Learning in Myanmar
Pre and Post-Covid-19

Myanmar

WORLD BANK GROUP

Acknowledgement

Executive Summary

This brief summarizes the state of student learning outcomes in Myanmar before the onset of the COVID-19 pandemic, and presents retrospective estimates of the losses in learning and future earnings of students resulting from the disruptions caused by the pandemic and the military coup of February 1, 2021. It shows that Myanmar had been facing a learning crisis even before the COVID-19 pandemic as reflected in very low levels of learning outcomes in reading and math, and large disparities in learning outcomes across different population groups. This crisis was aggravated by the pandemic and the coup which caused schools to remain closed for almost two years. As a result, the children in Myanmar have been experiencing significant learning losses which will, in turn, also reduce their future earnings substantially. This points to the need for both shorter term learning recovery-focused interventions as well as longer term interventions aimed at strengthening system resilience.

The analyses of learning outcomes presented here focus on disparities in learning outcomes across genders, locations, and income groups, and are based on data from the 2019 South East Asian Primary Learning Metrics (SEA-PLM), a high-quality learning assessment of grade 5 students conducted in six South East Asian countries, including Myanmar.[1] As more recent learning assessment data for Myanmar are not available, it is not possible to compute the actual declines in learning assessment scores resulting from the pandemic and the coup. However, this brief presents estimates of learning and earnings losses using a simulation model developed at the World Bank by Azevedo et al. (2020), which utilizes actual data on school closures for the period following the onset of the COVID-19 pandemic until the end of February 2022.

This brief highlights six key findings and four major implications of the findings. The first key finding is that before the pandemic, around 89% of grade 5 students were not able to achieve minimum proficiency in reading. Second, very small percentages of students belonging to the poorest quartile or students who do not speak Myanmar at home achieve minimum proficiency in reading and math. Third, learning outcomes vary significantly across students' schooling experiences, with students who attended preschool or did not repeat a grade doing much better than other students. Fourth, there is a large urban-rural divide, as reflected in a reading proficiency rate that is three times higher in urban schools than in rural schools. Fifth, as a result of COVID-19 and disruptions caused by the coup, it is estimated that the average learning adjusted years of schooling (LAYS) for the current cohort of school age children will decrease by 1.9 to 2.2 years, implying that children in Myanmar, on average, have learnt nothing during the period of school closures induced by COVID and the coup. At the same time, the learning poverty rate—defined as the percentage of 10-year-olds who cannot read and understand a short passage of age-appropriate material[2]— is expected to increase to 100%. And sixth, the reductions in LAYS are estimated to result in a decline in average annual earnings per student by 11% to 13%.

The first implication of these findings is that interventions for improving access and learning outcomes should be targeted towards students from the poorest quartiles, non-Myanmar speakers, and students from rural areas. Second, interventions targeted specifically towards linguistic minorities will require the design and implementation of appropriate language of instruction policies that recognize the need to provide education to students in the language they understand and systematically support the learning of all children. Third, there is a need to increase investment in early childhood education and implement interventions that give special attention to students at the lower end of the learning distribution. Fourth, the large losses of learning and earnings due to the pandemic suggest the need for shorter term interventions to help students recover lost learning as well as longer term investments in remote learning—both ICT based and non-ICT based—to make the system more resilient.

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[1] The SEA-PLM participants include Cambodia, Lao PDR, Malaysia, Myanmar, the Philippines, and Vietnam.

[2] The World Bank defines learning poverty rate as "the percentage of 10-year-olds who cannot read and understand a short passage of age-appropriate material—in other words, those who are below a "minimum proficiency" threshold for reading" (Azevedo et al. 2021, p. 5).
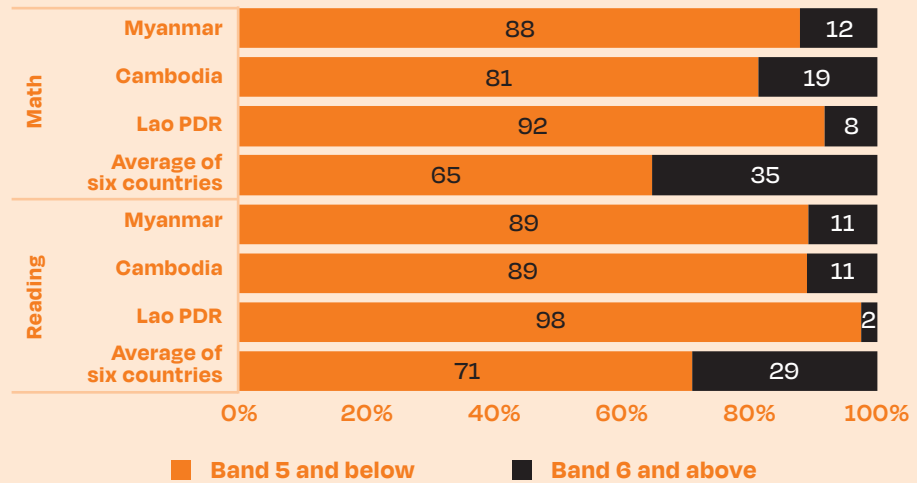
Learning levels and disparities in learning outcomes

Myanmar made very good progress in the decade before the COVID pandemic in ensuring access to school education. The national net enrollment rate (NER) increased from 89% in 2010 to 98% in 2018 for primary education, and from 45% to 64% for secondary education (WDI 2021). Myanmar had achieved gender parity in NER at both the primary and secondary levels. When compared with countries at similar levels of per capita GDP globally, Myanmar had above-average performance in terms of enrollment rates at all levels of education.

However, more than 4 out of 5 children at the end of their primary education cycle did not acquire minimum proficiency in mathematics and reading, reflecting the low quality of education. Data from the 2019 SEA-PLM student assessments show that the performance of the vast majority of grade 5 children in Myanmar was below minimum proficiency[3] in reading and math (Figure 1). In particular, 89% of grade five students perform below minimum proficiency in reading, a finding that is consistent with the World Bank's learning poverty rate estimate of 89.5% for Myanmar for 2019 (Azevedo et al. 2022), which takes into account the SEA PLM based estimate of the share of students meeting minimum proficiency in reading and the share of out-of-school children. Compared to the other Southeast Asian countries that participated in the SEA-PLM, Myanmar performs below average in both math and reading.

FIGURE 1

Shares of grade 5 students meeting minimum proficiency in math and reading, 2019

		Band 5 and below	Band 6 and above
Math	Myanmar	88	12
	Cambodia	81	19
	Lao PDR	92	8
	Average of six countries	65	35
Reading	Myanmar	89	11
	Cambodia	89	11
	Lao PDR	98	2
	Average of six countries	71	29

Source: Authors' calculations using SEA-PLM (2019)

There are significant disparities in student performance across different individual student characteristics including socio-economic status, language spoken at home, and gender (Figures 2-4). Almost no students from the poorest quartiles or students who do not speak Myanmar at home are able to reach minimum proficiency in reading and mathematics. There is a particularly stark difference in proficiency rates—percentages of students achieving minimum proficiency—across students belonging to different socioeconomic groups. In particular, the performance gaps between students from the top

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[3] The SEA-PLM data provide information on student performance along proficiency scales that include eight bands for math and five bands for reading. For both subjects, "Band 6 and above" is considered the proficiency level that meets or exceeds the Sustainable Development Goals' "end of primary" proficiency indicator targets. The term "minimum proficiency" used in this brief refers to "Band 6 and above".

and bottom socio economic status (SES) quartiles are substantially greater than the gaps across all other student and school characteristics discussed in this brief, highlighting the need for specific policies and programs to help students from poor families be successful in school. The differences in proficiency rates across language groups are also large in both domains: the reading and math proficiency rates of students who speak the Myanmar language at home are, respectively, 11 and 9 percentage points higher than the proficiency rates of students who usually speak a different language. Female students outperform male students in reading, though there is little difference in math performance. Similar patterns of differences across these different characteristics are observed for the other SEA-PLM countries as well. However, in terms of the ratios between the performance rates of the groups compared, the disparities across students from different socio-economic groups and language groups are greater for Myanmar than for the average of the six countries.

FIGURE 2

Student proficiency rates in math and reading by SES quartile, 2019 (%)
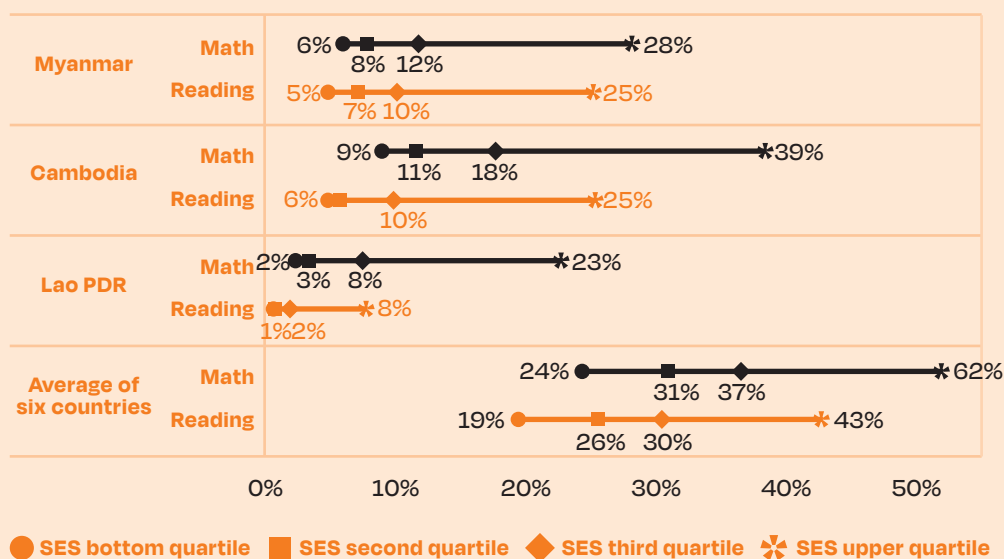
Source: Authors' calculations using SEA-PLM (2019)

FIGURE 3

Student proficiency rates in math and reading by language spoken at home, 2019 (%)
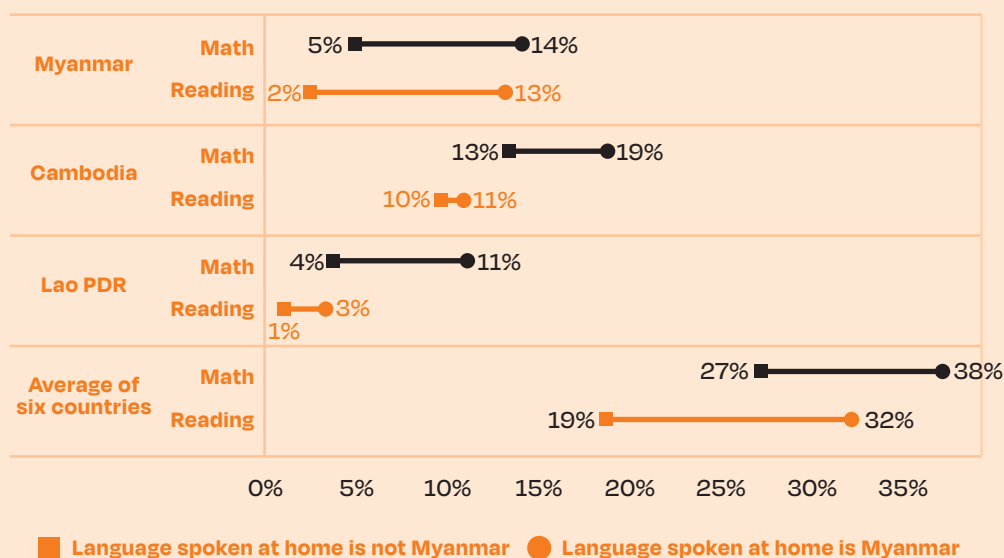
Source: Authors' calculations using SEA-PLM (2019)

FIGURE 4

Student proficiency rates in math and reading by gender, 2019 (%)

		Male	Female
Myanmar	Math	12%	12%
	Reading	10%	12%
Cambodia	Math	17%	20%
	Reading	8%	14%
Lao PDR	Math	8%	9%
	Reading	2%	3%
Average of six countries	Math	34%	36%
	Reading	26%	32%

■ Male   ● Female
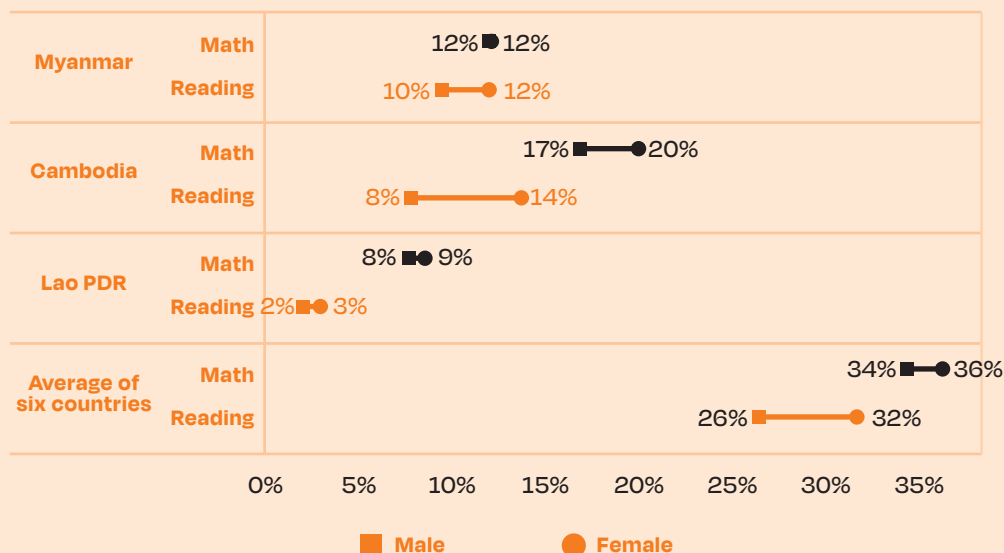
Source: Authors' calculations using SEA-PLM (2019)

Learning outcomes also vary significantly across students' schooling experiences, with students who attended preschool or did not repeat a grade doing much better than other students (Figures 5-6). Students who have attended at least a year of preschool have twice the proficiency rate of students who haven't attended preschool. For instance, 16% of students with at least a year of preschool experience are proficient in reading compared to 8% of students without preschool experience. Similarly, students who haven't repeated any grade have significantly higher proficiency rates than students who have repeated at least one grade. Only 3% of students who have repeated grades have minimum proficiency in reading compared to 14% of students who haven't repeated any grade.

FIGURE 5

Student proficiency rates in math and reading by grade repetition status, 2019 (%)

		Repeated at least one grade	Did not repeat grade
Myanmar	Math	5%	15%
	Reading	3%	14%
Cambodia	Math	12%	22%
	Reading	6%	14%
Lao PDR	Math	5%	10%
	Reading	1%	3%
Average of six countries	Math	27%	38%
	Reading	19%	31%

■ Repeated at least one grade   ● Did not repeat grade
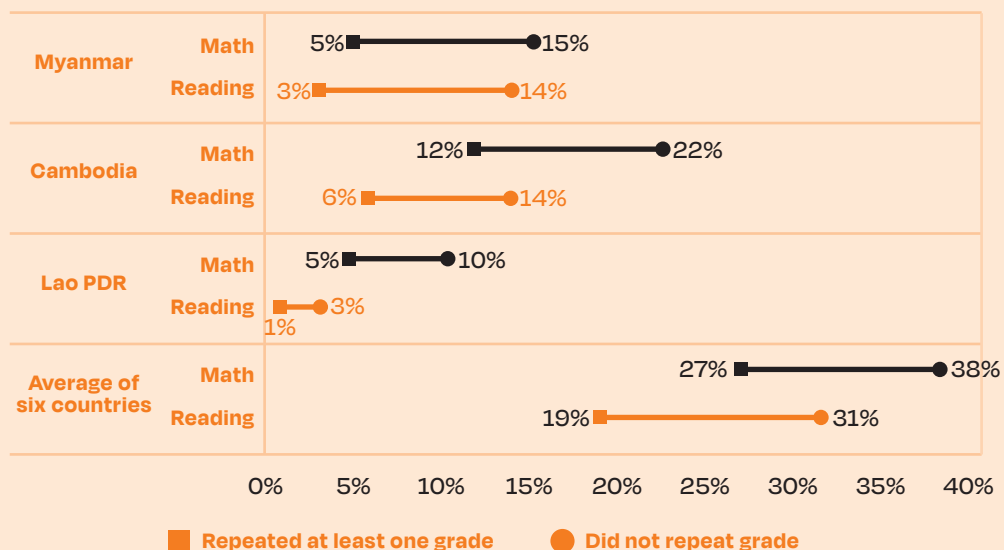
Source: Authors' calculations using SEA-PLM (2019)

FIGURE 6

Student proficiency rates in math and reading by pre-school attendance status, 2019 (%)

Myanmar	Math	9%	17%
	Reading	8%	16%
Cambodia	Math	13%	23%
	Reading	8%	14%
Lao PDR	Math	4%	11%
	Reading	1%	3%
Average of six countries	Math	27%	37%
	Reading	22%	31%

■ Did not attend preschool ● Attended preschool
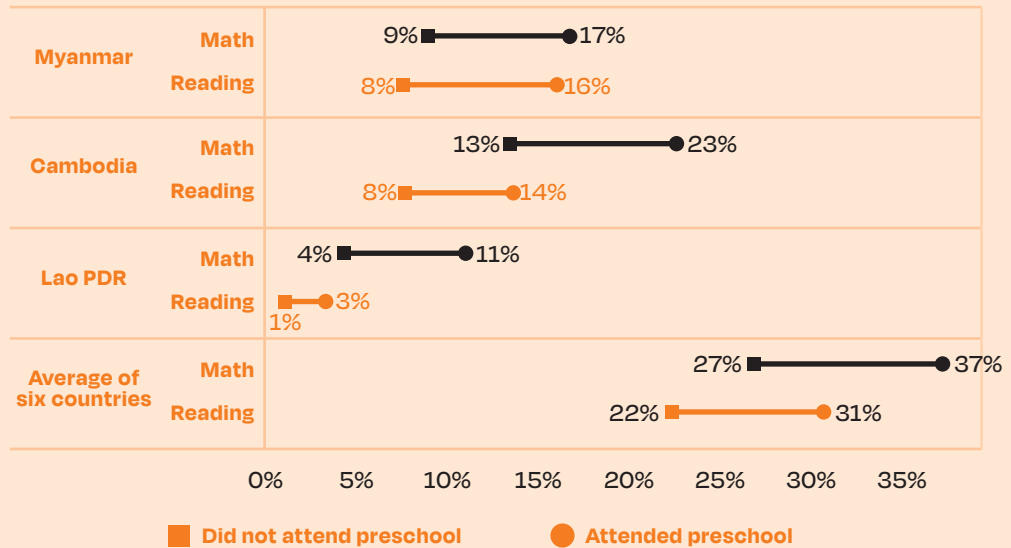
Source: Authors' calculations using SEA-PLM (2019)

The school environment also influences student performance, with students in urban areas doing much better than those in rural areas. More specifically, the reading proficiency rate for urban schools in Myanmar (25%) is three times higher than that for rural schools (8%), and the urban-rural gap in math proficiency rate is also quite substantial (17 percentage points) (Figure 7). Similarly, the proficiency rates for larger schools in Myanmar are higher than those for smaller schools, though the differences are relatively small compared to the differences in other countries. These associations between the different student and school attributes and student learning outcomes are also confirmed by findings from regression analyses of the determinants of student performance.

FIGURE 7

Student proficiency rates in math and reading by school location, 2019 (%)

Myanmar	Math	9%	26%
	Reading	8%	25%
Cambodia	Math	15%	70%
	Reading	9%	43%
Lao PDR	Math	8%	22%
	Reading	2%	6%
Average of six countries	Math	32%	53%
	Reading	27%	42%

■ Rural ● Urban
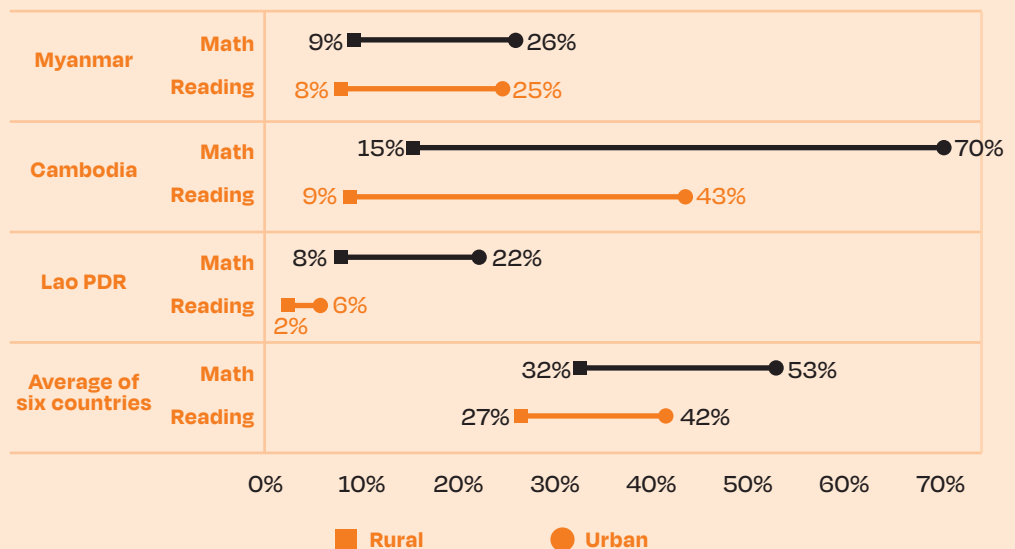
Source: Authors' calculations using SEA-PLM (2019)

The low learning outcomes of Myanmar children have contributed to a deficit in the country's human capital. Myanmar had the second lowest Human Capital Index (HCI) among the south-east Asian countries in 2020. Its HCI of 0.48 indicates that an average child born in 2020 would be only 48 percent as productive by age 18 as the benchmark of a child who had a complete education and full health (World Bank 2020). Disaggregation of the HCI components reveals that Myanmar performs below the average for the SEA-PLM countries in terms of all three education components included in the index, namely, harmonized learning outcomes (HLO), expected years of schooling (EYS) and learning-adjusted years of schooling (LAYS) (Figure 8). In Myanmar, a child who starts school at age four can expect to complete only 10 years of schooling by their 18th birthday, but only 6.8 years of LAYS, which factors in what children actually learn.

FIGURE 8

HCI by component, Myanmar and other SEA-PLM countries, 2020
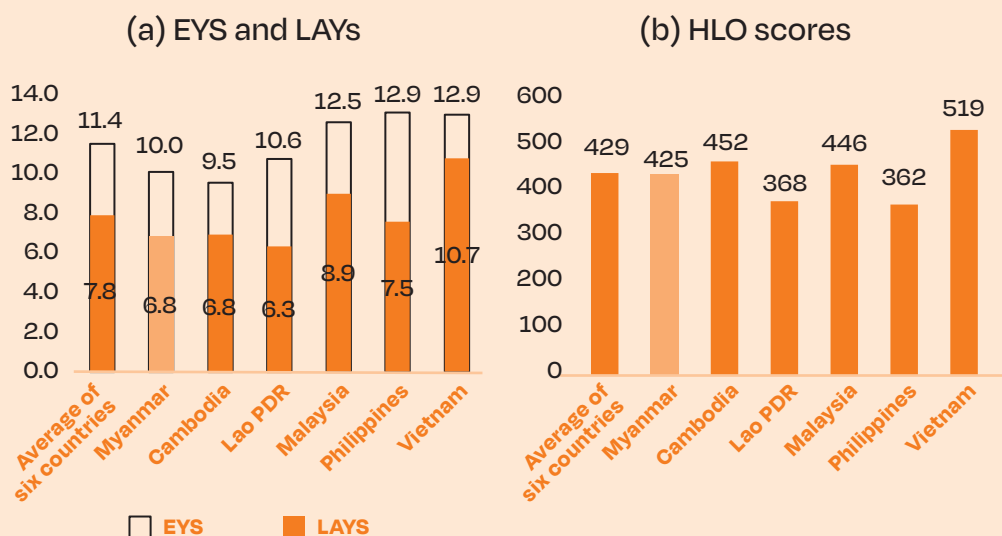
Source: World Bank (2020); Note: The average of six countries is a simple average.

Impact of COVID-19 and the coup on learning and earnings

COVID-19 and the military coup of February 1, 2021, have severely disrupted the education of Myanmar's children. In response to the pandemic, all public schools closed at the end of February 2020 and remained closed for the entire 2020-2021 schoo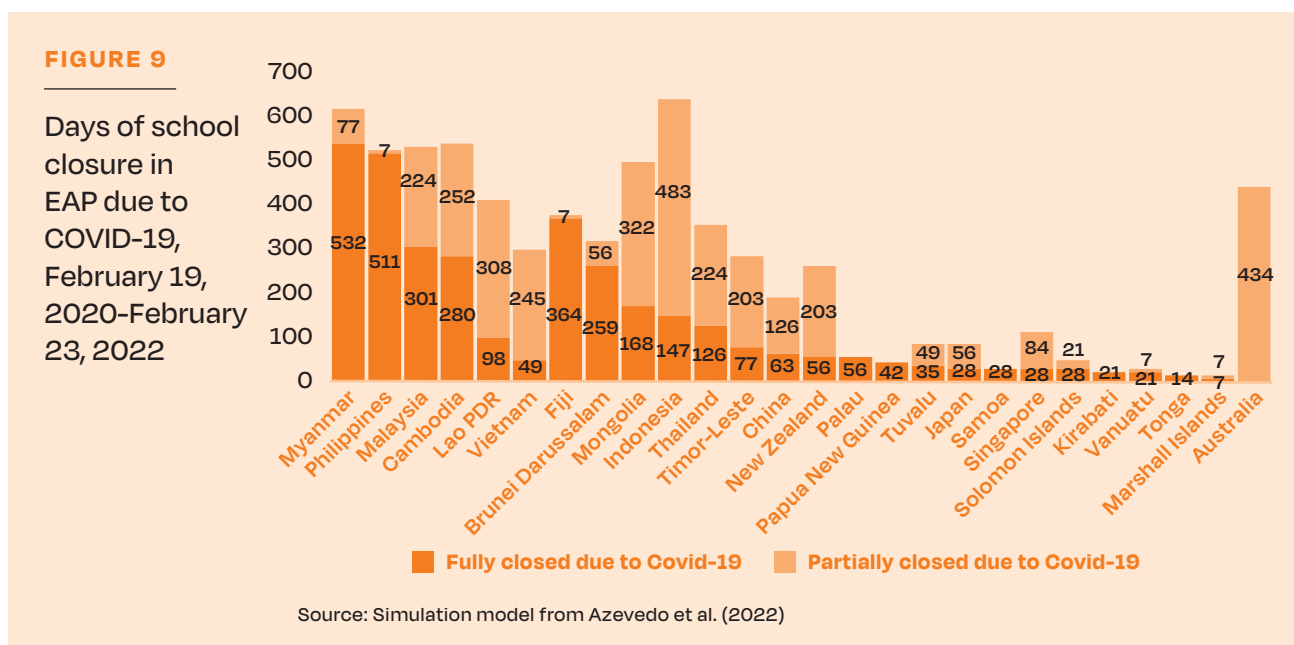l year (June 2020 to February 2021), depriving the vast majority of children of learning opportunities throughout this period.[4] Though the military government instructed all schools to reopen on June 1, 2021 (the beginning of the new academic year), anecdotal evidence from media reports suggests that only a small fraction of the students returned to school. Furthermore, this reopening was short-lived since the military government again closed all public schools starting July 9, 2021, in response to the third wave of COVID-19. Schools were instructed to reopen again on November 1, 2021, but official data indicate that a large percentage of students have not enrolled in school (SAC 2021). Between February 19, 2020, and February 23, 2022, schools were fully closed for 532 days and partially closed for 77 days (Figure 9). Thus, Myanmar stands out as the country that experienced the highest number of full school closure days in the East Asia and the Pacific (EAP) region since the start of the pandemic.

FIGURE 9

Days of school closure in EAP due to COVID-19, February 19, 2020–February 23, 2022

Source: Simulation model from Azevedo et al. (2022)

The disruptions caused by the pandemic are expected to have affected students' learning through multiple channels. There is evidence in the literature that any interruption in schooling, including breaks in continuity of learning during scheduled vacations, can lead to learning loss among students (Azevedo et al., 2000; Alexander et al., 2016; Cloutier et al., 2000). Learning loss can result from school closure in two ways—first, in the absence of face-to-face instruction at school, the quality of education will deteriorate, and children will learn less; and second, the break in the continuity of learning will cause children to forget what they have already learned. Furthermore, the pandemic related income shocks experienced by families will result in an increase in school dropouts as children disengage from studies to work or because schooling becomes unaffordable (Azevedo et al. 2020).

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[4] Schools are closed for holidays during the months of March, April and May.

Following Azevedo et al. (2022), learning loss simulation results are provided for three scenarios based on assumptions regarding partial school closures and the effectiveness of mitigation measures: (i) optimistic scenario (75% of the schools are closed and mitigation effectiveness is 14%); (ii) intermediate scenario (85% of the schools are closed and mitigation effectiveness is 7%); and (iii) pessimistic scenario (100% of schools are closed and mitigation effectiveness is 7%). The simulation estimates the impacts of the pandemic on three indicators of learning—LAYS, HLO, and learning poverty—and on individual earnings.

The simulation results indicate that children in Myanmar will on average have learnt nothing during school closures, as it is estimated that the country will experience a decrease in average LAYS for the current cohort of school age children by 1.9 to 2.2 years (Figure 10), which is approximately the amount of time children were out of schools full-time. This represents a loss of 28% to 32% in LAYS compared to the baseline of 6.8 years. These figures represent the average loss, which means that many children will have regressed (i.e., not just learnt nothing, but will have forgotten some of what they learnt previously) during the time of school closure. Note that the LAYS loss estimates for Myanmar are significantly greater than the loss estimates for Myanmar's LMIC peers in south east Asia—Cambodia and Laos—and for the average of the six SEA-PLM countries. The estimated loss in HLO for Myanmar ranges from 11% in the optimistic scenario to 13% in the pessimistic scenario (Table 1).[5] The impact on the learning poverty rate is also expected to be substantial—the share of children who are learning poor is expected to increase to 100% (from a baseline of 89.5%) even in the optimistic scenario.[6] Furthermore, as a result of the reductions in LAYS , the average annual earnings per student is expected to decline by 11% to 13% compared to a baseline earning of $4,360 per year in 2017 PPP $.

FIGURE 10

Loss in LAYS due to COVID-19 under different scenarios
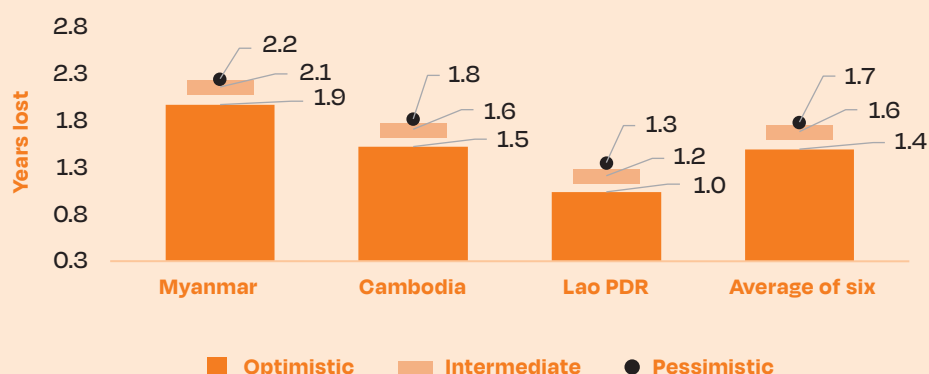
Source: Simulation model from Azevedo et al. (2022)

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[5] Note that the reduction in HLO is a partial result of the simulation model. The parameters (school closure, mitigation effectiveness, and expected learning gains) simulate changes in terms of 1) HLO score and 2) expected years of schooling. Combining the two simulates expected loss in LAYS.

[6] While simulation estimates are presented here, evidence from student assessment surveys conducted in countries around the world after the pandemic shows that, almost universally, learning losses have been real and large.

TABLE 1

Learning and earnings losses due to COVID-19 under different scenarios

Scenario	Loss in LAYS (years)	Loss in HLO (%)	Annual earnings loss/student (US$)*
Pessimistic	2.2	13.2	572
Intermediate	2.1	12.6	549
Optimistic	1.9	11.2	501

Source: Simulation model from Azevedo et al. (2022); *in 2017 purchasing power parity (PPP) US$

It is likely that these estimates of learning and earnings losses underestimate the actual losses for a number of reasons. First, while they take into account losses associated with students dropping out of school due to the income shock, they do not account for the additional dropouts in future years that may result from the long gap in regular schooling as children find it harder and harder to learn what they are expected to learn as they progress through school. Second, the mitigation effectiveness estimates for LMICs used in these simulations might overestimate the true mitigation effectiveness of distance learning approaches used in Myanmar, which has low levels of technology penetration and has experienced additional disruptions to service delivery from the coup. Third, these estimates do not consider the reduction in education quality due to teachers being unable or unwilling to perform their teaching duties or from disruptions in teacher training. And fourth, the simulation accounts only for losses in private returns to education (i.e., students' future wages), and does not consider the loss of external benefits to society (e.g., higher tax revenues, lower mortality, later marriage and first child, etc.).

Myanmar can be expected to experience further losses in learning and earnings in the future due to continuing partial school closure and absence of many students from school. Given the continuing volatile political situation in the post-coup context and no indications of an imminent resolution of the crisis, it is difficult to predict when and the extent to which schools will fully reopen in the future. Even if the military government mandates the full reopening of all schools, it will result in a de-facto partial reopening of the school system as it is likely that a large percentage of students will not enroll. In the post-coup period, many parents have not sent their children to school, either to affirm their solidarity with the anti-coup civil disobedience movement or because of safety concerns. This decline in attendance is reflected in the findings of a high frequency phone survey of households conducted by the World Bank in May 2022, which indicates that only 40% of children in the 5-15 year age group are attending school. This is significantly lower than a corresponding estimate (87%) for 2017 based on household survey (Bhatta and Katwal 2022). There is also evidence that compared to the approximately 9.6 million students enrolled in schools in 2019, only around 3.21 million (33%) were attending classes in 2021 (SAC 2021). While some students among the 67% not attending classes may be receiving adequate home-based learning support, it is likely that most of the non-attendees are learning very little. Furthermore, because of the long gap in schooling, it is possible that some of these children may drop out of school altogether. Hence, the criticality of ensuring access to learning opportunities for Myanmar children cannot be underestimated. There is an urgent need to help children recover their lost learning and also reach out to children at risk of not continuing their education.

Implications

- Non-Myanmar speakers, students from the lower SES quartiles, and students from rural areas not only have lower learning outcomes but are also the groups lagging in terms of access. Hence, interventions targeted towards students from these population groups can serve the twin purpose of enhancing equitable access and improving equity in learning outcomes.

- Interventions targeted specifically towards linguistic minorities are needed as this population group suffers the most from large learning deficits. This will require the design and implementation of appropriate language of instruction policies that recognize the need to provide education to students in a language they understand and systematically support the learning of all children. While Myanmar has more than 100 spoken languages, more than 80 percent of the population speaks one of five languages, which can provide a basis for an effective language of instruction policy.

- The evidence on higher learning outcomes among children who have attended pre-school highlights the importance of increasing investment in early childhood education (ECE). This is particularly relevant since overall coverage of ECE is estimated at only 23% for children aged 3 to 5 years (Save the Children 2022), and investment in ECE in Myanmar is very limited.

- Low learning outcomes for students who repeated grades at least once points to the need for giving special attention to students at the lower end of the learning distribution. This may require different interventions such as providing remedial classes, training teachers to teach at the right level, and making provisions for greater peer support from academically better performing students. Every effort should be made to avoid students having to repeat a grade since they are very unlikely to do better.

- The extended school closures due to the pandemic and disruption following the coup, and the ensuing significant losses of learning and earnings suggest the need for shorter term interventions to help students recover lost learning as well as longer term investments in remote learning to make the system more resilient. In particular, there is a need for investing heavily in technology-based remote learning tools development, content development, connectivity expansion, and teacher training on digital literacy and utilization of digital and hybrid teaching methods. But at the same time, the country can also benefit from strengthening non-ICT-based remote learning modalities, such as video-based lessons and distance learning using traditional paper-based materials and tools. In the shorter term, approaches such as the RAPID framework proposed by UNESCO, UNICEF and the World Bank could be used to systematically guide the development of learning recovery and accelerated learning programs (Box 1).

BOX 1

RAPID
framework

Developed by UNESCO, UNICEF and the World Bank, the RAPID framework for establishing learning recovery programs focuses on five policy actions, the key elements of which are summarized below (see World Bank et al. 2022; World Bank 2022).

1. **R**eaching every child and retaining them in school: reopening schools safely and keeping them open; conducting re-enrollment campaigns; strengthening early warning systems to identify students at risk of dropping out and implementing drop-out prevention strategies; providing cash transfers to children from poor families to increase their attendance.

2. **A**ssessing learning levels regularly: providing assessment tools to teachers for measuring learning levels of individual students for both formative and summative assessment purposes; assessing learning levels and losses at the national and sub-national levels; identifying learning equity impacts.

3. **P**rioritizing teaching the fundamentals: prioritizing numeracy, literacy, socioemotional skills, and prerequisites for future learning by adjusting the curricula and rebalancing time allocations within and across subjects; training teachers on the revised curriculum; properly aligning learning assessments with content covered in class.

4. **I**ncreasing the efficiency of instruction, including through catch-up learning: using teaching-learning approaches such as structured pedagogy, teaching at the right level, small group tutoring, and self guided and self paced learning; supporting continuous teacher training, coaching, and peer learning; increasing instruction time; enhancing learning with technology.

5. **D**eveloping psychosocial health and wellbeing: building teachers' capacity to support their students' wellbeing and identify students in need of specialized services; supporting teacher wellbeing and resilience; investing in students' safety, nutrition, and access to water, sanitation, and hygiene facilities.

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