



SEA-PLM 2019 Main Regional Report Summary

Children's learning in 6 Southeast Asian countries

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 **SEA-PLM 2019**
Southeast Asia Primary Learning Metrics



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SEA-PLM 2019 Main Regional Report Summary: Children's learning in 6 Southeast Asian countries



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1. Introduction

In 2012, the Southeast Asian Ministers of Education Organization (SEAMEO) Secretariat and the UNICEF East Asia and Pacific Regional Office (EAPRO) launched the South East Asia Primary Learning Metrics (SEA-PLM) Programme. SEA-PLM aims to improve the region's measurement of learning outcomes, use of data, and peer exchange on policies and practices. SEA-PLM's ambitious agenda is designed to support countries' efforts to achieve Sustainable Development Goal 4 – Education 2030 (SDG 4), and in particular to track progress on foundational learning (SDG 4.1.1) and knowledge and skills related to global citizenship (SDG 4.7).

As a flagship of the Programme, the SEA-PLM Assessment was launched in 2014 to measure learning outcomes for children enrolled in Grade 5. Six participating countries – Cambodia, Lao PDR, Malaysia, Myanmar, the Philippines and Viet Nam – embarked on this endeavour to improve the future of millions of children. The Australian Council for Educational Research (ACER) was contracted for technical management of design, implementation, coordination, training and quality assurance, and contribution to the reporting of the main regional results of SEA-PLM 2019.

SEA-PLM Secretariat is now honoured to present the SEA-PLM 2019 Main Regional Report Summary: Children's Learning in 6 Southeast Asian Countries. This summary report presents the main findings and recommendations extracted from the SEA-PLM 2019 Main Regional Report (UNICEF & SEAMEO, 2020).

We hope that this report, along with further national and regional research, offers a new policy momentum among Southeast Asian countries and partners. This work can then, in turn, assist the development of national and regional frameworks, actions, practices and research in key policy areas, and inform curriculum alignment, resource allocation, pedagogical practice, and planning at regional, national and sub-national levels.

SEAMEO Secretariat and UNICEF Regional and Country Offices will continue to do their best to support governments in advancing the right to education and reaching the levels of equity and prosperity the region is committed to achieve. We invite more countries and partners to join us in these efforts.

The SEA-PLM Secretariat co-managed by SEAMEO Secretariat and UNICEF EAPRO.



2. SEA-PLM 2019 scope

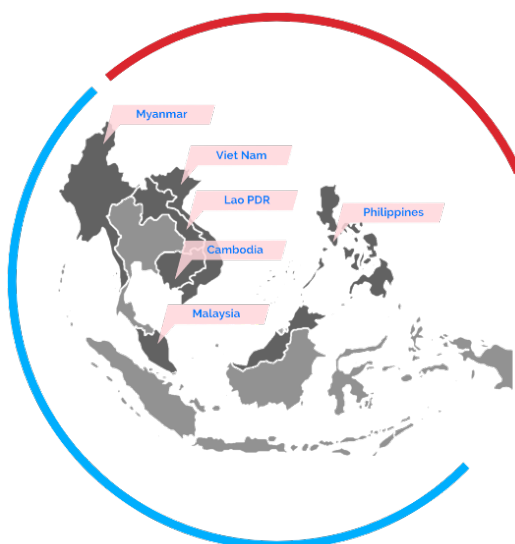
Southeast Asia Primary Learning Metrics (SEA-PLM) is a new comparative learning assessment programme, designed by and for countries in Southeast Asia. The programme aims to generate reliable data and evidence for monitoring learning outcomes across and within countries, and understanding what factors facilitate or hinder children's learning along their school journey. It also aims to promote cross-border exchange on learning and education policies, and to build the capacity of participating countries to design and conduct solid learning assessments. Furthermore, it aims to strengthen national education stakeholders' capacity to analyse, interpret and use learning outcomes data. Finally, SEA-PLM aims to help countries to identify, prioritize and address educational challenges in key policy areas, such as curriculum development, resource allocation, pedagogical practice, and planning at national and sub-national levels.

Through this first round of SEA-PLM (SEA-PLM 2019) stakeholders obtained robust evidence to answer a critical question: how do children in Southeast Asia perform against regional metrics in reading, writing and mathematics at the end of primary school?¹ Participating countries also gathered contextual information about children to help monitor the progress of disadvantaged sub-groups of children and schools at the end-of-primary years, and to explore equity in learning achievement. SEA-PLM 2019 findings will improve countries' understanding of Grade 5 children's learning achievements and barriers to achievement.

Moreover, the SEA-PLM programme is structured so that children's achievement can be measured over time through subsequent cycles of assessments.² In the context of the 2020 COVID-19 pandemic, this is particularly relevant as SEA-PLM 2019 provides an authentic baseline for children's learning. With this baseline, participating countries will be able to compare their own children's learning levels before and after COVID-19, which disrupted students' learning despite various distance-learning strategies and programmes.

SEA-PLM 2019's main survey was implemented at the end of the 2018–2019 school year. Six countries from the region participated: Cambodia, Lao PDR, Malaysia, Myanmar, the Philippines and Viet Nam.

Figure 2.1: Map of SEA-PLM 2019 participating countries



¹ Children in this report refer to students in the selected schools.

² As of 2020, SEA-PLM 2023 is the next intended cycle of SEA-PLM.



3. Methodology

The SEA-PLM programme aims to achieve the breadth and rigour of a large-scale international survey, while at the same time addressing the unique needs and contexts of countries in the Southeast Asian region. SEA-PLM 2019 collected children's and schools' responses through paper-pencil tests and questionnaires, conducted with a sample of children that was representative of the school population enrolled at Grade 5 in each country. SEA-PLM 2019 used tests to collect valid and reliable data on children's level of proficiency in 3 learning domains (reading, writing and mathematics), and used questionnaires to gather information on educational context and participants' attitudes. A global citizenship module was also developed as an experimental exercise in comparative large-scale assessment at primary education level, using contextual questionnaires.

SEA-PLM 2019's main survey data were collected towards the end of the 2018–2019 school year. Tests and questionnaires were administered in the official language(s) of instruction in Grade 5 in each participating country, as determined by the education ministry in each country.

In the inception phase – from 2012 to 2015 – the scope and format of the SEA-PLM assessment was constructed in collaboration with participating countries, observers, partners and technical experts, taking into consideration policy priorities, technical feasibility, international assessment standards and resource availability. The SEA-PLM 2019 assessment framework (UNICEF & SEAMEO, 2017) summarizes the concepts, processes, contributions and outputs developed during the inception phase.

By definition, SEA-PLM tests have been designed as an external measurement of education systems and their specific objectives. SEA-PLM adopts a literacy-based approach and references common curriculum targets and content across Southeast Asian countries.

Children's proficiency in reading, writing and mathematical literacy was measured through SEA-PLM tests and described on new proficiency scales specially designed for SEA-PLM regional assessment. Each proficiency scale is unique and was empirically developed on the basis of children's responses and each question's content and parameters. Proficiency scales offer a common reference for comparing performance between and within countries.

Describing children's knowledge in a rigorous, measurable and comparable way is a key milestone in any international assessment. SEA-PLM 2019 methodology enabled the overall national performance of participating countries to be reported for 2 Sustainable Development Goal indicators in reading and mathematics: SDG 4.1.1a (end of lower primary) and SDG 4.1.1b (end of primary).

SEA-PLM 2019 used a series of background questionnaires to collect extensive information about children, classrooms, teachers, schools, principals, parents and communities. Linking this information to the learning domains provides important insights into variations and inequity in children's performance levels, and the different drivers of learning and achievement.

Quality assurance was maintained for tests, questionnaires, survey procedures and data analyses. The tools were standardized across all countries and the entire assessment process, and in the delivery of the final databases, scales and indicators. This ensured that results could be compared across countries and different test languages.



4. Children's proficiency in reading, writing and mathematics

SEA-PLM has developed its own proficiency scales in reading literacy, writing literacy and mathematical literacy to enable countries to report overall student performance across contexts and over time. SEA-PLM 2019 proficiency scales enable education stakeholders and systems to monitor learning growth for students with different profiles, which in turn allows for sustainable improvement in curriculum achievement and literacy.

For each of the SEA-PLM 2019 proficiency scales – in reading, writing and mathematics – children who are in the highest band are likely to have mastered the fundamental skills expected by the end of primary school. Those children are also more likely to engage well in other important Grade 5 curriculum content, including the development of skills commonly considered critical in the 21st century, such as communication, technology use and critical thinking.

SEA-PLM proficiency scales provide an insight into what children can do and, importantly, what they should aim to do next. This, in turn, enables a more nuanced teaching and learning strategy at the national and school levels to ensure that teaching is targeted at the level of students' abilities. Teaching the Grade 5 curriculum to students who are yet to master the foundational skills of reading, writing and mathematics will do little to improve student learning outcomes. Understanding that learning is a progression and that teaching must be targeted at the level of students' abilities is central to understanding the results of SEA-PLM 2019.

Box 4.1: Reading the SEA-PLM proficiency scales

In SEA-PLM, students' proficiency in each domain is represented in the form of described proficiency scales. The proficiency scales are underpinned by an empirical scale based on actual student responses in the SEA-PLM 2019 assessment. Students are located on the scale based on their demonstrated levels of proficiency.

Each proficiency scale is divided into bands describing different levels of student proficiency. These bands were developed against the empirical scale through a process of grouping test items by difficulty and item content. Proficiency scales describe what children in each band can do. These bands of proficiency are unique to each domain and therefore are not directly comparable across the domains.

The SEA-PLM reading proficiency scale (Appendix Figure 1) includes 5 bands, ranging from Band 2 and below to Band 6 and above. The SEA-PLM writing proficiency scale (Appendix Figure 2) includes 8 bands, ranging from Band 1 and below to Band 8 and above. The SEA-PLM mathematical proficiency scale (Appendix Figure 3) includes 8 bands, ranging from Band 2 and below to Band 9 and above.

For a child to be considered proficient in any given band, they must be able to correctly answer, on average, at least half the questions set in that band. A child whose score is at the lower end of the range can correctly answer at least 50% of the questions set for that band. A child whose score is at the higher end of the range can correctly answer close to 70% of the questions.

In summary, children in any given band can correctly answer the majority of the questions set for that band and for lower bands, but face greater difficulty in performing the activities set for higher bands. For instance, children in Band 3 can correctly answer most of the questions set for Bands 1, 2 and 3, but are likely to correctly answer less than 50% of questions in Band 4.

4.1 Reading proficiency across countries

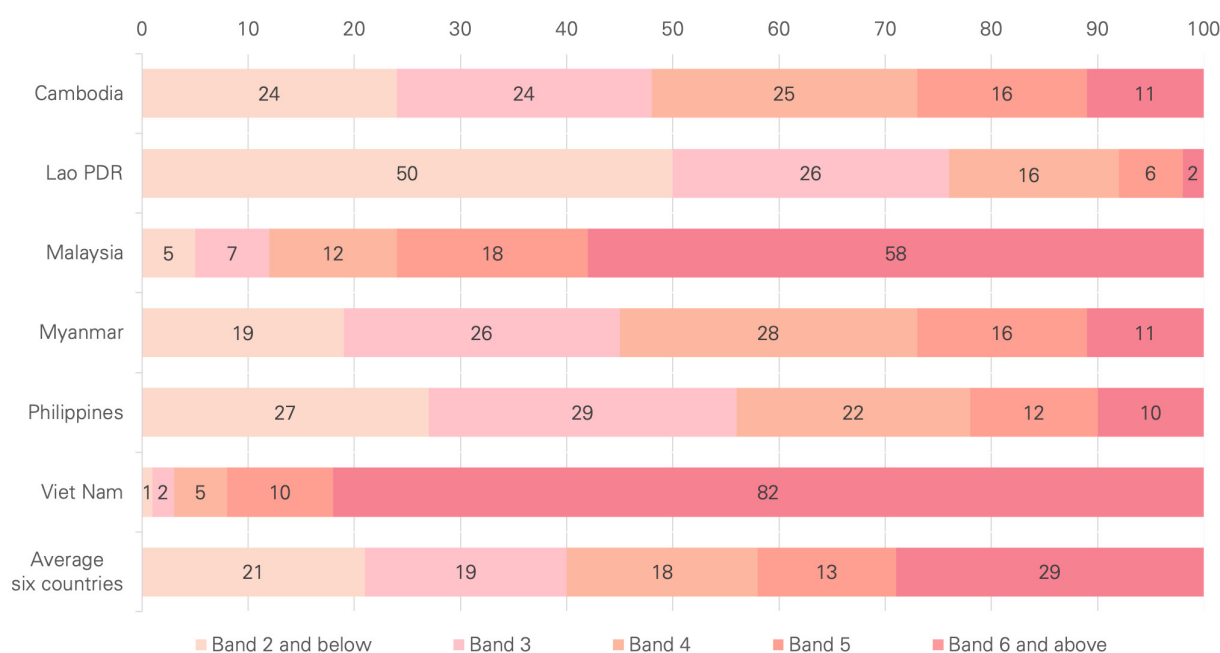
The SEA-PLM 2019 assessment framework defines reading literacy as ‘understanding, using and responding to a range of written texts, in order to meet personal, societal, economic and civic needs’ (UNICEF & SEAMEO, 2017, p. 21). The definition focuses specifically on written texts and emphasizes the interactions of readers with them. More information on reading literacy, as defined in SEA-PLM 2019, is presented in the SEA-PLM 2019 assessment framework (UNICEF & SEAMEO, 2017).

The scale includes 5 bands of proficiency, ranging from Band 2 and below to Band 6 and above. The proficiency within each band is described to illustrate what children can do. For instance, in the lowest band (Band 2 and below) children can identify relationships between words and their meanings in their language of instruction. A reader in Band 4 understands simple texts and can make plausible interpretations of the information in texts. At Band 6 and above, a reader understands texts with familiar structures, and can manage competing information when locating ideas and understanding implicit details.

Figure 1 in the Appendix presents the SEA-PLM proficiency scale for reading literacy and shows the proportion of children in each band across all 6 SEA-PLM 2019 participating countries, with associated scale score cut points reported for each of the bands.

Children’s proficiency in reading varied greatly across the 6 SEA-PLM 2019 countries. Some countries had a significant proportion of students in Band 6, while others had a significant proportion of students in the lowest band. The percentage of children from each participating country estimated to be in each band of the reading proficiency scale is shown in Figure 4.1. Countries are presented in alphabetical order.

Figure 4.1: Percentage of Grade 5 children in each reading band, by country



Note: Statistic standard errors appear in table reported in the Appendix 2 of the SEA-PLM 2019 Main Regional Report

- There was a large variation (from 2% to 82%) across participating countries in the number of Grade 5 children who could read, understand and use explicit and implicit information from various text types to reflect on new ideas and opinions. These skills are reflected in Band 6 and above and are generally expected of children at the end of primary education. Similarly, there was a large variation (1% to 50%) across countries in the number of Grade 5 children with a level of reading proficiency equivalent to that expected in the first years of primary school (Band 2 and below). These children were still at the stage of matching single words to an image of a familiar object or concept.
- In Malaysia and Viet Nam, the majority of Grade 5 children had achieved the reading literacy skills expected at the end of primary school. In those 2 countries, a further 18% and 10% of children, respectively, were in Band 5 and so were progressing towards achieving this level. These children have developed a solid basis in reading literacy skills in their language of instruction.

- In Cambodia, Lao PDR, Myanmar and the Philippines, small to modest percentages of Grade 5 children had achieved Band 6 and above or were progressing (Band 5) towards achieving the expected levels of reading proficiency at the end of primary education.
- For some countries, Grade 5 is the end of primary school. In these countries, children who do not meet a minimum proficiency in reading by Grade 5 will likely struggle to transition to secondary school.

4.2 Writing proficiency across countries

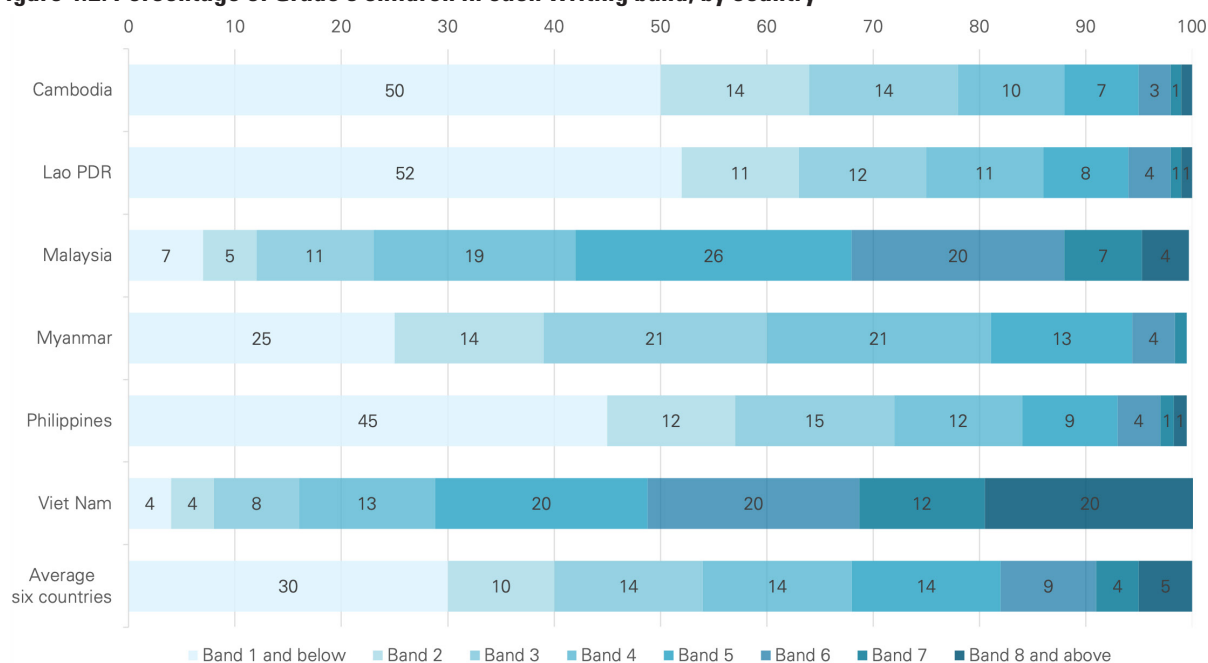
In the 21st century, written language is at least as important as it has ever been for the individual. The SEA-PLM 2019 assessment framework defines writing literacy as ‘constructing meaning by generating a range of written texts to express oneself and communicate with others, in order to meet personal, societal, economic and civic needs’ (UNICEF & SEAMEO, 2017, p. 30). This definition considers the act of writing as meaning-making and does not include merely copying words or chunks of language. Measuring the writing domain is new in the area of comparative large-scale assessment at primary level, and is a particular achievement in SEA-PLM 2019 where student writing is compared across a broad range of official languages of instruction.

The scale includes 8 bands of proficiency, ranging from Band 1 and below to Band 8 and above. The proficiency within each band is described to illustrate what children can do. For instance, in the lowest band (Band 1 and below) students have only limited ability to present ideas in writing. Students who are in the higher bands have demonstrated varying proficiencies in writing literacy skills, with those in Band 8 and above able to write cohesive texts with detailed ideas and a good range of appropriate vocabulary. Students in the higher bands are working towards meeting the SEA-PLM definition of writing literacy. The descriptions contain only the skills that are typical of most students in that band; individual students may not be able to demonstrate all of the skills described for the band in which they have been situated.

Figure 2 in the Appendix presents the SEA-PLM proficiency scale for writing literacy and shows the proportion of children in each band across all 6 SEA-PLM 2019 participating countries, with associated scale score cut points reported for each of the bands.

Children’s proficiency in writing varied greatly across the 6 SEA-PLM 2019 countries. Some had significant proportions of children in Bands 7 and 8 and above, while others had a significant proportion of children in the lowest bands. The percentage of children from each participating country estimated to be in each band of the writing proficiency scale is shown in Figure 4.2. Countries are presented in alphabetical order.

Figure 4.2: Percentage of Grade 5 children in each writing band, by country



Note: Statistical standard errors appear in table reported in Appendix 2 of the SEA-PLM 2019 Main Regional Report

- A significant finding of the SEA-PLM 2019 writing assessment is that a vast proportion of students across all 6 SEA-PLM 2019 countries are not demonstrating writing proficiencies expected of a Grade 5 student.
- In total, approximately 9% of students who sat SEA-PLM 2019 performed at Band 7 and Band 8 or above, the highest 2 bands. The middle 4 bands have similar proportions of students in them; 51% of all students fall into 1 of the 4 middle bands. Below this, 40% of students across all 6 SEA-PLM 2019 countries are in the lowest 2 bands, indicating that they have only limited writing skills.
- For some countries, a relatively high proportion of students were in the upper bands for writing. For other countries, however, large gaps in learning outcomes were evident.
- In Viet Nam, more than 30% of Grade 5 children had writing skills described in Bands 7 and 8 and above. These children may be able to transition well through to secondary education, and may possibly be on the right track to meet the challenges of a 21st century skills based curriculum.
- In Malaysia, almost 12% of Grade 5 children produced writing in the top 2 bands of writing proficiency.
- In Cambodia, Lao PDR, Myanmar and the Philippines, a very limited number of Grade 5 children achieved higher levels of proficiency in writing. In Myanmar approximately 60% of children were in the 3 lowest bands while in Cambodia, Lao PDR and the Philippines this increased to more than 70% of children. The highest performers of this group can produce very limited writing, with simple, insufficient ideas and limited vocabulary. The weakest students have only limited ability to present ideas in writing.

4.3 Mathematical proficiency across countries

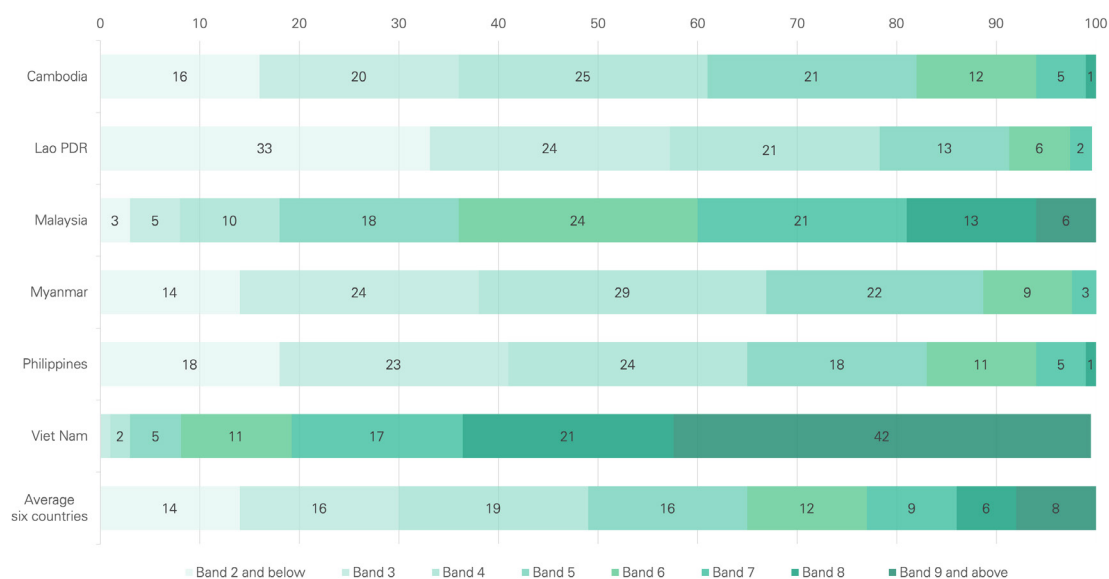
The SEA-PLM 2019 assessment framework defines mathematical literacy as ‘a person’s capacity, given a problem in a context that is of interest or importance to them to translate the problem into a suitable mathematical formulation, to apply mathematical knowledge and skills to find a solution, and to interpret the mathematical results in relation to the context and to review the merits or limitations of those results’ (UNICEF & SEAMEO, 2017, p. 13). SEA-PLM mathematical literacy is oriented to include the specific curricula and interests of participating Southeast Asian countries at Grade 5. The assessment of mathematical literacy takes into account the wide range of abilities of students across the countries. It includes basic skills as well as ‘knowledge typically developed in the primary schooling years’ (UNICEF & SEAMEO, 2017, p. 12).

The scale includes 8 bands of proficiency, ranging from Band 2 and below to Band 9 and above. The proficiency within each band is described to illustrate what children can do. For instance, in the lowest band (Band 2 and below) children have difficulty understanding place value, scales of measurement and ordering 2-digit numbers. These children are at the level of emerging mathematical skills. A mid-level mathematical learner (Bands 3, 4 and 5) is beginning to solve arithmetic problems more fluently and apply number properties and units of measurement. A more proficient learner (Band 6 and above) can perform more mathematical operations (including with fractions), interpret tables and graphs, apply fractions and percentages, and analyse data representations.

Figure 3 in the Appendix presents the SEA-PLM proficiency scale for mathematical literacy and shows the proportion of children in each band across all 6 SEA-PLM 2019 participating countries, with associated scale score cut points reported for each of the bands.

Children’s proficiency in mathematics varied greatly across the 6 SEA-PLM 2019 countries. Some countries had a significant proportion of children in the higher bands (as expected generally at the end of primary education), while others had a significant proportion of children in the lowest bands (as expected of children in the early grades of primary education). The percentage of children from each participating country estimated to be in each band of the mathematical proficiency scale is shown in Figure 4.3. Countries are presented in alphabetical order.

Figure 4.3: Percentage of Grade 5 children in each mathematics band, by country



Note: Statistical standard errors appear in table reported in Appendix 2 of the SEA-PLM 2019 Main Regional Report.

- In some countries there were very few (1 %) Grade 5 children with a mathematical proficiency equivalent only to that expected in the first years of primary school, while other countries had a large number (57%) at this level. These children were still in the stage of solving simple problems – for example, requiring them to add or subtract 2 single-digit numbers together or to recognize simple shapes. To take another example, in some countries there were few (8%) and in other countries a very large majority (91 %) of Grade 5 children who could solve problems involving measuring devices requiring conversion of metric units (Band 6), as generally expected at the end of primary education. This situation illustrates the huge disparities in mathematical proficiency across the 6 participating countries.
- In Malaysia and Viet Nam, the majority of Grade 5 children have achieved the mathematical literacy skills expected at the end of primary school, as indicated by a SEA-PLM 2019 mathematical proficiency of Band 6 and above. In these countries, large numbers of children are on the right track to meet the challenges of a 21st century skills-based curriculum when they transition through to secondary education.
- In Cambodia, Lao PDR, Myanmar and the Philippines, modest percentages of Grade 5 children have achieved the mathematical literacy skills expected at the end of primary school, as indicated by a SEA-PLM 2019 mathematical proficiency of Band 6 and above. This implies that in these countries the majority of Grade 5 children are still working towards mastering fundamental mathematical skills.
- In all countries, a significant proportion of children may still be able to reach the higher mathematical proficiency bands (Band 6 and above) if the right school and system-level support is provided. For example, there were many children who could interpolate capacity from a marked cylinder and estimate the mass of an object (Band 5), and with the right support they could learn to solve problems involving measuring devices requiring conversion of metric units of length and capacity (Band 6).
- For some countries, Grade 5 is the end of primary school. Children who do not meet the mathematical proficiency expected for Grade 5 will struggle to complete their primary education and/or to transition into secondary school.
- Students found items where they needed to write an answer (constructed response) more difficult than those where they needed to select an answer from given options (multiple choice).
- The results showed fewer chance and data items in the lower proficiency levels of the SEA-PLM 2019 scale. This may reflect that topics in this area are not taught to children as much (or perhaps as carefully) as for the other 2 strands (number and algebra, and measurement and geometry).
- Children appeared to be more familiar with making calculations than with formulating, interpreting, communicating and explaining.

4.4 SEA-PLM 2019 alignment with the SDGs 4.1.1b

SEA-PLM 2019 methodology enabled the performance of participating countries to be reported for 2 Sustainable Development Goal indicators in reading and mathematics: SDG 4.1.1a (end of lower primary) and SDG 4.1.1b (end of primary).³ This process used qualitative alignment of SEA-PLM 2019 proficiency descriptors to include the SDG expanded definition of minimum proficiency levels, as endorsed by the Global Alliance to Monitor Learning and coordinated by the UNESCO Institute for Statistics (UNESCO Institute for Statistics, 2019). This initiative enables the reporting of national progress against United Nations targets for the year 2019. Indicators are reported below for reading and mathematics at the end of primary only (SDG 4.1.1b).⁴ More results on SDG 4.1.1a are reported in the SEA-PLM 2019 Main Regional Report. For some countries, Grade 5 is the end of primary education, while for other countries primary education finishes at Grade 6.

Table 4.1: Percentage of Grade 5 children performing at or above SDG 4.1.1b 'end of primary' indicator in reading, by country

Country	Reading end of primary SDG 4.1.1b Band 6 and above	
	%	Standard Error
Cambodia	11	1.01
Lao PDR	2	0.41
Malaysia	58	2.06
Myanmar	11	0.78
Philippines	10	1.21
Viet Nam	82	1.42

Table 4.2: Percentage of Grade 5 children performing at or above SDG 4.1.1b 'end of primary' indicator in mathematics, by country

Country	Mathematics end of primary SDG 4.1.1b Band 6 and above	
	%	Standard Error
Cambodia	19	1.34
Lao PDR	8	0.77
Malaysia	64	0.94
Myanmar	12	1.96
Philippines	17	1.38
Viet Nam	92	1.11

³ SDG Indicator 4.1.1: Proportion of children and young people (a) in Grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex.

⁴ End of primary grade of measurement point as defined by the Global Alliance to Monitor Learning: plus or minus 1 year from the last year of primary according to ISCED level mapping in the country.



5. Equity in learning opportunities

This section describes how contextual factors affect the equity of learning outcomes. By aggregating and comparing information gathered from students, parents, teachers and school principals, SEA-PLM 2019 shows that all participating countries experience learning inequalities between children. The study also reveals several gaps in resources, school experiences and practices between different school and children profiles.

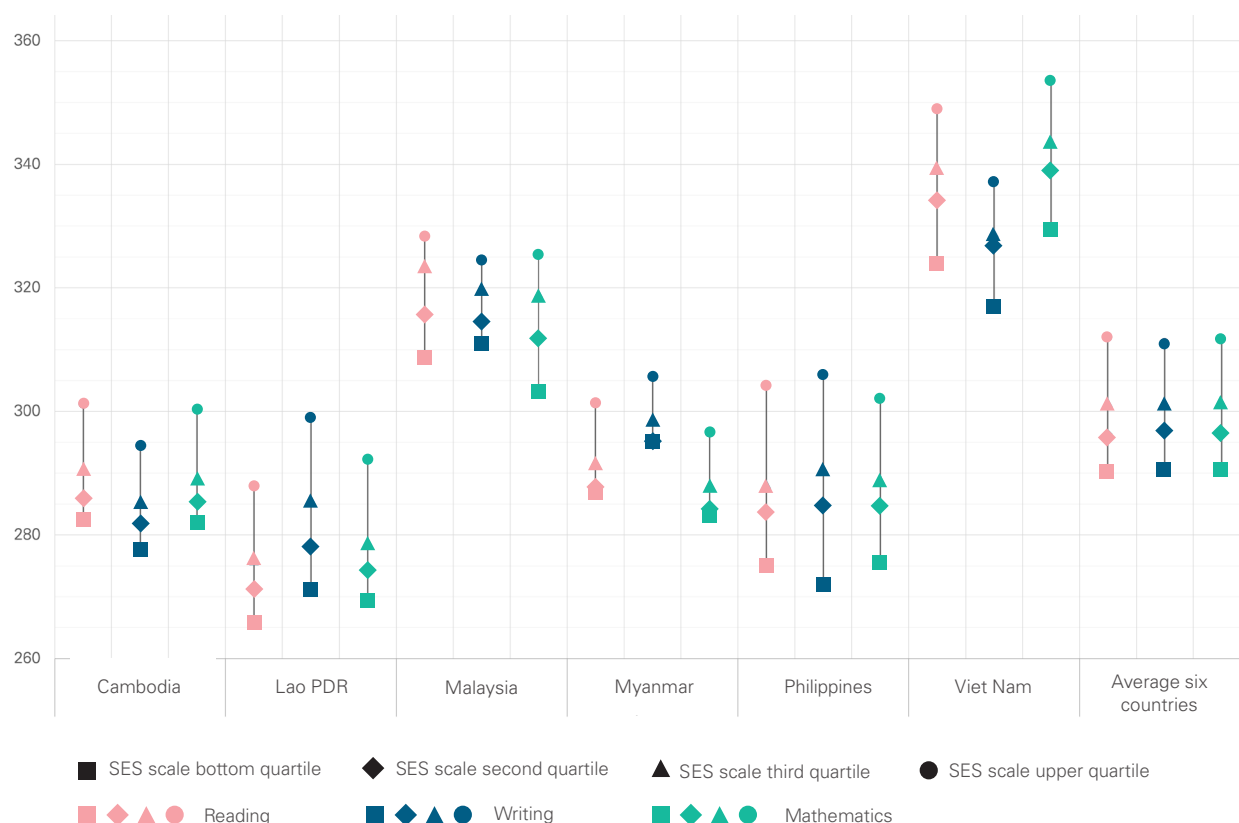
Addressing the learning gap for all children is a complex challenge, as governments and communities across the region will not all be able to immediately apply the same high-quality standards, resources and practices to all children, grades, curriculum content and schools. Any single regional or national response will not be adequate, as existing policies, experience, education structures and capacity for transformation vary for each country.

While socioeconomic factors may not be easily changed in the short term for many children, there are other related factors that, if understood and recognized, can be addressed, compensated for and prioritized at the system and local levels. For example, countries can prioritize the development of fundamental skills for children coming from disadvantaged backgrounds, in the early grades and beyond.

5.1 Children's background, home influence and school experience

- SEA-PLM 2019 confirmed in all countries that children from higher socioeconomic status (SES index) backgrounds tended to achieve significantly higher scores in reading, writing and mathematics. Figure 5.1 presents the average score differences between the 4 SES quartiles in each country, in each of the 3 learning domains.

Figure 5.1: Differences in average reading, writing and mathematics scores by socioeconomic status

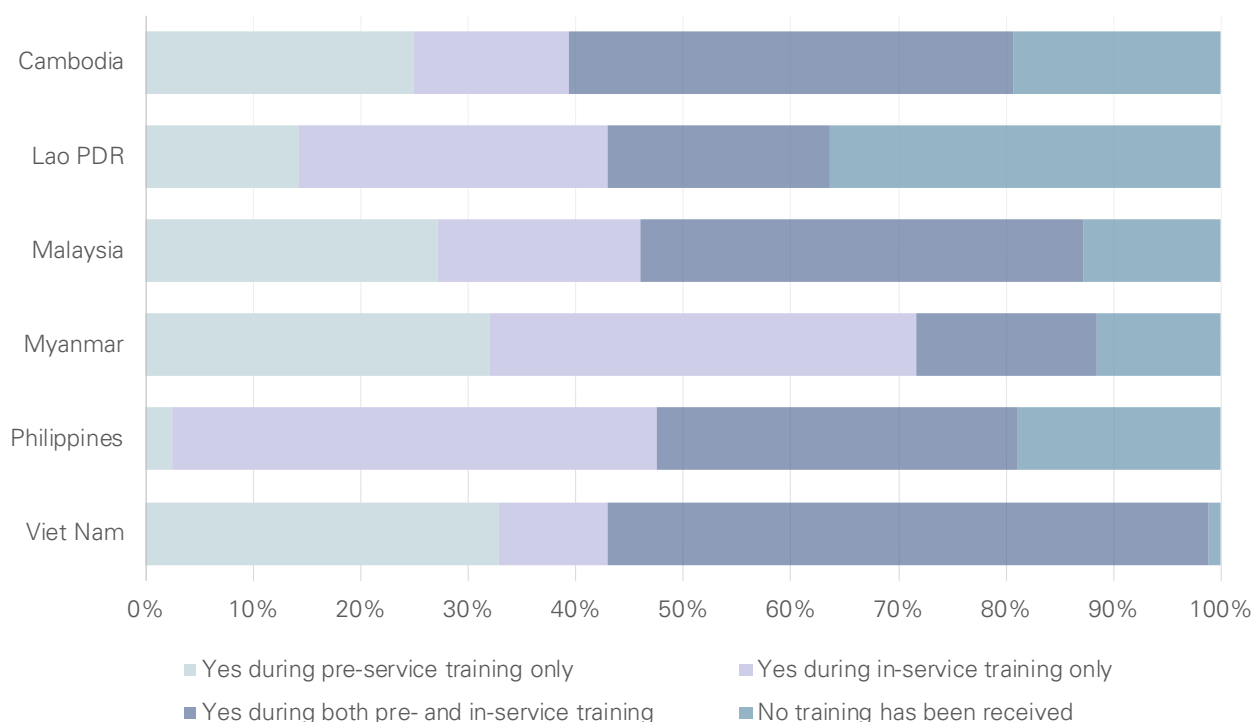


- The figure shows a general pattern of increasing achievement based on quartiles of the SES index nationally. In all 6 participating countries, children belonging to the bottom SES quartile had the lowest levels of achievement, whereas children belonging to the upper SES quartile had the highest levels of achievement. This pattern is consistent across all 3 domains, and the magnitude of this difference was substantial, ranging between 24 and 26 scale points, on average across countries, for the 3 learning domains.
- These results reinforce the importance of children's backgrounds and the reproduction of societal inequalities at school in the early grades. In some countries, inequalities are huge and are still affecting children's proficiency in reading, writing and mathematics by the end of primary education. Findings address the challenge of reducing the effect of children's origin and societal inequalities at school over time and place, and across basic education. Countries' efforts in the last decade to reduce the impact of social inequities on children's learning have not been sufficiently effective for all groups of children.
- Girls were more likely to perform better than boys, regardless of socioeconomic status or school location, depending on the achievement domain. In all countries, boys had lower levels of achievement than girls in reading and writing. In 3 countries, they had lower levels of achievement in mathematics in comparison with girls. More research across the different profiles of girls and boys is encouraged to estimate if gaps in performance between sub-groups of children are constant across other variables of interest. Despite the difference in performance, in all countries, few to large proportion of girls and boys still have difficulties to reach the expect level of performance in the three domains.
- Children who spoke the language of instruction more often at home achieved higher levels of literacy in reading, writing and mathematics than those who did not, except in the Philippines. This practice varied across countries, with almost all children speaking the official language of instruction at home at the end of primary education in Cambodia, Malaysia and Viet Nam compared with less than 1 in 10 children in the Philippines.
- A third of children had attended at least 2 years of preschool education. However, there was considerable country variation in the proportion of children attending preschools, and their duration of attendance. The positive influence of these preparatory years continues to show benefits for children's outcomes at least 5 years into their primary education. Children who had attended at least 1 year of preschool education consistently performed better than children who had not. The systems need to explore alternative modes of sustainable preschool in order to provide at least 1 year of free, high-quality preschool education to enable successful transition into early primary school years.
- Most Grade 5 children in most countries demonstrated a solid grasp of key language and mathematical skills prior to entering school. These children consistently outperformed children who did not have those skills. This finding highlights the importance of creating an environment in the early years of school that replicates a literate home environment and focuses on building core foundational skills of language, vocabulary, communication and mathematics.
- In 4 out of the 6 countries, older age was not correlated with poorer learning performance, but grade repetition was. In Malaysia and Viet Nam, where the age of all or almost all Grade 5 children was 10 or 11 years and grade repetition was completely or almost non-existent, older children tended to achieve significantly higher scores in reading, writing and mathematics (only in mathematics in Vietnam), when grade repetition and socioeconomic status are held constant.
- Children who had repeated a grade were more likely to have lower levels of achievement in reading, writing and mathematics in comparison with children who had not repeated a grade. Official grade repetition policies vary by country, with some adopting automatic progression of children and others basing children's progression on proven performance. In Malaysia, grade repetition is almost non-existent, with less than 1% of children reported to have repeated. In Viet Nam, this practice affected less than 10% of children enrolled at Grade 5 in 2019. On average, across the other 4 SEA-PLM 2019 countries, 20% to 40% of children at Grade 5 reported having repeated a grade of schooling. While these findings warrant further investigation on causes and outcomes, children's performance and system efficiencies play an important part in levels of grade repetition.

5.2 School environment and teachers profiles

- Children learning in larger schools in well-resourced locations, with a textbook for each child, performed better than children in smaller, less well-resourced schools. Across the 6 participating countries, the majority of children (87%) attended schools where they had 1 textbook per child in Grade 5, for both language and mathematics lessons. In all countries except Malaysia, there were still a proportion of children learning in schools where the principal reported that there were no language or mathematics textbooks. In Lao PDR and the Philippines, around 20% of children shared a reading or mathematics textbook in Grade 5, sometimes with more than 2 children.
- The availability of school libraries varied significantly across countries, with principals in Malaysia reporting that all children had access to a library, while in another country principals reported that 35% of children had access to a library at school. This shows an example of the importance of allocating adequate and free resources for all schools in the appropriate language from the early grades.
- In 3 of the participating countries, school principals reported that the lack of qualified teachers was a significant issue hindering school capacity to provide instruction to children. Countries all adopted different approaches to hiring and training teachers, and allocating generalist or specialist teachers.
- In 5 out of the 6 countries, children were being taught by 1 generalist teacher for all or most of their subjects, while in Malaysia children were learning more with specialist teachers in charge of teaching only specific learning domains.
- The majority of children attended schools where teachers in charge of the language of instruction had attended pre-service or in-service reading training. However, in almost all countries, a non-negligible percentage of children were in class with teachers who had received no training in reading before or during their service.

Figure 5.2 Percentage of children by teachers⁵ training in the language of instruction



⁵ teachers in charge of the language of instruction

5.3 Children', teachers' and parents' attitudes and engagements

- Most children in all participating countries had high levels of interest in school. About 80% or more of children in all countries expressed positive attitudes about school – such as liking school, feeling safe at school and having a sense of belonging. However, 10% of students across all countries and up to 20% of students in some countries reported not feeling comfortable at school and having a negative attitude towards school.
- On average, children who felt better and safer at school performed better than children who reported less positive feelings. Systems and communities may continue to value constructive, collaborative interactions between children and teachers within schools in learning activities and other projects with the local community to promote and value a peaceful school.
- In all countries, higher levels of parental engagement were associated with higher reading, writing and mathematics scores in children. Half of the children reported that their parents motivate them to succeed in school (47%). Around one-third reported that their parents check if they do their homework (36%) and ask them about what they are learning in school (34%), and that they talk about their schoolwork with their parents (32%). Around one-quarter reported that their parents help them with their homework (27%). However, a large proportion of children suggested that their parents rarely or never engage in those activities. Strategies that better communicate with parents and provide practical solutions for better parental engagement with children's learning are likely to have a significant impact on children's success in school.
- A large majority of children attended schools where their teachers considered that lack of basic knowledge (74%) and lack of interest (63%) affected children's learning in class. Around one-third of children attended a school where teachers reported that children's hunger in class (34%) or lack of sleep (32%) were issues affecting children's learning. In some countries, a higher percentage of teachers reported these factors. This may confirm the difficulty for teachers in delivering Grade 5 instruction as expected in the official programme. This finding also strengthens the need for systems and communities to better monitor health and wellbeing within each school during the stages of basic education.
- In several countries, high percentage of teacher absenteeism and lateness were reported by children. In Viet Nam, children's perceptions of teachers were more positive than for children in other countries, with less than 1 in 10 (9%) reporting that their teacher was often or sometimes absent, compared with 38% to 58% across other countries, and 14% reporting that their teacher was often or sometimes late, compared with 51% to 67% across other countries. A high proportion (from 49% to 74%) of children reported that it often or sometimes took their teacher a long time to settle the class. This raises the need for systems and communities to identify and eliminate explicit and informal practices that could reduce the time for learning and teachers' effectiveness in basic education.



6. Global citizenship education at primary level

Global citizenship is a relatively new concept that expands the notion of citizenship beyond the boundaries of the state, with the implication that there are multiple issues that connect us as citizens of the globe. Global citizenship is generally described in terms of global belonging, solidarity and collective identity.

The definition of global citizenship in SEA-PLM, generated in collaboration with Southeast Asian countries and experts, acknowledges the need for region-specific characteristics, and local appropriateness and relevance at community, school and individual levels. The SEA-PLM 2019 global citizenship assessment framework states:

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. (UNICEF & SEAMEO, 2017, p. 6)

Certainly, there is no single, common Southeast Asian regional identity with core shared values, and the participating countries are acknowledged as greatly diverse in history and culture. Nonetheless, it was anticipated that, across the region, there would be universal values, principles and standards that most people uphold as important or worthy – such as peace, safety, security, stability and justice. Similar values are also present in literature relating to global citizenship education (UNICEF & SEAMEO, 2017).

SEA-PLM 2019 is the first large-scale comparative assessment to measure global citizenship attitudes, values and behaviours of children at primary level. The representative sample of Grade 5 children in the 6 participating countries provided a unique and valuable insight into global citizenship education across the Southeast Asian region.

The SEA-PLM 2019 global citizenship questionnaires – developed through the assessment framework and contextual questionnaires⁶ – fills a gap in global citizenship research, providing countries and stakeholders with new qualitative and quantitative information. All concepts and topics covered by the questionnaire were defined, designed and trial tested in collaboration with participating Southeast Asian countries. Global citizenship education as a specific concept is derived from civics and citizenship education. It is still emerging as a standalone domain in curriculum documentation in Southeast Asia, as it is in international research on civics and citizenship.

One of the major challenges for the development of the global citizenship questionnaires was the relatively young age of children in Grade 5. At this age, children are not expected to have formally learned all of the specific concepts and elements in this area. In fact, most of their civics and citizenship knowledge, as well as what they know and think about global citizenship, is generally acquired in other subjects, informally at school and in out-of-school contexts (in particular at home).

Many of the attitudes, values and behaviours inherent in the SEA-PLM concept of global citizenship embed and support 21st century learning, such as critical thinking, problem-solving, empathy and collaboration. Beyond reflecting on existing policies and practices, the SEA-PLM global citizenship framework, data and questionnaires provide crucial information that could be useful for regional and international agendas. In particular, Sustainable Development Goal (SDG) target 4.7 focuses on all learners acquiring the knowledge and skills needed to promote sustainable development, including global citizenship.

In the early stages of developing the SEA-PLM global citizenship questionnaires, official curricula of the Southeast Asian countries were audited to explore global citizenship concepts and topics within curricula at the end of primary level (UNICEF & SEAMEO, 2016). The review identified where global citizenship concepts and topics were located in curricula, and whether they aligned with the underpinning concepts and definition of global citizenship education in SEA-PLM. To ensure consistency with SEA-PLM, Grade 5 or approximate level curriculum frameworks in 9 countries were reviewed in detail.

⁶ SEA-PLM 2019 instruments only focused on measuring attitudes, values and behaviours, and did not include cognitive questions to measure knowledge and proficiency.

6.1 Key findings for global citizenship

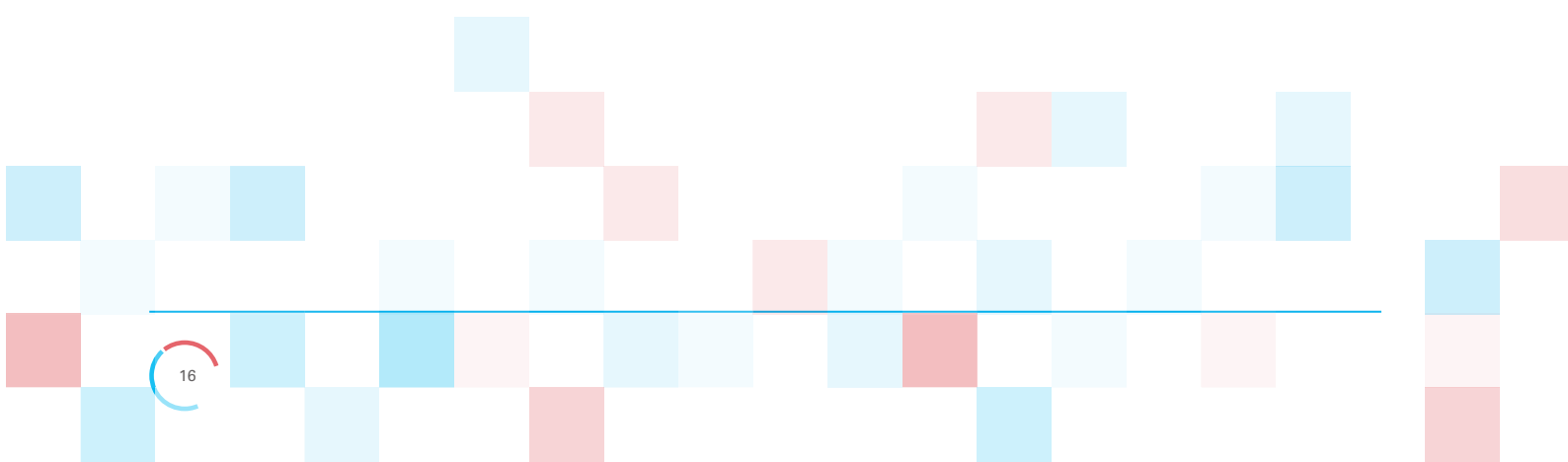
- Environmental issues (such as climate change and environmental pollution) and local topics related to the classroom environment (such as solving disagreements with classmates and solving problems in the community) appeared to be the most important and valued global citizenship topics and concepts learned at primary school.
- The majority of children reported that they participated in school activities that relate to global citizenship education, such as communicating ideas to their classmates, voting for class leader, and participating in an activity to make the school more environmentally friendly. Less than half the children reported experience speaking in an organized debate, joining in classroom discussions about problems in the world and becoming a candidate for class leader. This provides insight into the global citizenship activities that children found engaging during class time, but also identifies some room for improvement in promoting more activities related to global citizenship within schools.
- Both children and teachers valued global citizenship education to a greater extent than they reported that the topics were covered in the classroom. Further, more children indicated they will or might engage with global citizenship activities in the future than were currently engaging in those activities, which suggests that children would engage more should they be given the opportunity.
- Most of the teachers indicated they were prepared for and felt confident teaching almost all topics listed in the questionnaire. Children's rights and respecting diversity were the topics teachers said they were most prepared for during pre-service training, and were also the topics teachers felt most confident teaching. Grade 5 teachers were consistently less prepared for teaching globalization (34% 'very well') and challenging inequality (42% 'very well') and also felt less confident teaching them. Across countries, teachers were most confident with the topics most covered in pre-service training. This may represent a relationship between training and confidence.
- Responses from the questionnaire reinforce the conclusions from the SEA-PLM official curriculum review by reporting that most of the Grade 5 children and teachers in most of the countries have a better grasp of local issues than of regional and global ones. More specifically, the questionnaire highlighted that, in all countries, less than 60% of Grade 5 children identified themselves as Asian. This finding from the children's perspective is supported by the responses of Grade 5 teachers, who generally reported having less confidence in cross-national attitudes and values compared with local community and classroom issues.

6.2 Emerging themes

- By encouraging knowledge exchange and providing research, the SEA-PLM 2019 global citizenship module supports regional and national dialogue, and efforts on global citizenship concepts, topics and skills across basic education and beyond. Countries and stakeholders can use this report and the released framework and questionnaires to acknowledge, credit and increase national capacities and research across the Southeast Asian region. Systems, schools, children and practitioners can focus on global citizenship education, as outlined in the Sustainable Development Goal target SDG 4.7.1, which refers to (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment. SEA-PLM 2019 findings support the monitoring of such system-level indicators and provide a new source of information for policy implementation within schools and classrooms.
- The children's responses in SEA-PLM 2019 showed their views on a range of topics, rather than a comprehensive understanding of global citizenship. Children of this age are naturally more aware of local issues within their community than they are of global matters and events outside their environment. In basic education, children's development of regional and global values relies on the efforts of teachers, schools and communities to encourage citizenship values and skills.
- SEA-PLM 2019 identified variation within and across countries in the value that teachers and children place on global citizenship. Such variation may be explained by differences in official curriculum and materials, and teachers' and school leaders' practices. Developing more school-based community activities with underlying objectives related to citizenship could be beneficial in promoting topics

related to global citizenship. Providing equal opportunities to develop citizenship at primary level may be a crucial step to undertake before adding regional and global identities and concepts.

- Findings in this report may lead to systems, schools and practitioners reflecting on how to better frame regional and global concepts at the end of primary level while keeping national citizenship values and cultural beliefs as core goals. At the end of primary level, countries may have an interest in schools, teachers and children progressively increasing their awareness of regional issues and dynamics outside of the local community. Activities to support increased awareness may be encouraged within existing learning activities in fundamental domains (for example, 'Exploring the world' in reading and mathematics) and/or within social and citizenship areas. Further explicit development of global citizenship subjects may be beneficial in the compulsory curriculum at the secondary level and beyond.







7. Findings and recommendations

Quality education and learning is a fundamental right for every child and a strategic, smart investment for individuals, families, governments and societies. Guaranteeing children a solid foundation in learning is an essential building block in achieving prosperity, equity, and peaceful and sustainable societies in Southeast Asia. The SEA-PLM programme strengthens governments' capacity to identify children's learning outcomes in reading, writing and mathematics, and to use this information to create better conditions for equitable learning. The programme also collects data on attitudes and values related to global citizenship education and concepts.

The SEA-PLM 2019 Main Regional Report and Summary aim to inform policy dialogue around learning improvement throughout the region, which is even more relevant now owing to the impact of COVID-19 on children's education. SEA-PLM provides a space for participating countries to define and confirm key priorities and strategies to improve students' learning. Participating countries and partners are strongly encouraged to use the SEA-PLM 2019 datasets to analyse and reflect on the appropriateness and effectiveness of national and regional policy frameworks, implementation plans and practices, and monitoring and feedback strategies. SEA-PLM 2019 sheds new light on critical issues such as curriculum development and implementation, resource allocation and transformation, school practices and teacher development.

SEA-PLM 2019 data can also be used to provide evidence about the learning and equity challenges of different sub-groups of children and countries. Participating countries can use this information to target support at improving learning outcomes among the most disadvantaged and vulnerable children at regional, national and sub-national levels.

7.1 Key findings

The new SEA-PLM proficiency scales provide solid benchmarks for the Southeast Asian region to examine what specific groups of Grade 5 children know and can do in reading, writing and mathematics. SEA-PLM 2019 also gauges children's and teachers' values and attitudes about global citizenship concepts, behaviours and activities, which are becoming more and more important for thriving in the 21st century world.

Children's performance on the SEA-PLM 2019 proficiency scales clearly demonstrates large differences in learning outcomes between countries and between groups of students within each country. The outcomes also reveal substantial need and room for improvement in supporting students to achieve the national, regional and international standards of learning expected at the end of primary education.

More specifically, SEA-PLM 2019 reveals stark differences between students' learning outcomes according to various profiles and characteristics, such as gender, socioeconomic status, language spoken at home, preschool experience and early developmental skills. It should be noted that some of these disadvantages may be combined, and thus the most vulnerable children face multiple deprivations and factors that negatively affect their learning (for example, boys from poorer households in remote rural areas). The SEA-PLM 2019 data also highlight that in addition to students' home environment, the resources and contexts of schools and classrooms have a substantial impact on learning.

7.2 Recommendations to improve learning

SEA-PLM 2019 presents a wide range of policy recommendations to facilitate improvement of students' learning, with a strong equity focus, across the 6 participating countries in the region.

The following 6 priority recommendations address how SEA-PLM 2019's key findings and evidence can be translated into specific policies. Aligned with SEA-PLM programme goals, the recommendations focus on improving the foundational learning and skills of all students. Some recommendations target system-level changes, while others focus on the practices of schools and communities. See Box 7.1 for a summary.

The recommendations align with Sustainable Development Goal 4 – Education 2030 (SDG 4), as well as relevant SEAMEO and ASEAN plans and frameworks. They are also consistent with existing national

and regional commitments, and with evidence and recommendations from other initiatives, such as the 5-year progress review of SDG 4 in the Asia-Pacific (UNESCO & UNICEF, forthcoming). The recommendations also take into account other existing global and regional evidence, including from participating SEA-PLM countries.

Encouraging fruitful collaboration and trust between the different stakeholders at all levels – regional, national, community and school – is crucial for creating real improvement in equitable learning outcomes. In light of the current COVID-19 pandemic and the forthcoming recovery phase, these recommendations are even more relevant and more urgent.

Box 7.1: Summary of the 6 priority recommendations

Recommendation 1: Prioritize early learning in disadvantaged contexts

Recommendation 2: Guarantee a solid start in primary education through on-time enrolment and progression for all children, especially the disadvantaged.

Recommendation 3: Ensure explicit and progressive learning standards in the curriculum of basic education, including in digital and blended learning options

Recommendation 4: Support motivated and experienced teachers with conducive teaching and positive school environments

Recommendation 5: Use data, monitoring and research to achieve better learning environments

Recommendation 6: Participate in and support SEA-PLM 2023 activities, including the opportunities and challenges arising from the COVID-19 pandemic

Recommendation 1

Prioritize early learning in disadvantaged contexts

- Expand provision of at least 1 year of free pre-primary education to children in disadvantaged communities (for example, remote rural areas and informal urban settlements) to equip them with a solid foundation in cognitive, physical and socio-emotional skills.
- Ensure smooth transition to primary education, and enrolment at the right age.
- Support parental education and multi-sectoral early childhood development services (including health, nutrition, water and sanitation, and poverty alleviation mechanisms).
- Support specialized training programmes for early years' educators.
- Provide adequate investment in early learning systems, proportionate to the investment in primary education.
- Promote mother tongue-based multilingual education in the early grades of pre-primary.
- Continue to make early learning a priority during and after the COVID-19 pandemic. Continue pre-primary services and protect their budgets.

Recommendation 2

Guarantee a solid start in primary education through on-time enrolment and progression for all children, especially the disadvantaged

- Formalize and guarantee 9 years of free and compulsory basic education for all children (aligned with SDG 4).
- Increase, or at least maintain and protect, the volume and proportion of the overall education budget at the internationally recommended level (4% to 6% of GDP, or 15% to 20% of total public expenditure).
- Allocate sufficient resources to basic education and ensure smart investment to implement equity-focused programmes, even if they require additional costs to accommodate hard-to-reach children.
- Eliminate direct and indirect costs incurred by the poorest households, with support for students, households and/or schools (for example, scholarships, cash transfers and school grants).
- Establish better mechanisms to support all schools and teachers in their pedagogic and inclusive practices in classrooms. This includes continuing the process to abolish grade repetition, and supporting children with learning challenges.
- Work with communities, teachers and principals to eliminate gender stereotypes and address gender gaps in learning processes and outcomes, with emphasis on underperforming boys and girls, depending on the local contexts.
- Provide special support to schools in disadvantaged communities (often small schools in remote rural areas). Ensure equitable allocation of resources (including topped-up school grants, experienced teachers, textbooks, facilities and other materials).

Recommendation 3

Ensure explicit and progressive learning standards in the curriculum of basic education, including in digital and blended learning options

- Define clear student learning standards that integrate all components of the learning processes for each key domain and at every stage of primary education. Ensure curriculum frameworks and materials, teacher standards and assessment frameworks are closely aligned with these standards.
- Strengthen mechanisms that monitor student learning, including system-wide and school-level assessment to understand the gap between expected standards and actual student learning, with a focus on reading, writing and mathematics. Understanding children's learning progression better equips parents, teachers, schools and education systems to support targeted intervention strategies for all children to improve their learning outcomes.
- Prepare teachers and school leaders to better understand the use of standards in their teaching practices and ensure that teaching is targeted to the student level.
- Establish clear and consistent policies about the language of instruction. Children who are taught in the same language throughout their primary education years perform better in reading, writing and mathematics.
- Support the introduction of learning intervention strategies in the early years of education. Interventions should include specialized training programmes for teachers to assist all children to develop strong reading comprehension skills, especially children from linguistically diverse communities.
- Prioritize and adequately finance pre-primary education programmes for all children, but especially for children from disadvantaged backgrounds. Programmes should incorporate strong parental involvement in children's early learning, with a focus on language development.

- Integrate and teach concepts and knowledge associated with global citizenship, within children's immediate environments and communities. This global citizenship education is associated with stronger transversal skills, such as communication, empathy, respect for diversity, decision-making and self-management.
- Support teachers to implement digital literacy in their teaching and to introduce digital instruction and technologies in (online and offline) classes, especially in remote and disaster-prone communities.

Recommendation 4

Support motivated and experienced teachers and positive school environments

- Attract, retain and invest in teachers and school leaders who have proven to have (or have the potential to develop) the right teaching competencies and knowledge. Continue to evaluate the quality of instruction and teachers' aspirations administratively and technically. Provide feedback and support in a timely and relevant manner to promote realistic improvement, professional development and access to instructional resources.
- Support schools, teachers and supervisors with incentives and in-service and participative training to target identified gaps and needs, and encourage curriculum evolution. Poor teacher training is linked to unclear programme objectives, overreliance on textbooks, and weak assessment and reporting. Provide particular support for new teachers. Growing evidence indicates that in-service training and support for new teachers is more effective than support later on in their careers.
- Support school leaders and supervisors to encourage and monitor inclusion and wellbeing, including in digital and blended education formats. In particular, ensure principals and teachers are prepared and willing to address the diversity of learners (for example, special needs, disabilities and learning difficulties) and specific environments (for example, multi-grade and multilingual classrooms).
- Select committed teachers for the first 3 years of primary education, and support them to excel in responding to the learning needs of all students.
- Support teachers to develop project-based and community-based pedagogies and to link these with academic learning goals (such as reading, writing and mathematics). Support teachers to develop children's transversal skills (for example, problem-solving, critical thinking and creativity).
- Develop digital literacy and technology education for teachers and principals. Facilitate pre-service and in-service professional development in this area, access to instruction materials and administrative support.

Recommendation 5

Use data, monitoring and research to achieve better learning

- Develop and support learning assessment policies and mechanisms to cover basic education priorities and progress at the classroom and individual level. Use appropriate assessment strategies, mechanisms and reporting activities, as well as support mechanisms in schools, districts and regions, for better accountability and use of data.
- Prioritize the long-term capacity of education ministries and the individuals serving within them, so that they can generate and use evidence to improve policy implementation and support for schools and teachers.
- Support and coordinate research, peer learning and knowledge exchange to inform all stakeholders about curriculum progress – intended, implemented and achieved – and new trends.

- Use SEA-PLM 2019 results as a key baseline to measure learning progress against SDG 4.1, sector plans, and other national and regional benchmarks (for example, GPE indicators), and as a baseline measure of student learning prior to the COVID-19 pandemic.
- Use the evidence, framework, curriculum audit and questionnaires from the SEA-PLM 2019 global citizenship module to contribute to the debate about and monitoring of SDG 4.7.
- Unpack SEA-PLM 2019 national data to identify disadvantaged children and schools, and to assess the associated differences in resources, practices and learning outcomes in schools.

Recommendation 6

Participate in and support SEA-PLM 2023 activities, including the opportunities and challenges arising from the COVID-19 pandemic

- Support the SEA-PLM programme and its 3 aims: (i) generate comparative data on student learning competencies and contexts; (ii) promote the use of data and findings from system to school level; and (iii) strengthen cross-border collaboration and national capacities to improve learning for all.
- Participate in the new cycle of SEA-PLM (SEA-PLM 2023) to generate comparisons in learning outcomes over time. SEA-PLM 2019 can provide an authentic baseline of learning and system-level progress before the COVID-19 pandemic.
- Agree on a regional agenda for the SEA-PLM framework that can generate meaningful cyclical data and monitor the following 3 targets over time and across the region: i) all children enjoy an appropriate and high-quality basic education journey; ii) all children achieve at least adequate levels of proficiency in reading, writing and mathematics throughout basic education years; and iii) all children develop good socio-emotional skills and positive attitudes towards education, which reinforces their lifelong learning and overall wellbeing.

7.3 Looking ahead

SEA-PLM 2019 participating countries have ambitious plans to improve learning and equity and to achieve the SDG 4 education agenda. SEA-PLM 2019 data show that learning for all children is still a far-off goal, as are other related education targets.

Countries face aggravated challenges ahead owing to the current COVID-19 pandemic and the subsequent economic downturn in the region. Compensating for several months of school closures and unplanned digital and blended learning will also require robust efforts to 'come back better'. However, the COVID-19 pandemic has brought opportunities to experiment with hybrid and flexible learning, and organizational pathways in education delivery and services. Several of these innovations can inspire and influence reform agendas.

Continuing a positive path towards learning improvement, countries and education stakeholders will thus require clear equity learning strategies, better implementation capacity, sufficient financial and human resources, and sturdy monitoring and improvement loop mechanisms. In this context, as part of this mandate, the SEA-PLM programme proposes that all countries in Southeast Asia, and their allies, continue this work to improve the capacity to measure learning outcomes, use data, and allow for peer exchange on policies and practices.

the SEA-PLM programme proposes that all countries in Southeast Asia, and their allies, continue this work to improve the capacity to measure learning outcomes, use data, and allow for peer exchange on policies and practices.



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Appendix

Figure 1: SEA-PLM 2019 described proficiency scale for reading literacy, showing percentage of children in each band across all 6 countries

Band and % of students	Description of what students can typically do
Band 6 and above 317 points and above 29%	Understand texts with familiar structures and manage competing information Children are able to understand texts with familiar structures and manage competing information when locating ideas and details. They are able to find multiple pieces of related information in texts with familiar structures and make connections between details and ideas to draw inferences. They are able to use clues and explicit information to support inferences even when there is competing information. They are also able to identify the most likely reasons for events and the reactions of characters in narratives, where that information is only implied in the text.
Band 5 304 to less than 317 points 13%	Make connections to understand key ideas Children are able to connect pieces of related information across sections of texts, including tables and diagrams, enabling them to understand key ideas. The context and ideas in the texts that they can access may not be wholly familiar to the student. They can recognize phrases and sentences that convey the same meaning and make simple inferences when there is some competing information. They can identify the purpose of prominent textual features in short, familiar texts and can use textual features to aid them in locating information.
Band 4 289 to less than 304 points 18%	Understand simple texts Children can understand simple texts that contain some ideas and information that are partly outside of their personal experience. Children can locate different, short expressions that have the same meaning and use textual features to locate information in tables and other familiar text types. They can connect prominent information across adjacent sentences. They can make simple inferences when obvious clues are provided, in a range of simple texts of different types. Children are able to make plausible interpretations of information in a text and can identify the purpose of familiar text types. In matching words to an image, they are able to choose between words that have similar but distinct meanings, and they can identify longer sentences that describe an image.
Band 3 274 to less than 289 points 19%	Read a range of everyday texts fluently and begin to engage with their meaning Children are able to read a range of everyday texts, such as simple narratives and personal opinions, and begin to engage with their meaning. They are able to locate prominent details in everyday texts, as well as connect related information where it is obvious and there is minimal competing information. They are typically able to make simple inferences from prominent information.
Band 2 and below less than 274 points 21%	Identify relationships between words and their meanings There were only a few items in SEA-PLM 2019 below Band 3, so it is not possible to create a general description of what children below Band 3 know and can do in reading. However, the items that were included indicate that children in Band 2, and possibly below Band 2, are typically able to match 1 of 4 given words to an illustration of a familiar object, place or symbol, where the task is simple, direct and repetitive. This demonstrates that children below Band 3 are able to identify the meaning of some words.

Note: Statistical standard errors appear in a table Appendix 2.

Figure 2: SEA-PLM 2019 described proficiency scale for writing literacy, showing percentage of children in each band across all 6 countries

Band and % of students	Description of what students can typically do
Band 8 and above 346 points and above 5%	<p>Write cohesive texts with detailed ideas and a good range of appropriate vocabulary</p> <p>Children can produce texts that draw on a wider-world context, with relevant, detailed and sometimes imaginative ideas. They can write texts with an introduction, body and conclusion in which ideas are well related and easy to follow. For example, they can provide a clear overall description of a detailed image. These children can write using a polite, formal style and a good range of appropriate vocabulary, with a degree of sophistication.</p>
Band 7 338 to less than 346 points 4%	<p>Write clear, detailed texts in various contexts with adequate vocabulary</p> <p>Children can produce texts that relate to wider-world, local and personal contexts, expressing ideas that go beyond mere description to include some persuasive or evaluative aspects. Ideas are well related and easy to follow, using sentences that are varied in structure and often correctly formed. They can produce some complex sentences, but these may contain errors. When writing about a personal context, for example about a favourite activity, they can use vocabulary that goes beyond the basic, to produce some interesting descriptive elements.</p>
Band 6 327 to less than 338 points 9%	<p>Write simple texts for a range of purposes with above basic vocabulary</p> <p>Children can produce texts that relate to local and personal contexts, presenting simple writing with some supporting details. They can produce sequenced writing that a reader can follow easily, but they are still learning to use linguistic devices to create cohesion within their texts. At this level, children's vocabulary is basic and beyond; it may be adequate to convey the detail of a message, for example, in a short, formal note.</p>
Band 5 316 to less than 327 points 14%	<p>Write non-cohesive basic texts for a range of purposes, using simple vocabulary</p> <p>Children can write texts such as notes, descriptions and narratives in a range of contexts, with well-controlled handwriting. They can communicate ideas in simple writing, obviously related to the task, with some attempt at detail. Their ideas are generally expressed in a logical sequence that is relatively easy to follow but may not be adequately linked with connecting words, or may lack an introduction or conclusion. A description of a detailed image, for example, may describe a range of elements in the picture with some detail but not comprise an integrated whole. Sentence forms are generally simple and may be repetitive or may be more complex but contain errors, although children can form correct question forms, and punctuation is usually correct. They can use vocabulary that is sufficient to convey a range of concepts but that lacks precision or clarity.</p>

<p>Band 4</p> <p>306 to less than 316 points</p> <p>14%</p>	<p>Produce limited writing, conveying simple ideas with basic vocabulary</p> <p>Children can produce limited writing related to the task, presenting simple ideas but lacking elaboration or detail. In a task such as writing basic instructions, they can present a process clearly, using 3 or 4 well-formed but simple sentences, and use the correct form of imperative language for instructions. Basic vocabulary may limit children's ability to convey detail at this level.</p>
<p>Band 3</p> <p>296 to less than 306 points</p> <p>14%</p>	<p>Produce very limited writing, with simple, insufficient ideas and limited vocabulary</p> <p>Children can produce limited writing relating to personal or local contexts. Ideas may be very simple, irrelevant or incomplete. They may be disjointed so that the text is difficult to follow. In writing a simple story, for example, there may be some sense of sequence, but it is not consistent or always clear. Children at this level display some competence in using a polite style, and can form questions. Children can produce simple or repetitive sentences that use repetition of pronouns or nouns to link ideas. Their handwriting is legible, with most letters (or characters) well-formed. Basic vocabulary at this level is inadequate to convey a good description or may be repetitive.</p>
<p>Band 2</p> <p>287 to less than 296 points</p> <p>10%</p>	<p>Produce very limited writing, with fragmented ideas and inadequate vocabulary</p> <p>Children can write in a limited way. Ideas can be unclear, irrelevant, limited or consist of fragments only. These children may be able to write 1 simple correct sentence, or produce incomplete sentences or sentences containing many errors and inconsistent punctuation. Sentence structure is likely to be repetitive. Children's vocabulary at this level is basic and inadequate to convey a clear message or is very repetitive.</p>
<p>Band 1 and below</p> <p>less than 287 points</p> <p>30%</p>	<p>Limited ability to present ideas in writing</p> <p>Children may be able to produce a few sentences with very limited content. When trying to describe a picture, for example, they may focus on only a few isolated features or produce extremely general ideas. They can produce some imperative language, but it is inconsistent. The limited range of vocabulary accessed by students in this band would be inadequate to describe a picture. Words used are likely to be basic and repetitive.</p>

Figure 3: SEA-PLM 2019 described proficiency scale for mathematical literacy, showing percentage of children in each band across all 6 countries

Band and % of students	Description of what students can typically do
Band 9 and above 347 points and above 8%	There were too few items in SEA-PLM 2019 to comprehensively describe what children operating above Band 8 can do. However, the items that were included indicate that children in Band 9 and above can reason about triangles to find an unknown side length using information about the perimeter, and they can solve problems using frequency distributions.
Band 8 334 to less than 347 points 6%	Think multiplicatively and convert between units Children can solve problems by adding fractions with the same denominator and by dividing a decimal number by a 1-digit number. They can continue a pattern involving decimals. They can convert from fractions of hours to minutes, and they can calculate the difference between lengths involving metric conversion. They can solve problems using many-to-one pictographs.
Band 7 321 to less than 334 points 9%	Apply fractions and percentages and analyse data representations Children can calculate a percentage and a simple fraction of a number. They can identify the rotation of a design by half a turn. Children can find the missing value in a table using a given total and calculate a missing percentage value on a pie chart.
Band 6 308 to less than 321 points 12%	Perform mathematical operations, including with fractions, and interpret tables and graphs Children can convert a fraction in tenths to its decimal equivalent. They have a firm grasp of place value and rounding in numbers up to 5 digits. They can solve problems involving measuring devices requiring conversion of metric units of length and capacity. They can calculate the mass of objects using a balance. Children can add 30 minutes to a given time. They can visualize 3-dimensional objects from 2-dimensional representations and interpret a simple map using directional language. They can interpret a frequency table and a line graph showing growth over time.
Band 5 295 to less than 308 points 16%	Fluently solve arithmetic problems Children can add 4-digit numbers and subtract 2-digit numbers in context, and they can identify a 5-digit number given in words. They can continue simple counting and shape patterns. They can model scenarios with multiplication and division. They understand the process of taking half of a quantity. Children can interpolate capacity from a marked cylinder and can compare angles to a right angle. They can estimate the mass of an object. They can read numbers from a table and sum them. They understand the structure of a bar graph showing amounts over time.
Band 4 282 to less than 295 points 19%	Apply number properties and units of measurement Children can find half of a 1-digit even number and understand place value in 5-digit numbers. They can solve a problem involving capacity that does not involve conversion of units. They can apply their knowledge of the number of minutes in an hour. They can read a value from a bar graph.
Band 3 269 to less than 282 points 16%	Understand place value and scales of measurement Children can order 2-digit numbers. They can read length and mass measurements from scales requiring some interpolation. They can recognize simple shapes and compare angles. They can interpret a simple bar graph.
Band 2 and below less than 269 points 14%	There were too few items in SEA-PLM 2019 to describe what children operating below Band 3 can do. Some children might be able to add single-digit numbers together; others might only be able to count a small collection of objects or recognize numbers.

Note: Statistical standard errors appear in a table reported in Appendix 2.

Can 5 Grade students in the region understand simple texts? Are 5 Grade students able to write their thoughts in a structured way? What is the proportion of children that can perform complex mathematical operations? Do students think that climate change or injustice is important for their lives? These are among the questions addressed in the *SEA-PLM 2019 Main Regional Report, Children's learning in 6 Southeast Asian countries*.

Southeast Asia Primary Learning Metrics (SEA-PLM) is a new regional large-scale student learning assessment programme, designed by and for countries in South-east Asia. The programme aims to generate reliable data and evidence for monitoring learning outcomes across and within countries, and to understand what factors facilitate or hinder effective learning of children along their school journey. By doing so, each participating country can develop and implement policies and programmes to improve students' learning outcomes. SEA-PLM 2019 is the first round of this regional assessment.

Six countries from the region participated in SEA-PLM 2019: Cambodia, Lao PDR, Malaysia, Myanmar, Philippines and Viet Nam. This first round focused on Grade 5 students, and on 3 learning domains: reading, writing and mathematics. A global citizenship questionnaire module was also developed as an experimental exercise in comparative large-scale assessment at primary education level. In addition, SEA-PLM 2019 used a series of background questionnaires to collect extensive information about children, classrooms, schools, teachers, head teachers, parents and communities.

SEA-PLM 2019 was conducted with a sample of children that is representative of the entire school population enrolled at Grade 5 in each country. Tests and questionnaires were administered in the official language(s) of instruction in Grade 5. SEA-PLM 2019 data were collected towards the end of the 2018–2019 school year, just before the COVID-19 pandemic. Therefore, SEA-PLM 2019 provides a solid picture of the situation of children's learning before 2020 and could serve as an authentic baseline for future monitoring and trend analysis. SEA-PLM Programme is co-chaired by SEAMEO Secretariat and UNICEF EAPRO.



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