagrams.

Quantity and quantity measure
Includes: Length, Time, Volume, Velocity (and velocity-time-distance relationship), Currency, and Weight.

Geometrical Factor
Includes: two-dimensional shapes and some simple three-dimensional shapes (rectangular, parallelepiped, cube, cylinder and sphere), Perimeter, Area including lateral surface area, and surface area, Angles.
Solving math problem with written words
Includes: one-step word problems, multi-step word problems, many examples of worded, reasoning type questions that students are expected to be able to solve. This is recognised as an important process for students to formulate and translate real world problems into mathematical formulations and then develop solutions.

Contexts

The curriculum includes an explanation for teachers of how the content should be linked to real-world mathematics and students’ own experiences. A short section attempts to explain to teachers that content should be selected according to the specific conditions and locations of schools (local context) and in order to cater for individual students’ abilities. The curriculum also includes guidance on general delivery of the mathematical knowledge and skills and how students should be encouraged to show their thinking and make connections and apply mathematics to the real world. It is indicated that learning activities should be engaging and should make connections with children’s personal knowledge and experiences. There is mention of using concrete learning tools.

Processes

No mathematical processes are made explicit in the detail of the curriculum. The Objectives section and in Explanation-Instruction state that students are expected to develop mathematical ideas given problems (translate), apply their mathematical knowledge and interpret and communicate their findings which matches the three framework processes. Some processes are included in the Solving math problems with written words. The curriculum in the second table provides more detailed teaching ideas and worked examples of how to teach the content. There are examples of understanding and applying content to solve problems.

Reference documents

- Vietnam Primary Curriculum
- PM Declaration on Curriculum and textbook reform 404 (EN).
3. Reading and Writing

3.1 Brunei Darussalam

General information

English language and Malay are both core subjects across all year levels. English is the medium of instruction for all subjects except for Malay, religious studies and art. The focus of this review is on English which has the status of a second language in Brunei Darussalam.

The primary English curriculum has detailed descriptors of standards and examples for their application, as well as teaching suggestions for each Year Level from 1–6. There are allocated teaching and study times as well as assessments.

The progressions from year to year through each of the four Language Components of Speaking, Listening, Reading and Writing allow teachers to see what should have been covered previously and adjust work for a student who needs to catch up.

Overarching orientation

The overarching purpose of the Brunei curriculum is well-aligned with the SEA-PLM working definitions of reading and writing literacy.

The mission of the Ministry of Education is ‘to provide holistic education to achieve the fullest potential for all...to achieve a high level of learning in all subjects, and to benefit from the wide opportunities in higher education, in the global economy’ (p.4).

The Year 5 overarching reading standards (p.8) clearly indicate a literacy orientation in requiring learners to read independently, intensively and extensively and to use reading strategies to locate information from a variety of text types to produce opinions and views.

The Year 5 overarching writing standards also focus on the practical application of writing skills for a range of purposes by (p.8) requiring students to write short texts of four or more connected sentences independently to produce texts about personal experiences, familiar events, short notes and simple non-chronological texts.

Content areas

Reading

A variety of text formats are specified (p.8) including continuous texts such as stories and factual (non-chronological) texts and graded readers. Non-continuous texts include non-sequenced texts such as charts, diagrams, signs labels and posters (p.15). Students also use a dictionary and English Thesaurus as to further improve their study skills.

Students are required to read different texts, genres and literary texts. There is specific mention of stories, information texts, instructions and reports but not of persuasive texts. Graded readers are specified which typically also include a range of text types. By Year 6, these contain texts of 300–400 words out of 700–950 key word range.

Writing

In Year 5, students write in several text types:

- compose short stories in discussion and write the final sentence
- plan a set of instructions in pictures and write some of the instructions
- plan a simple report of a science experiment and write the report.
Contexts

The contexts for reading are broad as students are expected to read extensively by Year 5. The contexts for writing are focused on the personal and familiar, or local at this level.

Processes

Reading

There is a strong focus on continuing to build decoding skills and improving fluency in reading English at Year 5. Students are also required to construct meaning from texts using visual information, cohesive devices, contextual clues and prior knowledge (p.14-15). The four reading processes in the framework are reflected in the curriculum.

- Locating information is clearly specified: students construct meaning and locate information
- Interpreting is specified in the Year 5 standards about making predictions, summarising main ideas, using context to identify the meaning of unfamiliar words, and interpreting characters, events or information
- Reflecting skills include identifying grammatical features, recognising text types, linking the text to personal experiences, recognising the role of punctuation and giving opinions and identifying preferences
- Recognising words includes using phonic, spelling, grammatical and contextual cues, developing sight words and blending and reading two- to five-syllable words.

Writing

The Year 5 curriculum (p.16-18) describes a range of writing processes requiring students to:

- Plan, brainstorm, draft, revise and edit short texts
- Correctly construct and punctuate sentences
- Spell correctly
- Develop their creativity or ideas in oral language tasks that have a small written component.

These skills align with the writing processes described in the framework, although controlling text structure and managing coherence are implied as part of producing short texts.

Documentation

- SPN21 Curriculum for English
- Framework and Guidelines for Curriculum & Assessment – English Language for Year 5.
3.2 Cambodia

Background

The 2005–2009 Basic Education Curriculum was developed by the Ministry of Education, Youth and Sport (MoEYS). The Basic Curriculum was meant to be reviewed for the 2010-2014 period, with the help of UNICEF, but the reviewed draft was never approved. Instead of having a new policy endorsed, MoEYS decided to issue a Prakas (a high level legal documents/proclamation) on the curriculum implementation. Currently, the curriculum framework and policy are under review with UNICEF support. In principle, MoEYS has agreed to review the Primary School Curriculum under this current education reform agenda.

Khmer is the language of instruction. Grades 1 to 6 (Primary is divided into two stages; 1–3 and 4–6. The full curriculum continues through to Grade 12.

The curriculum documentation provided describes the curriculum for Grades 3, 6 and 9. The Grade 6 curriculum is reviewed here.

Overarching orientation

The Khmer curriculum has an overarching literacy orientation in its intention to:

- provide learning experiences that will enable students to learn to know, learn to do, learn to be and learn to live together;
- equip students with the everyday Life Skills they will require to reach their full potential
- be effective and productive members of society.

The teaching of Life Skills is one of the most important roles of schools. In this policy, Life Skills are defined as the intellectual, personal, interpersonal and vocational skills that enable informed decision-making, effective communication, and coping and self-management skills that contribute to a healthy and productive life.

The most fundamental of all life skills are Khmer literacy and numeracy, and the teaching of these skills is the main purpose of primary education in the first three years of schooling (Policy for Curriculum Development 2005-2009 (2004), p.8).

The Reading competency refers to learning to make meaning from print texts. Through reading, students extend their understanding of the world and of themselves, and understand more about the meaning of cultural beliefs and values (p.4).

In each competency, students learn how to use language effectively through learning about language and applying that understanding in creating their own texts (Khmer Grades 1-9, p.2).

Content

Reading

The Reading competency refers to learning to make meaning from a wide range of print texts. Print texts can be fiction or fact and include picture storybooks, traditional stories, plays, poetry and translated works. Print texts also include writing that is part of everyday life, for example, messages, newspapers, signs, instructions, labels, and the Internet. Through reading, students extend their understanding of the world and of themselves, and understand more about the meaning of cultural beliefs and values.

These competencies are well matched to the framework definition of text formats and text types.

Writing

The Writing competency refers to learning to create and compose narratives, paragraphs about people, places and events, write diary entries, personal letters, persuasive texts and simple forms.
Context

The contexts for Grade 6 reading and writing are mainly personal and local.

Processes

Reading
Reading processes for the Khmer curriculum match the framework definitions of locating and interpreting, and recognising words. The curriculum includes reading details, describing the important details of simple narrative texts by answering what, who, where, when, why and how questions, using different strategies to obtain meaning from unfamiliar words and texts including using dictionaries, glossary and context. Students read for comprehension and interpret more complex fictional stories by constructing and answering questions related to the characters, events and setting.

In learning to reflect on texts, students predict developments of simple narrative texts by answering what, who, where, when, why and how questions, identify different text types and identify the intended audience and purpose of examples of different non-fiction text types that contain polysyllabic words (Khmer Basic Curriculum Standards, Reading, Grade 6 report, p.4).

Writing
Students plan their writing in order to develop a collection of writing for different audiences and purposes across a range of text types. They select appropriate vocabulary and use words accurately and correctly. They punctuate their work correctly and write clearly and neatly.

The Khmer curriculum does not explicitly identify all of the writing processes that are described in the framework, but clearly students need to generate ideas, control text structure and organisation and manage coherence as well as using vocabulary and controlling for syntax and grammar in order to develop a collection of writing.

Documentation

- Basic Education Curriculum Khmer Grades 1 – 9
- Khmer Basic Curriculum Standards.
3.3 Indonesia

Background

Indonesian is the medium of instruction. Religion is one of the core subjects taught in primary schools and it is an important part of Indonesian people’s lives. This is evident in the curriculum where each of the six religions recognised by the Indonesian government is addressed individually with learning standards.

Overarching orientation

With this curriculum the education system seems to be moving towards inquiry-based learning where the emphasis is on the process of learning. The purpose of the curriculum is to prepare Indonesian people with the ability to live as individuals and as citizens who can be productive, creative, innovative, centred around religion teachings and beliefs, and who are capable of contributing to the society and the world.

In the Curriculum 2013, all core subjects (Religion, The Five Principals and Citizenship, Indonesian, Mathematics, Natural Sciences and Social Sciences) are developed around the four core competences from Years 1–6. These competences focus on spiritual attitude, social attitude, knowledge and skills. For Indonesian Language, students are to demonstrate their understanding of the use of Indonesian as the national language with God’s grace, demonstrate positive attitude when interacting with others, demonstrate their understanding of factual knowledge via observation and inquisitive behaviour and demonstrate ability to present their knowledge clearly, systematically and logically.

Learning of Indonesian is carried out across all subject areas in the cross curriculum content. It is not specifically studied as a subject; there is also no mention of specific literature. Reading literacy is not specifically mentioned but the underlying assumption is that the reading and writing skills covered mainly under Indonesian Language require students to demonstrate their understanding of the use of Indonesian as the national language, to demonstrate a positive attitude when interacting with others, to demonstrate their understanding of factual knowledge via observation and inquisitive behaviour and to demonstrate ability to present their knowledge clearly, systematically and logically. Students understand that texts have different text structures depending on purpose and context; they explain how language features, images and vocabulary are used to engage the audiences. They read texts in different sentence structures, respond to particular text types and share key points of their knowledge in a written or oral form.

The Reading standards for Grade 5 specify that students are able to explain how text structure assists in understanding the text. They understand that language features and images can influence interpretations of texts. When reading, they learn and decode unfamiliar words from a variety of topics using their previous knowledge. They analyse information from a variety of texts. They explain their own responses, and also listen and ask questions to clarify content.

The Writing standards for Grade 5 specify that students create imaginative, informative and persuasive texts for different purposes and audiences using the standard form of Indonesian Language.

Content

Reading and writing

In Curriculum 2013, Indonesian Language is not taught specifically as a subject area and learning the language is carried out in other subject areas. Therefore students learn their writing skills when creating or completing tasks in Mathematics or Religion, for example.

At Grade 5, students engage with a variety of texts. They listen to, read, view and interpret a variety of texts in which the primary purposes are to inform and persuade. These encompass:
• interviews and speeches
• adventurous stories
• procedures (e.g. instructional texts)
• reports on observations and explanations such as food and food chains, human’s health, the balance of ecosystem and nature, impact of human activities
• explanations about water recycling processes, electricity, magnets, parts of living beings and their functions, breathing systems
• advertisements on export and import in economic activities
• poems and verses on natural disasters and life as a member of a nation
• book reviews
• narratives on the development of Islam.

Context

The contexts for Grade 5 reading and writing are personal, local and national with a strong focus on desirable attitudes and values.
Students are to show a positive attitude when interacting with others using Indonesian. They show care for the environment, study about businesses, food, nature, recycling, force, movement/action, heat, sound and light, and the impact of human activities. Students show affection for the nation, they study about solar systems, government and public services, the history of Indonesia and relationships with neighbouring countries.

Processes

Reading
The Reading processes outlined in the curriculum cover the scope of the framework processes of locate, interpret and reflect and recognise words.

By Grade 5, students:
• understand how texts vary in purpose, structure and topic as well as in the degree of formality
• use comprehension strategies to analyse information, integrating and linking ideas from texts
• clarify understanding of content in different situations, connecting ideas to their own experiences
• interpret ideas and information, investigate key points in order to carry out tasks and use information to share and extend ideas and information
• explain how images contribute to our understanding of information in factual and persuasive texts
• identify aspects of the reading material that convey details or information about particular scientific, social, economic, cultural and historical contexts
• identify and explain characteristic text structures and language features used in imaginative, informative and persuasive texts to meet the objective of the text
• investigate how the organisation of texts into chapters, headings and other elements can be used to predict content
• understand how texts vary in topic and the degree of formality, and understand how authors use a variety of language features to achieve particular purposes and effects
• make connections between a text and personal experiences such as maintaining their five senses, use of technology, history of their religion, health.

Writing
• For Writing, students are to:
• plan, draft and publish imaginative, informative and persuasive texts, choosing text structures, and language features appropriate to purpose and audience
• write based on their own experiences
• write about how they care for the environment, local businesses, their food, natural environment, recycling, force, movement/action, heat, sound and light, and the impact of human activities on their surroundings
• write about their love of the nation, solar systems, government and public services, the history of Indonesia and relationships with neighbouring countries
• differentiate standard Indonesian Language from slang.

The Indonesian curriculum does not explicitly identify all of the six writing processes that are described in the framework, but clearly students need to generate ideas, control text structure and organisation and manage coherence as well as using vocabulary and controlling for syntax and grammar in order to produce a wide variety of pieces of writing.

Documentation

• Curriculum 2013: Basic framework and structure for primary schools and madrasah ibtidaiyah (Islamic primary schools).
3.4 Lao People’s Democratic Republic

General information

Lao Language is the medium of instruction with some allowance for using mother-tongue in the early years of school. Lao is an additional language for many students. English is taught as a foreign language. The focus of this review is on Lao Language. The Lao Language primary curriculum is divided into Reading, Writing and Speaking and Listening and covers Grades 1 to 5. The curriculum documents include overarching aims and a list of basic competencies at each grade level.

Overarching orientation

There is a strong literacy orientation in the purpose of education in Laos. One of the six goals of the Primary Curriculum is:
Helping students in developing basic capability in terms of remembering, understanding, thinking and solving problems in everyday life; having skills in learning and experience in expressing feelings and presenting comments in an appropriate way.

The definition of literacy in the Lao Language curriculum is largely reflected in the framework orientation. Literacy is defined as the ability to read and use written information and to write appropriately in a range of contexts. Literacy is used to develop knowledge and understanding, to achieve personal growth and to function effectively in our society. Literacy involves the integration of speaking, listening and critical thinking with reading and writing. In the lower primary grades, there is a strong focus on developing basic literacy skills as students learn language and learn about texts. By the time students complete primary school, they will be using their literacy skills as learning tools in all subjects (p.1 Lao Language).

The overarching definition of reading is reflected in the domain definition used in the framework. Through studying Reading, students will be able to read and understand a variety of common types of texts. They will be able to apply their skills to access information in their life, and for future study. The students will take pleasure in reading texts to obtain information, explore ideas, and think imaginatively and critically. Through reading activities, students will experience increasingly more complex models for their own writing, and these reading texts will contain increasingly more complex meanings. To read well, students need to learn about different types of written texts, learn about and use reading skills and strategies, and learn to apply what they know to fully understand the range of reading texts (p.3 Lao Language).

Content areas

Reading
A variety of common text types and a range of reading texts and the importance of learning about different types of texts are clearly specified in the overarching aims (p.3 Lao Language). The Basic Learning Competencies for Grade 5 Reading texts identify reading a wider range of texts including texts about unfamiliar topics and community issues, arguments, advertisements and texts available in the local community. Students are also expected to describe basic structures and features of a range of text types (p.8–9 Lao Language).

Writing
The overarching aims identify that students will be able to write in a variety of common text types and to apply their skills to use their writing in everyday life. Students write to give opinions and information, explore ideas and express themselves which all fit within the scope of the framework list of text types for writing (p.4. Lao Language). The Basic Learning Competencies for Grade 5 Writing specify that students write a wider range of texts including narratives, recounts, texts about community issues, factual texts and advertisements and arguments. Texts should include creative ideas and students need to express their opinions and provide supporting reasons.
**Contexts**

Appropriate contexts for Grade 5 reading mainly focus on the personal and local, especially at the community level. The contexts start to move into the wider-world with the inclusion of some unfamiliar topics (p.3).

The focus in Grade 5 writing is on local and familiar contexts producing texts that are commonly written in everyday life and used for learning in the school and community (p.4).

**Processes**

**Reading**

Reading is divided into two sub-parts: Reading Texts and Skills and Strategies.
In the general aims for Reading Texts students are expected to analyse and learn from texts, identify the writer’s purpose and demonstrate a deep, critical understanding of meaning and an appreciation of the value of written text. These skills are covered in the framework reading processes of locate and interpret.

Students are also expected to reflect on the texts by understanding the strategies writers use, including the way the text is structured and language features and how the text is shaped to suit the purpose and audience (p.3). Skills and Strategies focus on decoding, developing fluency and expanding vocabulary knowledge. These are fundamental literacy skills that underpin reading and include the process of recognising words.

In the Basic Competencies for Reading Texts at Grade 5 students identify ways that texts have been shaped for particular audiences, read with understanding and use texts purposefully including responding to information, making plans or giving reasons to support or disagree with an idea. Students also describe the basic structures and features of a range of common text types (p.9-10). In the Grade 5 Skills and Strategies they use a broad range of strategies to read effectively including predicting and checking meaning. While these terms are not used, these strategies would include locating, interpreting and reflecting on texts in order to understand the meaning.

The importance of reading aloud, fluently, with correct pronunciation is an important part of many reading curricula. These skills are not described in the SEA-PLM framework because of the impracticality of assessing them on a large scale. However, the application of fluent reading skill is assessed through reading comprehension tasks.

**Writing**

Writing is divided into two sub-parts: Writing Texts and Skills and Strategies.
In the general aims for Writing Texts students are required to understand structures and features of different text types, learn about and use writing skills and strategies and analyse their own writing. Skills and Strategies identify the importance of grammar and punctuation, spelling and handwriting (p.4-5).

In the Basic Competencies for Writing Texts at Grade 5 students plan new texts and consider purpose and audience and select and use the correct structure and language features for the text type. They develop creative ideas and express ideas clearly to the reader. In Skills and Strategies they form complex sentences correctly, follow grammatical rules and use punctuation creatively.

These writing skills reflect the six writing processes in the framework. Handwriting is one skill that is included in the curriculum. This could be addressed in the framework under ‘Other language-specific features’.

**Documentation**

- Primary and Secondary Curriculum of Laos
- Lao Language curriculum.
3.5 Malaysia

General information

There are three mediums of instruction allowed in Malaysian schools. Malay Language is the medium of instruction in National Schools, while Chinese Type and Tamil Type National Schools use the Chinese Language and Tamil Language as their medium of instruction. English is taught as a second language in all Malaysian primary and secondary schools. While Chinese Language and Tamil Language are taught as second languages in National Schools.

This review focuses on the Malay Language with reference to Chinese, Tamil and English Language. Malay Language is the national and official language of Malaysia. The Malaysia Education Blueprint of the Ministry of Education requires all students in all schools to learn the Malay Language, which is a core subject that they must pass in order to receive the Malaysian Certificate of Education.

The Malay primary curriculum consists of three language components; listening and speaking skills; reading skills; and writing skills. The curriculum contains descriptors of standards and detailed examples, activities and notes for their application.

Overarching orientation

The Malaysia language curricula have a literacy orientation. Each makes reference to the practical application of students’ skills, knowledge and understanding to solve problems both now and in the future. For example, the aim of the Malay Language curriculum is to:
‘Equip students with language and communication skills to meet their needs in the areas of education, social interaction and the acquisition of knowledge’ (p. 1 Translation of Main Languages).

The curriculum for second languages (Chinese, Tamil and English) also makes reference to equipping learners with skills to communicate more broadly. The objective of teaching and learning of second languages is to:
‘Master the language and to be able to interact with confidence to deliver opinions, ideas and information in the daily social discourse’ (p. 1 Synopsis of Second Language Curriculum).

The English Language curriculum makes specific reference to equipping pupils with skills so that they are able to communicate, meet the challenges of the real world and network with people both locally and overseas (p. 1-5 Curriculum Specifications English).

These definitions fit within the orientation of the SEA-PLM assessment framework.

Content

Reading
Schools are encouraged to stock a range of reading materials suitable for all levels of learners. Pupils are required to be taught to read with understanding and enjoyment, building on what they already know (p.6 Curriculum Specifications English). A variety of text formats are specified, including continuous texts such as stories and poems, and non-continuous texts comprising dictionaries and word lists. The English Language curriculum provides a word list of high frequency words which pupils will need to understand (p. 42).

There is no specific mention of the range of text types that students might read, however stories and poems could be classified as narrative, descriptive, and persuasive text types.

Writing
Grade 5 students write in a number of text types (p. 26-30).
• Instructional: ‘complete simple instructions, recipes’
• Descriptive: ‘write simple descriptions with guidance’
Narrative: ‘write stories with little or no guidance’.

Context

The contexts for reading and writing are focused on the personal, local and the wider-world. The curriculum makes specific reference to the world of self/personal relationships, world of stories (i.e. wider-world through narrative) and the world of knowledge (i.e. familial, local and national) (p.7 Curriculum Specifications English).

Processes

Reading

Reading skills are defined as ‘students’ ability to read out loud, use right intonation and pausing with appropriate speed’ (p.3 Translation of Main Languages). By Grade 5 students should be able to understand and demonstrate that they can:

- ‘read mechanically and smoothly, clear pronunciation, right intonation, with the right expression according to situations, understand and analyse the literal and figurative contents, identify the language style of presentation, basic appreciation of the beauty of the language and to have passion in reading’ (p.4 Translation of Main Languages).

The four reading processes in the framework are reflected in the curriculum:

- tasks such as scanning text for specific information is an example of locating
- Interpreting is indicated by asking students to predict outcomes in stories
- Reflecting skills include reading and understanding cause and effect relationships
- students must recognise key words at various stages of development, including compound words in texts and ordinal numbers.

Writing

Writing skills refers to pupils’ ability to express ideas through various written forms based on their knowledge and experiences in a clear and grammatically correct manner (p.4 Translation of Main Languages). By Grade 5 students should be able to:

- ‘write using cursive writing in neat and balanced structure, take notes in the correct sequence within a specified pacing, and convey concise, precise and with concrete content on the information through paragraph writing, using various sentence structures and show interest in writing essays’ (p.5 Translation of Main Languages).

Grade 5 writing processes include:

- Constructing simple and compound sentences with guidance and independently
- Spelling correctly and taking dictation
- Generating ideas.

These skills overlap with the writing processes described in the framework.

Documentation

- Synopsis of the Second Language Curriculum Chinese Type and Tamil Type National Schools.
- Translation of Main Languages.
### 3.6 Myanmar

#### General information

The Myanmar curriculum is undergoing a national revision. This review is based on the materials available at the time of this audit on the draft curriculum framework.

Two of the eight learning areas in the draft Myanmar Primary Level Curriculum Framework are language subjects. These are Myanmar Language and English Language. Myanmar Language is the official language of Myanmar, it is also the medium of instruction for all subjects except for English Language. The draft curriculum framework allows ethnic languages to be used as a medium of instruction in schools together with Myanmar language if it is necessary to aid learners' understanding. Ethnic languages are to be decided by state, regions, townships and schools based on students' educational needs.

The draft curriculum will cover Grades 1 to 5. It will provide a breakdown of allocated teaching times for each learning area and extra curriculum activities. Assessments and teaching learning approaches will also be specified.

#### Overarching orientation

The draft primary level curriculum framework has a literacy orientation. The curriculum has nine aims and each makes reference to the application of skills for either the benefit of the individual in daily life or so that the learner can appreciate their own country. Three of the nine aims of the curriculum are related to language. These are Myanmar Language, English Language and ethnic languages. The aim of each learning area is to:

- Achieve basic mastery of four skills of...language (speaking, listening, reading and writing skills) for daily life application.

References to the practical application of students’ skills are consistent with the SEA-PLM assessment framework.

#### Content

The information provided for this audit makes reference to textbooks.

#### Contexts

The guiding principles set out in the draft national curriculum framework indicate that the contexts for reading and writing are likely to be broad. The draft framework has personal principles which focus on students’ personal development, local principles relating to customs and traditions and wider-world principles which encourage students to become good citizens at the global level.

#### Processes

The information provided for this audit states that learners will need to achieve basic mastery of reading and writing skills for daily life application. Further information was not available at the time of this audit.

#### Documentation

- PowerPoint Presentation, Primary Level Curriculum Framework.
- PowerPoint Presentation, Middle School Curriculum Framework.
- PowerPoint Presentation, Myanmar National Curriculum Framework (Draft).
3.7 Philippines

General information

The Philippines curriculum is centred on Mother Tongue – Based Multilingual Education (MTB-MLE). Learners begin schooling in their mother tongue and once they have developed a strong foundation in their native language they use this to scaffold the development of other languages. Filipino is taught as a second language and English is taught as a third language. This approach was formally established with the passing of the Republic Act 10523, otherwise known as the Enhanced Basic Education Act of 2013.

The review focuses on the English Language curriculum but reference is made to the Mother Tongue and Filipino curriculum.

The English curriculum covers Grades 1 to 12. The curriculum contains core learning standards, key stage standards and grade level standards. Detailed tasks are provided for each week of Grade 5 across ten areas including reading comprehension, reading fluency, written composition and attitude.

Overarching orientation

The Philippines language curricula have a strong literacy orientation. The Mother Tongue, Filipino Language and English Language curriculum are each focused on the practical application of students’ skills, knowledge and understanding. This is reflected in the overarching goal of the curricula which is to:
‘Produce graduates who apply the language conventions principles, strategies and skills in (1) interaction with others, (2) understanding and learning other content areas, and (3) fending for themselves in whatever field of endeavour they may engage in’ (p. 6 English).

The English curriculum also has a literacy orientation with its multiple references to learners of the future. English is seen as a tool that can equip students with the tools to navigate the world economy, producing learners who will: ‘Be able to appreciate and be sensitive to sociocultural diversity and understand that the meaning of any form of communication depends on context, purpose and audience (p.7 English).’

Content

Reading
The overarching standard for Grade 5 students states that they should be using different text types and reading for a variety of needs (p. 67 English).
The examples provided in the outline for Grade 5 specifically reference narrative text types. Learners are tasked with ‘reading narrative texts to understand themes, setting, characters and plots’ (p. 68). The curriculum also refers to reading poems to identify rhymes, imagery and hyperbole. It is likely that the frequent reference to ‘grade level appropriate text’ includes descriptive, instructional, persuasive, transactional and label text types.

Writing
The overarching standard for Grade 5 students refers to students expressing ideas in a variety of written forms (p. 67).

The curriculum makes explicit reference to writing paragraphs, but does not mention stories, personal or imaginative writing. However, the task of ‘writing an essay on a self-selected topic’ (p. 81) would require students to compose a full range of text types.
Context

It can be inferred that the contexts for reading and writing are personal, local and wider-world based on the introduction to the curriculum. The curriculum makes reference to 'understanding oneself', 'forming interpersonal relationships' and developing perspectives on the 'global community' (p. 3). Subsequent references to films, poems and reading extensively at grade level can be situated in the personal, local and wider-world context identified in the assessment framework for SEA-PLM.

Processes

Reading
The English Language curriculum sets out the standards that Grade 5 students need to achieve by each quarter of the school year. The grade level standards for reading are focused on learners demonstrating autonomy and interest in the domain to meet various needs. This ranges from recognising words with an accuracy rate of 95-100% in the first quarter of the grade to interpreting and reflecting texts by explaining and classifying different types of texts in the second quarter (p.67–75).

Writing
Grade 5 students must demonstrate competencies in expressing ideas logically and accurately in written forms. The curriculum is sequenced so that each week students need to demonstrate increasingly complex competencies. These range from 'planning a paragraph' in the first quarter of the year to 'composing a three paragraph descriptive essay on a chosen topic' by the final quarter of the year (p.67–83). Writing processes include:

- Composing, planning, revising
- Correct spelling
- Writing paragraphs showing cause and effect, and comparison and contrast.

These competencies reflect the writing process articulated in the framework through generating ideas and managing coherence.

Documentation

- K to 12 Curriculum Guide English: Grade 1 to Grade 10.
- K to 12 Curriculum Guide Mother Tongue: Grade 1 to Grade 10.
- K to 12 Curriculum Guide Filipino: Grade 1 to Grade 6.
3.8 Singapore

**General information**

Bilingualism is the foundation of the Singapore education system. The four official languages of Singapore are Malay, English, Mandarin and Tamil. Pupils learn both English and their own Mother Tongue language in school. However, English is the medium of instruction in schools as well as a subject of study for all primary and secondary school pupils.

The English curriculum has the following eight areas of language learning:
- Listening and Viewing
- Reading and Viewing
- Speaking and Representing
- Writing and Representing
- Grammar
- Vocabulary.

The focus of this review is on ‘Reading and Viewing’ and ‘Writing and Representing’.

The primary English curriculum covers Grades 1 to 6. In order to cater for the diverse range of pupils in Singapore schools, the curriculum provides detailed descriptions of what the areas of language learning entail, when they can be taught and learned and why they are important (p. 16).

**Overarching orientation**

English Language proficiency is seen as a national and global connector in Singapore. It is regarded as essential for producing citizens who can bond across ethnic and cultural groups and enables Singaporeans to participate in the knowledge-based global economy. This rationale aligns with the overarching literacy orientation of the SEA-PLM framework.

The aim of the English syllabus is to produce pupils who ‘will be able to communicate effectively in English’ (p. 10). Skills in Listening, Reading and Viewing will produce pupils who have: ‘...a better understanding of our cultural values and National Education themes and engage in Social and Emotional Learning (SEL), where applicable’ (p. 10).

Speaking, Writing and Representing will produce students who: ‘...will speak, write and represent for creative, personal, academic and functional purposes by using language in a sustained manner (e.g., in speech and writing) and by representing their ideas in a range of multimodal texts and text forms. Our most able pupils will do so with increasing ease and inventiveness at higher levels of proficiency.’ (p.10).

**Content**

**Reading**

A range of print and non-print text types are specified in the curriculum. The rationale is that a variety of materials will broaden pupils’ learning experiences, providing them with ‘opportunities to see how language structures and skills work according to purpose, audience context and culture’ (p.9).

Print resources refer to continuous and non-continuous texts such as newspapers, print advertisements and diagrams. Non-print resources refer to narrative text types comprising blogs and wikis and instructional texts including, manuals and recipes.

**Writing**

The curriculum exposes students to a number of different text types so that they can ‘explore and assume diverse roles as writers’ (p. 60). This includes texts for academic and functional purposes comprising lists, procedures, notes, letters, emails and notices (p. 73). Texts for creative and personal expression are also cited, such as poetry, personal recounts and narratives (p. 72).
Context

The contexts for reading and writing are focused on the personal and local but there is reference to the wider-world. The majority of examples refer to personal contexts such as expressing feelings or talking about past experiences.

Processes

Reading

The English Language syllabus contains five learning outcomes (LO) for Reading and Viewing. These align with the four processes identified in the framework for SEA-PLM:

- LO1: use reading readiness and word identification skills (recognising)
- LO2: Process and comprehend texts at literal and inferential levels (interpreting)
- LO3: Apply critical reading and viewing by focusing on implied meaning (interpreting and reflecting)
- LO4: Apply close and critical reading and viewing to understand how lexical and grammatical items are used in context (locate, interpret, recognise and reflect)
- LO5: Read and view widely for pleasure, and to demonstrate independent reading and learning in the literacy/content areas (locate, interpret, recognise and reflect) (p. 29).

Writing

The five learning outcomes associated with Grade 5 writing also mirror the processes identified in the framework. Students are required to generate, create and express ideas and information via print and non-print writing forms. This includes, brainstorming, concept mapping and storyboarding. They must also use writing as tool for communicating familiar topics about self, familiar persons and objects, and personal experiences. This requires students to demonstrate the breadth of their vocabulary, organisation, syntax and grammar.

Documentation

- English Language Syllabus 2010: Primary & Secondary (Express/Normal [Academic]).
- English Language Syllabus 2010: Primary & Secondary (Express/Normal [Technical]).
3.9 Thailand

General information

Two of the eight learning areas in the Thailand Basic Education Core Curriculum are language subjects. These are Thai language and Foreign languages. Thai is the official and national language of Thailand. The focus of this review is on Thai language, which is the medium of instruction for all subjects in Thailand, except for Foreign languages. In Thailand, Foreign languages include English, French, German, Chinese, Japanese, Arabic, Pali and languages of neighbouring countries. However, the Ministry of Education only provides prescribed learning content for English. The Basic Education Core Curriculum was updated in 2008. Learning areas such as Thai language now include prescribed minimum times for subject areas in each grade. There are also improvements to the process of measuring and evaluating learning performance and criteria for graduation at each educational level.

Overarching orientation

The Basic Education Core Curriculum has an overarching literacy orientation in its intention to:

- Equip Thai people with the ability to adjust themselves to unavoidable change
- Guide Thai children and youth towards the 21st Century
- Enable children and youths to acquire knowledge, skills, attitudes and morality to serve as a foundation for Thai-ness and universal values (p.2–4).

The overarching reading standard for Thai Language has a literacy orientation in requiring learners to apply reading processes to 'build knowledge and thoughts for decision making and problem solving to life' (p. 48).

The overarching writing standard also focuses on the application of writing which is an indication of a literacy orientation. It contends that writing should be applied for a variety of reasons including communication and composition (p. 50).

Content

Reading
The indicators for Grade 5 task learners to read to explain, infer meaning and analyse a range of texts. This includes prose and verse, explanatory paragraphs and instructions and information from a variety of books. These are examples of continuous, non-continuous and composite text formats for the full range of text types identified in the assessment framework for SEA-PLM.

Writing
Writing content includes synopses, stories in various forms, data and information reports, study reports and research reports. The curriculum contains general categories of writing such as personal and imaginative writing.

Context
The contexts for Grade 5 reading and writing are mainly personal and local.

Processes

Reading
Students are required to demonstrate the following reading competencies:

'pronouncing words; reading, sentences, literature and different kinds of compositions; reading to oneself for comprehension for acquiring thinking skills in analysing and synthesising knowledge from the readers in order to apply in daily life' (p. 41).

This statement aligns with the framework definition of recognising, interpreting and reflecting words. The curriculum includes inferring the meaning of what has been read, differentiating between facts and opinions and accurately reading aloud prose and verses' (p. 46).
Writing
Students are required to demonstrate the following writing competencies:
‘writing words in accord with rules of Thai orthography; writing various kinds of communications, compositions, synopses and reports based on study and research, as well as imaginative, analytical, critical, and creative writing’ (p. 41).

This statement overlaps with the framework definition of generating ideas, using vocabulary and controlling syntax and grammar. The Grade 5 curriculum requires students to demonstrate these competencies by writing letters to parents and relatives, and writing about feelings, opinions and intentions.

Documentation

3.10 Timor Leste

**General information**

The Timor Leste primary language curriculum allows for mother tongue and national languages to be used as the medium of instruction, but the balance shifts as students progress through grade levels. There are six grades at the primary level and these are divided into two cycles. Cycle 1 consists of Grades 1–4. During this phase teachers are encouraged to use students’ home language with Tetum to support their learning. Portuguese is taught to a limited extent. Cycle 2 consists of Grade 5 and 6 where Tetum and Portuguese are the medium of instruction. A heavy emphasis in the curriculum is on helping students build their ‘academic’ language, first in Tetum and then in Portuguese. The focus of this review will be on Cycle 2 Tetum and Portuguese.

**Overarching orientation**

The Timor Leste curriculum has an overarching literacy orientation in its intention: ‘The purpose and goal of this syllabus is that, by the end of Class 6, all students will have attained the level of competency in Tetum and Portuguese, the two national languages of Timor Leste as identified by the Constitution (RDTL 2002) and by the Base Law of Education (Law 2008/14), that they will need for their continuing education and to prepare them as productive citizens of this country’ (p.1). The Grade 5 reading standards for both Tetum and Portuguese, indicate a literacy orientation in requiring students to read grade level texts to classmates, express and explain preferences and discuss text with others to understand and analyse the text.

The Grade 5 writing standards follow a similar trajectory. Students are required to write about familiar people and activities, report on local events and create written materials. All of these competencies are focused on the practical application of skills which is consistent with the framework definition.

**Content**

**Reading**

The reading content for the Tetum and Portuguese curriculum are very similar. Each program requires students to read a variety of text types. These include graded level stories, poems, biographies, fables, legends and proverbs, tables of contents, indexes and charts. The materials cover the full range of text types identified in the framework from narratives (stories) to labels (charts).

**Writing**

The writing content contains the same variety of written text types for Tetum and Portuguese. These include writing creatively in a variety of genres and producing texts for a variety of audiences. These tasks require students to produce content that is narrative, descriptive, persuasive, instructional and transactional.

**Context**

The contexts for Grade 5 reading and writing are broad as students are given the scope to read and write about ‘a variety of issues’ on ‘various subjects’. However, explicit reference is made to local contexts with writing tasks that include writing reports of local news events and writing directions to places in the community (p. 18).

**Processes**

**Reading**

Portuguese is taught as a third language in Timor Leste so there is a stronger emphasis on students understanding the basic elements of literacy in this language at Grade 5 compared to in Tetum Language. The Grade 5 Portuguese content focuses on improving decoding ability by understanding syllables, pronunciation and using intonation patterns correctly (p. 18). Students must also
demonstrate skills in locating, interpreting and reflecting. This is evidenced by the following performance indicators (p. 17-18).

- Locating information: ‘reads to find information to use in completing assignments’
- Interpreting: ‘Reads, comprehends and attempts to interpret written texts’
- Reflecting: ‘states personal ideas about the content of the reading’.

Tetum requires students to demonstrate similar competencies but there is less emphasis on recognising words. The focus is on the more advanced competency of using knowledge of letter-sound relationships to decode new words (p. 18).

**Writing**
The Grade 5 curriculum for Tetum and Portuguese describe a range of writing processes requiring students to:

- write more complex texts about a variety of issues
- write creatively in a variety of genres
- understand the difference between oral and written styles of communication and apply that knowledge when creating written texts
- improve spelling and punctuation.

The Portuguese curriculum also includes specific performance indicators for using grammar structures appropriately. This is not surprising as a substantive period of time is not allocated to the Portuguese language in the curriculum until later grades.

**Documentation**
- Dixiplina Literasia: Tetum no Portugés.
- Learning Outcomes and Performance Indicators for Literacy: Portuguese.
- Learning Outcomes and Performance Indicators for Literacy: Tetum.
Vietnam

General information

The Vietnamese curriculum is divided into two circles. Circle 1 includes Grades 1, 2 and 3 and it focuses on helping students form skills of reading, writing and listening. Circle 2 consists of Grades 4 and 5 and it provides students with primary knowledge about the Vietnamese language to develop skills of reading, writing, speaking, and listening at a higher level.

Vietnamese is the medium of instruction for primary education. In Grade 1, schools can use the time allocated for optional subjects to teach ethnic minority languages. However, starting from Grade 3 optional session times should be used to teach optional content and the optional subjects of foreign language or computer science.

The Vietnamese curriculum specifies standards of knowledge and skills that children should acquire for each subject at each grade level. The corresponding level of achievement is also documented for each grade.

Overarching orientation

There is a clear literacy orientation in the purpose of Vietnamese language acquisition at the primary level:
‘To form and develop skills in using Vietnamese (reading, writing, listening, speaking) for the students for learning and communicating in the environment that is age appropriate’ (p. 4).

Reading literacy is not explicitly mentioned in the objectives for Vietnamese language but reference to the domain is implied by statements such as ‘learning of Vietnamese will provide students with basic knowledge on Vietnamese and foreign cultures and literature’ (p. 4). The same is true for writing literacy. The curriculum states that an outcome of learning Vietnamese is to communicate in the national language to help form ‘the identity of the socialist republic of Vietnam for students’ (p. 4). References to ‘communication’ and ‘identify’ are reflected in the domain definition for reading and writing used in the framework.

Content

Reading
Reading is divided into three areas: fluent reading, meaning-based reading and applying reading skills (p.30–31). Consistent with the framework, a range of text types are contained in each of these areas. The curricula refers to artistic, scientific and administrative documents. Also, both continuous and non-continuous text types are referenced. The former include poems and newspaper articles whereas the latter requires students to understand symbols and data on maps and graphs.

Writing
Writing is divided into two areas: writing in response to dictation and writing passages and texts (p.31). The writing content for Grade 5 students covers a range of text types. This range includes short prose, developing a framework for a descriptive essay, writing a record of an event and summarising a document. Most of the content could be classed as narrative or descriptive.

Context

The contexts for Grade 5 reading and writing are personal and local. Measures of quality for Grade 5 writing include the ability of students to write descriptive passages about themselves and events that have happened within the classroom or school (p.32).

Processes
**Reading**

The Vietnamese curriculum includes reading processes that mirror the framework definitions of locate, interpret, reflect and recognise words (p. 29-32). Students need to be able to skim read texts and search handbooks and take note of the information obtained. They need to demonstrate meaning-based reading by interpreting passages, poems and excerpts of drama. Students are also asked to reflect on narrative texts and speak about their own ideas on the meaning behind materials. By Grade 5 students should be demonstrating a wider vocabulary. This includes knowing idioms, proverbs and common Chinese Vietnamese words. Students are also expected to possess more advanced skills such as transferring meaning for words that have multiple uses.

**Writing**

The Vietnamese curriculum includes various processes for writing literacy. Some of the processes are explicitly referenced such as generating ideas for writing stories and narratives. Whereas other processes such as controlling text structure and organisation, managing coherence, using vocabulary and controlling syntax and grammar are implied by tasks which include: writing a short and action plan or developing a descriptive text about subject matters (p. 29–32).

**Documentation**

- Vietnam Primary Curriculum.
- Decision on Approval of the School Education Textbook and Curriculum Innovation Scheme.
4. Global Citizenship

4.1 Brunei Darussalam

Learning Area(s): Social Studies
Source: Social Studies for Grades 4, 5 and 6, 2009

Learning area description: Social Studies is described as looking at society in totality and examining the forces that hold society together and those that transform it. Content is described as covering national history, human relationships, and their interdependence to each other, economics and resources, global issues, and how global events affect students’ views on the world. Note that Social Studies is a replacement for History and Geography. The objectives of the learning area are described as fostering ‘knowledge, skills, attitudes and values’ to ‘appreciate that resources are limited’ and ‘appreciate the multicultural way of living in Brunei Darussalam’, as well as the skills to ‘present information and ideas clearly orally, visually and in written forms’ and ‘effective decision-making skills’. ‘Understanding and responsibility toward social harmony’ and ‘recognizing the need for change’ are attitudes and values to be fostered through participation in this course. Included here are concepts typically associated with global citizenship such as knowledge of global issues, interdependence, and awareness of environmental issues.

How the learning area (at Grade 5 level) addresses the key measurement sub-domains:

Knowledge

The curriculum includes outcomes related to knowledge of historical events and concepts which link with global citizenship such as migration, for example, ‘the impact of the arrival of westerners in Brunei from the 16th century to the 19th century; losing territories to western powers; accepting the residential system and the advantages and disadvantages to this system’ [italics added]. The common attitudes and values underpinning these learning outcomes are the students should be able to evaluate the ideas and beliefs from what had happened in the past so as to develop our country and change the mindset of citizens to become tolerant society and act globally.

Conversely, the learning area includes: ‘our resources’ as a discrete theme; learning outcomes include ability to define the meaning of resources; distinguish between renewable and non-renewable resources; explain what scarcity means; and; analyse and evaluate steps by the government to conserve natural resources. The values that underpin this theme are described as appreciating that resources are limited, and that conservation is everyone’s responsibility. Global interdependence in relation to importing and exporting is a theme at Grade 6 level; associated values are described as appreciating the links with the rest of the world and instilling awareness that globalisation has its advantages and disadvantages.

Attitudes and Values

These are described to a limited extent, regarding the environment, as above.

Behaviours and Skills

Described under the Resources theme is the learning outcome that students will ‘suggest ways of how we can reduce the usage of resources at school, home and the community’. While this is most likely a cognitive outcome, it links with global citizenship in that it points to potential behaviour or behavioural intentions arising from the exercise.
4.2 Cambodia

Learning Area(s): Social Studies
Source: Social Studies Grades 4 – 9, 2006

Learning Area Description:
Social Studies are organised in five strands: Moral Civics, History, Geography, Art Education, Planning and Organising.

How the learning area (at Grade 5 level) addresses the key measurement sub-domains:

Knowledge

Knowledge-related learning outcomes are specified for Grade 5 under the Moral Civics strand. They include: being able to explain the difference between rights and responsibilities of children; describe ways to respond to pressure from others to engage in risky behaviour; demonstrate understanding of road rules; and understanding the roles and processes of parliament, for example, how laws are made.

In Grade 8, Geography (as a unit under Social Studies) includes comparing the characteristics and living conditions of developed and developing countries and comparing Cambodia with other countries in the region such as Vietnam, Thailand, Lao PDR Indonesia and Timor Leste.

Attitudes and Values

At the Grade 5 level, the following learning outcome is included: ‘Construct possible responses to the same scenarios to show how different behaviours demonstrate different values (for example, honesty, courtesy, thoughtfulness, respect and their opposites)’. These values broadly align with those associated with global citizenship but are not explicit or detailed regarding the subject of respect/courtesy/thoughtfulness (i.e. diverse peoples). Discrimination (based on race and/or disability) and the effect on people’s lives is discussed in Grade 8.

Behaviours and Skills

The curriculum does not include learning outcomes related to fostering the skills and behaviours associated with global citizenship at the Grade 5 level. Organising and participating in class elections is included in the Moral Civics component of Social Studies in Grade 7, as is presenting to the class on a topic. Suggesting ways to improve the rights of particular groups of people is discussed in Grade 8. Peaceful conflict resolution is listed as a learning outcome for Grade 8.

Notes

At the Grade 5 level, Moral Civics is focused on ‘good’ over active citizenship’ with the emphasis on personal efficacy in the Cambodian context; getting on with others by fostering courtesy, honesty, thoughtfulness and respect. At the Grade 5 level, understanding a child’s rights is not embedded with other aspects such as identity or engagement (which children have fewer rights than others and what to do when a child’s rights are infringed.) The focus is on living safely in the present, avoiding danger or conflict (staying safe, drug free, avoiding accidents) over emancipation (improving one’s situation and those of others). Skills for participation are fostered through understanding the skills required to obtain employment, and through working in groups to plan an event.
4.3 Indonesia

Learning Area(s): Religion; The Five Moral Principles; Citizenship; Social Sciences; and Natural Sciences.
Source: Indonesian Curriculum 2013

Learning Area Description: The new curriculum (2013) responds to external challenges such as globalisation, environmental challenges, technology and information, and international competitiveness. In the Curriculum 2013, all learning areas are divided into two groups. Group A comprises of six core subjects (Religion, The Five Moral Principles (Pancasila) and Citizenship, Indonesian, Mathematics, Natural Sciences and Social Sciences – the last two learning areas are taught from Year 4 onwards) and are designed by the central government. Group B (Culture and Arts, PE/Sports and Health) are developed by the local governments. Concepts typically associated with global citizenship are covered in the following subjects:

- Religion
- The Five Moral Principles
- Citizenship, Social Science and Natural Science.
- There is significant evidence that the topic of diversity is covered in the Five Moral Principles, and Citizenship and Social Science. There is also a connection with global citizenship in Natural Science.

How the learning area (at Grade 5 level) addresses the key measurement sub-domains:

Knowledge

Students develop their understanding about the organisation in society from Year 1. In Years 1 to 4 they begin to learn about familiar contexts – home and family, school and local community. They begin to notice the similarities and differences between individuals and groups in their classroom, school and community, and to learn to appreciate the different cultural, language and religious groups that make up the Indonesian nation. In Years 5-6, they are introduced to broader understandings of the diverse ethnic groups that make up the nation. They become increasingly aware of: the complexity and diversity of Indonesian society and the groups that make up that society; national events, as well as environmental and social issues. They begin to understand the structure of government through the activities of government that they are familiar with – in local, state, and national contexts. They reflect on the values that are important to a democratic and multicultural society. Specific topics that align with global citizenship are covered as follows:

I. The organisation of societies and the world including local, national and global (families, tribes, groups, communities, villages, cities, countries, regions):

II. In Religion, in the early years, students are taught about God’s creation, including their own existence, their family’s and friends’, and they begin to appreciate nature and these existences. They understand the levels of status and relationships in the family and how to refer to those older than them. They build on their learning about belonging – to the communities of the school, the local, the nation and the world.

III. In the Five Moral Principles and Citizenship, students observe and describe unity in diversity at home and school. In Social Science, they also recognise roles in social, economy, educational, and cultural communities and how the individual relates to the community (historically, geographically and economically).

IV. Teaching and learning about global issues such as climate change, global conflict, resource shortages and financial crises: In Natural Science, students identify changes in nature and make connections between the changes and human activities and related effects to the balance of the surrounding environment. In the Five Moral Principles, Year 6 students appreciate their existence as citizens of the nation and world and acknowledge how they are affected by global issues.
V. Teaching and learning about the relationship between local and global issues: Not included.

VI. Teaching and learning about global structures or systems and phenomena such as trade, migration, media, international organisations, political and economic alliances, public and private sectors, civil society: There are several instances where these concepts can be found in Social Science. Social Science is introduced in Year 4, where students’ learning takes place in a broader context and they become more aware of the complexities of society. They learn about trade between provinces and understand the interdependence between provinces in nation building. Students are required to present results of their observations on activities and changes in people’s lives and their continuation in social, economy, culture and education environment from provided resources. Students must demonstrate ability to elaborate on their understanding of the interconnections between humans and the environment. They must be able to explain their understanding about the power dynamics based on their observation of the Indonesian people and their activities related to their functions and roles in social, economic and cultural organisations in Indonesia.

Attitudes and Values
Students explore ways to shape their lives and value belonging to the diverse and dynamic society and how to contribute locally and nationally. They are introduced to the key values of Indonesia’s democratic system of government, such as freedom, equality and justice. Students investigate the role of different groups in their community and also explore cultural diversity, and how belonging to different groups can shape personal identity. They develop values and skills that enable people to live together peacefully.

I. Values learning about global citizenship
In the later years (post Years 1 and 2), students become increasingly aware of the complexity of the wider-world and recognise and comprehend the benefits of the diversity of society, culture and economy as implied in the Indonesian motto Bhinneka Tunggal Ika ‘Unity in Diversity’. They identify similarities and differences within and between cultures and societies (gender, age, religion and socioeconomic status).

In Religion, students distinguish between ‘right’ and ‘wrong’ and give reasons for their choices. They appreciate God’s creations such as the climate and its phenomenon and the variety of flora and fauna. They also appreciate the existence of others representing different cultures, nations, ethnicity and religions. They help each other and others in need and appreciate and respect others’ opinions. Students also begin to understand the concept of justice and appreciate different genders. They demonstrate responsibility and understand their existence as a citizen and part of the world.

II. Fosters respect for or appreciation of diversity
In Religion, students build on their understanding with regard to respecting and caring for themselves and others. They demonstrate tolerance and affection to others; and appreciate and respect other living beings. In the Five Moral Principles, students accept diverse individual characteristics in religious life at home and school and accept the unity in diversity in Year 1.

Then in Year 2, they demonstrate tolerance, affection and care when interacting with friends, family, teachers at home and school who come from diverse backgrounds of religions, ethnicities, etc.

In the later years, students learn to appreciate and respect the diversity of individual characteristics in different groups of people. They comprehend the meaning of differences in cultures and societies beyond their own experience and the value of different perspectives. They appreciate the benefits of diversity in individual characteristics and appreciate unity in diversity.
III. Values opportunities to demonstrate the behaviours or skills associated with global citizenship such as encouraging respect for diversity, assisting those in need, or acting to protect the environment.

Students apply values, attitudes and skills to manage and engage with diverse groups and perspectives; they engage and take action to promote common good.

In the lower primary in Religion, students fulfil their responsibilities to their family; they respect their parents and other family members. They are humble and demonstrate positive manners to their friends, at home, at school and in the community. They demonstrate tolerance and maintain harmony, care for others and interact positively to maintain peace with diverse groups of people.

In the upper primary they are involved and act on world issues. In Buddhism, they complete tasks and create work related to the preservation of nature to show gratitude to San Cai (Child of Wealth). They create a teenagers’ program to be submitted to Kong Hu Cu’s religious leaders as contributions to the local Matakin (Council of Kong Hu Cu Religion Indonesia) and community. In the Five Moral Principles, they play roles to represent unity, they demonstrate cooperation with different groups of people at home, school and community. They demonstrate behaviour in accordance to the rights and obligations as members of a family, school and community in lower primary, and to the laws as a citizen in upper primary. They fulfil their obligations and follow regulations to ensure order at home, school and in the community.

Behaviours and Skills

Students investigate and identify the roles and contributions of various individuals and groups in the community and nation, and the ways they can participate in a community. They reflect and communicate ideas on issues related to citizenship.

I. Opportunities to present ideas

Students participate in role-play to present and simulate different forms of unity in diversity. They make connections and share ideas of positive behaviour and the Five Moral Principles. They present the dynamics of fulfilling basic necessities between provinces to nurture national unity. In Social Science, students interact with people from various social groups in real world interactions to support interdependence in building and strengthening the nation.

II. Opportunities to demonstrate leadership

In upper primary, students studying Christianity and Catholicism are involved and act on real world issues. In the Five Moral Principles, they participate in programs to help the community with their activities regardless of religion, ethnicity and socio-economic status.

III. Opportunities to make decisions

In the Five Moral Principles, students of Years 5 and 6 demonstrate appreciation and participate in cooperative strategies that enable decision making and demonstrate commitment to implement the results of discussions.

IV. Opportunities for communication

In the Five Moral Principles, students interact with diverse groups of people and simulate forms of unity in diversity. They share ideas in written and oral forms on their cooperation with diverse members of the society while implementing a variety of activities related to the community.
4.4 Lao People’s Democratic Republic

Learning Area(s): World Around Us
Source: World Around Us, 2013

Learning Area Description: The subject World Around Us is a combination of Science, Social Studies, Environment and Health learning at the primary school level. It is the study of these subjects as they relate to the daily life of the students themselves, in their own environment and society. In daily life these subjects (fields of knowledge) are integrated, and so in the World Around Us, the learning is presented in an integrated way. Use of language skills and ideas of technology are also integrated with the World Around Us content.

Learning Area Objective: To foster knowledge, skills and attitudes regarding relationships between environments and living things, changing environment and society, culture and community, social diversity and cohesion, societies outside of Lao PDR, questioning why things are the way they are, conducting research, taking action, thinking critically, solving problems, respect for the views and cultures of others, care for Lao PDR resources, caring attitudes toward self, others and environment, and fostering openmess to new ideas, intellectual honesty and rigour.

Within this learning area, the units History and Geography most often include the typical concepts associated with global citizenship. Importantly, the introduction to the learning area includes a list of aims under the headings Knowledge, Skills, and Attitudes and Values. Examples of some of the aims under these headings that align with typical global citizenship concepts are:

- Ability to think critically, basing opinions on supportable and reliable evidence
- Respect for the views of others
- Respect for the culture of others
- Care for the resources of Lao PDR
- A responsible and caring attitude towards themselves, other people and the environment
- Knowledge of social diversity and social cohesion.

However, in the section that describes basic learning competencies for each grade, there are few references to outcomes associated with these aims.

How the learning area (at Grade 5 level) addresses the key measurement sub-domains:

Knowledge
At the Grade 5 level, competencies include knowledge of the importance of markets for success of industries, comparing Laos and other ASEAN countries including population and economic conditions, advantages of relationships with neighbouring countries, reporting on ASEAN events since 1995, and the significance of world events. Students are required to demonstrate ability to explain the terms civil and criminal law and describe the impact on their lives. Competencies also include ability to compare Laotian arts and culture with other ASEAN countries and ability to express own attitude to arts, culture and traditions.

Attitudes and Values
Not included at the Grade 5 level.

Behaviours and Skills
Not included at the Grade 5 level.
Learning Area: Moral Education, 2013  
Source: Moral Education in English (document name)

Learning Area Description: This subject focuses on developing students’ ability to become good citizens in all the social spheres that they will operate in the future. It is the study of a community’s rules for and expectations of its citizens and citizen’s roles and responsibilities to the community. The text below refers to basic learning competencies achieved at the Grade 5 level.

How the learning area (at Grade 5 level) addresses the key content sub-domains:

**Knowledge**
Learning competencies listed at the Grade 5 level include ability to ‘tell world rules (international laws and agreements)’, and explain their purpose in terms of how they assure a ‘good global environment’ (for example, successful relationships between nations, peaceful, fair, just, safe for all, and explain the responsibilities of individuals to ensure the rules are followed). Students are required to describe their own actions to follow rules and assist others to follow. They must be able to identify international laws and agreements that are often broken and the reason why and develop, implement and evaluate a plan to improve self as a follower/keeper of the laws and agreements.

Under Leadership and Management they must be able to identify leaders and managers of the world and their responsibilities, identify characteristics of good leaders and managers and describe the way they are applied in good management and leadership of the world. Under Problem Solving students must identify a global problem, and discuss and undertake wide research to gather information about the problem. Under Culture and Traditions in Modern Life students must conduct research to find out the way the world has changed over time, and about how that change has affected lifestyles globally (for example, higher education, economic opportunities, higher technology, changing gender roles, environmental change, solidarity among national groups, etc).

**Attitudes and values**
Moral Education includes the following aims regarding values and attitudes, i.e. that students will foster:
- Self esteem and self reliance, and thereby a positive approach to life
- A commitment to live a useful and productive life
- A spirit of enjoyment, appreciation and tolerance of their own and other cultures
- A sense of personal worth through healthy psychological growth
- Moral values and standards of personal conduct based on integrity, respect and consideration for others
- Pride in their culture and their own work
- The values of cooperation, kindness, trust, respect and honesty
- Motivation to become part of a force for social change that improves the quality of life
- Willingness to participate and cooperate as part of a team in community activities.

These aims are articulated as basic competencies at the Grade 5 level under different themes such as ‘self esteem and self reliance’ or ‘teamwork and partnership’ including identifying the characteristics of a good world citizen, such as solidarity and respect for rights. These values align with those generally associated with global citizenship.

**Behaviours and Skills**
(Described as self esteem and self reliance; aligns with the notion of self-efficacy in global citizenship). Students must be able to identify the characteristics of being a good citizen of the world and tell why they support good global life. Students must develop, implement and evaluate a plan to improve her/himself as a citizen of the world including identifying which characteristics are needed, how to develop these characteristics, looking at one problem area, and implementing the idea for at least a week. Under Teamwork and Partnership students must be able to describe the ways that teamwork and partnership are used in world activities and the ways this supports success for the nations involved; identify the characteristics of being a good ‘team member of the world’ and develop,
implement and evaluate a plan to improve her/himself as a team member. Under Leadership and Management students
develop, implement and evaluate a plan to improve her/himself as a leader or manager. They make decisions, based on knowledge of and analysis of situations, to take local action to contribute to solving the (global) problem. After implementation, students evaluate decisions and actions in terms of their appropriateness to solve the problem, including: recounting what was done and why, reporting on results of action, reporting on the quality of results (did it reach target?), and replanning for further action based on evaluation. Students must plan, implement and evaluate a strategy for adopting some global behaviours to suit modern times, including listing good global behaviours (friendship, solidarity with strangers, kindness, good manners, etc), and advocate for them; identify their own area of weakness in adopting good global behaviours, and share ideas about how to develop strengths or how to adapt traditions/customs to make them relevant globally; and plan a strategy to develop self as a global person while living a Lao lifestyle.
4.5 Myanmar

Learning Area(s): N/A
Source: N/A

Learning Area Description: N/A
4.6 Philippines

Learning Area: Edukasyon sa Pagpapakatao (EsP) (Education in Health)
Source: ‘Edukasyon sa Pagpapakatao Curriculum Guide_English translation Grades 1-6 only’ (Document name), 2013

Note a translated version of the ARALING PANLIPUNAN (Social Studies) curriculum was not available at the time of the curriculum audit.

Learning Area Description: Not provided. The learning area framework is organised into standards and topics and values. At the Grade 5 level, there are four 'Topics/Values'. These are:

1. Personal Responsibility and Good Member of the Family
2. Human Relationships
3. Love for the Country and Participation in Global Solidarity
4. Faith and Love to God; Commitment to Goodness

The standard that applies to all topics is: ‘Demonstrated the students’ understanding on the thorough analysis of expression, performing of duties with responsibility and its application towards a happy, peaceful and prosperous life for oneself/family, others/community, country/world and God’. This appears to be a convergence of an aim and an objective given its broad nature.

How the learning area (at Grade 5 level) addresses the key measurement sub-domains:

Knowledge
Not included.

Attitudes and Values
Attitudes and values are included in list form, but not related to learning outcomes or competencies. A sample of some of the values listed that align with those ascribed to global citizenship include:

- Critical thinking
- Open mindedness
- Respect for other people’s opinions
- Care for the environment
- Peace and order
- Global solidarity
- Responsibility/Accountability
- Civic consciousness.

Behaviours and Skills
Not included.
4.7 Singapore

Learning Area(s): Civics and Morality Education (CME)
Source: Civics and Morality Education Syllabus Primary, 2007

Learning Area Description: Civics and Moral Education (CME) is described as developing the moral wellbeing of Singaporean pupils by helping them ‘acquire and live by the values that guide them to make appropriate choices and determine their behaviour and attitudes towards themselves, others and the environment’ (p. A-2). Emphasised strongly here are the ‘values and attitudes, and behaviours and skills’ as central to this learning area (knowledge is not emphasised as strongly).

The goal of CME is to nurture a person of good character who is caring and acts responsibly towards self, family, school, community, nation and the world. The syllabus is divided up into six core values: Respect, Responsibility, Integrity, Care, Resilience and Harmony. These values align with other national policy documents including in Education. This is the only curriculum reviewed that is organised this way. The approach to teaching is also described as a ‘process based approach’ rather than a ‘content based approach’ meaning that instead of learning facts and information, students learn new skills and values through action.

How the learning area (at Grade 5 level) addresses the key measurement sub-domains:

Knowledge
Knowledge is described in the context of a student knowing their strengths and weaknesses, being aware of what they are good at, understanding the value of fostering empathy and learning how to apply this knowledge. Knowledge of the schools’ vision, and goals is listed, as are knowledge of financial literacy, healthy habits and understanding concepts such as self-discipline.

Attitudes and Values
The syllabus is primarily concerned with teaching attitudes and values, and underpinning this is the inherent importance placed upon this kind of learning. The concepts that are highlighted as important are those such as consensus, not conflict, racial and religious harmony, mutual respect, and building friendships with diverse peoples. Many of these values align with those ascribed to global citizenship. However, strategies for non-violent/peaceful conflict resolution are generally associated with global citizenship (over consensus). In the CME syllabus, ‘conflict’ is presented in a negative light.

Behaviours and Skills
The syllabus focuses on fostering skills associated with social and emotional learning such as self-awareness, relationship management, responsible decision making, self-management and social awareness which is described as being aware of how others feel to enable pupils to develop empathy and appreciation for diversity, as these skills are fundamental to good interpersonal relationships. Specifically, under the Respect value strand, learning objectives are described as demonstrating ways to live up to the school’s vision, and achieve the school’s goals. Leadership, namely practising ways of being a good team leader, is included under the Responsibility strand as a learning outcome.

However, while active citizenship is included as a key message, the scope and learning outcomes pertain to upholding laws and ideals, taking care of public property, defending the nation: generally concepts associated with civic compliance. Active citizenship is associated with critical thinking and advocacy: taking informed and responsible action. A teaching and learning program that fosters active citizenship develops in learners the desire to make a positive change and the skills to engage in political activity. However the CME syllabus fosters understanding of the concepts associated with the core values and opportunities to practice these to a limited extent.
4.8 Thailand

Learning Area(s): Basic Education Core Curriculum, Background, Vision, Principles, and Goals. Specific Learning Area: Social Studies, Religion and Culture.

Source: Basic Education Core Curriculum, 2008

Learning Area Description: The Basic Education Core Curriculum, Background section cites the value of ‘maintaining Thailand’s competitive position in the world community’ through enhanced capacity of learners. This acknowledges globalisation as a force impacting economic development and influencing learning requirements. It states that ‘Emphases have been placed on morality, preference for Thai-ness, skills in analytical and creative thinking, technological know-how, capacity for teamwork and ability to live in peace and harmony in the world community’.

These concepts align strongly with those typically associated with global citizenship. The vision for the curriculum includes enhanced capacity for all learners to ‘fully realise their commitment and responsibilities as Thai citizens and members of the world community.’

The learning area Social Studies, Religion and Culture is described as ‘peaceful coexistence in Thai society and the world community; good citizenship; faith in religious teachings; appreciation of resources and the environment; and patriotism and pride in Thai nationalism’. There are five strands under this learning area including specified standards, namely: Religion, Morality and Ethics, Civics, Culture and Living in Society, Economics, History and Geography. This analysis focuses on strand Two as the most relevant to global citizenship concepts and content.

How the learning area (at Grade 5 level) addresses the key measurement sub-domains:

Knowledge
The types of cognitive processes develop in complexity as the years progress. At Grade 5 level students are to be able to ‘analyse’ the importance of Buddhism or the learners’ own religions as cultural heritage and a pivot for developing the Thai nation. In the strand Civics, Culture and Living in Society, outcomes are included relating to knowing what a good citizen is and does as opposed to an active citizen. Other comprehension level indicators include explaining the structure, power, duties and importance of local administration, specifying the roles, duties and methods of assuming posts in local administrations and the community benefit of such posts. There is no mention of global systems, structures or issues or the relationship between the global and local; this is addressed to a limited extent at the Year 9 level.

Attitudes and Values
Under the Civics, Culture and Living in Society strand at the Grade 5 level, there is one learning outcome that aligns with the attitudes and values measurement domain: learners are expected to be able to ‘appreciate the values’ of Thai culture that affect the way of life in Thai society. However these values are not specified thereby making it impossible to ascertain whether they align with those ascribed to global citizenship.

Behaviours and Skills
Under the Civics, Culture and Living in Society strand, learners are expected to be able to ‘propose methods’ of protecting themselves and others from violation of children’s rights. Earlier grades include knowledge level outcomes related to knowing what a right is and what rights are protected by law. Finally, Grade 5 level learners are expected to ‘participate’ in the preservation and dissemination of the local wisdom of their communities, indicating a link with the third measurement domain within the SEA- PLM Global Citizenship Assessment Framework.
4.9 Timor Leste

Learning Area(s): Social Science

Source: Social Science Curriculum, 14 May 2014

Learning Area Description: Social Science is described as the study of interaction between the individual and his/her local and social environment. The core concepts include respect for human dignity and rights, pride in Timorese identity and culture, commitment to democratic and peaceful processes and love and care for the environment. Teaching strategies are articulated as emphasising experiential learning, inquiry and critical thinking, and various forms of communication.

The discipline is organised around four recurring concepts: people, places, times and systems. There is strong alignment here with the concepts typically associated with global citizenship, specifically the following concepts which are included as descriptors against the organising concepts:

- Human rights
- Interdependence
- Interrelationship between people, animals and their natural environment
- The need to protect the earth and natural resources through responsible and sustainable development
- Continuity and change/transformation on the personal, family, community, national and world levels
- The systems people create – economic and political and their strengths and weaknesses (inferring a critical view of systems).

The last point is important: few curricula declare the fallibility of systems and offer opportunities to critique. This process is akin to global citizenship teaching and learning.

How the learning area (at Grade 5 level) addresses the key measurement sub-domains:

**Knowledge**
Cognitive processes identified include understanding Timor Leste’s political structure and democratic processes, and those processes that occur at a school level such as school councils. Students are required to develop an understanding of Timorese pre-independence history via reading migration maps, presumably to understand the effect of migration on social and cultural history. At the Year 5 level, in the ‘second cycle’ of the curriculum, outcomes are organised as they relate to identities, grouped as ‘me and others’, ‘me and my family’, ‘me and my community’, ‘me and my nation’, and ‘me and the world’. This is significant as recognising different levels of identity and placing the self in the world is a typical global citizenship concept.

**Attitudes and Values**
Not included.

**Behaviours and Skills**
At Year 5 level, skills to be developed include presenting one’s knowledge or ideas in oral and written form, reflecting one’s own critical thinking process.
4.10 Vietnam

Learning Area(s): Morals; and, Nature and Society

Source: Vietnam Primary Curriculum: Morals; and, Nature and Society, 2007

Learning Area Description:
Morals: the objectives of this learning area are to foster understanding about standards of behaviour with relation to self, work, communities, country, environment, and mankind; develop skills related to self-efficacy and behaviour regulation and modification; and social and emotional development such as fostering self-esteem, responsibility, and respect and advocacy against cruelty or wrongdoing.

Nature and Society: The objectives of this learning area are to foster understanding about human health, natural and social phenomena, and skills related to observing, commenting, and questioning and expressing understanding about human health-related issues and simple natural and social events and phenomena. In addition, it aims to promote attitudes and values pertaining to environmental protection, national pride, respect for school community, hygiene and personal safety and the safety of families and communities.

How the learning area (at Grade 5 level) addresses the key measurement sub-domains:

Knowledge
The Grade 5 level Moral curriculum achievement standards describe knowing the meaning of peace (and the value for people, families and mankind) as a learning outcome. In addition the standards include obtaining an awareness level understanding of the United Nations and the relationship between Vietnam and the United Nations. Also included is the ability to identify natural resources nationally and locally (in one’s community) and understand why preservation is important.

Attitudes and Values
The Grade 5 level Morals curriculum prioritises teaching and learning about taking responsibility for one’s actions, respecting elders, children and women, cooperation, valuing peace, and respecting all nations and cultures. However, these values appear as aims rather than competencies or outcome statements resulting from a program of teaching and learning incorporating these values. The standards section describes taking responsibility in the context of impulse control, demonstrating commitment to and protecting one’s own ideas, and standing up against wrongdoing.

Behaviours and Skills
In the description of learning area content, the Morals curriculum includes active participation in activities aligned to students’ ages to make a contribution to national development and preservation. Against the ‘natural environment’ sub-topic, a learning achievement is included relating to students’ ability to preserve natural resources by suitable actions (although these are not explained or elaborated).
Annex I

List of contributors

All ministries of participating countries, as well as members of the SEA-PLM Secretariat hosted by SEAMEO and UNICEF have been involved in this process.

The list below present specific names of experts involved specifically associated with the development and validation of this publication.

Australian Council for Educational Research

- Prue Anderson – Principal Research Fellow, Assessment and Psychometric Research
- Adeola Capel – Research Fellow, Education Monitoring and Research
- Rachel Parker – Senior Research Fellow, Education Monitoring and Research
- Tom Lumley – Senior Research Fellow, Assessment and Psychometric Research
- Annie Brown – Principal Research Fellow, Assessment and Psychometric Research
An early step in developing an assessment framework for the Southeast Asia Primary Learning Metrics (SEA-PLM) was determining how to design and construct a single assessment program across all ASEAN member countries. This step needed to take account of the similarities and differences in the curriculum frameworks in each country for the four domains to be assessed through SEA-PLM: Mathematics, Reading, Writing and Global Citizenship.

This document presents the outcomes of the curriculum audit realized in 2015-2016 in the domains of Reading, Writing, Mathematics, and Global Citizenship for the following countries: Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Singapore, Thailand, Timor Leste and Vietnam. Limited information was available from Myanmar, due to the national curriculum reform process that was happening at the time of the audit; however some general information was reviewed.